

# RECORD OF DECISION

American Cyanamid Superfund Site  
Operable Unit 04

Bridgewater Township  
Somerset County, New Jersey

United States Environmental Protection Agency  
Region II  
New York, New York

September 2012

R2-0007109

**DECLARATION STATEMENT**

**RECORD OF DECISION - OPERABLE UNIT 04**

**American Cyanamid Superfund Site**

**SITE NAME AND LOCATION**

American Cyanamid Superfund Site  
Bridgewater Township, Somerset County, New Jersey  
EPA ID# NJD002173276  
Operable Unit 04

**STATEMENT OF BASIS AND PURPOSE**

This decision document presents the selected remedy for the American Cyanamid Superfund Site (Site), which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Part 300. This decision is based on the Administrative Record file for the Site. The attached index (see Appendix III) identifies the items that comprise the Administrative Record, upon which the selection of the remedial action is based.

The New Jersey Department of Environmental Protection (NJDEP) concurs with the selected remedy (see Appendix IV).

**ASSESSMENT OF THE SITE**

The response action selected in this Record of Decision (ROD) is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

**DESCRIPTION OF THE SELECTED REMEDY**

The remedy described in this document represents the fourth Operable Unit (OU) of the American Cyanamid Site. Due to the volume, complexity and nature of contamination at the Site,

waste disposal areas (referred to as impoundments), Site-wide soils and groundwater were originally separated into seven phased or operable units. The Site-wide remedy for OU4 presented in this ROD also combines OU1 to OU5 and OU7 response actions. The Hill Property (OU6) was addressed in a July 1996 ROD and was deleted from the National Priorities List in December 1998. Impoundments 1 and 2 are being addressed separately under a recently created OU8. In March 2010, the Region II Office of the U.S. Environmental Protection Agency (EPA) discussed the proposed alternatives to remedy the Site with EPA's National Remedy Review Board (NRRB). The remedy described in this ROD was selected based upon NRRB input.

Materials meeting the definition of principal threat waste exist at the Site that could pose a potential risk from exposure if appropriate remedial actions are not implemented. Principal threat wastes are materials that include or contain hazardous substances, pollutants or contaminants that act as a reservoir for the migration of contamination to groundwater, surface water or air, or act as a source for direct exposure. In this OU4 ROD, materials that meet the definition of principal threat waste will be treated through solidification/stabilization (S/S) technologies to prevent the migration of contaminants.

The selected remedy for OU4 includes the following components:

- Waste material located within Impoundments 3, 4 and 5 will be entirely treated through in-situ S/S to prevent the migration of contaminants. An impermeable engineered vapor control barrier and an engineered soil cover system will be installed following solidification. The waste materials in these impoundments typically consist of tarry substances or high-hazard materials defined by EPA as principal threat waste.

Site-wide soils that consist of tarry substances or principal threat wastes will require complete excavation and relocation to Impoundments 3, 4 and 5. Following relocation, these soils will be treated using in-situ S/S, along with the remaining materials in Impoundments 3, 4 and 5 as stated above.

In-situ S/S reduces the mobility of principal threat waste by sequestering contaminants to restrict migration and reduce leaching to the groundwater. In addition to immobilizing contaminants in a solid matrix, in-situ S/S may also chemically convert certain contaminants into a less toxic form. Effective sequestering mixes would be needed to effectively treat principal threat wastes. Different in-situ

S/S mixes and methods may be required for different areas of the Site. Treatability testing would be conducted prior to full-scale implementation to optimize the in-situ S/S mix and demonstrate a correlation between leachability and unconfined compressive strength (UCS) and permeability performance criteria. Materials that are treated with in-situ S/S will be required to meet performance measures, such as minimum UCS, maximum permeability and leachability testing for Site-related constituents.

Prior to in-situ S/S of the contents in Impoundments 3, 4 and 5, the area would be cleared of vegetation and excavated for surface and subsurface debris removal (e.g., large boulders, tank pads, conduits and concrete), as these materials could interfere with the in-situ S/S process. In-situ S/S will be implemented for the full depth of the impoundment material prior to capping. The actual depth of treatment will be established and confirmed during the remedial design phase. The selection of mixing equipment would be determined during final design. Dust, vapor and noise management controls would be put in place to protect workers and the community during construction activities.

Since the selected remedy requires the transportation of materials to the Site, EPA will evaluate all transportation options, including the use of rail and trucks. A thorough review will be conducted to understand and consider the impacts to the community.

- For Site-wide soils that are determined to require vapor controls, an impermeable multi-layered engineered cap with a vapor mitigation system will be constructed. The engineered vapor control cap will reduce infiltration and the vapor mitigation system will capture and treat emissions. These soils typically contain volatile and semi-volatile organic compounds that have the potential to migrate into the atmosphere. All engineered caps will be designed and constructed to withstand the effects of a 500-year flood event. In addition, the engineered caps will be designed and constructed to protect against all Site-specific hazards which may pose a threat to their integrity, such as flooding, inadequate drainage, slope instability, erosion, freeze/thaw cycle effects, surface vegetation and any other risks associated with being located in a flood hazard area. An inspection and maintenance program for the engineered capping systems will be developed as part of the ongoing operation plan for the Site.

- For Site-wide soils determined to require a direct contact barrier, an engineered soil cover system will be utilized. Soils requiring this engineered cover typically consist of low-level contaminated soils containing hazardous substances at levels greater than NJDEP nonresidential direct contact soil remediation standards.
- An ecological risk assessment will be conducted for Impoundments 13, 17 and 24 to confirm the appropriate treatment for these materials. If the ecological risk assessment identifies any impoundment contents that present an unacceptable risk, these materials would be relocated and consolidated in the North Area in areas where the same types of controls are warranted. Any impoundment contents that do not present an unacceptable risk could remain in their current location. Any impoundment contents requiring excavation and relocation would be remediated to acceptable levels, such as NJDEP ecological soil screening criteria or ecologically protective benchmarks.
- The existing bedrock groundwater collection system will be improved by relocating the primary extraction wells to a more central location and by adding new extraction wells, as necessary, to ensure that all Site-related groundwater is captured. In addition, a recovery system (such as trenches, wells and/or containment walls) will be constructed for collection of overburden groundwater at several locations. The details of these improvements will be developed during the remedial design phase. These improvements will eliminate the migration of contaminants exceeding the more stringent of federal maximum contaminant levels (MCLs) and New Jersey groundwater quality standards (GWQS) in the overburden and bedrock aquifers beyond the point of compliance through a combination of source actions and hydraulic controls and, further, will restore the overburden and bedrock aquifers within the area of attainment to their expected beneficial use and to concentrations below the more stringent of federal MCLs and NJ GWQS within a reasonable period, as practicable. The waters collected at the Site will be discharged to surface water following complete on-site treatment. If it is determined that this treatment method is not appropriate or feasible, then collected groundwater will either be re-injected following complete on-site treatment or be discharged to the local sewerage authority directly or following pre-treatment.

- Institutional controls, monitoring and periodic reviews will also be required to ensure that the remedy remains protective of public health and the environment. The following institutional controls will be implemented as part of the remedy: deed restrictions, restrictive covenants and a groundwater Classification Exception Area/Well Restriction Area. Monitoring of the engineered capping systems, sediment, surface water and groundwater will be required as part of the ongoing operation plan at the Site. The details of the maintenance and monitoring requirements for the engineering controls will be determined in the design phase.

## **STATUTORY DETERMINATIONS**

### **Part 1: Statutory Requirements**

The selected remedy is protective of human health and the environment, complies with federal and state requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies to the maximum extent practicable.

### **Part 2: Statutory Preference for Treatment**

This remedy also satisfies the statutory preference for treatment as a principal element of the remedy (i.e., reduces toxicity, mobility or volume of hazardous substances, pollutants or contaminants as a principal element through treatment).

### **Part 3: Five-Year Review Requirements**

Because this remedy will result in hazardous substances, pollutants or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

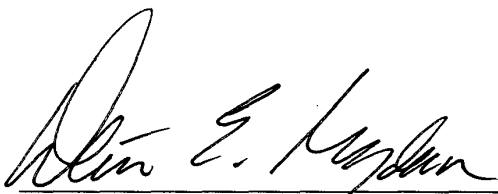
## **ROD DATA CERTIFICATION CHECKLIST**

The ROD contains the remedy selection information noted below. More details may be found in the Administrative Record file supporting this ROD.

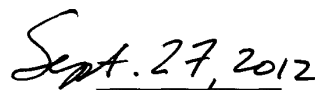
- Contaminants of concern and their respective concentrations may be found in the "Summary of Site Characteristics" section.

- Baseline risk represented by the contaminants of concern may be found in the "Summary of Site Risks" section.
- Cleanup levels established for contaminants of concern and the basis for these levels can be found in the "Remedial Action Objectives" section.
- Manner of addressing source materials constituting principal threats may be found in the "Principal Threat Wastes" section.
- Current and reasonably-anticipated future land use assumptions and current and potential future uses of groundwater considered in the baseline risk assessment and ROD can be found in the "Current and Potential Future Site and Resource Uses" section.
- Estimated capital, operation and maintenance (O&M) and total present worth costs, discount rate and the number of years over which the remedy cost estimates are projected can be found in the "Description of Alternatives" section.
- Key factors that led to the selection of the remedy may be found in the "Comparative Analysis of Alternatives" section.

**AUTHORIZING SIGNATURE**



Walter E. Mugdan, Director  
Emergency and Remedial Response Division  
U.S. EPA Region II



Date

**DECISION SUMMARY**

American Cyanamid Superfund Site

Bridgewater Township  
Somerset County, New Jersey

United States Environmental Protection Agency  
Region II  
New York, New York

September 2012

**R2-0007116**



TABLE OF CONTENTS

SITE NAME, LOCATION AND DESCRIPTION..... 1  
SITE HISTORY AND ENFORCEMENT ACTIVITIES..... 3  
HIGHLIGHTS OF COMMUNITY PARTICIPATION..... 8  
SCOPE AND ROLE OF OPERABLE UNIT 04 REMEDY..... 9  
SUMMARY OF SITE CHARACTERISTICS..... 10  
CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES..... 20  
SUMMARY OF SITE RISKS..... 21  
REMEDIAL ACTION OBJECTIVES..... 24  
REMEDIATION GOALS..... 25  
DESCRIPTION OF ALTERNATIVES..... 28  
COMPARATIVE ANALYSIS OF ALTERNATIVES..... 37  
PRINCIPAL THREAT WASTES..... 46  
SELECTED REMEDY..... 47  
STATUTORY DETERMINATIONS..... 52  
DOCUMENTATION OF SIGNIFICANT CHANGES..... 55

APPENDICES

APPENDIX I                    FIGURES  
APPENDIX II                  TABLES  
APPENDIX III                 ADMINISTRATIVE RECORD INDEX  
APPENDIX IV                  STATE LETTER OF CONCURRENCE  
APPENDIX V                    RESPONSIVENESS SUMMARY

ATTACHMENTS TO RESPONSIVENESS SUMMARY

A        PROPOSED PLAN  
B        PUBLIC NOTICE  
C        TRANSCRIPT FROM PUBLIC MEETING  
D        PUBLIC COMMENTS

## SITE NAME, LOCATION AND DESCRIPTION

The American Cyanamid Superfund Site (Site), located in the central portion of New Jersey, is within the southeastern section of Bridgewater Township, Somerset County. It is bounded by Main Street to the north, the Raritan River to the west and south and Interstate 287 to the east, as shown in Figure 1.

The Site encompasses approximately 435 acres and was used for numerous chemical and pharmaceutical manufacturing operations over the past 90 years. The facility was originally built in 1915 as Calco Chemical Company to manufacture intermediate chemicals and dyes. The plant expanded over the following 60 years to become one of the nation's largest dye and organic chemical plants, resulting in the production of thousands of chemical products. The majority of the expansion at the plant occurred after American Cyanamid purchased the facility in 1929 and was driven by the large increase in demand for chemicals in the United States, particularly during and immediately after World War II. The large increase in manufacturing capacity during the period from 1930 through 1970 required more buildings, support services and disposal capabilities. As a result of past activities at the facility, a number of waste storage and disposal areas, referred to as "impoundments," were constructed. Due to these activities, the surrounding soils and groundwater were eventually adversely impacted. Throughout its more than 75-year manufacturing history, numerous organic and inorganic chemical raw materials were used at the facility to produce products including rubber chemicals, pharmaceuticals, dyes, pigments, chemical intermediates and petroleum-based products.

Previously, the Site was generally divided into two main portions, referred to as the Main Plant and the Flood Plain. The Main Plant area referred to the portion of the Site within a flood control berm, where manufacturing activities were historically conducted. The Flood Plain area referred to the portion of the Site outside of the flood control berm. These terms were derived when the facility was operational and failed to recognize that both of these areas lie within the flood hazard area of the Raritan River. For this ROD and future documents, the Site has been re-designated into five new areas for ease of understanding. As shown in Figure 2, the Site is now divided into the following five areas: North Area, South Area, West Area, East Area and the Impoundment 8 Facility. The North Area, which was referred to as the Main Plant area in previous documents, refers to that portion of the Site property within a

flood control dike. The portion of the Site previously referred to as the Flood Plain area has been separated into the following three areas: West Area, South Area and East Area. The West Area refers to the portion of the Site bounded by the Somerset County Recycling Center to the north, the Raritan River to the west, the Port Reading rail line to the south and the flood control berm to the east. The South Area refers to the portion of the Site located west of Interstate-287 between the Port Reading rail line and the Raritan River. The East Area, which is the only portion of the Site located in the Borough of Bound Brook, refers to the small triangular portion of the Site located to the east of Interstate-287. The Impoundment 8 Facility, which is designated as a corrective action management unit (CAMU) under the Resource Conservation and Recovery Act (RCRA), is located to the northwest of the Site across Polhemus Lane. The entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility.

Approximately 50% of the North Area was used for production activities over the time the facility was active. Impoundments cover approximately 10 to 15% of the North Area. The remaining 35 to 40% was used for storage of general equipment, raw material and finished product, as well as incidental waste disposal. Approximately 80% of the West, South and East Areas contain impoundments. The remaining 20%, consisting of the East Area and portions of the South and West Areas, continues to be virtually undisturbed. A map of the Site can be found in Figure 2.

The Hill Property, which was formerly part of the Site, consists of 140 acres located northeast of the Site. The Hill Property was separated from the Site and included a research laboratory and administrative buildings. In December 1990 (amended March 1992), a Baseline Site-wide Endangerment Assessment (BEA) Report established that there are no current or future unacceptable risks to human health and the environment associated with the Hill Property. Based on this finding, no remedial action was required other than the implementation of a classification exception area (CEA) and a well restriction area (WRA) for the groundwater, shown on Figure 3.

In June 1999, all manufacturing ceased at the Site. By the end of November 2000, almost all buildings on-site were demolished.

In December 1994, American Home Products Corporation purchased the American Cyanamid Company. In March 2002, American Home Products Corporation changed its name to Wyeth. In October 2009,

Wyeth was purchased by Pfizer Inc. and became a wholly owned subsidiary of Pfizer. Title to the Site property is held by Wyeth Holdings Corporation (Wyeth).

### **SITE HISTORY AND ENFORCEMENT ACTIVITIES**

Preliminary investigations completed in 1981 verified that approximately one-half of the Site was utilized to support manufacturing, waste storage or waste disposal activities, and that contaminated source areas were confined primarily to the North Area and in the on-site waste storage areas (impoundments). Twenty-seven impoundments are believed to have been constructed for disposal purposes. Of the 27, 16 are being addressed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) since they were used for storing by-products of rubber chemical production, dye production and coal tar distillation, as well as for disposal of general plant waste and demolition debris. These impoundments were originally estimated to contain 877,000 tons of waste material. Hence, these impoundments, along with identified areas of contaminated soils, are the primary focus of current remedial activities. Both media have been found to be sources of groundwater contamination. On September 8, 1983, the site was placed on the National Priorities List (NPL).

American Cyanamid entered into an Administrative Consent Order (ACO) with the N.J. Department of Environmental Protection (NJDEP) (referred to as the 1988 NJDEP ACO) in May 1988 to address the 16 impoundments, Site-wide contaminated soils and groundwater. In addition to the regulatory requirements established under the 1988 NJDEP ACO, a New Jersey Pollutant Discharge Elimination System/Discharge to Groundwater (NJPDES/DGW) permit was issued in 1987. This permit required American Cyanamid to conduct extensive groundwater monitoring on a quarterly basis and to continue pumping bedrock production wells, at a minimum rate of 650,000 gallons per day. This action was designed to capture groundwater contamination within the Site boundaries.

In May 1994, American Cyanamid and NJDEP executed an ACO Amendment (1994 NJDEP ACO Amendment) which incorporated the existing groundwater pumping and monitoring requirements of the NJPDES/DGW permit and included additional groundwater monitoring underlying the Impoundment 8 RCRA Facility.

The 16 impoundments being addressed under CERCLA have been

identified using numbers, which include: Impoundments 1, 2, 3, 4, 5, 11, 13, 14, 15, 16, 17, 18, 19, 20, 24 and 26. Due to the volume, complexity and nature of contamination at the Site, all impacted and affected impoundments, Site-wide soils and groundwater were originally separated into seven Operable Units (OUs). A summary of the specific OUs and their status are as follows:

OU1 (Group I): Impoundments 11, 13, 19 and 24

A Corrective Measures Study/Feasibility Study (CMS/FS) was completed for the Group I Impoundments in 1992 and a Record of Decision (ROD) was signed in September 1993. The remedies for Impoundments 11 and 19 were completed in November 1997 and November 1995, respectively. The remedial activities for Impoundments 13 and 24 are being re-evaluated based upon the results of a remedy review report (Impoundment Remedy Appropriateness Evaluation, 2005) and a subsequent Comprehensive Site-wide Feasibility Study (FS) report (2012).

OU2 (Group II): Impoundments 15, 16, 17 and 18

The CMS/FS for Group II Impoundments was completed in November 1993 and a ROD was signed in July 1996. The remediation of Impoundment 18 was completed in April 1998. The remedy for Impoundments 15 and 16 was modified by NJDEP with an Explanation of Significant Differences (ESD) on November 30, 1998. The ESD selected an alternative remedy consisting of recycling of the material (iron oxide) within both impoundments. The recycling started in the spring of 2000 and is ongoing with an expected completion in 20 years. The remedial activities for Impoundment 17 are being re-evaluated based upon the results of a remedy review report (Impoundment Remedy Appropriateness Evaluation, 2005) and a subsequent 2012 Comprehensive Site-wide FS.

OU3 (Group III): Impoundments 1, 2, 3, 4, 5, 14, 20, 26

The CMS/FS for Group III Impoundments was completed in November 1997. A ROD followed in September 1998.

The remedial activities for Impoundments 1 and 2 were never initiated and eventually suspended in 2004. These impoundments are currently being re-evaluated as part of a separate study due to the nature of their contents and their complexity. After a brief pilot test confirmed that the selected 1998 remedy was technically infeasible and could not be performed as originally scoped, remediation of Impoundments 3, 4 and 5 was suspended in

2004 and is being re-evaluated based upon the results of a remedy review report (Impoundment Remedy Appropriateness Evaluation, 2005) and a subsequent Comprehensive Site-wide FS. Impoundments 14 and 20 were remediated under CERCLA pursuant to a 2007 ESD and completed in August 2010. Impoundment 26 was excavated, solidified with cement and placed in the Impoundment 8 Facility. Remediation of Impoundment 26 was completed under CERCLA in May 2002.

#### OU4: Site Soils

A 1992 Surface Soil Remedial/Removal Action Program was completed addressing specific areas of soil contamination that posed a potential risk to worker health and safety. The program addressed several soil areas contaminated with polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) and chromium. The program included excavation and off-site disposal of PCB-contaminated soil, excavation and disposal of PAH-contaminated soil, capping of another PAH-contaminated area, as well as placement of a geotextile, soil and vegetative cover over a chromium-contaminated area. This program, along with plans for an OU4 Surface Soils ROD, was suspended in 2004, re-evaluated as part of the Comprehensive Site-wide FS and included as part of this ROD.

#### OU5: Site Groundwater

In accordance with the NJDEP ACO, a groundwater monitoring program was established and included Site-wide groundwater pumping and monitoring. To control groundwater contamination related to the Site, Wyeth operates bedrock production wells with pumping at a minimum rate of 650,000 gallons per day and monitors groundwater quality on a semi-annual basis. The groundwater monitoring program was re-evaluated as part of the Comprehensive Site-wide FS and is included as part of this ROD. A Site-wide CEA/WRA is currently being developed with NJDEP to restrict potable use of groundwater until groundwater has been restored and chemical-specific ARARs have been met.

#### OU6: Hill Property

The Hill Property was addressed in a July 1996 ROD. This ROD selected a remedy consisting of no further action with monitoring and institutional controls. As a part of the ROD, NJDEP established a CEA/WRA on the Hill property to maintain water use restrictions. The CEA/WRA was subsequently closed in June 2008 after residual groundwater contamination was

recovered. The Hill Property has since been deleted from the NPL on December 29, 1998 and was redeveloped for commercial use (i.e., retail stores, a professional baseball stadium and a commuter/stadium parking lot).

#### OU7: Site-related Wetlands

A Baseline Ecological Risk Assessment (BERA) was completed in January 2005 and a Human Health Risk Assessment (HHRA) for the South and West Areas was completed in December 2006. Site-related wetlands were re-evaluated as part of Site-wide soils in the Site-wide FS.

#### Non-CERCLA Impoundments (RCRA)

Lagoons 6 and 7 and Impoundments 8, 9A and 25 either have been or are currently being addressed under RCRA. In May 1991, Impoundment 8 was developed into a RCRA Subtitle-C landfill, referred to as the Impoundment 8 Facility. The design included a triple liner, leachate detection and collection system and a groundwater monitoring system. As part of the 1998 OU3 ROD, Impoundment 8 was designated as a CAMU in accordance with RCRA regulations. The Impoundment 8 Facility accepts only Site-related materials defined under RCRA Subtitle C landfill requirements. The use of Lagoons 6 and 7 as Treatment/Storage/Disposal facilities under RCRA was discontinued in 1984. All of Lagoon 6 and approximately 95% of Lagoon 7 soils and silts have undergone remediation through excavation/solidification and were placed into the Impoundment 8 Facility. The remainder of the material in Lagoon 7 is in the process of being closed in accordance with RCRA closure plans. Impoundment 9A was closed in-place by installing a double synthetic liner capping system and Impoundment 25 was closed under RCRA in 1988.

#### Comprehensive Site-wide Feasibility Study

In Spring 2004, Wyeth submitted several documents to EPA and NJDEP seeking a suspension of remedial design and remedial action work on the OU3 remedy and proposed to reassess the entire Site through a Comprehensive Site-wide FS. In its proposal, Wyeth stated that the remedy selected for the OU3 impoundments could not be performed as intended based on technical infeasibility. The difficulties mentioned included the technical infeasibility of the selected remedy, the impracticability of containing air emissions within permissible levels, a schedule to complete the actions was estimated at 15

to 20 years and a major cost escalation of over 100% higher than the original estimate provided in the September 1998 ROD. Based on these issues and the belief that previous decisions may also benefit from a comprehensive review, Wyeth proposed to reassess the OU3 remedial action and the other ROD remedies; complete the remedial investigations (RIs)/studies for Site-wide soils, groundwater and wetlands; and evaluate potential future-use plans for the Site. All ongoing remedial activities at the Site (with the exception of other ongoing investigation and remediation activities associated with Impoundments 14, 15, 16 and 20 and the bedrock groundwater capture system) were suspended pending the completion of a remedy review report to evaluate the appropriateness of the remaining impoundment remedial programs. Based upon this report, referred to as the 2005 Impoundment Remedy Appropriateness Evaluation, it was recommended that a Comprehensive Site-wide FS be conducted. The objective of the Site-wide FS, completed in February 2012, was to develop and evaluate remedial alternatives in a comprehensive manner.

#### Impoundment 1 and 2 Focused Feasibility Study (FFS)

In 2009, both EPA and NJDEP agreed to separate Impoundments 1 and 2 from the Site-wide FS and Site-wide remedy decision. Due to the highly complex nature of the contaminants within Impoundments 1 and 2 and their proximity to the Raritan River, a FFS is currently being performed for these impoundments with its own specific remedy to follow.

#### Summary of Impoundment Status

Of the 16 impoundments addressed under CERCLA, Impoundments 3, 4, 5, 13, 17 and 24 were re-evaluated as part of the 2012 Comprehensive Site-wide FS. Impoundments 1 and 2 are being re-evaluated as part of an ongoing FFS due to their complexity, location and volume. Impoundments 15 and 16 are currently undergoing remediation. Impoundments 11, 14, 18, 19, 20 and 26 were remediated in accordance with CERCLA closure plans.

Impoundments 9, 10 and 12 were never used for waste disposal. Impoundment 21 was used to contain emergency fire water and Impoundments 22 and 23 were used to contain river silt from the facility's former river water settling operation. Lagoon 6 and Impoundments 8, 9A and 25 were closed and classified as Treatment/Storage/Disposal facilities pursuant to regulations issued under RCRA. Lagoon 7 is in the process of being closed in accordance with RCRA closure plans.



## Removal Action on Groundwater Discharges

In December 2010, Wyeth performed a Site-wide inspection of the facility to note any environmental-related concerns. As a result, Wyeth observed groundwater discharge (referred to as seeps) from the Site banks in the vicinity of Impoundments 1 and 2 into the Raritan River. After sampling was performed and preliminary laboratory analytical results were reported on January 6, 2011, it was determined that the seeps contained up to 20,000 parts per billion of benzene.

In February 2011, EPA and Wyeth developed an Interim Mitigation System plan to immediately address the seeps while a longer term solution could be discussed, planned and implemented. This plan required the installation of activated carbon-filled sand bags along the river at the seep discharge points.

For the long-term solution, Wyeth signed an Administrative Settlement Agreement and Order on Consent (AOC) with EPA on July 19, 2011 requiring the design and construction of a groundwater removal system to intercept and capture the releases of groundwater originating from the Site into the Raritan River. The groundwater capture system includes a collection trench, a containment wall and an interim groundwater treatment plant. This system was completed in May 2012 and is currently operating. The treated water is discharged to Cuckel's Brook (formerly referred to as Cuckhold's Brook) under a New Jersey Pollution Discharge Elimination System/Discharge to Surface Water (NJPDDES/DSW) Permit Equivalency.

## **HIGHLIGHTS OF COMMUNITY PARTICIPATION**

EPA has encouraged and received public involvement throughout the history of the Site. A Community Involvement Plan was established in 1988 by NJDEP and implemented for a series of RODs in the 1990s. An updated Community Involvement Plan was established in January 2011 to serve as a guide for Pfizer and EPA in sharing information and obtaining public input on the Site-wide remedy. In 1992, EPA awarded a technical assistant grant (TAG) to CRISIS, Inc. This grant provides funding for activities that help a community participate in decision making at eligible Superfund sites. Since that time, CRISIS has been the primary community-based group serving as liaison between the NJDEP, EPA and the community. CRISIS has consistently participated in monthly project calls and served in a technical review capacity on behalf of the community.

Documents such as RI reports, the Site-wide FS and both the Human Health and Ecological Risk Assessment reports, which describe the nature and extent of contamination, identify Site-related risks to public health and the environment and evaluate remedial alternatives to address the identified contamination were made available to the public in information repositories maintained at the Superfund Records Center in the EPA Region 2 offices at 290 Broadway, New York, New York, the NJDEP Office of Records at 401 East State Street, Trenton, New Jersey and the Bridgewater Township Library at 1 Vogt Drive, Bridgewater, New Jersey.

In addition, the Proposed Plan (see Attachment A of Appendix V), which identifies EPA's preferred remedy and the basis for that preference is also included in the repositories.

On February 16, 2012, a notice of the commencement of the public comment period was published in the Courier News, a local newspaper (see Attachment B of Appendix V). The notice also informed the public of a public meeting date (held on March 8, 2012), a description of EPA's preferred remedy and the availability of the above referenced documents. Due to several requests for additional time to review EPA's preferred remedy, the public comment period was extended from 45 days to 90 days, ending May 15, 2012.

As mentioned earlier, the public meeting was held to present EPA's preferred remedy and to solicit input from the public about the Site, the remedial alternatives and the proposed remedy. The meeting was well attended by local residents, local and regional stakeholders, business owners, government officials and members of the responsible party's project team and their consultants.

EPA has received written comments along with a number of oral comments from the public meeting. Responses to the comments are included in the Responsiveness Summary (see Appendix V). The transcript and written public comments are found in Attachment C and Attachment D of Appendix V, respectively.

#### **SCOPE AND ROLE OF OPERABLE UNIT 04 REMEDY**

Due to the volume, complexity and nature of contamination at the Site, impoundments, Site-wide soils and groundwater were originally separated into seven OUs:

- OU1: Impoundments 11, 13, 19 and 24
- OU2: Impoundments 15, 16, 17 and 18
- OU3: Impoundments 1, 2, 3, 4, 5, 14, 20 and 26
- OU4: Site Soils
- OU5: Site Groundwater
- OU6: Hill Property
- OU7: Site-related Wetlands

RODs have been signed for OU1 (9/28/93), OU2 (7/12/96), OU3 (9/28/98) and OU6 (7/12/96).

However, in June 2004, all ongoing remedial activities at the Site, with the exception of other ongoing investigation and remediation activities associated with Impoundments 14, 15, 16 and 20 and the bedrock groundwater capture system, were suspended pending the completion of a remedy review report to evaluate the appropriateness of the remaining impoundment remedial programs. Based upon this report, referred to as the 2005 Impoundment Remedy Appropriateness Evaluation, it was recommended that a Comprehensive Site-wide FS be conducted.

Wyeth undertook completion of a Comprehensive Site-wide FS designed to address all remaining contamination within the various media on-site through a single comprehensive program.

The remedy presented in this ROD combines all remaining active OUs (OU1-OU5, OU 7) and is now being addressed under the existing OU4, which is referred to as the Site-wide remedy. Impoundments 3, 4, 5, 13, 17 and 24, as well as Site-wide soils and groundwater are being addressed as part of the Site-wide remedy under OU4. As mentioned earlier, Impoundments 1 and 2 are being addressed separately under a recently created OU8 due to their complexity and volume.

The groundwater seeps into the Raritan River in the vicinity of Impoundments 1 and 2 are currently being addressed through a Removal Action and will be incorporated into the Site-wide remedy under OU4.

## **SUMMARY OF SITE CHARACTERISTICS**

### **Overview**

The area surrounding the Site is an urban mixture of industrial and residential uses. The 435-acre Site (currently zoned for industrial use) is fenced and covered with a mixture of

vegetation and asphalt patches. About 100 acres of the Site are comprised of waste disposal areas and the remainder of the Site consists of soils and wetland areas.

The Site is generally bounded by NJ Transit and Main Street to the north, the Raritan River to the west and south and Interstate 287 to the east. In addition, a small parcel of land is situated between the Conrail freight rail line and the Raritan River in the Borough of Bound Brook. There are several commercial and industrial properties neighboring the Site, such as a tire manufacturing company, a local sewerage authority, a public water utility, a professional baseball stadium and an adult daycare center.

For the most part, the surrounding community is serviced by a public water supply, which is not connected to the contaminated groundwater beneath the Site. Private wells are utilized by some residents as a potable water supply in the communities of Franklin Township and South Bound Brook, which are located south of the Raritan River.

## **Geology and Hydrology**

### Geology

The Site is situated in the New Jersey Piedmont geomorphologic province, which is an area of rolling, low-lying terrain interrupted only by the Watchung Mountains, about 1.5 miles to the north. Overall, the Site is generally flat, with a natural slope to the south-southeast toward the Raritan River. The following paragraphs discuss the generalized stratigraphy of the Site.

#### *Surface geology*

The natural soils of the Site are a mixture of sand, silt and clay (loam). Man-made fill/general solid wastes and disturbed soil and gravel also exist at ground surface in portions of the Site.

#### *Geology of unconsolidated deposits*

The general area of and around the Site is covered by naturally occurring unconsolidated sediments ranging in thickness from 5 to 30 feet. These sediments are either the weathering product (residual soils) of the underlying bedrock or they are fluvial deposits related to the adjacent Raritan River.

The unconsolidated deposits are composed of a silt and clay sequence, a sand and gravel sequence and a weathered shale layer. The silt and clay sequence acts as a hydraulic barrier, which can prevent the vertical migration of groundwater due to its low permeability. The sand and gravel sequence underlies the silt and clay sequence, but it also penetrates upwards into the silt and clay sequence in some locations. The weathered shale layer underlies the sand and gravel sequence. The weathered shale layer was created by weathering of bedrock and consists of shale and siltstone fragments in a clay matrix. This layer acts as a low permeability boundary between the overlying deposits and the underlying bedrock. When viewing the overburden deposits from a Site-wide perspective, it can be seen that the entire sequence of overburden deposits (silt and clay, sand and gravel and residual soil) tend to be present across the Site, although the silt and clay layer is not continuous across the Site.

### *Bedrock geology*

The unconsolidated deposits are underlain by bedrock. This bedrock layer is part of the Passaic Formation, which consists of a series of reddish-brown shale, siltstone and fine-grained sandstone units. The bedrock contains highly fractured zones which allow vertical groundwater flow. The bedrock contains discrete bedding plane fractures which allow horizontal groundwater flow. These bedrock fractures control the composition and distribution of the overlying water-bearing units and the groundwater flow regime in the overburden aquifer system.

### Hydrogeology

A principal objective for understanding the Site hydrogeology is to understand the potential for movement of Site contaminants from source areas. The chemistry data and interpreted distribution of key marker compounds indicates that there are a few reasonably well-defined areas of contamination in overburden groundwater as opposed to one or more gradational plumes. This distribution is likely caused by the generally downward hydraulic gradients between the overburden and the bedrock, which is significantly influenced by the pumping of the bedrock extraction wells (PW-2 and PW-3). The overall transport of overburden impacts is horizontal, likely within the sand and gravel unit at the base of the overburden, until a hydraulic connection is made between overburden and bedrock. Across most of the North Area, impacts are further transported in the

bedrock co-located with structural bedding plains and migrate within the overall capture of the groundwater collection system.

### **Impoundments, Site-wide Soils and Groundwater Characteristics**

Based on information provided in previous studies and reports, Site areas of concern include: impoundment contents, North Area soils, South Area soils, West Area soils and impacted groundwater.

#### Impoundment Contents

The locations of the impoundments are shown on Figure 2. Out of the 27 impoundments constructed for waste storage or disposal, 16 were determined to potentially contribute to groundwater contamination and threaten human health and the environment. For a more comprehensive description and the current status of the impoundments, see Tables 1A-1F. These 16 impoundments are separated into previously remediated impoundments and remaining impoundments and are discussed as follows:

#### *Previously Remediated Impoundments*

Numerous impoundments have been remediated or partially remediated. The total area remediated (Lagoons 6 and 7; Impoundments 8 and 9A; Impoundments 11, 14, 18, 19, 20, 25 and 26; and portions of Impoundments 1, 2, 4 and 5) is approximately 79.8 acres, with an approximate volume of 1,089,100 cubic yards (CY) of waste material addressed. Of this amount, approximately 50,000 CY consisted of the highly mobile and toxic material from Impoundments 1, 2, 4 and 5. This material, which was considered to meet the definition of principal threat wastes (as defined by EPA under CERCLA), was treated off-site for energy recovery. Tables 1A-1F also provide the areas and volumes remediated by impoundment.

Impoundments 15 and 16 are currently undergoing remediation albeit on a slower pace. The ongoing remedy for these impoundments is considered appropriate and consists of recycling/reuse of iron oxide. Therefore, Impoundment 15 and 16 are not included as part of this Site-wide remedy.

#### *Remaining Impoundments*

The total area of the impoundments yet to be remediated (Impoundments 1, 2, 3, 4, 5, 13, 17 and 24) is approximately 27.7 acres, with an approximate volume of 387,700 CY. As

previously stated, Tables 1A-1F show the contaminants of concern (COCs) per impoundment. As previously noted, Impoundments 1 and 2 are being addressed separately under OU8.

Based on historical analytical data and information provided in previous studies and reports, the waste material in the remaining impoundments will generally require some form of control to eliminate direct contact exposures and migration to groundwater. Two additional exposure routes, inhalation or ingestion of dust or vapors and physical movement of the materials beyond their location and subsequent contact with receptors, must also be addressed.

### Site-wide Soils

The term "Site-wide soils" constitutes media that do not include impoundment contents or groundwater. The estimated total area of impacted surface and subsurface soils being addressed is approximately 284 acres; 194 acres in the North Area and 90 acres in the South and West Areas, with a total volume of approximately 3,339,000 CY. The East Area is a 10-acre parcel of land located east of I-287 in Bound Brook, NJ. These areas are discussed in further detail below.

#### *North Area Soils*

Approximately 50% of the North Area was used for active manufacturing and production operations. The remainder of the North Area was used for waste disposal, as well as for equipment and material storage. Soil impacts within the North Area are widespread and include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and inorganics with no discernable patterns or distinct areas of specific contamination.

#### *South and West Area Soils*

Historical records indicate that manufacturing activities were never conducted within the South or West Areas. Disposal of wastes was limited to Impoundments 1, 2, 13, 15, 16, 17, 18, 24 and the former drying bed area. It is suspected that the impacted soils in the South and West Areas are likely the result of incidental contamination, since they also have no discernible or specific sources.

## *East Area Soils*

Historical records, aerial photographs and sampling efforts indicate that manufacturing and waste disposal activities were not conducted in the East Area.

## Groundwater

For the past 60 years, production operations at the Site withdrew water from the on-site bedrock production wells for use as noncontact cooling water. The 1982 and 1988 NJDEP ACOs (as amended in 1994), require the current average withdrawal of over 650,000 gallons per day which results in groundwater flow inward from the perimeter of the Site toward the pumping wells. This system contains the existing groundwater contamination within the North Area of the Site. Recovered groundwater is discharged to the adjacent Somerset-Raritan Valley Sewerage Authority (SRVSA) wastewater facility for subsequent treatment and eventual release into Cuckel's Brook.

Site groundwater quality is currently monitored as part of a semi-annual monitoring program. Historical data is generally clustered around the impoundments, because this is where much of the past work at the Site was focused. In November 2005, as part of the groundwater RI, a Site-wide round of groundwater samples was collected with the objective of obtaining a Site-wide understanding of groundwater quality conditions. The results of this sampling effort indicated that VOCs, SVOCs, metals were present above state and federal standards in both the overburden and bedrock aquifers.

As noted above, the bedrock groundwater recovery system hydraulically controls bedrock groundwater in the North Area. Bedrock groundwater in the South and West Areas is not hydraulically controlled by the pumping of the production wells and eventually discharges to the Raritan River. Overburden groundwater in the vicinity of the bedrock groundwater recovery system migrates vertically due to induced hydraulic gradients, while overburden groundwater migrates horizontally due to natural hydraulic gradients near Cuckel's Brook and the Raritan River. Groundwater elevation contour maps for the overburden and bedrock aquifers are shown in Figures 4 and 5, respectively.

## **Investigation Summary**

The impoundments and contaminated soils have been the primary focus of the Site remedial activities since they have been found



to be the contributing sources of groundwater contamination. An Impoundment Characterization Program was completed in 1990, which was intended to fulfill the requirements of an RI for the impoundments. A soils RI was completed in May 1992 to characterize and delineate contaminated soils. Subsequent to the Impoundment Characterization Program, three CMS/FS reports were completed for the three impoundment groups between 1992 and 1997. RODs were issued for these impoundment groups consistent with the remedial alternatives recommended in the CMS/FS reports and remedial actions were completed in accordance with their respective RODs for Impoundments 11, 14, 18, 19, 20 and 26.

All remedial activities were suspended in 2004 pending the completion of a remedy review report, with the exception of other ongoing investigation and remediation activities associated with Impoundments 14, 15, 16, 20 and continued bedrock groundwater extraction and treatment. The remedy review report, known as the Impoundment Remedy Appropriateness Evaluation (July 2005) concluded that the remedies selected for Impoundments 1, 2, 3, 4, 5, 13, 17 and 24 were inappropriate, as previously discussed.

In 2005, a Data Adequacy Review (DAR) was completed to assess the adequacy of existing soil and groundwater data assembled through previous investigatory and monitoring programs at the Site. The DAR Report concluded that there was sufficient existing data related to Site soils and impoundment materials, but additional groundwater data was necessary to adequately characterize groundwater for the evaluation of remedial alternatives. Following the completion of a groundwater RI report in February 2006, NJDEP requested that additional monitoring wells be installed and additional data be collected. In February 2008, a supplemental groundwater RI report was issued by Wyeth and approved by NJDEP. The Report concluded that sufficient groundwater data existed for the completion of the Comprehensive Site-wide FS.

## **NATURE AND EXTENT OF CONTAMINATION**

### Impoundment Contents

Of the six impoundments (3, 4, 5, 13, 17 and 24) addressed in this ROD, there are two general types of impoundments being addressed:

- Those used to dispose mainly process wastes.
- Those used to dispose wastewater sludge.

Impoundments 3, 4 and 5 were used for mainly process waste disposal, and Impoundments 13, 17 and 24 were used for disposal of wastewater sludge. Impoundments 3, 4, 5, 13, 17 and 24 contain elevated levels of VOCs, such as benzene, chlorobenzene, toluene and xylene. VOCs contained in impoundments may be released to the atmosphere through volatilization from impoundment solids or impoundment water covers. These six impoundments have also been found to contain SVOCs, such as naphthalene, 2-methylnaphthalene, nitrobenzene, n-Nitrosodiphenylamine and 1,2-dichlorobenzene, as well as inorganics, such as antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and vanadium. In general, the concentrations of VOCs and SVOCs in Impoundments 3, 4 and 5 are significantly higher than in Impoundments 13, 17 and 24. Table 2A presents the COCs for the impoundments addressed in this ROD, as well as their mean, minimum and maximum concentrations for each impoundment. The information in this table is based upon the data contained in the Impoundment Characterization Program Report (1990), as well as additional information obtained since 1990.

The physical characteristics of the impoundments do not allow for the contents of these impoundments to be transported by surface water runoff, thus significant overland transport of the chemicals of interest with stormwater runoff does not occur. VOCs, SVOCs and inorganics have also been found in soils, as well as both the overburden and bedrock groundwater aquifers.

#### Site-wide Soils

As mentioned earlier, past leaks and spills have generally impacted soils in the eastern portion of the North Area, as well as some soil areas in the western portion of the North Area. Site-wide soils in the North Area contain VOCs, SVOCs and inorganics. North Area soils contain elevated levels of VOCs, such as benzene, chlorobenzene, toluene and xylene; SVOCs, such as naphthalene, nitrobenzene, benzo(a)anthracene, 1,2-dichlorobenzene and Total PCBs; and inorganics, such as antimony, arsenic, chromium, cobalt, cyanide and mercury. Table 2B presents the COCs for North Area soils, as well as the frequency of their detection and the mean, minimum and maximum concentrations for each COC.

As discussed previously, it is suspected that the impacted soils in the South and West Areas are likely the result of incidental contamination, since they also have no discernible or specific

sources. Site-wide soils in the South and West Areas contain VOCs, SVOCs and inorganics. South and West Area soils contain elevated levels of VOCs, such as benzene, chlorobenzene, toluene and xylene; SVOCs, such as naphthalene, nitrobenzene, n-Nitrosodiphenylamine and 1,2-dichlorobenzene; and inorganics, such as chromium, lead and mercury. Table 2C present the COCs for South and West Area soils, as well as the frequency of their detection and the mean, minimum and maximum concentrations for each COC.

Chemical migration from both impoundments and soils to the groundwater is a primary transport mechanism at the Site. Dust generation, volatilization and surface water runoff are considered secondary transport mechanisms at the Site. Chemicals such as PAHs, PCBs or most heavy metals have an affinity to bind to material with high organic carbon content such as certain types of soil or sediment. Substances retained in soils are exposed to additional transport mechanisms. These include overland transport with stormwater runoff, atmospheric transport with dusts, biodegradation and bioaccumulation in soil biota.

#### Groundwater

Organic and inorganic chemical contaminants detected above New Jersey groundwater quality standards (GWQS) are present in North Area bedrock groundwater, as well as South and West Area bedrock groundwater. As indicated earlier, impoundments and Site-wide soils act as the potential sources of contamination to groundwater.

North Area bedrock groundwater is captured by the bedrock groundwater recovery system and, therefore, is controlled and limits off-site migration. Bedrock groundwater in the South and West Areas is outside the zone of influence of the bedrock groundwater extraction system. Therefore, bedrock groundwater in the South and West Areas is not captured by the pumping wells and eventually discharges to the Raritan River. Contaminants present in the bedrock groundwater in these areas also discharge to the Raritan River. While bedrock groundwater concentrations in the South and West Areas are found above NJ GWQS, concentrations in these areas are generally lower than those detected in overburden groundwater. The highest bedrock groundwater concentrations in the South and West Areas are generally found in the vicinity of Impoundments 1 and 2. An evaluation was conducted to assess the potential for bedrock groundwater to flow south of the Raritan River into the communities of Franklin Township and South Bound Brook. Based

upon both regional and local groundwater characteristics, this evaluation concluded that a complete pathway does not exist for the transport of Site-related contaminants beyond the Raritan River to the south.

Under natural conditions, overburden groundwater at the Site flows toward the Raritan River and its tributaries; however, previous and current data indicates that overburden groundwater over most of the Site, particularly in the North Area, migrates vertically into the bedrock aquifer as a result of the bedrock pumping system.

The majority of North Area overburden groundwater migrates vertically into the bedrock aquifer due to induced hydraulic gradients and is eventually captured by the bedrock groundwater system. This capture is strongest in the northern portion of the North Area and weakens to the south. The bedrock groundwater extraction system has resulted in local areas with lower water table surface elevations, referred to as depressions, which indicate that groundwater flows downward into the bedrock aquifer at these locations. The bedrock system has also resulted in areas with elevated water table levels, referred to as mounds, specifically located in the northern and southern parts of the Site. The water table mounding directly influences the overburden groundwater by generating a flow gradient towards the depressions thereby extending the overall capture of overburden groundwater by the bedrock extraction wells. Any contaminants present in North Area overburden groundwater, therefore, tend to be drawn down into the bedrock aquifer and are eventually captured by the bedrock extraction system. Although portions of overburden groundwater in the North Area are not captured by the bedrock pumping system and discharge to Cuckel's Brook, the results of the overburden groundwater investigation in the North Area indicated no significant impacts to Cuckel's Brook.

Overburden groundwater in the South and West Areas is not captured by the bedrock pumping system and eventually discharges to the Raritan River. As discussed later on, the 2005 BERA evaluated the potential exposures to surface water and sediment in Cuckel's Brook and the Raritan River and concluded that the level of potential significant impact of Site-related COCs on ecological receptors is likely to be low. As discussed previously, the groundwater in the vicinity of Impoundments 1 and 2 is currently being addressed as part of the Removal Action and will be incorporated as part of the Site-wide remedy.

In both the overburden and bedrock aquifers, the most frequently

found VOCs above NJ GWQS and federal maximum contaminant levels (MCLs) are benzene, chlorobenzene, toluene and xylene. The most commonly found SVOCs above the GWQS or MCLs are 1,2-dichlorobenzene and 1,4-dichlorobenzene. In both the overburden and bedrock aquifers, inorganic contaminants found at concentrations above either the GWQS or MCLs included manganese, iron and arsenic. Other inorganic contaminants were occasionally found above the standards, although these were typically at concentrations close to the GWQS. Tables 2D and 2E present the COCs for overburden and bedrock groundwater, as well as the frequency of their detection and the mean, minimum and maximum concentrations for each COC.

### **CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES**

The title to the American Cyanamid Site property is held by Wyeth Holdings Corporation, a wholly owned subsidiary of Pfizer, Inc. The Site property lies within the M-2 General Manufacturing Zone. The current owner has discussed a number of potential future uses for portions of the Site, ranging from light industrial use to recreational use. The reuse of any portion of the Site will require approval from EPA. Institutional controls will be implemented to ensure the protectiveness of the remedy and its compatibility with future reuse.

The surrounding community located north of the Raritan River is serviced by a public water supply that is not connected to the contaminated groundwater beneath the Site. Private wells are utilized by some residents as a potable water supply in the communities of Franklin Township and South Bound Brook, which are located south of the Raritan River. An evaluation was conducted to assess the potential for groundwater to flow south of the Raritan River into these communities. Based upon both regional and local groundwater characteristics, this evaluation concluded that a complete pathway does not exist for the transport of Site-related contaminants beyond the Raritan River to the south. Groundwater is designated by the State as a Class IIA aquifer which requires it to be considered as a future potable water supply. Therefore, source control and eventual restoration of groundwater quality are important objectives of the selected remedy.

## SUMMARY OF SITE RISKS

### Baseline Risk Assessment

As part of the Site investigation process, a baseline risk assessment was conducted to determine the current and future effects of contaminants on human health and the environment.

A baseline risk assessment is an analysis of the potential adverse human health and ecological effects of releases of hazardous substances from a Site in the absence of any actions or controls to mitigate such releases, under current and future land, groundwater, surface water and sediment uses. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed by the remedial action.

### Human Health Risk Assessment (HHRA)

The potential noncarcinogenic hazards and carcinogenic risks associated with potential exposures to the impoundments, surface soil and groundwater were evaluated in the BEA (BB&L, 1992) for the North Area and the HHRA (O'Brien & Gere, 2006) for the South and West Areas. The 1992 BEA and the 2006 HHRA were approved by NJDEP. EPA Region 2 prepared a streamlined HHRA in February, 2010 which evaluated additional pathways.

The objective of the streamlined HHRA was to determine the cancer risks and noncancer hazards associated with exposure to contaminated surface soil (North Area), groundwater (overburden and bedrock) and the impoundments. Since the current zoning of the Site is industrial, the streamlined HHRA evaluated the Site worker's exposure to surface soil and the impoundments, as well as the trespasser's exposure to surface soil. The groundwater is a designated potable water supply; therefore, the residential exposure pathway was also evaluated.

The maximum detected concentrations in each medium were compared to their respective regional screening level (RSLs). The surface soil RSLs are based on a worker's direct exposure (via ingestion, inhalation and dermal contact) while working at the Site (25 years). Since the groundwater at the Site is classified by NJDEP as a potable water supply, the RSLs represent a resident's exposure to groundwater contamination over the time reasonably expected for a resident to live in an area.

Tables 3A-3C provide a summary of the COCs and medium-specific

exposure point concentrations for impoundments, North Area soils and both overburden and bedrock groundwater. Tables 4A-4D show the RSLs for impoundments, North Area soils and groundwater. Tables 5A-5C and Tables 6A-6C provide a summary of the noncarcinogenic and carcinogenic risk characterization for impoundments, North Area soils and groundwater.

In general, the industrial worker's exposure to the impoundments exceeded EPA's acceptable risk range of  $10^{-4}$  to  $10^{-6}$  and NJDEP's acceptable cancer risk level of  $10^{-6}$ , as well as the noncancer hazard threshold of 1. The streamlined HHRA indicates that the total noncarcinogenic risk for the commercial/industrial worker's exposure to impoundments contents is between 1.3 and 280 with nitrobenzene as the primary risk driver. The total carcinogenic risk for an industrial/commercial worker's exposure to impoundment contents varied from  $1.5 \times 10^{-5}$  to  $1.3 \times 10^{-2}$  with benzene, naphthalene and n-Nitrosodiphenylamine as the primary risk drivers. It should be noted that the risks and hazards for this receptor's exposure to the impoundments are underestimated since a limited number of chemicals were included in the risk calculation. Due to the high concentrations of several contaminants, other Site-related contaminants may not have been detected due to high method detection limits. Therefore, the risk drivers are not limited to only the contaminants listed above. However, it should be noted that any other risk drivers at the Site are co-located with the risk drivers identified in the risk calculations.

For exposure to North Area surface soil, the acceptable risk range and the noncancer hazard threshold of 1 were exceeded for both the industrial worker and the trespasser. The total noncarcinogenic hazard index for the commercial/industrial worker's exposure to North Area surface soils is 170, with antimony and cobalt as the primary risk drivers. The total noncarcinogenic hazard index for the trespasser's exposure to North Area surface soils is 1000, with cobalt, chromium VI and antimony as the primary risk drivers. The total carcinogenic risk is  $3.2 \times 10^{-3}$  for the commercial/industrial worker's exposure to surface soils and the primary risk drivers are chromium VI, Total PCBs, benzo(a)anthracene, benzo(a)pyrene and arsenic. The total carcinogenic risk for the trespasser's exposure to North Area surface soils is  $3.7 \times 10^{-4}$  with Total PCBs, benzo(a)anthracene and benzo(a)pyrene as the primary risk drivers.

The cancer risks and noncancer hazards associated with a resident's exposure to groundwater exceeded the acceptable risk

range and the noncancer threshold of 1. The streamlined HHRA indicates that the hazard index for a resident's exposure to bedrock groundwater is 14, while the hazard index for a resident's exposure to overburden groundwater is 160. The primary risk drivers in bedrock groundwater are 1,2,4-trichlorobenzene and chlorobenzene, while the primary risk drivers in overburden groundwater are aniline and chlorobenzene. The total carcinogenic risk for a resident's exposure to bedrock groundwater is  $1.1 \times 10^{-3}$ , while the total carcinogenic risk for a resident's exposure to overburden groundwater is  $1.0 \times 10^{-2}$ . The primary risk drivers in the bedrock groundwater are benzene, tetrachloroethylene, nitrobenzene, arsenic, benzo(a)pyrene and 1,4-dichlorobenzene. The primary risk drivers in the overburden groundwater are naphthalene, benzene, arsenic, 1,2-dichlorobenzene, 1,4-dichlorobenzene, chloroform, nitrobenzene and tetrachloroethylene.

It should be noted that other media (sediment and surface water) were not evaluated as part of the streamlined HHRA, which could underestimate the cancer risks and noncancer hazards. Overall, the streamlined risk assessment indicates that exposure to Site-related contamination results in an excess lifetime cancer risk that exceeds EPA's target risk range of  $10^{-4}$  to  $10^{-6}$ , as well as NJDEP's acceptable cancer risk level of  $10^{-6}$ . Therefore, Site-related contamination poses an unacceptable human health risk to current and potential future receptors.

### Ecological Risk Assessments

Ecological risks at the Site were addressed in two documents: the BEA approved by NJDEP and EPA in 1992 and the BERA in 2005. The Qualitative Ecological Assessment section of the BEA included the results of a Site-wide habitat survey, evidence from direct field observations and a Natural Heritage Data Base (NJDEP, 1991) search. The BEA indicated that the on-site habitat does not support threatened or endangered species. The BERA identified potential risks to ecological receptors from exposure to soils in an isolated portion of the West Area and from exposure to sediment and surface water in Cuckel's Brook. Potential risks to ecological receptors from exposure to Raritan River sediment and/or surface water were low. Groundwater discharge mass loading calculations suggest that exposure to concentrations of Site chemicals of interest resulting from overburden groundwater discharge is unlikely to affect the health and diversity of aquatic biota in the Raritan River.



Because the ecological risk associated with locations outside of the North Area had not been previously studied, the 2005 BERA evaluated the potential exposures for soils in the South and West Areas, as well as surface water and sediment in Cuckel's Brook and the Raritan River. Although tissue concentrations of contaminants in small mammals, invertebrates and vegetation were similar to those detected in reference samples, modeling indicated potential risk to some receptors from exposure to contaminants, primarily metals, in soils in an isolated cattail bank area of the West Area. Sediment toxicity was observed throughout Cuckel's Brook, impaired benthic communities were identified throughout the brook and concentrations of some metals were slightly above screening criteria in fish tissue. Due to the limited areal extent of contamination in the West Area and the physical limitations to habitat use in Cuckel's Brook, the BERA concluded that the level of potential significant impact of Site-related COCs on ecological receptors is likely to be low.

Impoundments 13, 17 and 24 were not included in either the 1992 BEA or the 2005 BERA because the contents of these impoundments were scheduled to be remediated under the OU1 and OU2 RODs. These impoundments will be the subject of an ecological risk assessment performed during the remedial design. As stated previously, the conclusions of this ecological risk assessment will influence how the contents of Impoundments 13, 17 and 24 will be addressed during the remedial action.

### Conclusion

Based upon the results of the risk assessments conducted to date, EPA has determined that actual or threatened releases of hazardous substances from the Site, if not addressed by the preferred alternative or one of the other active measures considered, may present a current or potential threat to human health and the environment.

### **REMEDIAL ACTION OBJECTIVES**

The following remedial action objectives (RAOs) address the human health risks and environmental concerns at the American Cyanamid Site. The RAOs are organized into three categories: principal threat waste, soil/impoundment material and groundwater.

**Principal Threat Waste:**

- Remove or treat material that meets the definition of principal threat waste, to the extent practical, and
- Prevent current or potential future migration of material that meets the definition of principal threat waste from the Site that would result in direct contact or inhalation exposure, to the extent practicable.

**Soil/Impoundment Material:**

- Prevent or minimize human and ecological exposure to contaminants in soils and impoundment materials at levels above relevant risk-based remediation criteria, and
- Prevent or minimize sources of groundwater impacts (*i.e.*, reduce chemical loadings to groundwater) resulting in long-term improvement of groundwater quality and eventual achievement of applicable regulatory standards.

**Groundwater:**

- Restore, as practicable, the overburden and bedrock aquifers within the area of attainment to its expected beneficial use and to concentrations below the more stringent of federal MCLs and NJ GWQS within a reasonable period, and
- Eliminate the migration of contaminants exceeding the more stringent of federal MCLs and NJ GWQS in the overburden and bedrock aquifers beyond the point of compliance through a combination of source actions and hydraulic controls to the extent practicable.

Note: Consistent with EPA Guidance (OSWER Directive 9283.1-2), the area of attainment includes the entire contaminant plume and the point of compliance is throughout the contaminant plume.

**REMEDIATION GOALS**

To meet the RAOs defined above, EPA has identified remediation goals to aid in defining the extent of contaminated media requiring remedial action. In general, remediation goals establish media-specific concentrations of Site contaminants that will pose no unacceptable risk to human health and the environment. Remediation goals have also been developed to establish criteria to define the source areas deemed principal

threats for the Site, areas for which EPA has concluded treatment should be considered as part of the remedy.

In addition, to develop remedial alternatives for the Site, impacted media are characterized based on the actions required to minimize potential exposures to human and ecological receptors.

These potential exposures consist of:

- Direct contact with impacted media and their contaminants (referred to as "direct contact control")
- Inhalation or ingestion of impacted media or their contaminants, including those that emit dust or vapors at unacceptable levels (referred to as "vapor control" [airborne contaminants])
- Physical movement of media beyond their containment areas that could result in contact by receptors (referred to as "movement control")

Likewise, potential adverse ecological impacts resulting from the remedial alternatives need to be assessed. Based on the data collected to date, impoundment contents, soils and groundwater will require some form of control to address the potential exposure pathways. Addressing these exposure routes by providing direct contact, vapor and movement control, as appropriate, will result in applying different remedial approaches across the Site.

Below is a summary of the remediation goals for source areas; most notably the impoundments as well as some areas within the North Area soils, South and West Area soils and groundwater established in the Site-wide FS.

Remediation goals for source areas, Site-wide soils and groundwater are presented in Tables 7A-7D.

#### Source Area Remediation Goals

Source Area Remediation Goals were developed for areas requiring movement control and vapor control. Numerical criteria were developed to aid in defining the extent of contaminated media requiring movement control. The visual observation of tarry substances will also be utilized to identify areas requiring movement control, regardless of whether these tarry substances

exceed the numerical criteria.

After reviewing the previous RIs, 2006 HHRA and the Site-wide FS, EPA has identified that the sludges and tarry substances in Impoundments 3, 4 and 5 require a remedy for movement and vapor control. Additionally, some soils within the North Area will also require movement control. A portion of the former drying bed in the South Area was also identified as requiring movement control. Pre-design investigations will be conducted to confirm the identified areas and further delineate areas containing principal threat waste.

#### Site-wide Soil Remediation Goals

Site-wide soil Remediation Goals were developed for areas requiring direct contact and, in some select areas, vapor control. Risk-based soil remediation goals were developed based on the potential exposure risks for ingestion, dermal contact and inhalation human health exposure pathways. Soil remediation goals were selected based upon consideration of these risk-based concentrations and promulgated NJDEP nonresidential direct contact soil remediation standards. NJDEP impact-to-groundwater soil screening criteria were also evaluated as "to-be-considered" (TBC) criteria.

Soils that exceed the soil remediation goal values, but do not constitute source areas, can generally be managed in place with engineering controls (capping) and proper land-use restrictions (institutional controls). As described earlier, both soils and impoundment contents in the North Area have concentrations that warrant the limiting of direct contact. This includes soils and impoundment contents in the entire North Area, with the exception of soils underneath Impoundments 14, 21 and 26, which have either never been used for waste disposal or were previously remediated. Existing data also indicates that some form of direct contact control is warranted in portions of the South and West Areas. This includes Impoundments 13, 17 and 24, but not the impoundments that were never used for waste disposal (9, 10, 12, 21, 22, 23), were previously remediated (11, 18, 19 and Lagoon 6), are in the process of being closed in accordance with RCRA closure plans (Lagoon 7) or are currently being remediated (15 and 16). Additionally, direct contact control is required for the former drying bed, as well as the isolated area located between Impoundment 13 and the railroad tracks that was identified as a potential risk in the HHRA and BERA. Regarding the Site soil areas requiring vapor control, there are locations within the North Area soils with contaminant concentrations

exceeding screening criteria. Data for the South and West Areas indicates that vapor control is only warranted in the tarry waste portion of the former drying bed area. The direct contact, vapor and movement control areas are identified on Figures 6-8.

### Groundwater Remediation Goals

Remediation goals were developed for groundwater based on the RAOs discussed earlier. The most stringent of the EPA federal MCLs, NJDEP groundwater quality criteria, NJDEP MCLs and Site-specific risk-based concentrations was selected as the remediation goal. Consistent with the RAOs for groundwater, these remediation goals will be used for developing use restrictions and other actions to prevent exposure and for assessing potential containment and restoration of the groundwater.

### **DESCRIPTION OF ALTERNATIVES**

CERCLA requires that each remedial alternative be protective of human health and the environment, be cost-effective, comply with other statutory laws and utilize permanent solutions and alternative treatment technologies and resource recovery technologies to the maximum extent practicable. In addition, the statute includes a preference for the use of treatment as a principal element for the reduction of toxicity, mobility or volume of hazardous substances. Remedial alternatives for the American Cyanamid Site are presented in this section.

A total of seven of the eleven original alternatives were carried through the screening process presented in the Comprehensive Site-wide FS. Please refer to the Comprehensive Site-wide FS for a more detailed discussion of all the remedial alternatives.

### Common Elements

Many of these alternatives include common components. Because any combination of remedial alternatives will result in some contaminants remaining on the Site above levels that would allow for unrestricted use, a review of the remedy will be conducted every five years, at minimum. The following institutional controls will also be required to maintain the long-term protectiveness of the remedy: deed restrictions to maintain the protectiveness and functional integrity of engineered capping systems; restrictive covenants to prevent future land uses that

interfere with the implementation or protectiveness of the selected remedy; and a groundwater CEA/WRA to prohibit future use of the groundwater in this area and to restrict the installation of wells (other than for monitoring or remediation purposes) in the area for the duration of the CEA.

**Alternative 1 - No Action**

<i>Capital Cost:</i>	\$0
<i>Annual O&amp;M Costs:</i>	\$0
<i>Total Present Worth:</i>	\$0
<i>Implementation Time frame:</i>	<i>Not Applicable</i>

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) requires that a "No Action" alternative be developed as a baseline for comparing other remedial alternatives. Under this alternative, no action would be taken to remediate impacted soils and impoundment contents or groundwater at the Site. The current bedrock pumping system would be turned off. This alternative would only involve long-term monitoring of groundwater quality through a sampling program. Alternative 1 does not include institutional controls.

**Alternative 2 - Limited Action**

<i>Capital Cost:</i>	\$683,283
<i>Annual O&amp;M Costs:</i>	\$32,399,257
<i>Total Present Worth:</i>	\$33,082,537
<u><i>Implementation Time frame</i></u>	
<i>Soils/Impoundments:</i>	<i>Not Applicable</i>
<i>Groundwater:</i>	<i>30 Years</i>

Under this alternative, the current groundwater pumping system would continue to operate and implementation of institutional controls as described above would be implemented. Groundwater monitoring would continue to be performed as a basis for evaluating the CEA/WRA and assessing the added value of the bedrock pumping system on impacted groundwater. Restrictions placed on the Site to limit its future use would be accomplished by recording in the property deeds that potentially hazardous media may be present and that use restrictions have been imposed. Should this alternative be implemented, the potential addition of monitoring wells to supplement the current monitoring scheme would be evaluated as part of the remedial action design development.

### **Alternative 3 - Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Groundwater**

<i>Capital Cost:</i>	\$87,976,060
<i>Annual O&amp;M Costs:</i>	\$49,973,383
<i>Total Present Worth:</i>	\$137,949,443
<u>Implementation Time frame</u>	
<i>Soils/Impoundments:</i>	10 Years
<i>Groundwater:</i>	30 Years

This alternative would provide a combination of containment caps over impacted areas at the Site to control the potential for exposure to contaminated soils and impoundment contents.

#### North/South/West Area Soils and Impoundments

For areas identified as requiring direct contact control, a 24-inch soil cover would be utilized to provide a barrier to prevent direct contact exposure with impacted media. This soil cover system would utilize an engineered cap designed and constructed to withstand the effects of up to a 500-year flood event. Appropriate controls and engineered mechanisms would also be included to safeguard against scouring, erosion or other effects from being constructed in a flood plain. In addition, an inspection and maintenance program will be developed as part of the ongoing operation plan for the soil cover system.

An engineered soil cover system would be installed over Impoundments 13, 17 and 24 (located in the South and West Areas) to prevent direct contact.

For areas identified in the Site-wide FS as requiring both vapor and movement control, a multi-layer engineered cap would be used. Measures would be employed in accordance with New Jersey requirements for vapor control as part of future construction. Where additional structural stability is needed to support a multi-layer cap (namely over Impoundments 3, 4 and 5), stabilization, or a similar physical process as determined to be appropriate during the conceptual design phase, would be employed prior to capping. This is anticipated to consist of the use of standard construction technologies such as the addition of amendments, stabilizing agents and/or the installation of physical structure (i.e., geogrids).

#### Groundwater

The groundwater component consists of collection of bedrock

groundwater within the North, South and West Areas. While the existing bedrock groundwater collection system provides hydraulic control over much of the North Area groundwater, the effectiveness of the bedrock groundwater collection system will be improved to better achieve the groundwater RAOs. Conceptual improvements to the bedrock collection system include placing the primary extraction well(s) in a more central location of the impacted bedrock and placing targeted bedrock groundwater extraction wells to address more localized impacts, such as in the vicinity of Lagoons 6 and 7 and Impoundment 24, or in other to be determined areas (See Figure 9). Additional details of these improvements would be developed during remedial design. This remedy also includes institutional controls that would prohibit potable use of groundwater at the Site.

Additionally, localized collection of overburden groundwater in specific areas would be included, as required, to prevent the migration of contaminants not currently captured by the existing collection system (see Figure 9).

Based on the information presented in the groundwater RI reports, the following presents the proposed collection component for these areas:

- recovery system (trenches, wells and/or containment walls) around Impoundments 1 and 2 and between these impoundments and the Raritan River;
- recovery system (trenches, wells and/or containment walls) to collect impacted overburden groundwater along the north side of the North Area flood berm, north of Cuckel's Brook and the rail line;
- recovery system (trenches, wells and/or containment walls) trench between Lagoon 7/Impoundment 24 and the Raritan River to the southwest, and extending around to the area between Impoundment 24/Lagoon 6 and New Jersey American Water to the south; and
- bedrock pumping well or a series of wells in the Lagoon 7 Area to capture bedrock groundwater not currently collected by the existing bedrock pumping system.

The waters collected at the Site will be discharged to surface water following complete on-site treatment. However, if it is determined that this treatment method is not appropriate or feasible, then collected groundwater will either be re-injected



following complete on-site treatment or be discharged to the local sewerage authority directly or following pre-treatment.

**Alternative 4 - Consolidation/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Groundwater**

<i>Capital Cost:</i>	<i>\$129,530,494</i>
<i>Annual O&amp;M Costs:</i>	<i>\$49,973,383</i>
<i>Total Present Worth:</i>	<i>\$179,503,877</i>
<u><i>Implementation Time frame</i></u>	
<i>Soils/Impoundments:</i>	<i>10 Years</i>
<i>Groundwater:</i>	<i>30 Years</i>

This alternative would provide a combination of caps over impacted areas at the Site to control the potential for direct contact with impacted soils and impoundments with the addition of excavation of the South and West Areas and consolidation in the North Area.

North Area Soils, Impoundments 3, 4 and 5

Includes same remedies as Alternative 3 with the exception of the South and West Area.

South and West Area Soils and Drying Bed Area

The areas identified in the FS requiring direct contact, vapor and movement control would be excavated and consolidated at the North Area in areas where the same types of controls are warranted.

Impoundments 13, 17 and 24

The material in Impoundments 13, 17 and 24 would be excavated and relocated to the North Area under an engineered soil cap.

Groundwater

Includes the same groundwater remedy as described in Alternative 3.

**Alternative 4A - Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Ground Water**

<i>Capital Cost:</i>	<i>\$154,224,898</i>
<i>Annual O&amp;M Costs:</i>	<i>\$49,973,383</i>
<i>Total Present Worth:</i>	<i>\$204,198,282</i>
<u><i>Implementation Time frame</i></u>	
<i>Soils/Impoundments:</i>	<i>10 Years</i>

This alternative would provide a combination of caps over impacted portions of the North Area to control the potential for direct contact with impacted soils and impoundments, which is one of the primary RAOs for the Site, with the addition of excavation and consolidation in the North Area for the contents of Impoundments 13, 17 and 24 as determined by an ecological risk assessment. In addition, this alternative would address principal threat wastes found in the North Area and in Impoundments 3, 4 and 5 by consolidating them into Impoundments 3, 4 and 5 and treating these materials using in-situ solidification/stabilization (S/S) followed by capping, thereby also addressing the RAOs. See Figure 10 for details on this alternative.

North Area Soils, Impoundments 3, 4 and 5

Includes same remedies as Alternatives 3 and 4 with the exception of the South and West Areas area and treatment of principal threat wastes.

For impoundment areas meeting the definition of principal threat wastes, (namely, the contents of Impoundments 3, 4 and 5), in-situ S/S would be employed for the full depth of the impoundment material prior to capping (the actual depth of treatment will be established and confirmed during the remedial design phase).

For North Area soils outside of the impoundment limits that meet the definition of principal threat wastes, the material would be excavated to its full depth and consolidated within Impoundments 3, 4 and 5 for subsequent treatment with those wastes. The excavated areas outside Impoundments 3, 4 and 5 would then be backfilled and covered with the multi-layer engineered cap discussed above.

An evaluation would be conducted during the remedial design phase to identify those soils that could potentially meet the definition of principal threat wastes. This evaluation would consist of first identifying areas where constituent concentrations, based on existing data, are above those presented within EPA's soil screening guidance, when adjusted to  $1 \times 10^{-3}$  risk (future Site user). Following this, field investigations (e.g., air sampling) would be conducted to verify the potential air risks. Those areas subsequently identified as potential principal threat wastes (i.e., presenting a  $1 \times 10^{-3}$  risk based on measured concentrations in the breathing zone) would be excavated and consolidated in the Impoundments 3, 4 and

5 area for subsequent treatment with those materials (see below). Excavation extent and depth would be determined based on sampling data in the breathing zone. These excavated areas outside Impoundments 3, 4 and 5 would then be backfilled and covered with the multi-layer engineered cap discussed above. Additionally, any future structures constructed within areas requiring vapor control at the Site would include a vapor mitigation system, as required.

For the remaining areas requiring direct contact and vapor controls, the same remedy as described in Alternatives 3 and 4 would be implemented.

#### South and West Area Soils and Drying Bed Area

The areas identified in the FS requiring direct contact, movement and vapor control would be excavated and consolidated within the North Area where the same types of controls are warranted.

#### Impoundments 13, 17 and 24

An ecological risk assessment will be conducted for Impoundments 13, 17 and 24 to confirm the appropriate treatment for these materials. If the ecological risk assessment identifies that any impoundment contents present an unacceptable risk, these materials would be relocated and consolidated in the North Area in areas where the same types of controls are warranted. Any impoundment contents that do not present an unacceptable risk would remain in their current location. Any impoundment contents requiring excavation and relocation would be remediated to acceptable levels, such as NJDEP ecological soil screening criteria or ecologically protective benchmarks.

#### Groundwater

Includes the same groundwater remedy as Alternative 3.

### **Alternative 5 - Consolidation/Capping and In-Situ S/S with Hydraulic Control/Treatment of Groundwater**

<i>Capital Cost:</i>	\$257,918,074
<i>Annual O&amp;M Costs:</i>	\$49,973,383
<i>Total Present Worth:</i>	\$307,891,457
<u>Implementation Time frame</u>	
<i>Soils/Impoundments:</i>	20 Years
<i>Groundwater:</i>	30 Years

This alternative would consist of a combination of technologies to address soils and impoundment contents.

North Area Soils, Impoundments 3, 4 and 5

In the areas identified in the FS requiring direct contact control, a 24-inch soil cover would be utilized to provide a barrier to prevent direct contact exposure with impacted media. This soil cover system would be an engineered cap designed and constructed to withstand the effects of up to a 500-year flood event. Appropriate controls and engineered mechanisms will be included to safeguard against scouring, erosion or other effects from being constructed in a flood plain. In addition, an inspection and maintenance program will be developed as part of the ongoing operation plan for the soil cover system.

Impoundments 3, 4 and 5 and a few soil areas located in the North Area have been identified as requiring vapor and movement controls. These impoundment and soil areas would utilize in-situ S/S as a means to reduce contaminant mobility. During S/S activities, emissions would be collected and treated to the extent practicable.

South and West Areas (including soils, Impoundments 13, 17 and 24 and drying bed area)

The material in Impoundments 13, 17 and 24 would be excavated and relocated to the North Area under an engineered soil cap.

Groundwater

Includes the same groundwater remedy as Alternative 3.

**Alternative 7 - Consolidation/Capping and Ex-Situ LTTD and S/S with Hydraulic Control/Treatment of Groundwater**

*Capital Costs:* \$774,315,057

*Annual O&M Costs:* \$49,973,383

*Total Present Worth:* \$824,288,040

Implementation Time frame

*Soils/Impoundments:* > 25 Years

*Groundwater:* 30 Years

This alternative would consist of a combination of technologies to address soils and impoundment contents.

In the North Area, areas identified in the FS requiring direct contact control would receive a 24-inch soil cover to provide a barrier to prevent direct contact exposure with contaminated soil. This soil cover system would be an engineered cap designed and constructed to withstand the effects of up to a 500-year flood event. Appropriate controls and engineered mechanisms will

be included to safeguard against scouring, erosion or other effects from being constructed in a flood plain. In addition, an inspection and maintenance program will be developed as part of the ongoing operation plan for the soil cover system.

Portions of the North Area requiring vapor and movement controls would be excavated and transported to a central area within the North Area for consolidation and staging. *Ex-situ* treatment would then be applied on-site, via low temperature thermal desorption (LTTD) and S/S. LTTD is a technology that uses heat to physically separate contaminants from the excavated soils. S/S would be used to provide appropriate geotechnical properties for backfilling treated materials as well as having the potential added benefit of reducing the mobility of the remaining constituents.

Treated materials from vapor control areas would be backfilled in the North Area, while treated materials from movement control areas would be placed in the Impoundment 8 RCRA Facility. Areas requiring direct contact control and vapor control would be excavated and treated on-site using a combination LTTD and ex-situ S/S. Treated materials would be backfilled on-site or placed in the on-site RCRA facility.

The material in Impoundments 13, 17 and 24 would be excavated and relocated to the North Area under an engineered soil cap.

#### Groundwater

Includes the same groundwater remedy as Alternative 3.

#### **Alternative 11 - On-Site/Off-Site Treatment with Hydraulic Control/Treatment of Groundwater**

<i>Capital Costs:</i>	\$1,750,292,506
<i>Annual O&amp;M Costs:</i>	\$49,973,383
<i>Total Present Cost:</i>	\$1,800,265,890
<u>Implementation Time frame</u>	
<i>Soils/Impoundments:</i>	> 25 Years
<i>Groundwater:</i>	30 Years

This alternative would consist of a combination of technologies to address soils and impoundment contents.

Impoundments and soils in the North, South and West Areas, would be excavated and consolidated and staged at a predetermined location within the North Area. These materials would receive on-site ex-situ treatment, via LTTD and S/S. Treated materials

from direct contact control areas would be backfilled at the North Area, while treated materials from areas warranting vapor control would be placed in the Impoundment 8 RCRA facility.

For areas identified in the Site-wide FS requiring movement control, soils and impoundment contents would be excavated and transported to either an off-site incineration or recycling facility for treatment or beneficial re-use. During S/S activities, emissions would be collected and treated, as practicable.

Groundwater

Includes the same groundwater remedy as Alternative 3

**COMPARATIVE ANALYSIS OF ALTERNATIVES**

In selecting a remedy, EPA considered the factors set out in CERCLA §121, 42 U.S.C. §9621, by conducting a detailed analysis of the viable remedial response measures pursuant to the NCP, 40 Code of Federal Regulations (CFR) 300.430(e)(9)(iii) and Office of Solid Waste and Emergency Response (OSWER) Directive 9355.3-01. The detailed analysis consisted of an assessment of the individual response measure against each of nine evaluation criteria and a comparative analysis focusing upon the relative performance of each response measure against the criteria. A summary of this analysis is provided below. A Detailed Analysis of Alternatives can be found in the Site-wide FS Report.

---

***Threshold Criteria*** - *The first two criteria are known as "threshold criteria" because they are the minimum requirements that each response measure must meet in order to be eligible for selection as a remedy.*

---

1. Overall Protection of Human Health and the Environment

*Overall protection of human health and the environment addresses whether each alternative provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced or controlled, through treatment, engineering controls and/or institutional controls.*

Alternative 1 is used as a baseline for comparison of the alternatives and is designed to represent baseline conditions at the Site and would not meet the RAOs established for the Site. Alternative 2, by comparison, would be protective of human

health and the environment for groundwater currently captured by the existing groundwater control system and SRVSA treatment, and would employ access restrictions and institutional controls to address potential exposures to other media and transport mechanisms, but would not meet RAOs for principal threat wastes and groundwater outside the current capture zone. Alternatives 3, 4, 4A, 5 and 7 include capping of material requiring direct contact control and groundwater collection/treatment and, therefore, would be protective of human health and the environment. Alternatives 3 and 4 include capping of materials requiring vapor and movement control, which would prevent exposure to impacted materials. Alternative 4A would also prevent exposure to impacted materials through capping, as well as treatment for the most-highly mobile materials, which would reduce toxicity and mobility of contaminants.

Alternatives 3, 4, 4A, 5, 7 and 11 each meet the RAOs for principal threat wastes. However, Alternatives 3 and 4 accomplish this primarily through containment while 4A, 5, 7 and 11, accomplish this primarily through treatment. Alternatives 5 and 7 include treatment of vapor and movement control material in the North, South and West Areas as an element of protection of human health and the environment; however, their treatment components are not proven for all Site contaminants and RAOs may not be met for these contaminants. Alternative 11 removes the material requiring movement control from the North, South and West Areas for off-site treatment/ disposal, while treating direct contact and vapor control material on-site which would be protective of human health and the environment. However, the capping, groundwater control and treatment-based remedy components of Alternative 4A essentially provide equivalent protection of human health and the environment by eliminating potential exposure pathways.

## 2. Compliance with Applicable or Relevant and Appropriate Requirement (ARARs)

*Section 121(d) of CERCLA and NCP §300.430(f)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate federal and state requirements, standards, criteria and limitations which are collectively referred to as "ARARs," unless such ARARs are waived under CERCLA section 121(d)(4). Applicable requirements are those cleanup standards, standards of control and other substantive requirements, criteria or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically address a hazardous substance,*

*pollutant, contaminant, remedial action, location or other circumstance found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable. Relevant and appropriate requirements are those cleanup standards, standards of control and other substantive requirements, criteria or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance at a CERCLA site address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well-suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate. Compliance with ARARs addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other federal and state environmental statutes or provides a basis for invoking a waiver.*

Applicable or Relevant and Appropriate Requirements (ARARs) would not be met for Alternative 1. ARARs would not be met for groundwater outside the current capture zone of the existing groundwater collection system or for soils and impoundment contents under Alternative 2. ARARs would generally be met for the remaining alternatives. However, more significant issues would be associated with location- and action-specific ARARs (e.g., stream encroachment, wetlands, flood hazard, etc.) in the South and West Areas for Alternatives 4, 4A, 5, 7 and 11; chemical- and action-specific ARARs associated with NJ Air Pollution Control Regulations may not be met for Alternatives 5, 7 and 11; and Alternative 7 would not meet the chemical-specific ARARs associated with the Treatment Objectives established in the Group III ROD/CAMU and Land Disposal Restrictions (LDRs). Table 8 provides a list of the current ARARs and TBCs used in the evaluation of remedial alternatives.

---

**Primary Balancing Criteria** - *The next five criteria, criteria 3 through 7, are known as "primary balancing criteria". These criteria are factors with which tradeoffs between response measures are assessed so that the best option will be chosen, given site-specific data and conditions.*

---

### 3. Long-Term Effectiveness and Permanence

*A similar degree of long-term effectiveness and permanence refers to the expected residual risk and the ability of a remedy*



*to maintain reliable protection of human health and the environment over time, once clean-up levels have been met. This criterion includes the consideration of residual risk that will remain on-site following remediation and the adequacy and reliability of controls.*

Long-term effectiveness and permanence do not apply to the baseline conditions represented by Alternative 1. By comparison, Alternative 2 would provide some degree of long-term remediation for groundwater within the current capture zone of the existing bedrock groundwater pumping system, but would not specifically address other media or groundwater outside the current capture zone. The groundwater remedy components for Alternatives 3, 4, 4A, 5, 7 and 11 provide a more certain effectiveness of groundwater control over the long-term, and remedies that would be functionally permanent with proper maintenance. Capping of material requiring direct contact control associated with Alternatives 3, 4, 4A, 5 and 7 would be effective over the long-term in controlling potential direct contact exposure. A cap is functionally permanent with proper maintenance. Alternatives 3, 4, 4A, 5, 7 and 11 would result in making the Site available for beneficial community reuse, although the time required to achieve this would be longer for Alternatives 5, 7 and 11, compared to Alternatives 3, 4 and 4A. Alternative 4A also utilizes some degree of treatment and/or consolidation which would provide additional permanence over Alternatives 3 and 4. Treatment associated with Alternatives 7 and 11 has not demonstrated effectiveness for the full range of contaminants, which would likely prolong schedules and increase time before RAOs would be attained, if they would be attained at all.

#### 4. Reduction in Mobility, Toxicity or Volume through Treatment

*Reduction of toxicity, mobility or volume through treatment refers to the anticipated performance of the treatment technologies that may be included as part of a remedy.*

Alternative 1 would provide no reduction in mobility, toxicity or volume. For Alternative 2, the mobility, toxicity and volume of contaminants in groundwater within the capture zone of the existing groundwater collection system would be reduced, but would not be reduced outside the existing capture zone or in other media. Groundwater collection and treatment associated with the remaining alternatives (3, 4, 4A, 5, 7 and 11) would control mobility of contaminants through capture, would reduce the volume and toxicity of contaminants through treatment and would be permanent. Capping associated with Alternatives 3, 4

and 4A would reduce mobility via control of vapor, movement and infiltration. In-situ S/S associated with Alternatives 4A and 5 would reduce contaminant mass through media transfer and mobility through binding the treated mass and limiting infiltration. LTTD and S/S associated with Alternatives 4A, 5, 7 and 11 would reduce contaminant mass through the treatment and capture of contaminants; however, S/S associated with Alternatives 4A, 5, 7 and 11 would increase the total volume of material.

## 5. Short-Term Effectiveness

*Short-term effectiveness addresses the period of time needed to implement the remedy and any adverse impacts that may be posed to workers, the community and the environment during construction and operation of the remedy until cleanup levels are achieved.*

No short-term effects would be anticipated with implementation of Alternatives 1 or 2, and the implementation time frames for both would be immediate. The duration of implementation for Alternatives 3, 4 and 4A would be relatively short at approximately 10 years. The implementation duration for Alternatives 5, 7 and 11 would be relatively long (over 20 years). Implementation of the remedial actions associated with Alternative 3 would be minimally disruptive, resulting in minimal short-term impacts and would be limited in wetland areas and ecological habitats, as well as the South and West Areas. Implementation impacts would occur in wetlands and ecological habitats with implementation of Alternatives 4 and 4A; however, enhancement of existing, nonimpacted wetlands and habitats and/or creation of new wetlands/habitats would be employed to mitigate impacts. Implementation of excavation, consolidation and treatment activities associated with Alternatives 5, 7 and 11 would result in large-scale intrusions and material disturbances, increasing the opportunity for emission generation and material release to the environment with commensurate complexity in implementation of effective controls. Additionally, such large-scale intrusions as associated with Alternatives 5, 7 and 11 would result in destruction of existing wetlands and habitats; and, temporary, but detrimental, disruption of habitat and flora/fauna communities would occur in surrounding areas during implementation; however, enhancement of existing, nonimpacted wetlands and habitats and/or creation of new wetlands/habitats would be employed to mitigate impacts.

Increases in truck traffic through the local community would

occur during construction of Alternatives 3, 4, 4A, 5, 7 and 11. However, trucks would be carrying only S/S admixtures, clean fill and construction materials with the implementation of Alternatives 3, 4, 4A, 5 and 7, while trucks would be carrying the most highly contaminated material from the Site to off-site treatment/disposal facilities with the implementation of Alternative 11. The potential for exposure to workers during construction for Alternative 3 would be minimal due to the minimally invasive nature of the construction. However, worker exposures would be increased with the implementation of Alternatives 4 and 4A, and even more so with Alternatives 5, 7 and 11, due to the increase in generation of air emissions related to excavation, consolidation and treatment. The potential for exposure to workers would be reduced with appropriate use of personal protective equipment and proper implementation of engineering controls and material/waste handling procedures.

## 6. Implementability

*Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability of services and materials, administrative feasibility and coordination with other governmental entities are also considered.*

A review of the implementability of Alternatives 1 and 2 is not applicable since either no action is taken or the actions are largely already complete. The engineered capping systems associated with Alternatives 3, 4, 4A, 5, 7 and 11 are proven, reliable technologies and would be readily constructed and maintained. Alternatives 3, 4 and 4A rely on capping as a component of the remedy and would be readily implementable; however, Alternative 4A also utilizes in-situ S/S to limit infiltration and reduce the mass and mobility of contaminants. Alternative 4A offers additional protection by also excavating materials which could meet the definition of principal threat waste with subsequent consolidation into Impoundments 3, 4 and 5 and treatment via in-situ S/S. In-situ S/S associated with Alternative 5 may prove difficult due to locations, nature of material and surroundings (i.e., South and West Areas, wetlands, etc.).

The treatment components of Alternatives 7 and 11 for the Site material are unproven. The effectiveness of the LTTD component of Alternatives 7 and 11 would be limited by the characteristics of the waste at the Site. The waste materials contain high

concentrations of tars and other organics, elevated sulfur levels, large quantities of heterogeneous debris and have a high moisture content, all of which limit the effectiveness of LTTD. The intrusive excavation activities and extensive materials handling required for Alternatives 7 and 11 would result in increased air emissions, which could pose an increased risk to Site workers and the surrounding community if not adequately controlled. LTTD was tested on Impoundment 3 and found not to be effective due to the high levels of air emissions, even with extensive controls. The potential for worker and community exposure would be minimized with the implementation of Alternative 4A in comparison with other alternatives, such as Alternatives 7 and 11. In addition, treatment via in-situ S/S associated with Alternative 4A would be equally effective at achieving the RAOs for soils and impoundment contents at the Site.

Equipment, materials and personnel necessary to implement Alternatives 3, 4, 4A, 5, 7 and 11 are typically available in the marketplace; however, qualified contractors that would implement the types of remedial projects associated with Alternatives 5, 7 and 11 may not be available or accessible for the entire duration of construction due to their relatively long implementation time frames. The stabilization of materials to support a cap for Alternatives 3, 4 and 4A utilizes proven geotechnical technologies; however, the variability of materials on-site could require additional treatment and affect intermediate milestones in a construction schedule.

The excavation of material proposed in Alternatives 4, 4A, 5, 7 and 11 would trigger LDRs; consequently, CAMU requirements would apply. The remaining capacity in Impoundment 8 may not be sufficient to receive treated material volumes resulting from implementation of Alternative 7 or 11. Invasive construction activities in the South and West Areas may increase the time required prior to initiation of the remedies employed by Alternatives 4, 4A, 5, 7 and 11. Regulatory review and approvals would be required from state and federal agencies; these would be of a standard, routine nature for Alternatives 3, 4 and 4A, but would be more extensive for Alternatives 5, 7 and 11. Failures/iterations relative to S/S and LTTD associated with Alternatives 5, 7 and 11 would likely cause construction delays and may result in ARARs not being attained.

For the material in Impoundments 13, 17 and 24, Alternative 3 utilizes an engineered soil cover to prevent direct contact. Alternatives 4, 5 and 7 call for the excavation and relocation

of these materials into the North Area followed by the placement of an engineered soil cover. Alternative 11 requires the excavation and relocation of this material into the North Area for treatment via LTTD and S/S. Alternative 4A is readily implementable and would be similar to Alternatives 4, 5 and 7, if relocation of the impoundment material in the South and West Areas to the North Area where the same types of controls is warranted, if required by the results of an ecological risk assessment. This approach ensures that existing wetlands and habitat are not impacted unnecessarily and ensures that materials which pose an unacceptable risk are adequately addressed.

The groundwater collection and treatment component of Alternatives 3, 4, 4A, 5, 7 and 11 are proven, reliable technologies and would be readily implementable. Monitoring for Alternatives 2, 3, 4, 4A, 5, 7 and 11 would be effective in identifying successful operation of the remedy.

## 7. Cost

*Includes estimated capital and Operations and Maintenance (O&M) costs, and net present worth value of capital and O&M costs.*

The estimated capital cost, O&M and present worth cost are discussed in detail in the Site-wide FS. The cost estimates are based on the best available information. Alternatives 1 (\$574,000) and 2 (\$33.1 million), No Action and Limited Action, respectively, would incur the least cost to implement. Alternative 3 would cost \$138 million. Alternative 4 (\$180 million) would cost 30% more than Alternative 3. Alternative 4A (\$205 million) would cost 49% more than Alternative 3 and 14% more than Alternative 4. Alternatives 5 (\$308 million) and 7 (\$825 million) are significantly more costly, at more than two and almost six times more costly than Alternative 3, respectively. Alternative 11 (\$1.8 billion) would be the most costly, at more than twice the cost of the next most costly (Alternative 7), and would be at least an order of magnitude higher in cost than other alternatives that meet the RAOs.

---

**Modifying Criteria** - *The final two evaluation criteria, criteria 8 and 9, are called "modifying criteria" because new information or comments from the state or the community on the Proposed Plan may modify the preferred response measure or cause another response measure to be considered.*

---

## 8. State/Support Agency Acceptance

*Indicates whether based on its review of the RI/FS reports and the Proposed Plan, the state supports, opposes and/or has identified any reservations with the selected response measure.*

The State of New Jersey concurs with EPA's Selected Remedy in this ROD.

## 9. Community Acceptance

*Summarizes the public's general response to the response measures described in the Proposed Plan and the RI/FS reports. This assessment includes determining which of the response measures the community supports, opposes and/or has reservations about.*

EPA solicited input from the community on the remedial alternatives proposed for OU4 and received extensive oral and written comments. The attached Responsiveness Summary addresses the comments received during the public comment period. The community (residents, nearby property and business owners) had widely varied positions, from support to strong reservations about EPA's Proposed Plan. The Mayor of Bridgewater and township council members expressed strong support for EPA's preferred remedy. More specifically, support was received by a New Jersey Assemblyman, a member of the New Jersey Senate Environmental Committee, the Somerset County Board of Chosen Freeholders and a Bridgewater Township Councilman. Representatives from CRISIS, the primary community group and TAG recipient, endorsed EPA's preferred remedy, although some concerns were expressed regarding the details of the remedy. In addition, EPA received written and oral comments from the representatives of several regional environmental groups expressing concerns over the remedy's impact on flooding and the practicability of capping contaminated materials in a flood hazard area. These environmental groups generally opposed EPA's preferred alternative and favored a remedy that removes waste from the Site and/or treats impacted media with thermal desorption technologies.

Through general comments received during the public comment period and the public meeting, EPA has identified several issues emphasized by the community that require further clarification by the agency:

- A number of commenters expressed concerns regarding the durability of engineered caps during flood events, and how that might affect the protectiveness of the remedy;
- A number of commenters expressed concerns about the practicability of capping in a flood plain and the potential impacts of an impervious surface and the addition of fill on the stormwater patterns in the immediate vicinity;
- A number of commenters indicated a preference for the selection of a remedy that removes waste from the Site and/or treats impacted media using thermal desorption;
- A number of commenters expressed concerns over the proposed surface water discharge effluent limits for the interim treatment plant being constructed as part of the groundwater seep removal action;
- A number of commenters indicated a preference for the construction of an on-site treatment plant for the Site-wide groundwater remedy, as opposed to the use of the local sewerage authority; and
- A number of commenters indicated a preference for the use of railroads for the transportation of materials to and from the Site, as opposed to the use of trucks.

To the extent that these issues are not addressed here, they are discussed in Appendix V of this document.

### **PRINCIPAL THREAT WASTES**

EPA's findings to date indicate the presence of principal threat wastes at the American Cyanamid Site. Principal threat wastes are considered source materials, *i.e.*, materials that include or contain hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to groundwater, surface water or as a source for direct exposure. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained, or would present a significant risk to human health or the environment should exposure occur. By utilizing treatment as a significant component of the remedy, the statutory preference for remedies that employ treatment as a principal element is satisfied.

## SELECTED REMEDY

Based upon consideration of the results of the Site investigations, the requirements of CERCLA, input from the National Remedy Review Board (NRRB), the detailed analysis of the response measures and public comments, EPA has selected Alternative 4A as the appropriate remedy for the impoundments, Site-wide soils and groundwater at the Site. The alternatives were discussed with the NRRB in March 2010 as part of the effort to evaluate an appropriate remedy for the remainder of the Site. The remedy presented in this ROD was selected based upon the recommendations of the NRRB.

### Summary of the Rationale for the Selected Remedy

The remedy described under Alternative 4A is both a treatment- and a containment-based alternative consisting of proven technologies that would be effective in controlling and reducing the risks associated with the exposure pathways identified at the Site. The use of an engineered soil cover system throughout the North Area would effectively control direct contact and a multi-layer vapor control cap would minimize the release of contaminants into the air. The vapor control cap would be impermeable to reduce infiltration and would also include a vapor mitigation system designed to capture and treat emissions. In addition to the use of engineered capping systems, Alternative 4A also utilizes in-situ S/S in areas requiring movement control to further reduce infiltration and decrease the mass and mobility of contaminants. Alternative 4A offers additional protection by excavating materials that meet the definition of principal threat waste with subsequent consolidation into Impoundments 3, 4 and 5 and treatment via in-situ S/S.

For Impoundments 13, 17 and 24, an ecological risk assessment will be conducted to determine whether excavation and relocation into the North Area is warranted. This approach ensures that existing wetlands and habitat are not impacted unnecessarily and ensures that any materials which pose an unacceptable risk are adequately addressed. This approach also reduces the risk of impoundments in the South and West Areas being compromised by any flooding, if necessary.

Although excavation of materials from the South and West Areas would remove the potential risks associated with the potential exposure pathways in those areas, there are risks associated with excavation activities. These could include air emission and



dust generation, damage to existing ecological systems, worker safety and control of construction activities

Hydraulic controls provided by improved collection/treatment of bedrock and overburden groundwater coupled with institutional controls that prohibit potable use of on-site groundwater would achieve the groundwater RAOs and provide for protection of human health and the environment. The continued use of the groundwater extraction and treatment system, supplemented by additional measures to contain and collect overburden groundwater in select areas, would provide for protection of human health and the environment by containing impacted groundwater.

This alternative is readily implementable using conventional technologies, would be potentially cost-effective and would return the Site to beneficial reuse as soon as practicable with an estimated implementation time frame of approximately 10 years for impoundments and soils and approximately 30 years for groundwater.

The selected remedy is believed to provide the best balance of tradeoffs among the alternatives based on the information available to EPA at this time. EPA believes that the selected remedy would be protective of human health and the environment, comply with ARARs, be cost-effective and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

#### Description of the Selected Remedy

The selected remedy involves a combination of caps over impacted areas at the Site to control the potential for direct contact with impacted soils and impoundments, which is one of the primary RAOs for the Site. This alternative would address principal threat wastes found at several locations in the North Area through consolidation into Impoundments 3, 4 and 5, followed by treatment via in-situ S/S and capping, thereby addressing the RAOs. Impoundments 13, 17 and 24 would be excavated and relocated into the North Area where the same types of control are warranted, if an ecological risk assessment determines that an unacceptable risk is present. See Figure 10 for visual details on this alternative. The major components of the selected remedy include:

- Waste material located within Impoundments 3, 4 and 5 will be entirely treated through in-situ S/S to prevent the migration of contaminants. An impermeable engineered vapor control

barrier and an engineered soil cover system will be installed following solidification. The waste materials in these impoundments typically consist of tarry substances or high-hazard materials defined by EPA as principal threat waste.

Site-wide soils that consist of tarry substances or principal threat wastes will require complete excavation and relocation to Impoundments 3, 4 and 5. Following relocation, these soils will be treated using in-situ S/S, along with the remaining materials in Impoundments 3, 4 and 5 as stated above.

In-situ S/S reduces the mobility of principal threat waste by sequestering contaminants to restrict migration and reduce leaching to the groundwater. In addition to immobilizing contaminants in a solid matrix, in-situ S/S may also chemically convert certain contaminants into a less toxic form. Effective sequestering mixes would be needed to properly treat principal threat wastes. Different in-situ S/S mixes and methods may be required for different areas of the Site. Materials that are treated with in-situ S/S will be required to meet three performance measures: minimum unconfined compressive strength of 40 pounds per square inch; maximum permeability of  $1 \times 10^{-6}$  centimeters per second; and leachability testing for site-related constituents. Leachability testing would require site-specific development during remedial design, using EPA's Synthetic Precipitation Leaching Procedure, the ANSI/ANS 16.1 method, or other appropriate methods. EPA would develop specific leaching values and select specific analytical methods in the design phase pending results of treatability studies. EPA would seek a 90 percent or greater reduction of leaching potential as a point of departure for S/S performance. Different in-situ S/S technologies would require different performance measures, though the overall in-situ S/S performance would need to be comparable (*i.e.*, similar leaching performance, from one in-situ S/S technology to the next).

Treatability testing would be conducted prior to full-scale implementation to optimize the in-situ S/S mixture and demonstrate a correlation between leachability, unconfined compressive strength and permeability performance criteria. Once this correlation is established, unconfined compressive strength and permeability would be used as the primary field criteria during implementation. During implementation of the full-scale remedial action, these performance measures would be used for the purposes of mix optimization, quality assurance and verification that the remedy is effective.

Prior to in-situ S/S of the contents in Impoundments 3, 4 and 5, the area would be cleared of vegetation and excavated for surface and subsurface debris removal (e.g., large boulders, tank pads, conduits and concrete), as these materials could interfere with the in-situ S/S process. In-situ S/S will be employed for the full depth of the impoundment material prior to capping. The actual depth of treatment will be established and confirmed during the remedial design phase. The selection of mixing equipment would be determined during final design. Dust, vapor and noise management controls would be put in place to protect workers and the community during construction activities. The potential for exposure to workers would be reduced with appropriate use of personal protective equipment and proper implementation of engineering controls and material/waste handling procedures.

Since the selected remedy requires the transportation of materials to the Site (and from the Site to a lesser extent), EPA will evaluate all transportation options, including the use of rail and trucks. A thorough review will be conducted to understand and consider the impacts to the community.

- For Site-wide soils that are determined to require vapor controls, an impermeable multi-layered engineered cap with a vapor mitigation system will be constructed. The engineered vapor control cap will reduce infiltration and the vapor mitigation system will capture and treat emissions. These soils typically contain VOCs and SVOCs, which have the potential to migrate into the atmosphere. All engineered caps will be designed and constructed to withstand the effects of a 500-year flood event; in addition, the engineered caps will be designed and constructed to protect against all Site-specific hazards which may pose a threat to their integrity, such as flooding, inadequate drainage, slope instability, erosion, freeze/thaw cycle effects, surface vegetation and any other risks associated with being located in a flood hazard area. An inspection and maintenance program for the engineered capping systems will be developed as part of the ongoing operation plan for the Site.
- For Site-wide soils determined to require a direct contact barrier, an engineered soil cover system will be utilized. Soils requiring this engineered cover typically consist of low-level contaminated soils containing hazardous substances at levels greater than NJDEP nonresidential direct contact soil remediation standards.

- An ecological risk assessment will be conducted for Impoundments 13, 17 and 24 to confirm the appropriate treatment for these materials. If the ecological risk assessment identifies that any impoundment contents present an unacceptable risk these materials would be relocated and consolidated in the North Area in areas where the same types of controls are warranted. Any impoundment contents that do not present an unacceptable risk could remain in their current location. Any impoundment contents requiring excavation and relocation would be remediated to acceptable levels, such as NJDEP ecological soil screening criteria or ecologically protective benchmarks.
- The existing bedrock groundwater collection system will be improved by relocating the primary extraction wells to a more central location and by adding new extraction wells, as necessary, to ensure that all Site-related groundwater is captured. In addition, a recovery system (such as trenches, wells and/or containment walls) will be constructed for collection of overburden groundwater at several locations. The potential components of the groundwater remedy are shown on Figure 9. The details of these improvements will be developed during the remedial design phase. These improvements will eliminate the migration of contaminants exceeding the more stringent of federal MCLs and NJ GWQS in the overburden and bedrock aquifers beyond the point of compliance through a combination of source actions and hydraulic controls and will restore the overburden and bedrock aquifers within the area of attainment to its expected beneficial use and to concentrations below the more stringent of federal MCLs and NJ GWQS within a reasonable period, as practicable. The waters collected at the Site will be appropriately treated or pre-treated, as necessary, for subsequent discharge in accordance with appropriate requirements. The waters collected at the Site will be discharged to surface water following complete on-site treatment. However, if it is determined that this treatment method is not appropriate or feasible, then collected groundwater will either be re-injected following complete on-site treatment or be discharged to the local sewerage authority directly or following pre-treatment.
- Institutional controls, monitoring and periodic reviews will also be required to ensure that the remedy remains protective of public health and the environment. The following institutional controls will be implemented as part of the remedy: deed restrictions to maintain the protectiveness and

functional integrity of engineered capping systems; restrictive covenants to prevent future land uses that interfere with the implementation or protectiveness of the selected remedy; and a groundwater CEA/WRA to prohibit future use of the groundwater in this area and to restrict the installation of wells (other than for monitoring or remediation purposes) in the area for the duration of the CEA. Monitoring of the engineered capping systems, sediment, surface water and groundwater will be required as part of the ongoing operation plan at the Site. The details of the maintenance and monitoring requirements for the engineering controls will be determined in the remedial design phase.

### **STATUTORY DETERMINATIONS**

Under its legal authorities, EPA's primary responsibility at Superfund sites is to undertake remedial actions that achieve adequate protection of human health and the environment. In addition, Section 121 of the CERCLA establishes several other statutory requirements and preferences. These specify that, when complete, the selected remedial action for a site must comply with applicable or relevant and appropriate environmental standards established under federal and state environmental laws unless a statutory waiver is justified. The selected remedy also must be cost-effective and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. Finally, the statute includes a preference for remedies that employ treatment that permanently and significantly reduces the volume, toxicity or mobility of hazardous wastes as its principal element. The following sections discuss how the selected remedy meets these statutory requirements.

#### **Protection of Human Health and the Environment**

The selected remedy will be protective of both human health and the environment. The soil cover system would contain source materials and eliminate potential direct-contact exposure to material, thereby eliminating risk. Additionally, the placement of the multi-layer caps in the areas of vapor and movement control would eliminate potential exposure to these materials, thereby eliminating risks. The collection and treatment of both the overburden and bedrock groundwater would control the migration of contaminants along with implementing institutional controls to eliminate potential exposure pathways. In this manner, the RAOs for the Site would be met. If it is determined

that an unacceptable ecological risk is present, invasive excavation activities in the South and West Areas may pose additional risks during implementation (e.g. air emissions, increased potential for migration of materials to nearby receptors). Excavation of the material, even under state-of-the-art control conditions, may result in the release of constituents to the environment. Materials which could meet the definition of a principal threat waste will be addressed in this remedy through consolidation within Impoundments 3, 4, 5 and treatment via in-situ S/S. Following treatment, the residual material will be further secured through the implementation of the multi-layered engineered cap.

The remedy will not impede the established beneficial reuse of the Site (*i.e.*, controlled, restricted access only) and will minimize the height and construction activities at the Impoundment 8 Facility. The Site could be made available for reuse within a reasonably short time after implementation (construction) of the remedy. The remedy implementation time frame of 10 years is considered to be relatively short given the complexity and volume of contamination at the Site. The remedy will provide a number of reuse options for the local community, aligning with local needs for potential recreational use and regional green-way initiatives.

#### Compliance with Applicable or Relevant and Appropriate Requirements

The selected remedy, Alternative 4A, will comply with all federal and state requirements which are applicable or relevant and appropriate to its implementation. As listed in Table 8, chemical-specific ARARs, such as NJ GWQSs and MCLs, would be met over time within the capture zone of the groundwater collection system for site-related chemicals. However, the time required to return groundwater to NJ GWQS is estimated at over 30 years. Capping would meet chemical-specific ARARs for other materials (*i.e.*, NJ soil remediation standards, RCRA requirements and ecologically-based screening criteria).

The remedial action would be conducted in accordance with location- and action-specific ARARs, pertinent TBCs and guidance, including the NJ Spill Compensation Control Act, Brownfields and Contaminated Site Remediation Act, NJ technical requirements for site remediation and NJ guidance for the remediation of contaminated soils (including deed notice as well as modification to groundwater CEA), NJ and federal wetlands and flood plain requirements, NJDEP air pollution control limits,

LDRs (40 CFR Part 268), CAMU requirements (40 CFR Part 264, Subpart S), RCRA requirements and Clean Water Act requirements.

### Cost-Effectiveness

The selected remedy is cost-effective at approximately \$205 million. Capital costs associated with the alternative are approximately \$155 million and the estimated total O&M cost for this alternative is approximately \$50 million. A summary of the cost estimate for the selected remedy can be found in Table 9. A more detailed cost estimate is presented in Appendix G of the Site-wide FS.

### Utilization of Permanent Solutions and Alternative Treatment Technologies to the Maximum Extent Practicable

The selected remedy represents the maximum extent to which permanent solutions and treatment technologies can be utilized in a practicable manner at the Site. Of those alternatives that are protective of human health and the environment and comply with ARARs to the extent practicable, EPA has determined that the selected remedy provides the best balance of trade-offs among the alternatives with respect to the five balancing criteria, while also considering the statutory preference for treatment as a principal element, compliance with ARARs and state and community acceptance.

The selected remedy treats source materials constituting principal threats at the Site, achieving significant reductions in the mobility and toxicity of movement control materials, while also substantially mitigating sources of groundwater contamination at the Site. The selected remedy satisfies the criteria for long-term effectiveness by in-situ S/S of wastes and capping that will effectively reduce the mobility of and potential for direct contact with contaminants remaining on-site. The selected remedy also presents substantially fewer short-term risks compared with other treatment/excavation alternatives and involves significantly fewer implementability issues, setting it apart from other alternatives involving extensive excavation of contaminated media.

### Preference for Treatment as a Principal Element

By utilizing in-situ S/S treatment to the extent practicable, the statutory preference for remedies that employ treatment as a principal element is satisfied.

### Five-Year Review Requirements

Because the remedy will result in hazardous substances, pollutants or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

### DOCUMENTATION OF SIGNIFICANT CHANGES

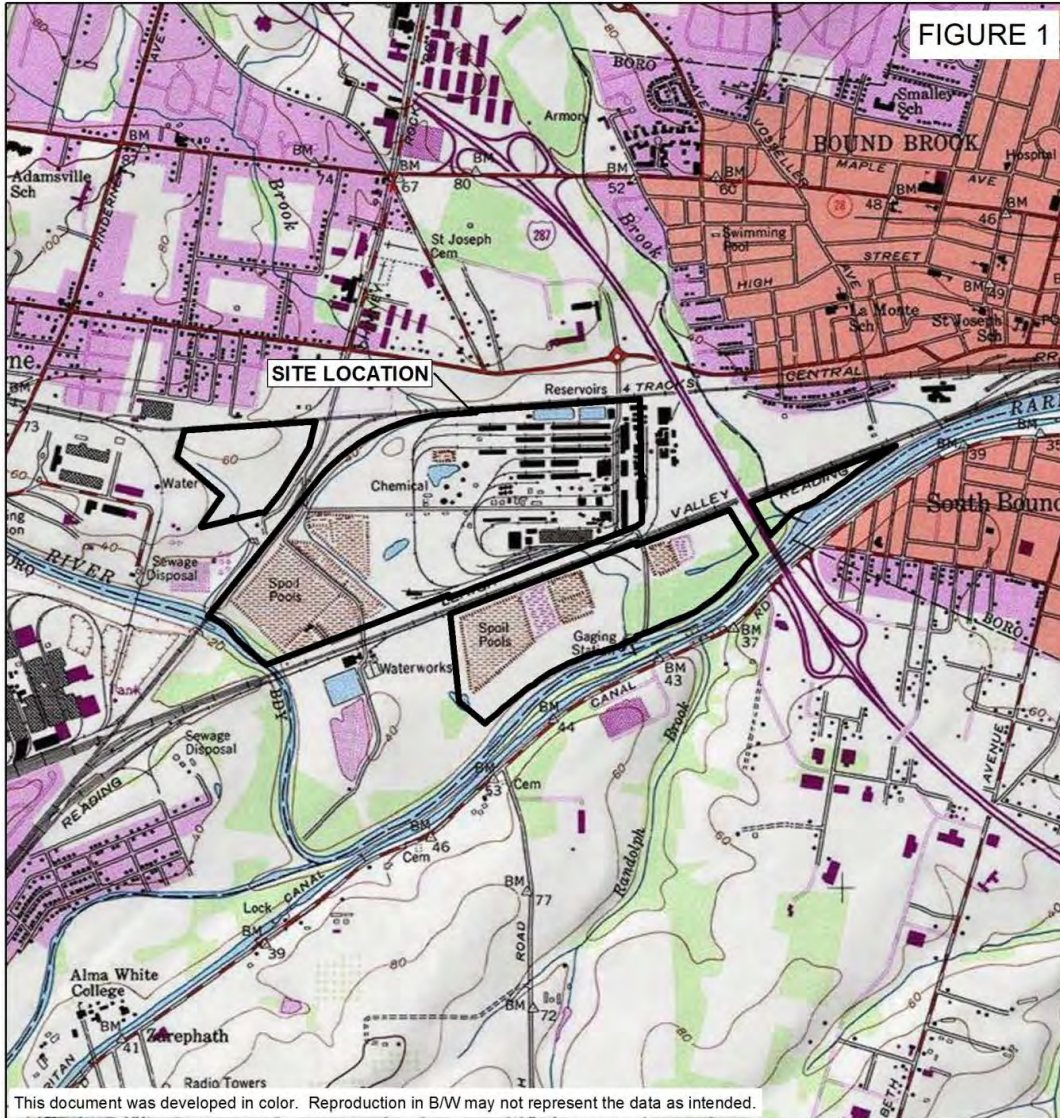
All written and verbal comments submitted during the public comment period were reviewed by EPA. All comments and EPA responses are included in the Responsiveness Summary (Appendix V). Upon review of these comments, EPA has determined that no significant changes are necessary to the preferred alternative, Alternative 4A, Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Groundwater, as presented in the Proposed Plan.



APPENDIX I: FIGURES

PATH: I:\Pizer\_4529\STD\GIS\Figures\F52012\_07\BoundBrook\_Figure1\_SiteLocation.mxd

PLOT DATE: 7/25/2012 DRK

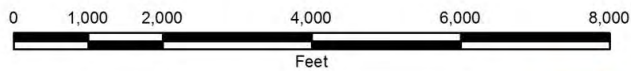


ADAPTED FROM: BOUND BROOK, NEW JERSEY USGS QUADRANGLE

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID  
 SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY



SITE LOCATION

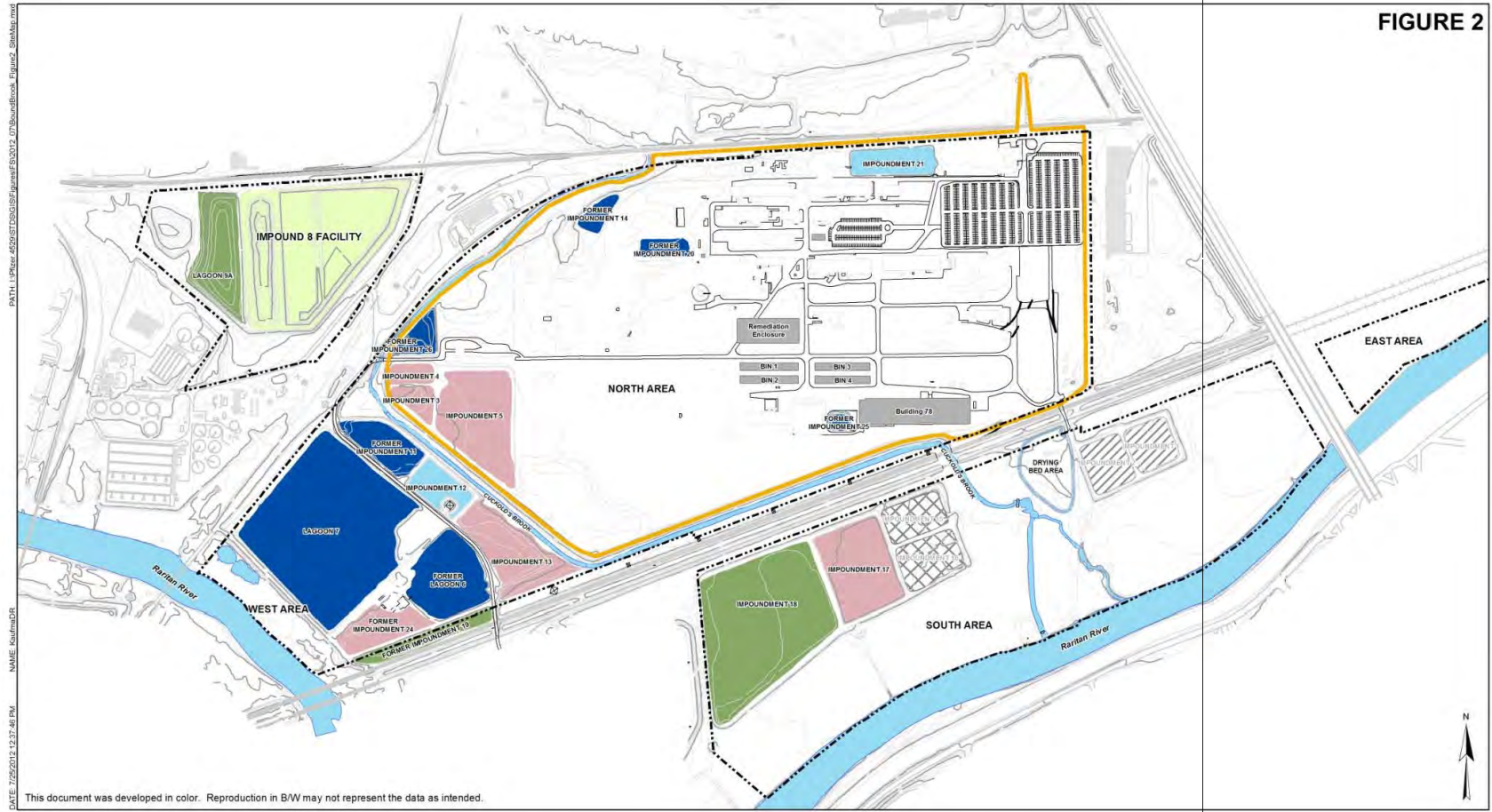


JULY 2012  
4529/48579

1:24,000



FIGURE 2



DATE: 7/26/2012 12:37:46 PM  
 NAME: kumar@O  
 PATH: L:\P\er\_452948579\fig2\fig2.dwg

This document was developed in color. Reproduction in B/W may not represent the data as intended.

- Legend**
- Approximate Property Boundary
  - Flood Control Dike
  - Drying Bed Area
  - Impoundments to be Addressed
  - Impoundments to be addressed but not included in this SWFSR
  - Impoundments Never Used for Disposal & Contain Water
  - Remediated Impoundments / RCRA Lagoons & Contain Water
  - Remediated Impoundments / RCRA Lagoons
  - Impound 8 Facility
  - Remediation on-going; not included in this SWFSR

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY



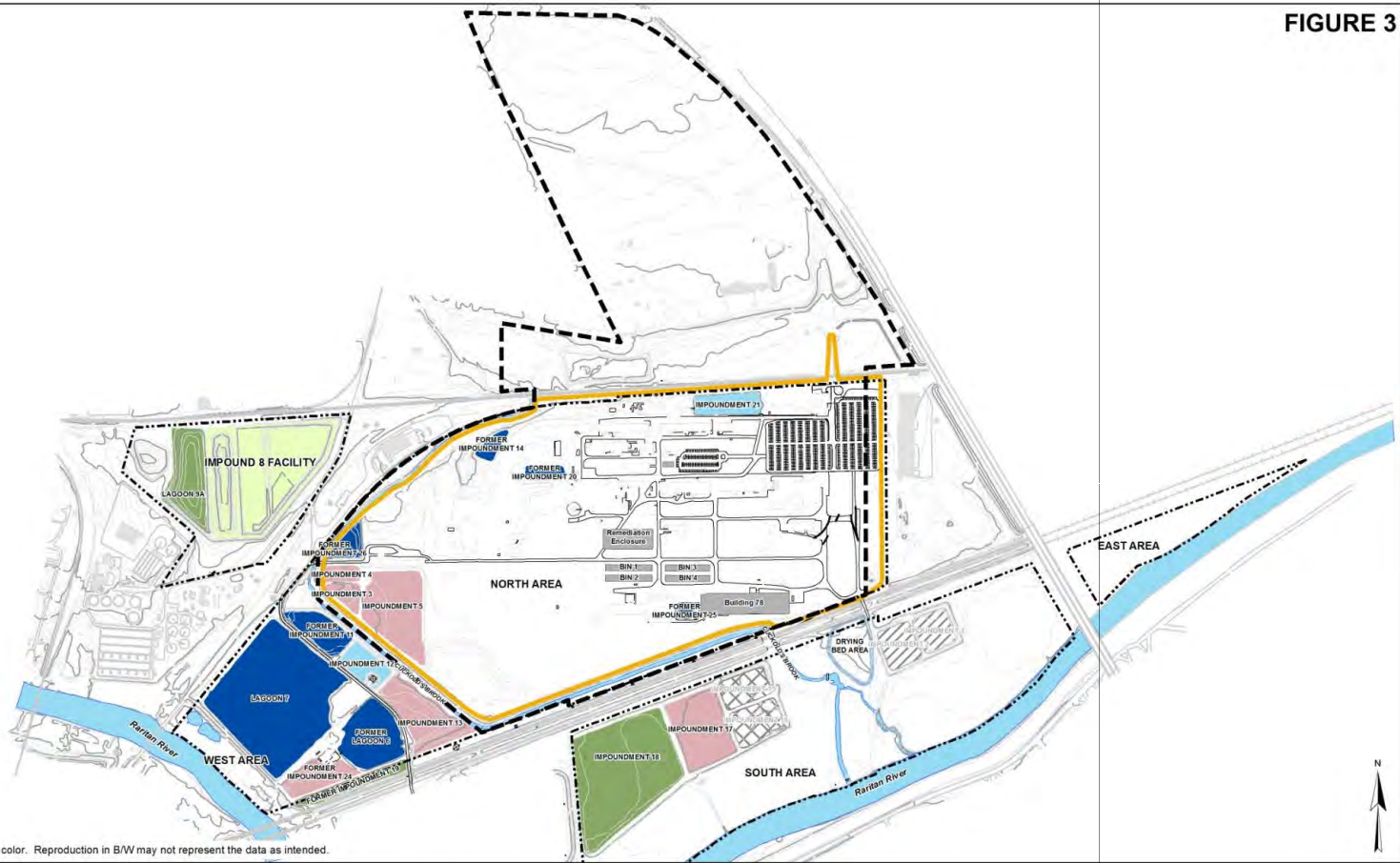
SITE MAP

FILE NO:  
452948579  
DATE:  
JULY 2012



DATE: 7/27/2012 1:33:25 PM NAME: kurumrkr PATH: I:\PDraw\_4529\ST\0501\CF\Project\Figures\Fig3\_01\Fig3\_01.dwg

FIGURE 3



This document was developed in color. Reproduction in B/W may not represent the data as intended.

**Legend**

- Classification Exception Area
- Approximate Property Boundary
- Flood Control Dike
- Drying Bed Area
- Impoundments to be Addressed
- Impoundments to be addressed but not Included in this SWFSR
- Impoundments Never Used for Disposal & Contain Water
- Remediated Impoundments / RCRA Lagoons & Contain Water
- Remediated Impoundments / RCRA Lagoons
- Impound 8 Facility
- Remediation on-going; not included in this SWFSR

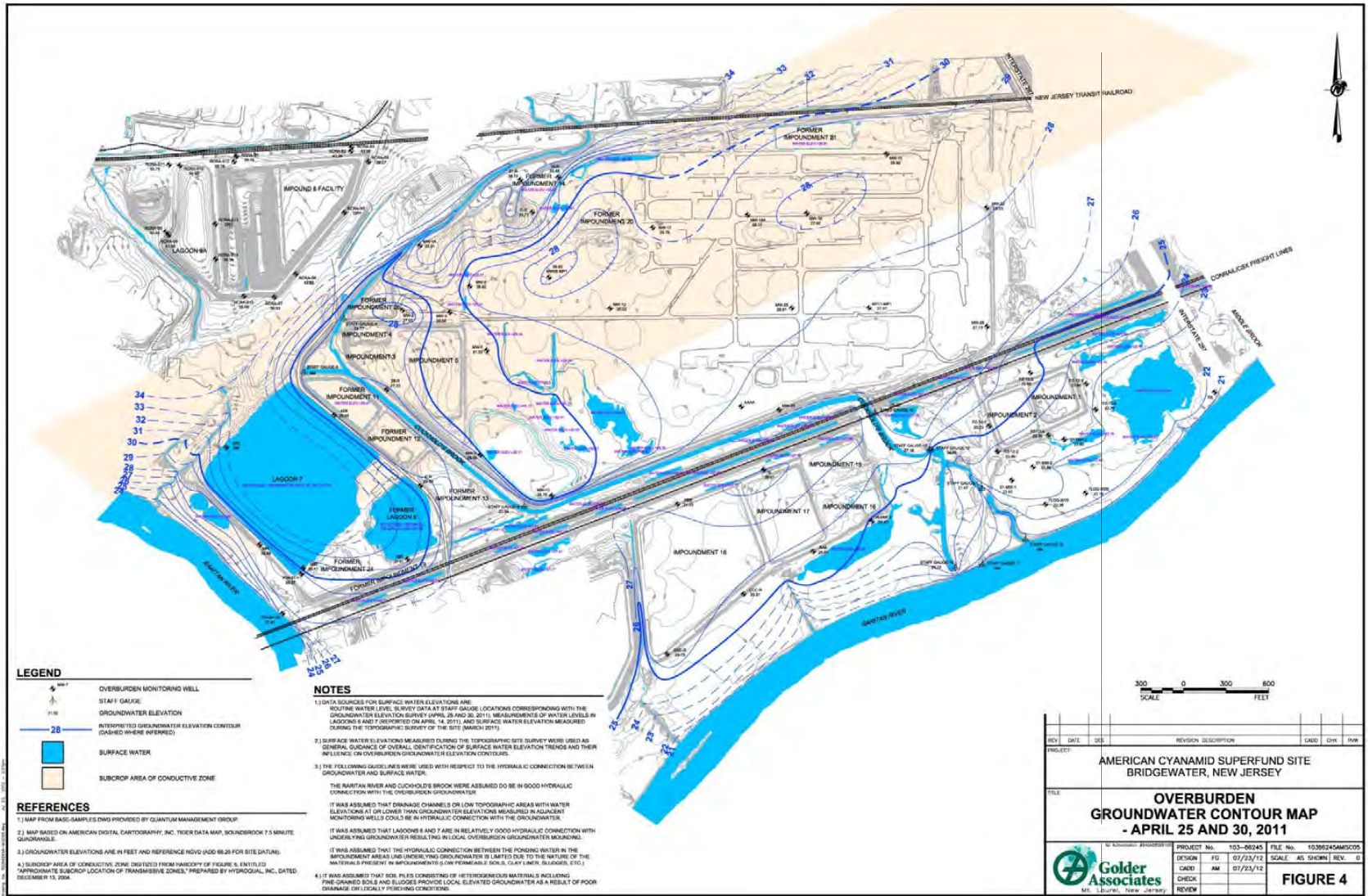
WYETH HOLDINGS CORPORATION  
AMERICAN CYANAMID SUPERFUND SITE  
SITE-WIDE FEASIBILITY STUDY



CLASSIFICATION  
EXCEPTION AREA

FILE NO.  
4529/48579  
DATE  
JULY 2012





**LEGEND**

- OVERBURDEN MONITORING WELL
- STAFF GAUGE
- GROUNDWATER ELEVATION
- INTERPRETED GROUNDWATER ELEVATION CONTOUR (DASHED WHERE REFERRED)
- SURFACE WATER
- SUBCROP AREA OF CONDUCTIVE ZONE

**REFERENCES**

- 1.) MAP FROM BASE SAMPLES DWS PROVIDED BY QUANTUM MANAGEMENT GROUP
- 2.) MAP BASED ON AMERICAN DIGITAL CARTOGRAPHY, INC. TIGER DATA MAP, SOUND BROOK 7.5 MINUTE QUADANGLE.
- 3.) GROUNDWATER ELEVATIONS ARE IN FEET AND REFERENCE NGVD (AD 89.28 FOR SITE DATUM)
- 4.) SUBCROP AREA OF CONDUCTIVE ZONE DERIVED FROM HANDCOPY OF FIGURE 6, ENTITLED "APPROXIMATE SUBCROP LOCATION OF TRANSMISSIVE ZONES," PREPARED BY HYDROQUAL, INC., DATED DECEMBER 13, 2004.

**NOTES**

- 1.) DATA SOURCES FOR SURFACE WATER ELEVATIONS ARE:
  - SURFACE WATER LEVEL MEASURED AT STAFF GAUGE (LOCATIONS CORRESPONDING WITH THE GROUNDWATER ELEVATION SURVEY APRIL 25 AND 30, 2011); MEASUREMENTS OF WATER LEVELS IN LAGOONS 1 AND 7 IDENTIFIED ON APRIL 14, 2011; AND SURFACE WATER ELEVATION MEASURED DURING THE TOPOGRAPHIC SURVEY OF THE SITE (MARCH 2011)
- 2.) SURFACE WATER ELEVATIONS MEASURED DURING THE TOPOGRAPHIC SURVEY WERE USED AS GENERAL GUIDANCE OF OVERALL IDENTIFICATION OF SURFACE WATER ELEVATION TRENDS AND THEIR INFLUENCE ON OVERBURDEN GROUNDWATER ELEVATION CONTOURS.
- 3.) THE FOLLOWING GUIDELINES WERE USED WITH RESPECT TO THE HYDRAULIC CONNECTION BETWEEN GROUNDWATER AND SURFACE WATER:
  - THE MARITAN RIVER AND CUCKSHOLD BROOK WERE ASSUMED TO BE IN GOOD HYDRAULIC CONNECTION WITH THE OVERBURDEN GROUNDWATER.
  - IT WAS ASSUMED THAT DRAINAGE CHANNELS OR LOW TOPOGRAPHIC AREAS WITH WATER ELEVATIONS AT OR LOWER THAN GROUNDWATER ELEVATIONS MEASURED IN ADJACENT MONITORING WELLS COULD BE IN HYDRAULIC CONNECTION WITH THE GROUNDWATER.
  - IT WAS ASSUMED THAT LAGOONS 6 AND 7 ARE IN RELATIVELY GOOD HYDRAULIC CONNECTION WITH UNDERLYING GROUNDWATER RESULTING IN LOCAL OVERBURDEN GROUNDWATER MONITORING.
  - IT WAS ASSUMED THAT THE HYDRAULIC CONNECTION BETWEEN THE PONDING WATER IN THE IMPOUNDMENT AREAS AND UNDERLYING GROUNDWATER IS LIMITED DUE TO THE NATURE OF THE MATERIALS PRESENT IN IMPONDMENTS (SAND, FINE GRAINED SOILS, CLAY, SILT, SLUDGES, ETC.)
  - IT WAS ASSUMED THAT SOIL PILES CONSISTING OF HETEROGENEOUS MATERIALS INCLUDING FINE GRAINED SOILS AND SLUDGES PROVIDE LOCAL ELEVATED GROUNDWATER AS A RESULT OF POOR DRAINAGE OR LOCALLY PERSISTING CONDITIONS.

300 0 300 600  
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	QAD	CHK	PKW

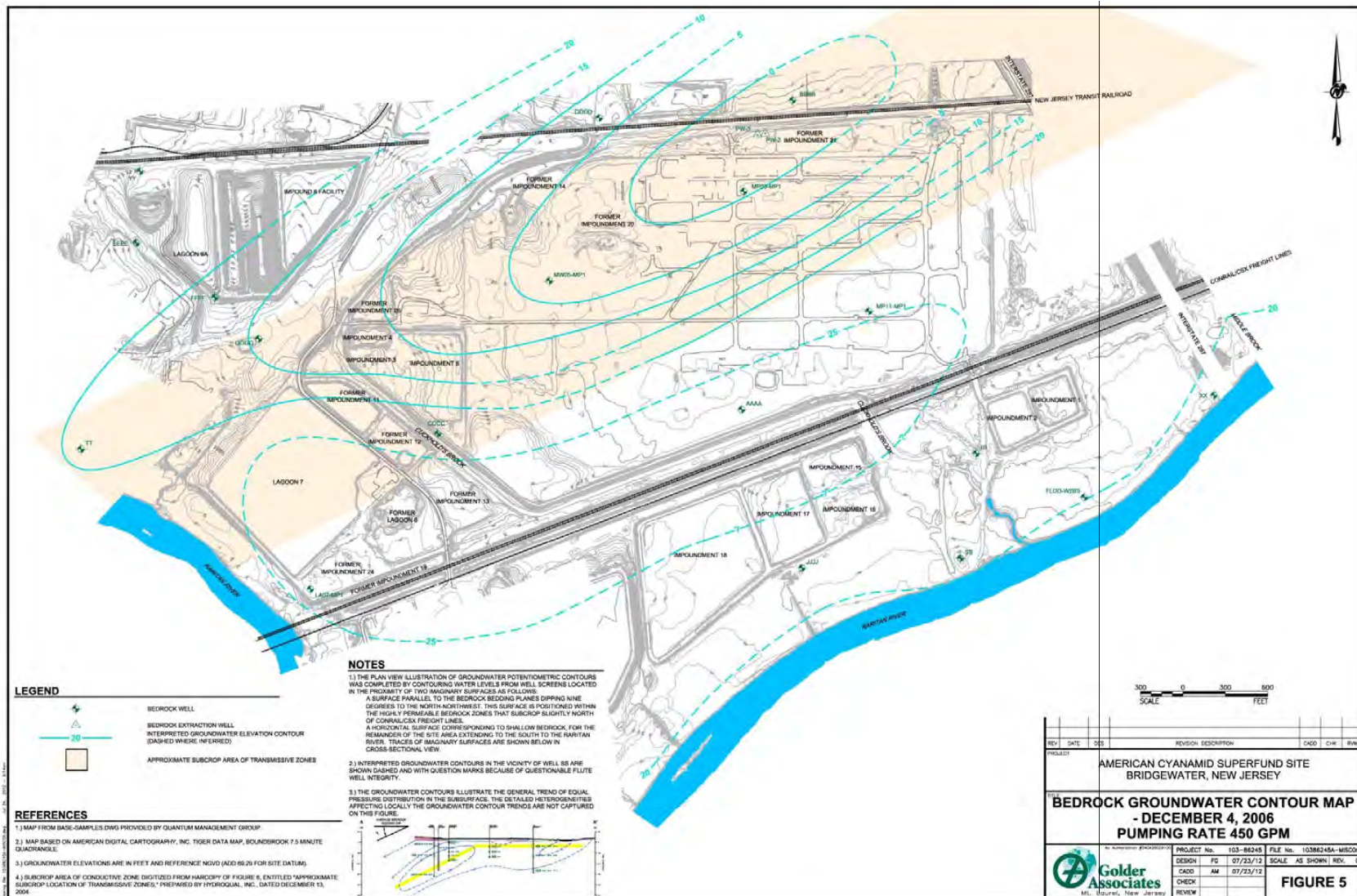
PROJECT: AMERICAN CYANAMID SUPERFUND SITE BRIDGEWATER, NEW JERSEY

FILE: OVERBURDEN GROUNDWATER CONTOUR MAP - APRIL 25 AND 30, 2011

PROJECT No.	103-60245	FILE No.	10360245AMS005
DESIGN	FG 07/23/12	SCALE	AS SHOWN   REV. 0
DRAW	AM 07/23/12		
CHECK			
REVIEW			

Golder Associates  
Mt. Laurel, New Jersey

**FIGURE 4**



**LEGEND**

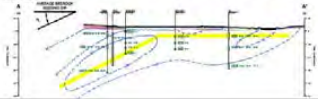
- BEDROCK WELL
- BEDROCK EXTRACTION WELL
- INTERPRETED GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRD)
- APPROXIMATE SUBCROP AREA OF TRANSMISSIVE ZONES

**REFERENCES**

- 1.) MAP FROM BASE-SAMPLES.DWG PROVIDED BY QUANTUM MANAGEMENT GROUP
- 2.) MAP BASED ON AMERICAN DIGITAL CARTOGRAPHY, INC. TIGER DATA MAP, BOUNDSDROOK 7.5 MINUTE QUADRANGLE.
- 3.) GROUNDWATER ELEVATIONS ARE IN FEET AND REFERENCE NGVD (AND 89.29 FOR SITE DATUM).
- 4.) SUBCROP AREA OF CONDUCTIVE ZONE, DIGITIZED FROM HANCOCK OF FIGURE 6, ENTITLED "APPROXIMATE SUBCROP LOCATION OF TRANSMISSIVE ZONES," PREPARED BY HYDROQUAL, INC., DATED DECEMBER 13, 2004.

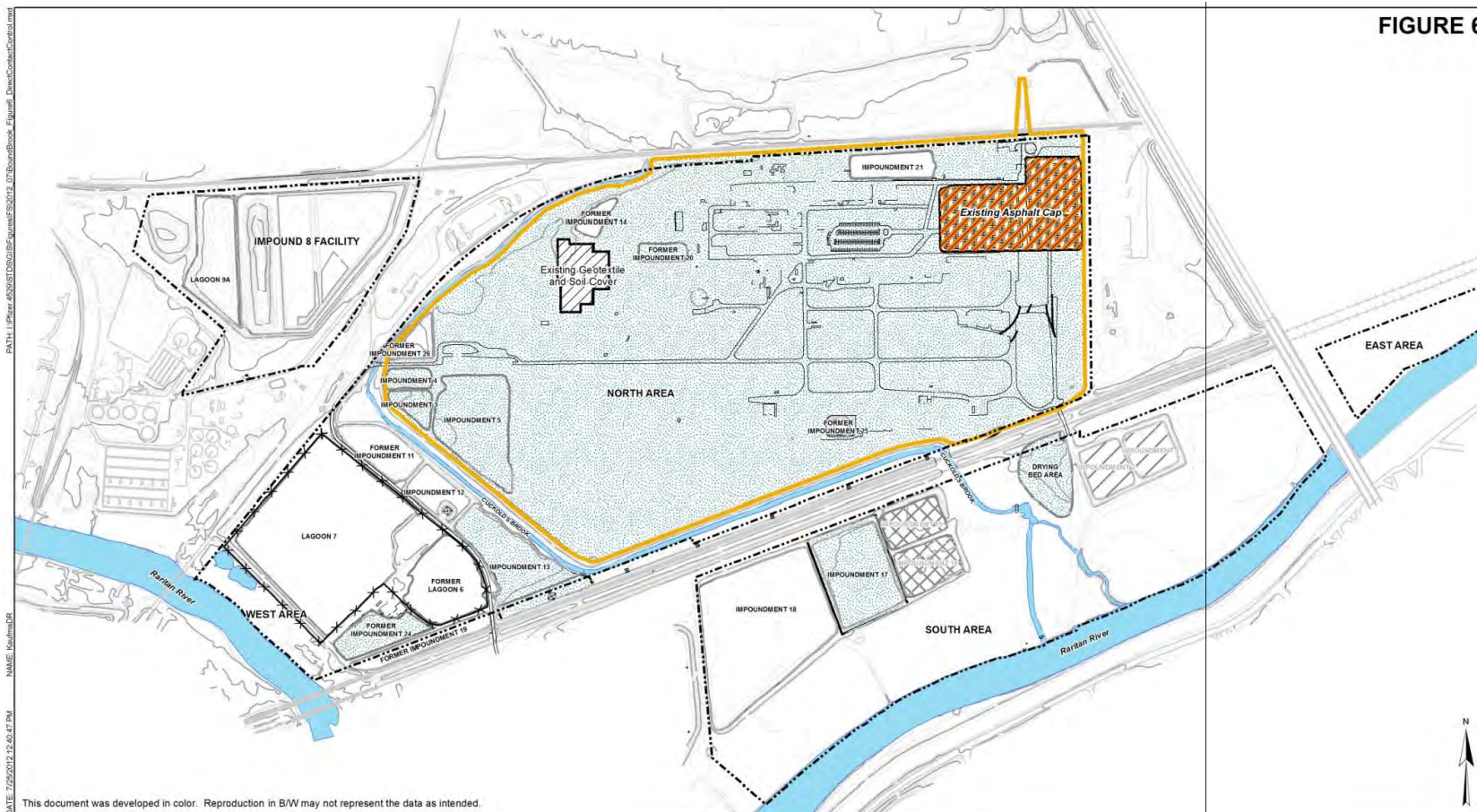
**NOTES**

- 1.) THE PLAN VIEW ILLUSTRATION OF GROUNDWATER POTENTIOMETRIC CONTOURS WAS COMPLETED BY CONTOURING WATER LEVELS FROM WELL SCREENS LOCATED IN THE PROXIMITY OF TWO IMAGINARY SURFACES AS FOLLOWS:  
 A SURFACE PARALLEL TO THE BEDROCK BEDDING PLANES DIPPING NINE DEGREES TO THE NORTH-NORTHWEST. THIS SURFACE IS POSITIONED WITHIN THE NEARLY FRAGMENTABLE BEDROCK ZONES THAT SUBCROP SLIGHTLY NORTH OF CONRAIL-CX FREIGHT LINES.  
 A HORIZONTAL SURFACE CORRESPONDING TO SHALLOW BEDROCK FOR THE REMAINDER OF THE SITE AREA EXTENDING TO THE SOUTH TO THE MAURICE RIVER. TRACES OF IMAGINARY SURFACES ARE SHOWN BELOW IN CROSS-SECTIONAL VIEW.
- 2.) INTERPRETED GROUNDWATER CONTOURS IN THE VICINITY OF WELL 82 ARE SHOWN DASHED AND WITH QUESTION MARKS BECAUSE OF QUESTIONABLE FLUTE WELL INTEGRITY.
- 3.) THE GROUNDWATER CONTOURS ILLUSTRATE THE GENERAL TREND OF EQUAL PRESSURE DISTRIBUTION IN THE SUBSURFACE. THE DETAILED HETEROGENEITIES AFFECTING LOCALLY THE GROUNDWATER CONTOUR TRENDS ARE NOT CAPTURED ON THIS FIGURE.



REV	DATE	BY	REVISION DESCRIPTION	CAD	CHK	REV
PROJECT: AMERICAN CYANAMID SUPERFUND SITE BRIDGEWATER, NEW JERSEY						
<b>BEDROCK GROUNDWATER CONTOUR MAP</b> - DECEMBER 4, 2006 PUMPING RATE 450 GPM						
PROJECT No. 103-86245		FILE No. 10386245A-MSC06		SCALE AS SHOWN		REV. 0
DESIGN	PC	07/23/12				
CADD	AM	07/23/12				
CHECK						
REVIEW						
						<b>FIGURE 5</b>

FIGURE 6



This document was developed in color. Reproduction in B/W may not represent the data as intended.

**Legend**

- Flood Control Dike
- Approximate Property Boundary
- Impoundments
- Direct Contact Control Areas - 190 Acres
- Impoundments to be addressed but not included in this SWFSR
- Remediation on-going, not included in this SWFSR
- Existing Geotextile and Soil Cover Installed in 1992 for Worker Direct Contact Control - Further Control not Required
- Existing Asphalt Cap Installed in 1999 for Hill Property Development - Further Control not Required
- Existing Fence with Water Cover for Direct Contact Control - Further Control not Required

WYETH HOLDINGS CORPORATION  
AMERICAN CYANAMID SUPREFUND SITE  
SITE-WIDE FEASIBILITY STUDY

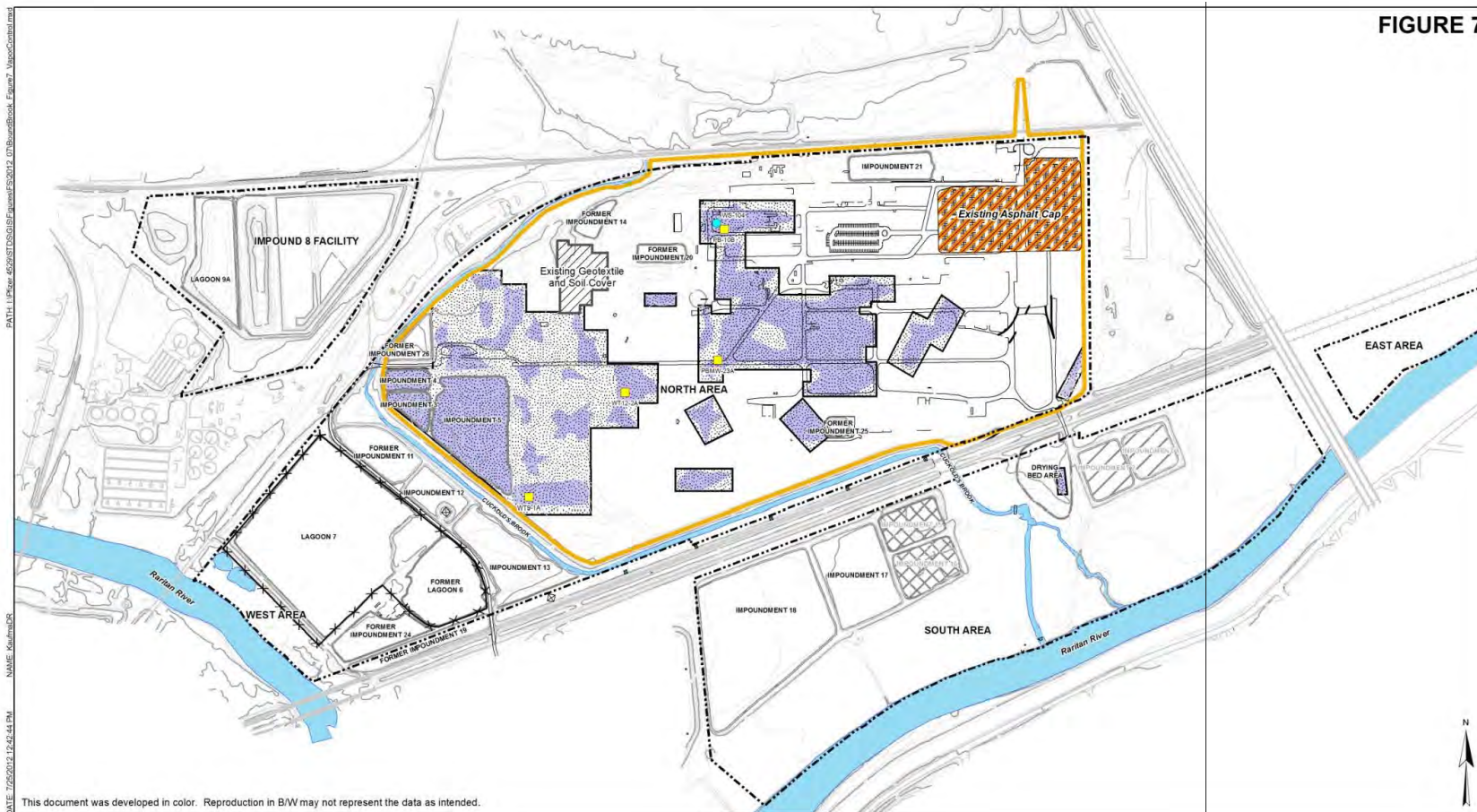
0 300 600 1,200 Feet

AREAS PROPOSED FOR  
DIRECT CONTACT CONTROL

FILE NO.  
4529/48579  
DATE  
JULY 2012



FIGURE 7



DATE: 7/26/2012 12:42:44 PM NAME: ksumner  
 PATH: I:\P\er\_459151250\SWF\Figure7\_S017\_07\BoundBook\_Figures\_VaporControl.dwg

This document was developed in color. Reproduction in B/W may not represent the data as intended.

**Legend**

- Flood Control Dike
- Approximate Property Boundary
- Impoundments
- Impoundments to be addressed but not included in this SWFSR
- Remediation on-going, not included in this SWFSR
- Vapor Control Areas - 38 Acres\*
- Total Areas Proposed for Vapor Control - 66 Acres
- SS Locations where analytical results exceed USEPA SSL Criteria 10<sup>-3</sup>
- SB Locations where analytical results exceed USEPA SSL Criteria 10<sup>-3</sup>
- Existing Geotextile and Soil Cover Installed in 1992 for Worker Direct Contact Control - Further Control not Required
- Existing Asphalt Cap Installed in 1999 for Hill Property Development - Further Control not Required
- Existing Fence with Water Cover for Direct Contact Control - Further Control not Required

\*These limits are preliminary and a more refined assessment method will be developed and implemented during the Remedial Design phase to appropriately delineate areas requiring vapor control.

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY



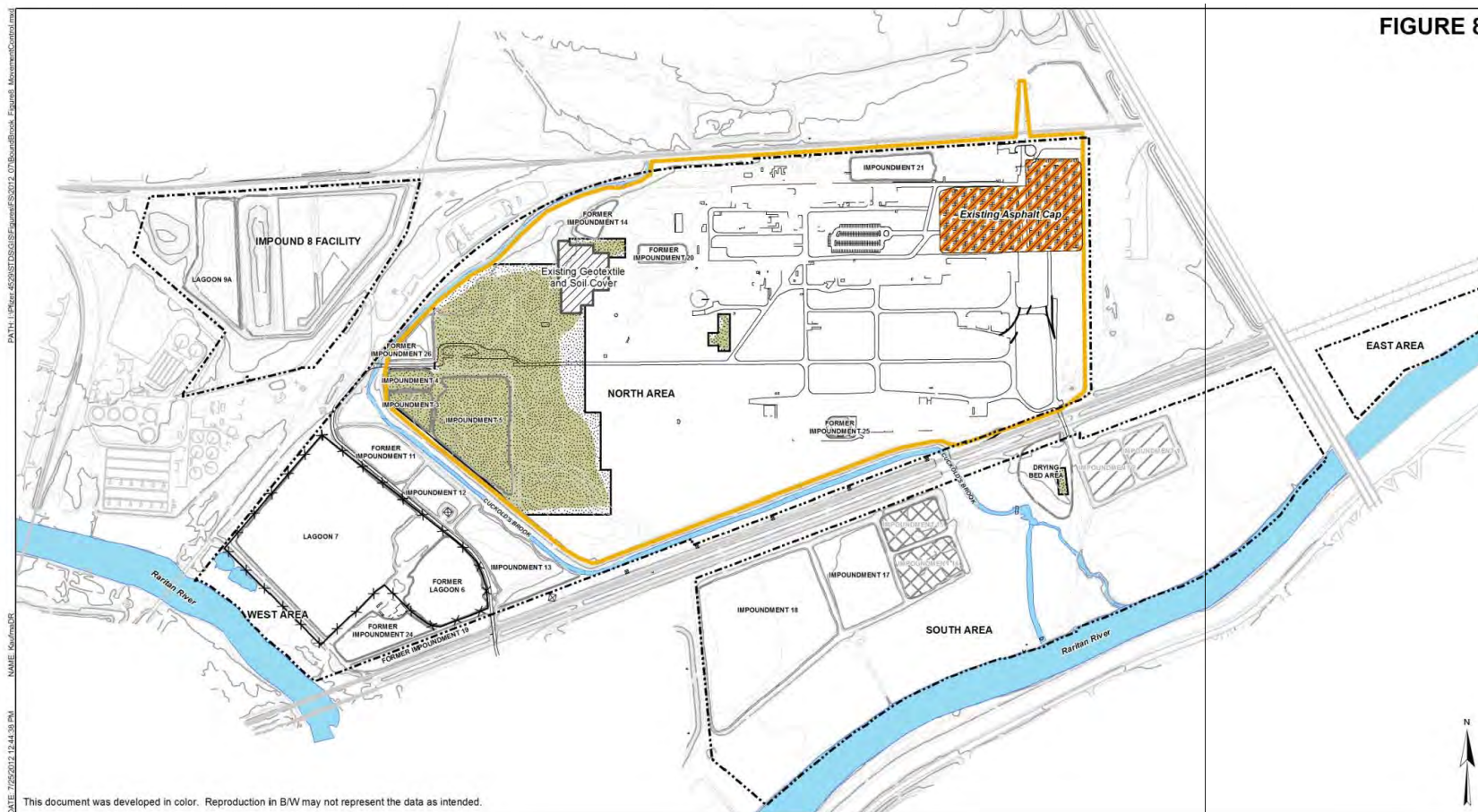
AREAS PROPOSED FOR  
 VAPOR CONTROL

FILE NO.  
 452948579  
 DATE  
 JULY 2012





FIGURE 8



PATH: I:\Pillar\_4529\STDS\03\Figure8\_S0074\_07\BoundBook\_Figures\_MovementControl.dwg  
 NAME: kourmkr  
 DATE: 7/26/2012 12:41:38 PM

This document was developed in color. Reproduction in B/W may not represent the data as intended.

- Legend**
- Flood Control Dike
  - Approximate Property Boundary
  - Impoundments
  - Movement Control Areas - 32 Acres
  - Total Areas Proposed for Movement Control - 38 Acres\*
  - Impoundments to be addressed but not included in this SIVFSR
  - Remediation on-going, not included in this SIVFSR
  - Existing Geotextile and Soil Cover
  - Existing Asphalt Cap Installed in 1999 for Hill Property Development - Further Control not Required
  - Existing Fence with Water Cover for Direct Contact Control - Further Control not Required

\*These limits are preliminary and a more refined assessment method will be developed and implemented during the Remedial Design phase to appropriately delineate areas requiring movement control.

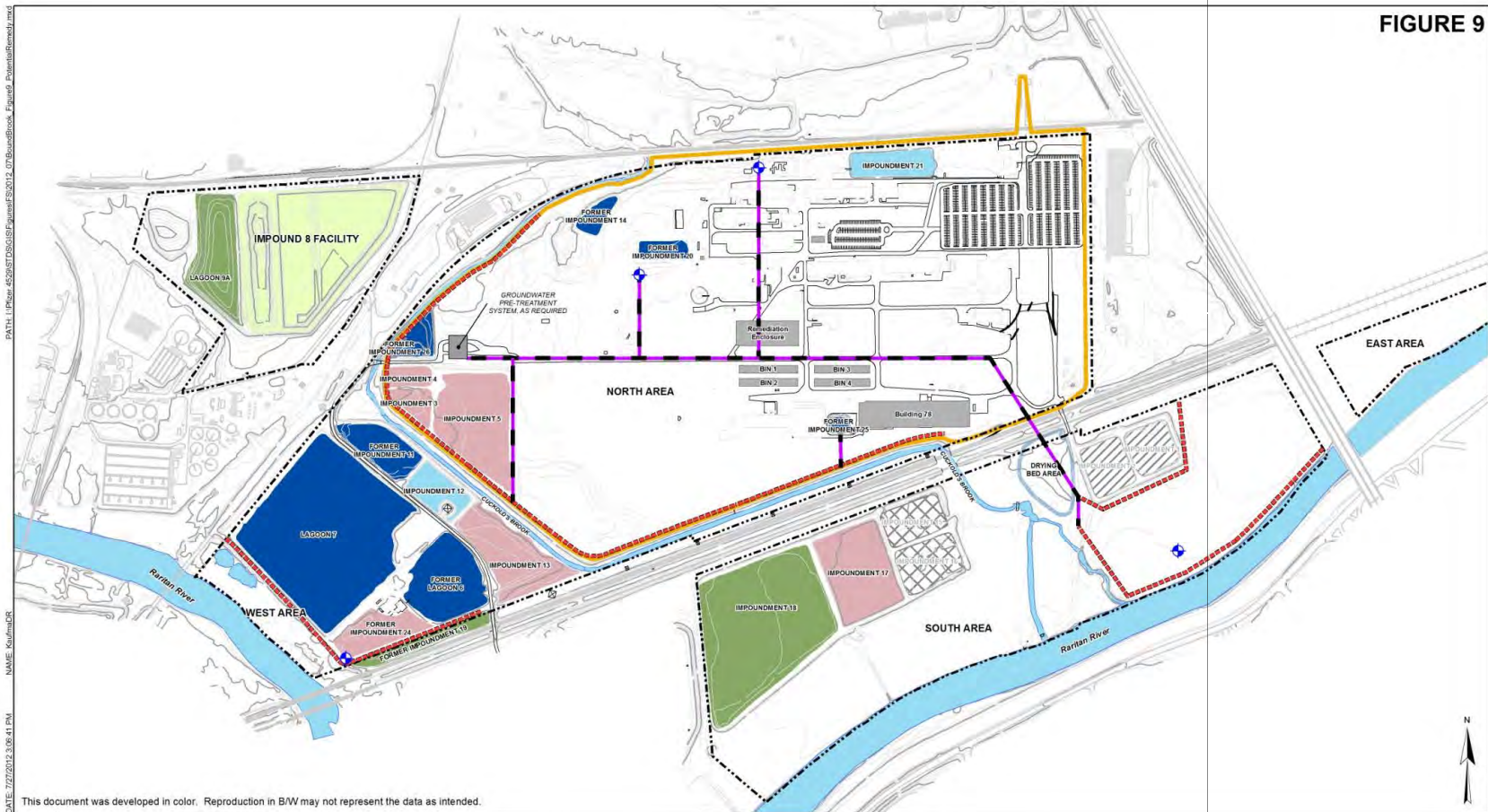
WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY

AREAS PROPOSED FOR  
 MOVEMENT CONTROL

FILE NO.  
 4529/48579  
 DATE  
 JULY 2012



FIGURE 9



DATE: 7/27/2012 3:06:41 PM NAME: KufmDOR PATH: I:\Flow\_4529\ET\_DSO\ISF\Figure9\Figure9\_PotentialRemedy.mxd

This document was developed in color. Reproduction in B/W may not represent the data as intended.

- Legend**
- Flood Control Dike
  - Approximate Property Boundary
  - Drying Bed Area
  - Impoundments to be Addressed
  - Impoundments to be addressed but not included in this SWFSR
  - Impoundments Never Used for Disposal & Contain Water
  - Remediated Impoundments / RCRA Lagoons & Contain Water
  - Remediated Impoundments / RCRA Lagoons
  - Impound 8 Facility
  - Remediation on-going; not included in this SWFSR
  - Conveyance Piping
  - Overburden Collection Trench
  - Bedrock Extraction Well/Necessity and Final Location to be Determined During Remedial Design

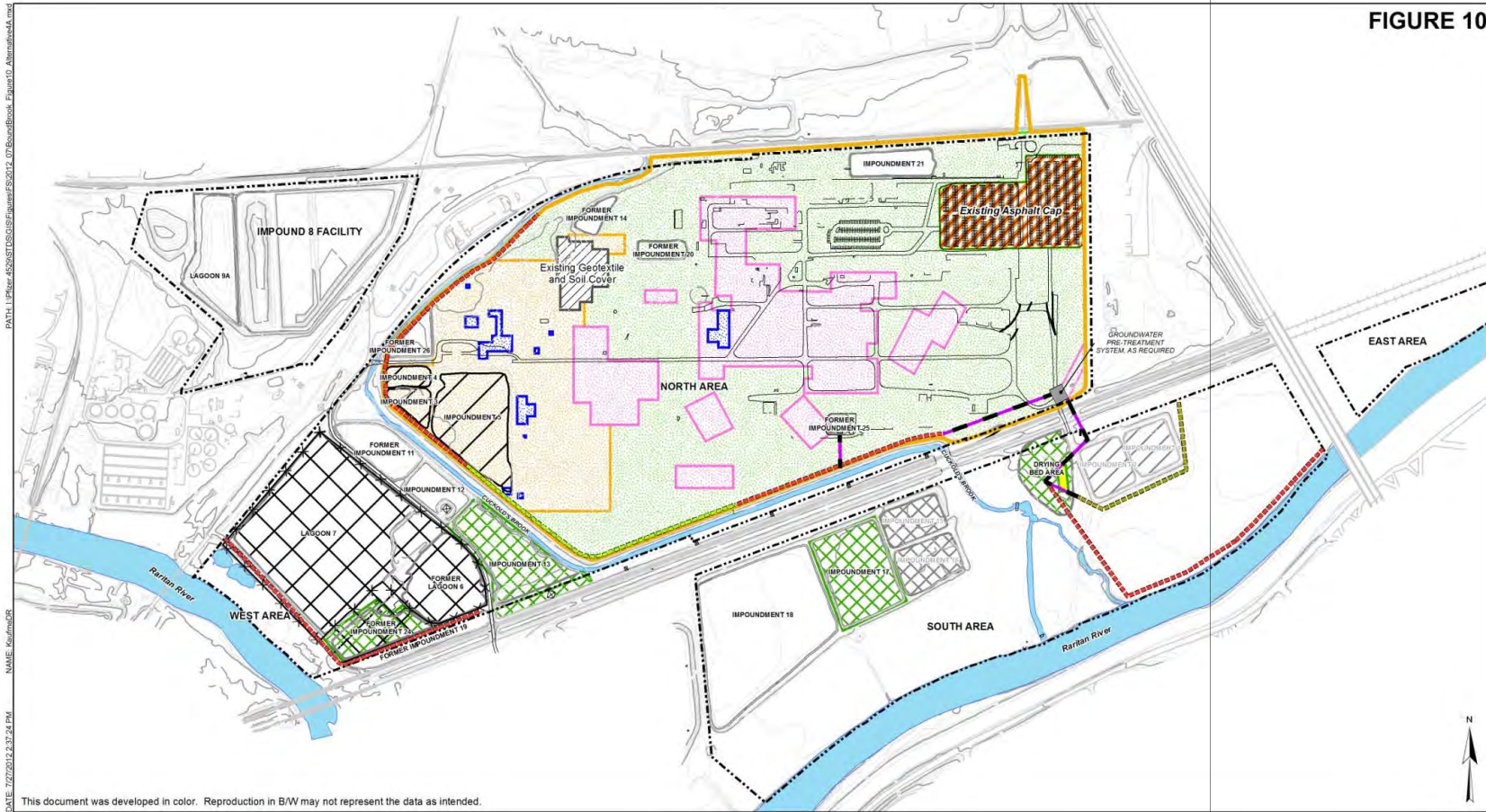
WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY

POTENTIAL COMPONENTS OF GROUND WATER REMEDY

FILE NO.  
 4529/48579  
 DATE  
 JULY 2012



FIGURE 10



PATH: I:\P\45591\DS\SE\PowerS\012\_07\BoundBook\_Figures\Alternative4.mxd  
 NAME: kumar  
 DATE: 7/27/2012 2:37:24 PM

This document was developed in color. Reproduction in B/W may not represent the data as intended.

**Legend**

- █ Flood Control Dike
- Approximate Property Boundary
- Impoundment
- In-situ Solidification
- Proposed Area for Recovery Well
- Conveyance Piping
- Collection Trench
- Higher Gradient Section
- (Final Layout and Construction Details TBD During RA)
- Impoundments to be addressed but not included in this SWFSR
- Remediation on-going, not included in this SWFSR
- Existing Geotextile and Soil Cover installed in 1992 for Worker Direct Contact Control - Further Control Not Required
- Existing Asphalt Cap installed in 1999 for Hill Property Development - Further Control not Required
- Existing Fence with Water Cover for Direct Contact Control - Further Control not Required
- Excavation and Relocation to Impoundments 3, 4, & 5 - 2 Acres
- Soil Cover for Direct Contact Control - 113 Acres
- Excavation and Relocation to North Area where Same Type of Controls are Warranted (Exc. of Imp. 13, 17, & 24 TBD by Eco. RA) - 20 Acres
- Multi-layer Cap for Vapor Control - 33 Acres (Final area based on inhalation risk greater than 10<sup>-6</sup>)
- Multi-layer Cap for Vapor and Movement Control - 36 Acres
- Excavation and Relocation to North Area for Vapor and Movement Control - 0.2 Acres

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY

0 300 600 1,200 Feet

SELECTED REMEDY/  
 ALTERNATIVE 4A

The limits shown are preliminary and a more refined assessment method will be developed and implemented, as necessary, during remedial design.

FILE NO.  
 4529/4529  
 DATE  
 JULY 2012



APPENDIX II: TABLES

**Table 1A: Summary of CERCLA Impoundments to be addressed in Focused Feasibility Study**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <small>*Please note that this list may not be exhaustive</small>
Impoundment 1	2.1	3.0 MG (Approx 26,900 CY Remaining)	Storage of sludges from the coal oil ("light oil") refining process	Approx 3.0 million gallons (MG) of light oil sludge (LOS) layer removed and recycled; solids not yet remediated, to be addressed in a separate FFS	benzene, toluene, xylene, 1,2-dichlorobenzene, naphthalene, nitrobenzene, arsenic, barium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc. pH less than 2
Impoundment 2	2.3	3.1 MG (Approx 26,700 CY Remaining)	Storage of sludges from the coal oil ("light oil") refining process	Approx 3.1 MG of light oil sludge (LOS) layer removed and recycled; solids not yet remediated, to be addressed in a separate FFS	benzene, toluene, 1,2 -dichlorobenzene, naphthalene, chromium, copper, lead, mercury, nickel, selenium, zinc. pH less than 2

**Table 1B: Summary of CERCLA Impoundments Currently Undergoing Remediation**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <small>*Please note that this list may not be exhaustive</small>
Impoundment 15	2.8	58,750 CY (94,000 tons) remediated to date (Approx 39,050 CY Remaining)	Storage of iron oxide material resulting from iron use in aniline production	Remediation in progress - iron oxide materials being excavated and sent off-site for recycling	iron oxide, acetone, benzene, methylene chloride, xylenes, 4-chloroaniline, n-nitrosodiphenylamine, anthracene, naphthalene, phenanthrene, arsenic, copper, lead, zinc, PCBs
Impoundment 16	3		Storage of iron oxide material resulting from iron use in aniline production	Remediation in progress - iron oxide materials being excavated and sent off-site for recycling	iron oxide, acetone, benzene, methylene chloride, xylenes, 4-chloroaniline, n-nitrosodiphenylamine, anthracene, naphthalene, phenanthrene, pyrene, arsenic, copper, lead, zinc, PCBs

**Table 1C: Summary of CERCLA Impoundments Addressed in this Proposed Plan**

Impoundment	Area (acres)	Volume Remediated	Description/Use	Current Status	COCs <i>*Please note that this list may not be exhaustive</i>
Impoundment 3	1.3	Not Yet Remediated (Approx 30,200 CY Remaining)	Storage of organic tars from the distillation of coal oil and consolidation of construction material, general plant debris and fill material	Not yet remediated; being addressed as part of this Proposed Plan	benzene, toluene, xylene, naphthalene, n-nitrosodiphenylamine, 2-methylnaphthalene, 1,2-dichlorobenzene, nitrobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, vanadium, pH of 4-8
Impoundment 4	1	18,700 CY Remediated (Approx 4,300 CY remaining in Impoundment 4 and 110,330 CY remaining in Impoundment 5)	Storage of sludges and organic tars from various production processes	Approximately 3.8 MG of pumpable sludge removed and recycled; remaining material not yet remediated, being addressed as part of this Proposed Plan	benzene, toluene, xylene, 1,2-dichlorobenzene, naphthalene, pH of 1-3
Impoundment 5 (wet)	5.2		Storage of sludges and organic tars from various production processes	Approximately 3.8 MG of pumpable sludge removed and recycled; remaining material not yet remediated, being addressed as part of this Proposed Plan	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, vanadium, zinc, pH of 3.7-9.0
Impoundment 5 (dry)	2.5	17,500 CY Remediated	Storage of sludges and, later, mixed fill materials (layered over the sludge)	Approximately 33% excavated, solidified and placed in Impound 8; remaining material not yet remediated, being addressed as part of this Proposed Plan	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, vanadium, zinc, pH of 3.7-9.0
Impoundment 13	3.9	Not Applicable (N/A) (Approx 55,000 CY Remaining)	Storage of lime and disposal of wastewater treatment sludges	Being addressed as part of this Proposed Plan	benzene, toluene, ethylbenzene, xylene, chlorobenzene, acenaphthalene, fluorine, 2-methylnaphthalene, naphthalene, 1,2,4-trichlorobenzene, arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, pH of 6.5-9.0
Impoundment 17	6.2	N/A (Approx 69,300 CY Remaining)	Storage of primary sludge from settlement of lime-neutralized effluent from on-site wastewater treatment	Being addressed as part of this Proposed Plan	acetone, toluene, ethylbenzene, and xylene, chlorobenzene, 1,2,4-trichlorobenzene, benzo(a)anthracene, bis(2-ethyl hexyl)phthalate, naphthalene, n-nitrosodiphenylamine, chromium, copper, lead, nickel, zinc. pH of 7-8
Impoundment 24	3.2	N/A (Approx 65,000 CY Remaining)	Storage of lime for primary treatment and, later, storage for sludges and general plant wastes	Being addressed as part of this Proposed Plan	acetone, chlorobenzene, methylene chloride, toluene, xylene, dibenzofuran, 1,2-dichlorobenzene, 2-methylnaphthalene, naphthalene, arsenic, chromium, copper, iron, lead, nickel, pH of 7-12.7

**Table 1D: Summary of CERCLA Impoundments with Remediation Completed**

Impoundment	Area (acres)	Volume Remediated	Description/Use	Current Status	COCs <small>*Please note that this list may not be exhaustive</small>
Impoundment 11	2.6	25,000 CY	Disposal of sludges, furnace ash, and klinkers	Remediation completed; Closed with No Further Action per remedy selected in 1993 OU-1 ROD. Impoundment material removed and placed in Impoundment 8.	acetone, ethylbenzene, chlorobenzene, methylene chloride, toluene, xylenes, acenaphthalene, benzo(a)anthracene, fluorene, naphthalene, 2-methylnaphthalene, chromium, copper, lead, mercury, nickel, zinc
Impoundment 14	0.9	7,200 CY	Storage of organic tars	Remediation completed; Closed with No Further Action per remedy selected in 1998 OU-3 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methylnaphthalene, 1,2-dichlorobenzene, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc
Impoundment 18	15.4	217,000 CY	Storage of primary sludge from settlement of lime-neutralized effluent from on-site wastewater treatment	Remediation completed; Closed with No Further Action per remedy selected in 1996 OU-2 ROD	acetone, chlorobenzene, 2-methylnaphthalene, naphthalene, 4-chloroaniline, acenaphthalene, benzo(a)anthracene, phenanthrene, bis(2-ethyl hexyl)phthalate, fluorene, arsenic, chromium, copper, lead, zinc
Impoundment 19	2.3	12,000 CY	Storage of lime for use in wastewater treatment	Remediation completed; Closed with No Further Action per remedy selected in 1993 OU-1 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, ethylbenzene, chlorobenzene, methylene chloride, toluene, xylenes, 1,2-dichlorobenzene, 2-methylnaphthalene, naphthalene, 1,2,4- trichlorobenzene, arsenic, chromium, copper, iron, lead, magnesium, nickel
Impoundment 20	1.0	12,100 CY	Settling basin for on-site treatment of dye and pigment operation wastewater	Remediation completed; Closed with No Further Action per remedy selected in 1998 OU-3 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, cyanide, mercury, nickel, selenium, silver, vanadium, zinc
Impoundment 26	2.3	22,000 CY	Storage of organic tars and, later, construction material, general plant debris and fill material	Remediation completed; Closed with No Further Action per remedy selected in 1998 OU-3 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc

**Table 1E: Summary of CERCLA Impoundments with No Remediation Required**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <small>*Please note that this list may not be exhaustive</small>
Impoundment 9	-	No Remediation Required	Never Used	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 10	-	No Remediation Required	Never Used	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 12	-	No Remediation Required	Never Used	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 21	-	No Remediation Required	Contains emergency fire water	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 22	-	No Remediation Required	Previously contained emergency fire water	No remediation required based on 1990 Impoundment Characterization Program; Impoundment was backfilled with clean fill	-
Impoundment 23	-	No Remediation Required	Previously used to collect river sediment from the facility's former river water treatment plant	No remediation required based on 1990 Impoundment Characterization Program	-



**Table 1F: Summary of Impoundments Addressed under RCRA**

Impoundment	Area (acres)	Volume Remediated	Description/Use	Current Status	COCs <small>*Please note that this list may not be exhaustive</small>
Lagoon 6	5.5	113,500 CY	RCRA impoundment; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA. Waste in Lagoon 6 has been removed, solidified, and placed in the Impoundment 8 Facility.	NA
Lagoon 7	20.9	241,400 CY	RCRA impoundment; in the process of being closed in accordance with approved RCRA closure plan	Remediation partially completed; Approx. 95% of waste in Lagoon 7 has been removed, solidified, and placed in the Impoundment 8 Facility.	NA
Lagoon 8	11.5	60.8 MG	RCRA impoundment; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA. Waste in Impoundment 8 [Old] has been removed, solidified, and placed in the Impoundment 8 Facility.	NA for Lagoon 8 (Old); Impoundment 8 Facility COCs: chloroform, tetrachloroethene, trichloroethene
Lagoon 9A	4.1	52,900 CY	RCRA impoundments; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA; Impoundment 9A (plant effluent sludge) was closed in-place by installing a double synthetic liner capping system	chloroform, 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, carbon tetrachloride, iron, manganese
Impoundment 25	0.2	1,600 CY	RCRA impoundments; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA Effluent Collection Basin for Plant Effluent (sludge removed and closed in 1988 with NJDEP approval)	NA

**Table 2A: Contaminants of Concern for Impoundment Contents**

Parameter	Minimum (mg/kg)	Maximum (mg/kg)	Mean (mg/kg)
<b><u>Impoundment 3</u></b>			
Benzene	130	36,000	15,458
Toluene	1,300	9,100	5,297
Xylene	370	2,300	1,393
2-Methylnaphthalene	484	1,700	1,092
Naphthalene	890	24,000	9,325
Nitrobenzene	4.7	530	295
n-Nitrosodiphenylamine	69.5	1,800	790
pH (S.U.)	4.3	8.6	N/A
<b><u>Impoundment 4</u></b>			
Benzene	20	21,000	10,510
Toluene	6.1	3,100	1,553
Xylene	2.3	1,000	501
1,2- Dichlorobenzene	0.1	170	85
Naphthalene	14	41	27.5
pH (S.U.)	1.3	3.3	N/A
<b><u>Impoundment 5</u></b>			
Benzene	2.8	7,200	961
Toluene	3	14,000	2,011
Xylene	4.8	7,000	1,220
1,2- Dichlorobenzene	4.7	30,000	2,062
2-Methylnaphthalene	4.7	12,000	3,215
Naphthalene	23	240,000	33,977
Nitrobenzene	4.7	75,000	9,206
n-Nitrosodiphenylamine	1.6	30,000	2,383
pH (S.U.)	3.7	9.9	N/A
<b><u>Impoundment 13</u></b>			
Benzene	0.008	10.2	2.2
Toluene	0.008	8.6	2.2
Xylene	0.007	56	8.8
1,2- Dichlorobenzene	0.089	99	29
2-Methylnaphthalene	0.12	870	113
Naphthalene	0.1	9,300	958
Nitrobenzene	0.07	588	85
n-Nitrosodiphenylamine	0.12	610	99
pH (S.U.)	6.5	9.3	N/A
<b><u>Impoundment 17</u></b>			
Benzene	0.004	1	0.28
Toluene	0.004	4.4	0.811
Xylene	0.02	38	7.96
1,2- Dichlorobenzene	3.8	143	103
2-Methylnaphthalene	4.7	125	54.5
Naphthalene	3.3	300	63
n-Nitrosodiphenylamine	12	180	52.5

pH (S.U.)	7.1	8.6	N/A
<b>Impoundment 24</b>			
Benzene	0.008	89.5	11.5
Toluene	0.002	13	3.5
Xylene	0.007	70	8.6
1,2- Dichlorobenzene	0.575	13,000	1,273
2-Methylnapthalene	0.575	56	22
Napthalene	0.3	8,800	949
Nitrobenzene	0.575	76	30
n-Nitrosodiphenylamine	0.575	1,200	200
pH (S.U.)	7.7	12.7	N/A
Notes: N/A – Not applicable This list is not inclusive; additional COCs may not be included on this list. Some contaminant concentrations may not have been detected due to high method detection limits.			

**Table 2B: Contaminants of Concern for North Area Soils**

Parameter	Number of Detects		Range of Detects		Mean of Detects (mg/kg)
			Min (mg/kg)	Max (mg/kg)	
<b>Subsurface Samples</b>					
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	6	of 291	0.007	180	30
1,1,1,2,2-Tetrachloroethane	1	of 137	0.47	0.47	0.47
1,1,2-Trichloroethane	3	of 137	0.044	0.36	0.15
1,2-Dichloroethane	3	of 195	0.16	4.75	2.0
1,2-Dichloropropane	1	of 137	0.22	0.22	0.22
1,3,5-Trimethylbenzene	1	of 9	8.36	8.36	8.36
2-Butanone	16	of 291	0.045	1700	130
2-Hexanone	5	of 291	0.009	0.92	0.4
4-Methyl-2-Pentanone	74	of 291	0.005	1.25	0.1
Acetone	164	of 290	0.005	600	5
Benzene	127	of 291	0.00048	23000	461
Bromoform	7	of 291	0.006	9.2	1.4
Bromomethane	1	of 195	0.21	0.21	0.21
Carbon Disulfide	20	of 291	0.005	35	3.4
Chlorobenzene	113	of 291	0.00048	4000	69
Chloroform	8	of 291	0.006	27	4.0
cis-1,2-Dichloropropene	1	of 128	0.32	0.32	0.32
Cyclohexane	1	of 9	0.189	0.189	0.189
Dibromochloromethane	1	of 128	0.2	0.2	0.2
Ethylbenzene	82	of 291	0.005	530	28
Isopropylbenzene	1	of 9	0.266	0.266	0.266
m,p-Xylene	2	of 9	0.00073	117	58.5
Methylene Chloride	167	of 291	0.005	45	1.5
o-Xylene	1	of 9	27.5	27.5	27.5
Styrene	8	of 291	0.31	400	103
Tetrachloroethylene	16	of 291	0.005	1.7	0.2
Toluene	130	of 291	0.005	6400	156
trans-1,2-Dichloroethene	1	of 184	0.005	0.005	0.005
Trichloroethylene	3	of 291	0.23	300	105
Xylene (Total)	111	of 291	0.00099	2500	157
<b>Semivolatile Organic Compounds</b>					
1,1-Biphenyl	2	of 9	0.0426	0.215	0.129
1,2,4-Trichlorobenzene	40	of 291	0.013	100	6.6
1,2-Dichlorobenzene	108	of 291	0.0042	19000	371
1,2-Diphenylhydrazine	3	of 9	0.115	25.3	8.53
1,3-Dichlorobenzene	33	of 302	0.0011	23	1.6
1,4-Dichlorobenzene	59	of 302	0.0033	290	15.7
2,4-Dichlorophenol	2	of 195	0.021	0.07	0.05

2,4-Dimethylphenol	33	of	291	0.014	360	18.5
2,4-Dinitrotoluene	6	of	199	0.006	5.4	2.0
2,6-Dinitrotoluene	10	of	291	0.024	66	8.1
2-Chloronaphthalene	19	of	291	0.009	55	3.7
2-Chlorophenol	11	of	291	0.02	1	0.17
2-Methylnaphthalene	139	of	291	0.005	3200	49
2-Methylphenol	33	of	291	0.014	120	5.5
2-Nitroaniline	1	of	195	0.15	0.15	0.15
2-Nitrophenol	2	of	195	0.008	72	36
3 & 4-Methylphenol	8	of	30	0.18	18.4	4.6
3-Nitroaniline	1	of	195	0.13	0.13	0.13
4-Chloro-3-Methyl Phenol	5	of	137	0.1	180	54
4-Chloroaniline	18	of	291	0.044	45	3.7
4-Methylphenol	27	of	261	0.014	170	9.3
4-Nitroaniline	15	of	287	0.016	390	68
4-Nitrophenol	6	of	142	0.14	44	11
Acenaphthene	85	of	291	0.009	630	17.8
Acenaphthylene	44	of	291	0.009	14	1.7
Acetophenone	2	of	9	0.025	0.667	0.35
Aniline	20	of	32	0.0788	110000	6826
Anthracene	93	of	291	0.007	430	8
Benzo(a)anthracene	87	of	291	0.009	44.6	3
Benzidine	1	of	9	0.227	0.227	0.227
Benzo(a)pyrene	64	of	291	0.01	32	1.3
Benzo(b)fluoranthene	74	of	291	0.004	59	1.7
Benzo(g,h,i) perylene	31	of	291	0.005	6.9	0.9
Benzo(k)fluoranthene	60	of	291	0.005	7.31	0.7
Benzoic Acid	20	of	265	0.048	6.9	1.08
Benzyl Alcohol	7	of	265	0.042	740	153
bis(2-Ethylhexyl)phthalate	129	of	291	0.005	77	1.5
Butyl benzyl phthalate	15	of	291	0.005	20	1.7
Carbazole	11	of	49	0.0317	29	3.0
Chrysene	92	of	291	0.01	87	2.4
Dibenzo(a,h)anthracene	14	of	291	0.0138	3.8	0.7
Dibenzofuran	102	of	291	0.006	410	12.7
Diethyl Phthalate	42	of	291	0.007	43	1.2
Dimethyl Phthalate	6	of	291	0.097	2.4	0.72
di-n-Butyl Phthalate	46	of	291	0.005	10	0.8
di-n-Octyl Phthalate	28	of	289	0.005	76	3.4
Fluoranthene	140	of	291	0.005	98	3.7
Fluorene	97	of	291	0.008	7200	90
Hexachlorocyclopentadiene	3	of	40	820	1100	1007
Indeno(1,2,3-Cd)Pyrene	33	of	291	0.004	9.1	0.9
Isophorone	2	of	289	0.18	48	24

Methylcyclohexane	1	of	9	0.904	0.904	0.904
Naphthalene	194	of	291	0.005	21000	422
Nitrobenzene	72	of	291	0.01	2500	136
N-Nitrosodiphenylamine	95	of	277	0.013	200	12
N-Nitrosodipropylamine	8	of	46	0.13	9.7	3.2
o-Toluidine	3	of	9	0.422	1.24	0.802
Pentachlorophenol	6	of	137	0.033	53	12
Phenanthrene	160	of	291	0.004	600	12
Phenol	24	of	291	0.19	120	10
Pyrene	128	of	291	0.005	71	2.6
<b>PCBs</b>						
Aroclor-1242	3	of	111	0.17	5.6	2.3
Aroclor-1248	5	of	168	0.16	67	14
Aroclor-1254	41	of	256	0.038	120	4.3
Aroclor-1260	10	of	111	0.6	33	5.3
Total PCB	54	of	258	0.038	153	5.6
<b>Inorganics</b>						
Aluminum	291	of	291	20	107000	10,858
Antimony	235	of	291	2.8	90200	389
Arsenic	289	of	291	0.37	14000	61
Barium	286	of	291	3.6	9060	222
Beryllium	265	of	291	0.17	4.5	0.9
Cadmium	247	of	291	0.1	224	2.4
Calcium	284	of	291	25.3	69100	3,405
Chloride	1	of	9	79	79	79
Chromium	287	of	291	1.9	216000	1,697
Cobalt	278	of	291	0.76	13500	101
Copper	291	of	291	1.8	43900	943
Cyanide	232	of	254	0.51	68.5	2.2
Iron	291	of	291	12	590000	52,956
Lead	291	of	291	0.16	3240	161
Magnesium	283	of	291	16	23300	3,578
Manganese	290	of	291	1.8	7665	501
Mercury	265	of	291	0.04	374	4.6
Nickel	289	of	291	0.82	5140	107
Potassium	273	of	291	9.3	8440	1,004
Selenium	261	of	285	0.08	35	1.5
Silver	237	of	291	0.68	38.1	1.4
Sodium	272	of	291	62.6	90800	1,182
Thallium	250	of	291	0.038	15	0.7
Total Phenolics	4	of	9	3.1	15.7	6.8
Vanadium	282	of	291	1	271	40
Zinc	291	of	291	2.3	48000	832
<b>Surface Samples</b>						

<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	19	of	144	0.006	0.06	0.02
1,1-Dichloroethene	7	of	98	0.005	0.01	0.01
1,2-Dichloroethene	1	of	99	0.006	0.006	0.006
2-Butanone	1	of	55	2.2	2.2	2.2
2-Hexanone	1	of	55	0.35	0.35	0.35
4-Methyl-2-Pentanone	9	of	144	0.005	0.019	0.01
Acetone	94	of	144	0.005	7.6	0.19
Benzene	31	of	144	0.005	3.8	0.28
Bromoform	1	of	99	0.075	0.075	0.075
Carbon Disulfide	2	of	99	0.005	0.008	0.007
Carbon Tetrachloride	2	of	99	0.005	0.007	0.006
Chlorobenzene	22	of	144	0.009	130	11
Chloroform	4	of	144	0.005	0.69	0.18
Chloromethane	1	of	99	0.012	0.012	0.012
Ethylbenzene	16	of	144	0.006	1500	102
Methylene Chloride	99	of	144	0.005	0.92	0.03
Styrene	1	of	99	5.6	5.6	5.6
Tetrachloroethene	18	of	144	0.005	2.4	0.16
Toluene	48	of	144	0.005	580	36
Trichloroethylene	1	of	99	80	80	80
Xylene (Total)	29	of	144	0.005	13000	553
<b>Semivolatile Organic Compounds</b>						
1,1-Biphenyl	3	of	10	0.0169	0.121	0.064
1,2,4-Trichlorobenzene	64	of	144	0.011	85	3.2
1,2-Dichlorobenzene	81	of	144	0.012	58	2.8
1,2-Diphenylhydrazine	2	of	10	0.0649	0.162	0.113
1,3-Dichlorobenzene	17	of	144	0.008	1.5	0.3
1,4-Dichlorobenzene	29	of	144	0.012	5	0.6
2,4,5-Trichlorophenol	1	of	55	0.36	0.36	0.36
2,4-Dichlorophenol	6	of	144	0.05	0.2	0.1
2,4-Dimethylphenol	3	of	144	0.026	0.0867	0.055
2,4-Dinitrophenol	5	of	144	0.033	2.9	1.0
2,4-Dinitrotoluene	2	of	55	0.35	0.96	0.66
2,6-Dinitrotoluene	1	of	55	0.15	0.15	0.15
2-Chloronaphthalene	17	of	144	0.019	17	2.2
2-Chlorophenol	7	of	144	0.008	0.55	0.1
2-Methylnaphthalene	108	of	144	0.007	150	3.3
2-Methylphenol	7	of	144	0.036	0.22	0.099
2-Nitroaniline	1	of	99	0.017	0.017	0.017
3 & 4-Methylphenol	1	of	10	0.0704	0.0704	0.0704
3-Nitroaniline	1	of	98	4.9	4.9	4.9
4-Chloroaniline	6	of	144	0.016	22	4.1
4-Chlorophenyl-Phenyl Ether	1	of	51	0.023	0.023	0.023

4-Methylphenol	9	of	134	0.055	7.7	1.1
4-Nitroaniline	3	of	99	0.019	4.2	2.7
Acenaphthene	87	of	144	0.014	57	2.5
Acenaphthylene	41	of	144	0.009	3.6	0.3
Acetophenone	1	of	10	0.166	0.166	0.166
Aniline	4	of	10	0.0455	2.29	1.06
Anthracene	75	of	144	0.026	95	2.7
Benz(a)anthracene	130	of	165	0.043	1300	77
Benzo(a)pyrene	75	of	149	0.0576	91	6.3
Benzo(b)fluoranthene	85	of	144	0.011	48	2.4
Benzo(g,h,i)perylene	48	of	144	0.0394	24	1.7
Benzo(k)fluoranthene	65	of	144	0.0437	60	2.7
Benzoic Acid	13	of	144	0.018	1.4	0.33
Benzyl Alcohol	2	of	144	0.085	1.6	0.84
bis(2-Ethylhexyl)phthalate	79	of	144	0.028	7.4	1.2
Butyl benzyl phthalate	5	of	144	0.045	0.331	0.173
Carbazole	8	of	14	0.055	6	1.2
Chrysene	90	of	140	0.033	71	3.2
Dibenzo(a,h)Anthracene	19	of	144	0.0207	4.35	1.04
Dibenzofuran	89	of	144	0.011	46	2.7
Diethyl Phthalate	28	of	144	0.008	1.6	0.21
Dimethyl Phthalate	10	of	144	0.027	2.9	0.55
di-n-Butyl Phthalate	42	of	144	0.012	6.6	0.39
di-n-Octyl Phthalate	4	of	144	0.051	4.8	1.6
Fluoranthene	119	of	144	0.029	210	5.5
Fluorene	71	of	144	0.015	46	2.2
Hexachlorobenzene	18	of	144	0.016	7	1.2
Hexachloroethane	2	of	144	0.027	1.4	0.7
Indeno(1,2,3-Cd)Pyrene	50	of	144	0.029	24	1.9
Naphthalene	129	of	144	0.015	290	13
Nitrobenzene	80	of	144	0.014	600	16
N-Nitrosodiphenylamine	96	of	144	0.0278	200	14
Pentachlorophenol	1	of	97	0.28	0.28	0.28
Phenanthrene	119	of	144	0.03	240	4.9
Phenol	2	of	10	0.0818	0.0906	0.0862
Pyrene	118	of	144	0.026	140	4.2
<b>PCBs</b>						
Aroclor-1242	12	of	134	0.26	180	18
Aroclor-1254	50	of	134	0.19	160	6.1
Aroclor-1260	3	of	134	0.46	0.58	0.51
Total PCB	137	of	226	0.0619	560	31
<b>Inorganics</b>						
Aluminum	144	of	144	141	18700	7,752
Antimony	135	of	144	1.5	17	3.5



Arsenic	143	of	144	0.55	104	15.8
Barium	143	of	144	7	4120	245
Beryllium	140	of	144	0.16	3.8	0.65
Cadmium	140	of	144	0.216	29.3	1.3
Calcium	142	of	144	18.9	42600	4,417
Chromium	206	of	206	7.7	214000	24,278
Cobalt	144	of	144	0.77	912	17.1575
Copper	144	of	144	1.71	22500	1,146
Cyanide	135	of	144	0.57	27.9	2.2
Iron	144	of	144	19	578000	55,290
Lead	144	of	144	6.7	1470	188
Magnesium	142	of	144	15.7	20300	3,670
Manganese	144	of	144	27.9	2070	431
Mercury	144	of	144	0.094	94.8	3.6
Nickel	144	of	144	4.2	1300	85
Potassium	137	of	144	92.9	3550	748
Selenium	136	of	144	0.09	29.4	0.99
Silver	135	of	144	0.66	2.2	1.03
Sodium	134	of	144	70.9	10100	487
Thallium	134	of	144	0.24	1.57	0.56
Total Phenolics	3	of	10	4.9	19.2	9.8
Vanadium	144	of	144	1	260	39
Zinc	144	of	144	8.9	50100	1,105
Notes: This list is not inclusive; additional COCs may not be included on this list. Some contaminant concentrations may not have been detected due to high method detection limits.						

**Table 2C: Contaminants of Concern for South & West Area Soils**

Parameter	Number of Detects			Range of Detects		Mean of Detects (mg/kg)
				Min (mg/kg)	Max (mg/kg)	
<b>Subsurface Samples</b>						
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	1	of	134	0.13	0.13	0.13
2-Butanone	13	of	134	0.0142	47	3.7
Acetone	49	of	136	0.005	2.3	0.37
Benzene	96	of	136	0.00092	13000	139.69
Carbon Disulfide	5	of	125	0.0047	0.28	0.11
Chlorobenzene	107	of	134	0.0015	250	8.65
Chloroform	4	of	136	0.11	0.66	0.26
Ethylbenzene	77	of	136	0.00096	63	2.93
Methylene Chloride	11	of	136	0.008	230	21.4
Tetrachloroethene	1	of	125	0.21	0.21	0.21
Toluene	77	of	136	0.00048	4000	58.2
Xylenes (total)	89	of	136	0.0038	1000	26.1
<b>Semi-Volatile Organic Compounds</b>						
1,2,4-Trichlorobenzene	47	of	136	0.029	120	7.16
1,2-Dichlorobenzene	70	of	136	0.0428	830	14.0
1,3-Dichlorobenzene	6	of	134	0.0794	0.3	0.14
1,4-Dichlorobenzene	35	of	136	0.016	2.4	0.46
2,4-Dimethylphenol	25	of	127	0.022	0.33	0.11
2-Chloronaphthalene	18	of	125	0.039	91	10.3
2-Methylnaphthalene	91	of	136	0.0173	490	24.9
2-Methylphenol	26	of	127	0.037	0.23	0.08
3 & 4-Methylphenol	34	of	80	0.1262	2.216	0.5355
4-Chloroaniline	1	of	136	0.3	0.3	0.3
4-Chlorophenyl Phenyl Ether	7	of	125	0.046	0.61	0.24
4-Nitroaniline	3	of	136	0.074	0.39	0.19
Acenaphthene	68	of	136	0.022	98	5.52
Acenaphthylene	11	of	127	0.25	5.7	1.13
Anthracene	47	of	136	0.025	55	2.78
Benzo(a)anthracene	47	of	127	0.026	14	1.92
Benzo(a)pyrene	18	of	136	0.043	1.8	0.27
Benzo(b)fluoranthene	25	of	136	0.025	1.8	0.24
Benzo(g,h,i)perylene	6	of	127	0.041	0.26	0.11
Benzo(k)fluoranthene	21	of	136	0.022	2.3	0.32
Benzoic Acid	9	of	55	0.0821	3.5	1.00
bis(2-Ethylhexyl)phthalate	45	of	136	0.016	2	0.14
Carbazole	10	of	79	0.047	3.8	0.99
Chrysene	33	of	136	0.024	2.5	0.29
Dibenzo(a,h)anthracene	2	of	125	0.051	0.17	0.11

Dibenzofuran	63	of	136	0.011	90	5.5
Diethyl Phthalate	4	of	125	0.062	0.38	0.15
di-n-Butyl Phthalate	24	of	136	0.029	1.3	0.16
di-n-Octylphthalate	2	of	134	0.036	0.051	0.04
Fluoranthene	50	of	136	0.048	15	1.2
Fluorene	55	of	136	0.014	110	9.9
Indeno(1,2,3-cd)pyrene	6	of	127	0.045	0.36	0.13
Isophorone	1	of	134	530	530	530
Naphthalene	122	of	136	0.0637	5900	154.5
Nitrobenzene	7	of	127	0.044	3.3	0.62
n-Nitroso-di-n-Propylamine	1	of	125	0.0262	0.0262	0.0262
N-Nitrosodiphenylamine(1)	52	of	136	0.012	160	11.1
Phenanthrene	60	of	136	0.0284	82	5.31
Phenol	18	of	125	0.096	0.9	0.38
Pyrene	48	of	136	0.032	5.6	0.61
<b>Inorganics</b>						
Aluminum	135	of	136	250	23800	14038
Antimony	14	of	136	0.88	23.5	7.8
Arsenic	136	of	136	1	125	6
Barium	136	of	136	7.3	1050	158
Beryllium	130	of	136	0.13	2.7	1.1
Cadmium	34	of	136	0.06	5.2	0.92
Calcium	125	of	136	50.3	260000	3971
Chromium	134	of	136	2.8	127000	1025
Cobalt	134	of	136	2.5	377	15.1
Copper	135	of	136	3.8	3970	109
Cyanide	11	of	33	0.5	1.9	1.1
Iron	135	of	136	2300	532000	38787
Lead	101	of	136	1.2	4900	106
Magnesium	136	of	136	275	29000	3940
Manganese	136	of	136	50.8	2850	550
Mercury	46	of	136	0.048	3.7	0.76
Nickel	136	of	136	8.2	904	42
Potassium	99	of	136	173	7630	965
Selenium	38	of	134	0.13	10.5	1.4
Silver	38	of	134	0.13	2.5	0.90
Sodium	90	of	133	51	29300	655
Thallium	32	of	134	0.21	6.4	1.5
Vanadium	135	of	136	3.2	112	38
Zinc	135	of	136	23.4	1250	89.0
<b>PCBs</b>						
Total PCBs	14	of	33	0.182	8.8	1.7
<b>Surface Samples</b>						
<b>Volatile Organic Compounds</b>						

2-Hexanone	1	of	41	0.007	0.007	0.007
4-Methyl-2-Pentanone	1	of	42	0.006	0.006	0.006
Acetone	7	of	42	0.006	0.026	0.013
Benzene	8	of	42	0.006	13800	1760
Ethylbenzene	1	of	32	65.9	65.9	65.9
Methylene Chloride	8	of	42	0.005	15.9	2.55
Toluene	14	of	42	0.005	1080	159
Xylenes (total)	6	of	42	0.006	793	149
<b>Semi-volatile Organic Compounds</b>						
1,2,4-Trichlorobenzene	7	of	42	0.019	4770	688
1,2-Dichlorobenzene	8	of	42	0.015	4700	697
1,3-Dichlorobenzene	2	of	42	0.15	428	214.1
1,4-Dichlorobenzene	4	of	42	0.009	1640	442
2-Methylnaphthalene	11	of	42	0.033	124	37.1
3 & 4-Methylphenol	3	of	30	64.1	345	181
Acenaphthene	10	of	42	0.024	116	38.5
Acenaphthylene	4	of	42	0.33	47.1	22
Anthracene	19	of	42	0.025	244	52.7
Benzo(a)anthracene	32	of	42	0.2	5050	296
Benzo(a)pyrene	22	of	42	0.19	893	146
Benzo(b)fluoranthene	23	of	42	0.12	904	140
Benzo(g,h,i)perylene	14	of	32	39.1	469	124
Benzo(k)fluoranthene	20	of	42	0.27	844	165
Benzo[ghi]fluoranthene	1	of	10	0.53	0.53	0.53
bis(2-Ethylhexyl)phthalate	25	of	42	0.048	18500	1147
Carbazole	2	of	32	116	154	135
Chrysene	29	of	42	0.26	984	140
Dibenzo(a,h)anthracene	1	of	30	127	127	127
Dibenzofuran	6	of	42	0.015	81.9	15.7
Diethyl Phthalate	2	of	42	0.029	47.5	23.8
Dimethyl Phthalate	1	of	30	1770	1770	1770
Fluoranthene	37	of	42	0.062	2040	208
Fluorene	3	of	42	0.018	130	44
Hexachlorobenzene	1	of	42	0.23	0.23	0.23
Indeno(1,2,3-cd)pyrene	14	of	32	35.7	452	116
Naphthalene	16	of	42	0.015	3000	344
Nitrobenzene	7	of	42	0.028	837	123
N-Nitrosodiphenylamine(1)	11	of	42	0.035	6840	866
Phenanthrene	32	of	42	0.027	1140	114
Pyrene	38	of	42	0.069	1540	188
<b>Inorganics</b>						
Aluminum	42	of	42	253	30300	16444
Antimony	10	of	42	3.1	21.6	6.3
Arsenic	54	of	54	2.6	90.4	25

Barium	41	of	42	5.9	1670	345
Beryllium	29	of	42	0.19	3.1	1.4
Cadmium	20	of	42	0.29	7.3	1.4
Calcium	36	of	42	71	6980	2144
Chromium	42	of	42	28.4	23200	796
Cobalt	37	of	42	4.8	67.3	19
Copper	42	of	42	27.1	3820	614
Cyanide	10	of	40	1.2	6.2	1.9
Iron	42	of	42	17800	597000	116819
Magnesium	40	of	42	73.8	7230	3993
Manganese	42	of	42	48	2700	796
Mercury	39	of	42	0.056	109	5.04
Nickel	42	of	42	15.7	1270	190.9
Potassium	38	of	42	99.9	2980	1518
Selenium	10	of	42	0.13	2.7	0.645
Silver	19	of	42	0.88	13.8	6.2
Sodium	10	of	42	67.7	256	178.9
Thallium	11	of	42	0.31	1.4	0.53
Vanadium	42	of	42	16.5	208	56.3
Zinc	41	of	41	41.8	831	191
<b>PCBs</b>						
Total PCBs	21	of	115	6230.99	23553.13	14855
Notes: This list is not inclusive; additional COCs may not be included on this list. Some contaminant concentrations may not have been detected due to high method detection limits.						

**Table 2D: Contaminants of Concern for Overburden Groundwater**

Parameter	Number of Detects		Range of Detects		Mean of Detects (mg/l)
			Min (mg/l)	Max (mg/l)	
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	1	of 568	0.00027	0.00027	0.00027
1,1-Dichloroethane	6	of 568	0.00068	0.0012	0.00091
1,2-Dichloroethane	27	of 568	0.00042	0.416	0.021
1,3,5-Trimethylbenzene	5	of 24	0.0036	0.062	0.030
2-Butanone	5	of 568	0.0481	6.32	2.03
4-Methyl-2-pentanone	10	of 568	0.021	0.0764	0.047
Acetone	89	of 568	0.0026	25	0.65
Benzene	317	of 568	0.00021	468	5.3
Carbon Disulfide	28	of 568	0.00045	0.0221	0.0047
Carbon Tetrachloride	1	of 568	0.0021	0.0021	0.0021
Chlorobenzene	427	of 570	0.00034	9.88	0.57
Chloroethane	10	of 568	0.0012	0.22	0.038
Chloroform	37	of 568	0.00025	0.223	0.019
Chloromethane	4	of 568	0.0024	0.537	0.16
cis-1,2-Dichloroethene	3	of 568	0.00027	0.00065	0.00044
Cyclohexane	2	of 24	0.0021	0.0123	0.0072
Ethyl Ether	3	of 24	0.0062	0.0908	0.060
Ethylbenzene	211	of 568	0.00018	0.696	0.054
Isopropylbenzene	5	of 24	0.00066	0.0181	0.0066
m,p-Xylene	16	of 24	0.0005	2.87	0.5
Methyl Cyclohexane	2	of 24	0.0019	0.007	0.004
Methylene Chloride	12	of 568	0.00042	0.095	0.015
o-Xylene	11	of 24	0.0168	0.921	0.224
Tetrachloroethene	12	of 568	0.00022	0.0314	0.0043
Toluene	220	of 568	0.00024	42.8	0.64
trans-1,2-Dichloroethene	1	of 568	0.00097	0.00097	0.00097
Trichloroethene	21	of 568	0.00039	0.011	0.0019
Xylene (Total)	221	of 568	0.0003	3.8	0.2
<b>Semi-Volatile Organic Compounds</b>					
1,1'-Biphenyl	6	of 25	0.0016	0.0238	0.0119167
1,2,4-Trichlorobenzene	200	of 507	0.00048	0.855	0.0371746
1,2-Dichlorobenzene	297	of 507	0.0005	5.92	0.3214989
1,3-Dichlorobenzene	168	of 507	0.00035	0.381	0.0319006
1,4-Dichlorobenzene	225	of 508	0.0005	0.767	0.0625301
2,4,5-Trichlorophenol	14	of 508	0.0015	0.0122	0.0070714
2,4,6-Trichlorophenol	9	of 508	0.0012	0.12	0.0199

2,4-Dichlorophenol	22	of	508	0.0013	0.156	0.0130318
2,4-Dimethylphenol	148	of	507	0.00049	13.7	0.3873889
2,4-Dinitrophenol	2	of	508	0.0191	0.191	0.10505
2-Chloroaniline	6	of	25	0.0072	0.0942	0.05825
2-Chloronaphthalene	111	of	507	0.00053	0.385	0.0227209
2-Chlorophenol	16	of	508	0.0011	0.11	0.00935
2-Methylnaphthalene	121	of	508	0.00033	1.8	0.1141796
2-Methylphenol	106	of	508	0.0007	7.85	0.2938245
3 & 4-Methylphenol	96	of	508	0.00041	23.7	0.9836425
3-Nitroaniline	1	of	507	0.0014	0.0014	0.0014
4-Aminobiphenyl	1	of	25	0.0015	0.0015	0.0015
4-Chloroaniline	51	of	507	0.00055	0.805	0.1079224
4-Nitrophenol	2	of	508	0.0473	0.473	0.26015
Acenaphthene	244	of	507	0.000221	0.304	0.0277355
Acenaphthylene	20	of	507	0.000217	0.0041	0.0019643
Acetophenone	14	of	25	0.00057	2.01	0.3847393
Aniline	195	of	453	0.00043	175	2.3433878
Anthracene	59	of	507	0.000163	0.087	0.0051499
Benzaldehyde	1	of	25	0.0053	0.0053	0.0053
Benzidine	5	of	25	0.0094	0.021	0.01684
Benzo(a)Anthracene	2	of	507	0.00038	0.00346	0.00192
Benzo(b)Fluoranthene.	1	of	484	0.000773	0.000773	0.000773
Benzo(g,h,i)Perylene	1	of	507	0.0032	0.0032	0.0032
Benzo(k)Fluoranthene	1	of	484	0.000253	0.000253	0.000253
Benzoic acid	22	of	153	0.0013	0.978	0.21975
Benzyl Alcohol	2	of	153	0.0056	0.0069	0.00625
bis(2-Ethylhexyl)Phthalate	118	of	507	0.00058	0.46	0.0235689
Butyl Benzyl Phthalate	2	of	507	0.00061	0.0073	0.003955
Carbazole	70	of	461	0.0021	0.185	0.0179256
Chrysene	1	of	507	0.00031	0.00031	0.00031
Dibenzofuran	204	of	507	0.00063	0.486	0.0210537
Diethyl Phthalate	10	of	507	0.00064	0.0118	0.004324
Dimethyl Phthalate	27	of	507	0.0011	2.17	0.1704593
di-n-Butyl Phthalate	10	of	507	0.00045	0.0054	0.002058
Fluoranthene	8	of	507	0.000234	0.00326	0.0010036
Fluorene	173	of	507	0.000224	0.086	0.0076325
Indeno(1,2,3-Cd)Pyrene	1	of	507	0.00032	0.00032	0.00032
Isophorone	15	of	507	0.00055	0.018	0.0044067
Methylcyclohexane	2	of	25	0.0019	0.007	0.00445
Naphthalene	271	of	508	0.000196	49.9	2.0524902
Nitrobenzene	13	of	507	0.0026	5.72	0.9274077
n-Nitrosodiphenylamine	280	of	507	0.00058	2.46	0.1394322

o-Toluidine	10	of	25	0.0014	15.6	2.37731
Pentachlorophenol	14	of	505	0.0015	0.228	0.0268036
Phenanthrene	116	of	507	0.00028	0.088	0.0037635
Phenol	61	of	507	0.002	16.4	0.924982
Pyrene	6	of	505	0.000222	0.00277	0.000917
Salicylic acid	1	of	25	0.0521	0.0521	0.0521
<b>Inorganic Compounds</b>						
Aluminum	30	of	175	0.213	269	29.5
Antimony	20	of	175	0.005	0.114	0.02
Arsenic	466	of	570	0.00194	0.637	0.0340
Barium	10	of	407	0.208	3.86	1.49
Beryllium	18	of	175	0.0011	0.0259	0.0089
Cadmium	11	of	491	0.0034	0.0141	0.0076
Calcium Metal	170	of	175	2.54	1180	82.2
Chromium	48	of	429	0.0101	1.12	0.0982
Cobalt	6	of	175	0.0578	0.177	0.123
Copper	31	of	407	0.0167	5.4	0.26
Cyanide	6	of	193	0.1	0.14	0.1
Iron	376	of	410	0.106	4830	84.7
Lead	30	of	407	0.0032	0.229	0.028
Magnesium	181	of	185	3.13	989	69.7
Manganese	399	of	400	0.0448	310	11.8
Mercury	16	of	407	0.00021	0.0044	0.00067
Nickel	20	of	175	0.0104	2.85	0.365
Potassium	55	of	164	5.32	132	18.9
Selenium	27	of	407	0.0051	0.172	0.023
Silver	1	of	407	0.0109	0.0109	0.0109
Sodium	170	of	175	2.97	1790	111
Thallium	13	of	175	0.0068	0.0281	0.014
Vanadium	7	of	174	0.05	0.336	0.2
Zinc	100	of	407	0.021	16.8	0.92
Notes:						
This list is not inclusive; additional COCs may not be included on this list.						
Some contaminant concentrations may not have been detected due to high method detection limits.						



**Table 2E: Contaminants of Concern for Bedrock Groundwater**

Parameter	Number of Detects			Range of Detects		Mean of Detects (mg/l)
				Min (mg/l)	Max (mg/l)	
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	81	of	1352	0.00015	0.0041	0.0019
1,1,2,2-Tetrachloroethane	2	of	1352	0.001	0.001	0.001
1,1,2-Trichloroethane	2	of	1352	0.001	0.001	0.001
1,1-Dichloroethane	72	of	1352	0.00013	0.0024	0.0012
1,1-Dichloroethene	96	of	1352	0.00062	0.0092	0.0041
1,2-Dichloroethane	36	of	1352	0.00018	0.0012	0.00060
1,2-Dichloropropane	8	of	1352	0.00027	0.001	0.0006
2-Butanone (MEK)	3	of	1352	0.005	0.0371	0.02
2-Hexanone	2	of	1352	0.005	0.005	0.005
4-Methyl-2-Pentanone (MKB)	2	of	1352	0.005	0.005	0.005
Acetone	14	of	1352	0.002	0.106	0.02
Benzene	148	of	1352	0.0003	3.36	0.8
Bromodichloromethane	2	of	1352	0.001	0.001	0.001
Bromoform	2	of	1352	0.001	0.001	0.001
Bromomethane	2	of	1352	0.001	0.001	0.001
Carbon Disulfide	129	of	1352	0.00034	18.9	3.3
Carbon Tetrachloride	59	of	1352	0.00021	0.0283	0.015
Chlorobenzene	166	of	1352	0.00015	8.87	0.93
Chloroethane	2	of	1352	0.001	0.001	0.001
Chloroform	99	of	1352	0.00017	0.0078	0.0024
Chloromethane	2	of	1352	0.001	0.001	0.001
cis-1,2-Dichloroethene	162	of	1352	0.0002	0.257	0.04
cis-1,3-Dichloropropylene	2	of	1352	0.001	0.001	0.001
Dibromochloromethane	2	of	1352	0.001	0.001	0.001
Ethyl Ether	2	of	3	0.0143	0.0305	0.0224
Ethylbenzene	81	of	1352	0.00044	0.0524	0.0087
m,p-Xylene	3	of	3	0.0023	0.0233	0.011
Methylene Chloride	10	of	1352	0.00048	0.0078	0.0021
o-Xylene	2	of	3	0.0016	0.0201	0.011
Styrene (Monomer)	3	of	1352	0.002	0.002	0.002
Tetrachloroethene	260	of	1352	0.00024	0.0733	0.014
Toluene	102	of	1352	0.00011	0.0192	0.0049
trans-1,2-Dichloroethene	58	of	1352	0.00086	0.0086	0.0026
trans-1,3-Dichloropropylene	2	of	1352	0.001	0.001	0.001
Trichloroethene	171	of	1352	0.0002	0.0346	0.007
Vinyl Chloride	20	of	1352	0.00043	0.0043	0.0020
Xylenes (Total)	83	of	1352	0.00035	0.148	0.011

<b>Semi volatile Organic Compounds</b>						
1,1'-Biphenyl	1	of	6	0.0073	0.0073	0.0073
1,2,4-Trichlorobenzene	152	of	584	0.00041	0.572	0.12
1,2-Dichlorobenzene	112	of	584	0.00053	1.53	0.12
1,3-Dichlorobenzene	105	of	584	0.00058	0.37	0.13
1,4-Dichlorobenzene	104	of	584	0.00052	0.857	0.057
2,4,5-Trichlorophenol	1	of	588	0.002	0.002	0.002
2,4,6-Trichlorophenol	1	of	588	0.002	0.002	0.002
2,4-Dichlorophenol	2	of	588	0.00084	0.005	0.003
2,4-Dimethylphenol	9	of	588	0.0005	0.0502	0.008
2,4-Dinitrophenol	1	of	588	0.02	0.02	0.02
2,4-Dinitrotoluene	1	of	588	0.002	0.002	0.002
2,6-Dinitrotoluene	1	of	588	0.002	0.002	0.002
2-Chloroaniline	1	of	3	0.0087	0.0087	0.0087
2-Chloronaphthalene	36	of	588	0.00084	0.0031	0.0014
2-Chlorophenol	10	of	588	0.00059	0.005	0.002
2-Methylnaphthalene	107	of	588	0.00064	0.139	0.028
2-Methylphenol	3	of	588	0.002	0.0182	0.008
2-Nitroaniline	3	of	588	0.00061	0.005	0.004
2-Nitrophenol	2	of	588	0.002	0.005	0.004
3 & 4-Methylphenol	8	of	588	0.0007	0.0541	0.009
3,3'-Dichlorobenzidine	2	of	588	0.002	0.005	0.004
3-Nitroaniline	2	of	588	0.005	0.005	0.005
4,6-Dinitro-2-Methylphenol	1	of	588	0.01	0.01	0.01
4-Bromophenyl Phenyl Ether	1	of	588	0.002	0.002	0.002
4-chloro-3-Methyl Phenol	1	of	588	0.005	0.005	0.005
4-Chloroaniline	8	of	588	0.002	0.0529	0.01
4-Chlorophenyl Phenyl Ether	1	of	588	0.002	0.002	0.002
4-Nitroaniline	4	of	588	0.0013	0.005	0.002
4-Nitrophenol	1	of	588	0.02	0.02	0.02
Acenaphthene	109	of	588	0.00067	0.027	0.011
Acenaphthylene	88	of	588	0.000208	0.0073	0.0016
Aniline	100	of	509	0.00094	6.36	0.30
Anthracene	76	of	588	0.00016	0.002	0.0007
Benzo(A)Anthracene	2	of	588	0.000357	0.002	0.001
Benzo(A)Pyrene	2	of	588	0.001	0.002	0.002
Benzo(B)Fluoranthene.	3	of	588	0.00031	0.002	0.001
Benzo(G,H,I)Perylene	2	of	588	0.002	0.0024	0.002
Benzo(K)Fluoranthene	3	of	588	0.001	0.002	0.001
bis(2-Chloroethoxy)Methane	1	of	588	0.002	0.002	0.002
bis(2-Chloroethyl)Ether	1	of	588	0.002	0.002	0.002
Butyl Benzyl Phthalate	1	of	588	0.002	0.002	0.002
Carbazole	61	of	515	0.00054	0.0025	0.0014
Chrysene	2	of	588	0.000174	0.002	0.001

Dibenzo(A,H)Anthracene	2	of	588	0.0019	0.002	0.002
Dibenzofuran	80	of	588	0.0011	0.018	0.0065
Diethyl Phthalate	1	of	588	0.002	0.002	0.002
Dimethyl Phthalate	2	of	588	0.0014	0.002	0.002
di-n-Butyl Phthalate	10	of	588	0.00062	0.004	0.002
di-n-Octyl Phthalate	5	of	588	0.00088	0.004	0.002
Fluoranthene	8	of	588	0.000129	0.00245	0.0007708
Fluorene	106	of	588	0.00048	0.0117	0.0040
Hexachlorobenzene	1	of	588	0.002	0.002	0.002
Hexachlorobutadiene	1	of	162	0.002	0.002	0.002
Hexachlorocyclopentadiene	1	of	588	0.01	0.01	0.01
Hexachloroethane	1	of	588	0.005	0.005	0.005
Indeno(1,2,3-Cd)Pyrene	2	of	588	0.002	0.002	0.002
Isophorone	1	of	588	0.002	0.002	0.002
Naphthalene	128	of	588	0.000134	0.803	0.110
Nitrobenzene	75	of	588	0.002	0.0576	0.02
n-Nitroso-di-n-Propylamine	1	of	588	0.002	0.002	0.002
n-Nitrosodiphenylamine	99	of	588	0.00055	0.0774	0.0069
o-Toluidine	2	of	6	0.0963	0.178	0.137
Pentachlorophenol	1	of	588	0.01	0.01	0.01
Phenanthrene	98	of	588	0.000216	0.0059	0.0020
Phenol	6	of	588	0.0013	0.0435	0.0092
Pyrene	4	of	588	0.000106	0.002	0.0008
<b>Inorganics</b>						
Aluminum	61	of	507	0.203	6.59	1.10
Antimony	47	of	507	0.0051	0.0127	0.0076
Arsenic	209	of	939	0.002	1.28	0.04
Barium	238	of	575	0.201	67.4	0.888
Beryllium	1	of	507	0.0116	0.0116	0.0116
Calcium Metal	507	of	508	26.3	565	113
Chromium	7	of	579	0.0104	0.139	0.0335
Copper	8	of	575	0.0119	0.068	0.038
Cyanide	1	of	72	0.15	0.15	0.15
Iron	271	of	577	0.1	55.2	1.5
Lead	56	of	575	0.003	0.198	0.01
Magnesium	507	of	508	6.02	137	18.5
Manganese	269	of	578	0.015	16.1	0.75
Mercury	15	of	575	0.0002	0.0018	0.0006
Nickel	1	of	507	0.012	0.012	0.012
Potassium	21	of	476	5.78	116	16.3
Selenium	8	of	575	0.0052	0.009	0.007
Silver	1	of	575	0.0283	0.0283	0.0283
Sodium	508	of	508	10.6	2410	46.8
Thallium	4	of	507	0.0052	0.0108	0.0078

Vanadium	1	of	507	0.0769	0.0769	0.0769
Zinc	87	of	575	0.0204	0.961	0.114
Notes: This list is not inclusive; additional COCs may not be included on this list. Some contaminant concentrations may not have been detected due to high method detection limits.						

**Table 3A: Summary of Chemicals of Concern and Medium Specific  
Exposure Point Concentrations for Impoundment Contents**

Scenario Timeframe: Current/Future Medium: Impoundment Exposure Medium: Impoundment				
Exposure Point	Chemical of Concern	Exposure Point Concentration	EPC Units	Statistic
Impoundment 3	Benzene	36000	mg/kg	1
	Naphthalene	24000	mg/kg	1
	Nitrobenzene	530	mg/kg	1
	N-Nitrosodiphenylamine	1800	mg/kg	1
Impoundment 4	Benzene	21000	mg/kg	1
	Naphthalene	41	mg/kg	1
Impoundment 5	Benzene	7200	mg/kg	1
	Xylene	7000	mg/kg	1
	1,2-Dichlorobenzene	30000	mg/kg	1
	2-Methylnaphthalene	12000	mg/kg	1
	Naphthalene	240000	mg/kg	1
	Nitrobenzene	75000	mg/kg	1
	N-Nitrosodiphenylamine	30000	mg/kg	1
Impoundment 13	Benzene	10.2	mg/kg	1
	Naphthalene	9300	mg/kg	1
	Nitrobenzene	588	mg/kg	1
	N-Nitrosodiphenylamine	610	mg/kg	1
Impoundment 17	Naphthalene	300	mg/kg	1
Impoundment 24	Benzene	89.5	mg/kg	1
	1,2-Dichlorobenzene	13000	mg/kg	1
	Naphthalene	8800	mg/kg	1
	N-Nitrosodiphenylamine	1200	mg/kg	1

Footnote: (1) Maximum Detected Concentration was used to estimate risk

**Table 3B: Summary of Chemicals of Concern and Medium Specific  
Exposure Point Concentrations for North Area Soils**

Scenario Timeframe: Current/Future Medium: Soil Exposure Medium: Surface Soil				
Exposure Point	Chemical of Concern	Exposure Point Concentration	EPC Units	Statistic
Surficial Soils in the North Area	Ethylbenzene	1500	mg/kg	1
	Trichloroethylene	80	mg/kg	1
	Xylenes	13000	mg/kg	1
	Benzo(a)anthracene	1300	mg/kg	1
	Benzo(a)pyrene	61	mg/kg	1
	Benzo(b)fluoranthene	48	mg/kg	1
	Benzo(k)fluoranthene	60	mg/kg	1
	Bis(2-ethylhexyl)phthalate	120	mg/kg	1
	Dibenzo(a,h)anthracene	4.2	mg/kg	1
	Hexachlorobenzene	39	mg/kg	1
	Indeno(1,2,3-cd)pyrene	24	mg/kg	1
	Naphthalene	290	mg/kg	1
	Nitrobenzene	600	mg/kg	1
	N-nitrosodiphenylamine	14100	mg/kg	1
	Total PCBs	560	mg/kg	1
	Antimony	25200	mg/kg	1
	Arsenic	382	mg/kg	1
	Cadmium	3960	mg/kg	1
	Chromium Total	214000	mg/kg	1
	Chromium VI	214000	mg/kg	1
	Cobalt	22500	mg/kg	1
	Copper	14600	mg/kg	1
	Cyanide	89400	mg/kg	1
	Iron	578000	mg/kg	1
Mercury	1320	mg/kg	1	
Thallium	53.2	mg/kg	1	

Footnote: (1) Maximum Detected Concentration was used to estimate risk

**Table 3C: Summary of Chemicals of Concern and Medium Specific Exposure Point Concentrations for Overburden and Bedrock Groundwater**

Scenario Timeframe: Current/Future				
Medium: Groundwater				
Exposure Medium: Groundwater				
Exposure Point	Chemical of Concern	Exposure Point Concentration	EPC Units	Statistic
Overburden Groundwater	1,2-Dichloroethane	41.6	ug/l	1
	Benzene	1400	ug/l	1
	Chloroform	22.3	ug/l	1
	Ethylbenzene	14.6	ug/l	1
	Methylene chloride	9.5	ug/l	1
	Tetrachloroethylene	3.14	ug/l	1
	1,4-Dichlorobenzene	76.7	ug/l	1
	Benzo(a)anthracene	0.038	ug/l	1
	Bis(2-ethylehexyl)phthalate	9.89	ug/l	1
	Indeno(1,2,3-cd)pyrene	0.32	ug/l	1
	Naphthalene	813	ug/l	1
	Nitrobenzene	5.75	ug/l	1
	n-Nitrosodiphenylamine	100	ug/l	1
	Pentachlorophenol	2.94	ug/l	1
	Arsenic	16.2	ug/l	1
	Iron	48300	ug/l	1
	Manganese	3580	ug/l	1
Thallium	2.81	ug/l	1	
Bedrock Groundwater	Benzene	340	ug/l	1
	Carbon Disulfide	1890	ug/l	1
	Carbon Tetrachloride	2.5	ug/l	1
	Chlorobenzene	292	ug/l	1
	Chloroform	0.78	ug/l	1
	Ethylbenzene	5.24	ug/l	1
	Tetrachloroethylene	7.3	ug/l	1
	Trichloroethylene	2.67	ug/l	1
	Vinyl chloride	0.26	ug/l	1
	4-Chloroaniline	0.61	ug/l	1
	Benzo(a)pyrene	0.1	ug/l	1
	Benzo(b)fluoranthene	0.12	ug/l	1
	1,2,4-Trichlorobenzene	57.2	ug/l	1
	1,4-Dichlorobenzene	13.6	ug/l	1
	Nitrobenzene	5.76	ug/l	1
	Arsenic	1.95	ug/l	1
Manganese	1610	ug/l	1	
Footnote: (1) Maximum Detected Concentration was used to estimate risk				

**Table 4A: Industrial RSL Summary for Impoundments**

<b>Pathway: Impoundments Receptor: Industrial Worker</b>		
<b>Chemical of Concern</b>	<b>RSL<sup>1</sup> (mg/kg)</b>	<b>Date of RSL<sup>1</sup></b>
Benzene	5.6	Jan 2010
Toluene	46000	Jan 2010
Xylene	2600	Jan 2010
Naphthalene	20	Jan 2010
Nitrobenzene	280	Jan 2010
N-Nitrosodiphenylamine	350	Jan 2010
2-Methylnaphthalene	4100	Jan 2010
1,2-Dichlorobenzene	10000	Jan 2010

Footnotes:  
 (1) Regional Screening Level (RSL) obtained in January 2010. The industrial screening criteria were used as a conservative measure to evaluate the industrial/commercial receptor considering the designated use and zoning of the property is industrial/commercial. The screening criteria are identified on the following website:  
<http://www.epa.gov/region9/superfund/prg/>

**Table 4B: Trespasser RSL Summary for North Area Soils**

<b>Pathway: North Area Soils Receptor: Trespasser</b>		
<b>Chemical of Concern</b>	<b>RSL<sup>1</sup> (mg/kg)</b>	<b>Date of RSL<sup>1</sup></b>
Ethylbenzene	5.4	May 2011
Benzo(a)anthracene	0.15	May 2011
Benzo(a)pyrene	0.015	May 2011
Dibenzo(a,h)anthracene	0.015	May 2011
Indeno(1,2,3-cd)pyrene	0.15	May 2011
N-Nitrosodiphenylamine	99	May 2011
Total PCBs	0.22	May 2011
Antimony	31	May 2011
Arsenic	0.39	May 2011
Chromium Total <sup>2</sup>	0.29	May 2011
Chromium VI	0.29	May 2011
Cobalt	370	May 2011
Copper	3100	May 2011
Cyanide	1600	May 2011
Iron	55000	May 2011
Mercury	7.8	May 2011
Thallium	0.78	May 2011

Footnotes:  
 (1) Regional Screening Level (RSL) obtained in May 2011. The residential screening criteria were used as a conservative measure to evaluate the trespasser receptor. The screening criteria are identified on the following website: <http://www.epa.gov/region9/superfund/prg/>  
 (2) The RSL table does not have screening criteria for Total Chromium. The screening criteria used for Total Chromium was obtained by using the screening criteria for Chromium VI.



**Table 4C: Industrial RSL Summary for North Area Soils**

<b>Pathway: North Area Soils Receptor: Industrial Worker</b>		
<b>Chemical of Concern</b>	<b>RSL<sup>1</sup> (mg/kg)</b>	<b>Date of RSL<sup>1</sup></b>
Ethylbenzene	29	Jan 2010
Trichloroethylene	14	Jan 2010
Xylenes	2600	Jan 2010
Benzo(a)anthracene	2.1	Jan 2010
Benzo(a)pyrene	0.21	Jan 2010
Benzo(b)fluoranthene	2.1	Jan 2010
Benzo(k)fluoroanthene	21	Jan 2010
Bis(2-ethylhexyl)phthalate	120	Jan 2010
Dibenzo(a,h)anthracene	0.21	Jan 2010
Hexachlorobenzene	1.1	Jan 2010
Indeno(1,2,3-cd)pyrene	2.1	Jan 2010
Naphthalene	20	Jan 2010
Nitrobenzene	280	Jan 2010
N-Nitrosodiphenylamine	350	Jan 2010
Total PCBs	0.74	Jan 2010
Antimony	410	Jan 2010
Arsenic	1.6	Jan 2010
Cadmium	810	Jan 2010
Chromium Total <sup>2</sup>	1400	Jan 2010
Chromium VI	200	Jan 2010
Cobalt	300	Jan 2010
Cyanide	20000	Jan 2010
Mercury	100	Jan 2010
Footnotes: (1): Regional Screening Level (RSL) obtained in January 2010. The industrial screening criteria were used as a conservative measure to evaluate the industrial/commercial receptor considering the designated use and zoning of the property is industrial/commercial. The screening criteria are identified on the following website: <a href="http://www.epa.gov/region9/superfund/prg/">http://www.epa.gov/region9/superfund/prg/</a> (2): The RSL table does not have screening criteria for Total Chromium. The screening criteria used for Total Chromium was obtained by using the screening criteria for Chromium VI.		

**Table 4D: Residential RSL Summary for Groundwater**

<b>Pathway: Groundwater Receptor: Residential</b>		
<b>Chemical of Concern</b>	<b>RSL<sup>1</sup> (mg/kg)</b>	<b>Date of RSL<sup>1</sup></b>
1,2-Dichloroethane	0.15	Jan 2010
Benzene	0.41	Jan 2010
Chloroform	0.19	Jan 2010
Ethylbenzene	1.5	Jan 2010
Methylene chloride	4.8	Jan 2010
Tetrachloroethylene	0.11	Jan 2010
1,4-Dichlorobenzene	0.43	Jan 2010
Benzo(a)anthracene	0.029	Jan 2010
Bis(2-ethylhexyl)phthalate	4.8	Jan 2010
Indeno (1,2,3-cd)pyrene	0.29	Jan 2010
Naphthalene	0.14	Jan 2010
Nitrobenzene	0.12	Jan 2010
n-Nitrosodiphenylamine	14	Jan 2010
Pentachlorophenol	0.56	Jan 2010
Benzo(a)pyrene	0.0029	Jan 2010
4-Chloroaniline	0.34	Jan 2010
Benzo(b)fluoranthene	0.029	Jan 2010
Carbon Disulfide	1000	Jan 2010
1,2,4-Trichlorobenzene	8.2	Jan 2010
Carbon Tetrachloride	0.2	Jan 2010
Chlorobenzene	91	Jan 2010
Trichloroethylene	1.7	Jan 2010
Vinyl chloride	0.016	Jan 2010
Arsenic	0.045	Jan 2010
Iron	26000	Jan 2010
Manganese	880	Jan 2010
Thallium	2.4	Jan 2010

Footnotes:  
(1): Regional Screening Level (RSL) obtained in January 2010. The industrial screening criteria were used as a conservative measure to evaluate the residential receptor considering groundwater aquifer is designated as a potable water supply. The screening criteria are identified on the following website: <http://www.epa.gov/region9/superfund/prg/>

**Table 5A: Non-Carcinogenic Risk Characterization Summary Table for Impoundment Media**

<b>Scenario Timeframe:</b> Current/Future <b>Receptor Population:</b> Industrial/Commercial Worker <b>Receptor Age:</b> Adult		
<b>Exposure Point</b>	<b>Chemical of Concern</b>	<b>Non-Carcinogenic Risk Exposure Route Total*</b>
<b>Impoundment 3</b>	Nitrobenzene	1.9
<b>Hazard Index Total*:</b>		<b>1.9</b>
<b>Impoundment 5</b>	Xylene	2.7
	1,2-Dichlorobenzene	3.0
	2-Methylnaphthalene	2.9
	Nitrobenzene	270
<b>Hazard Index Total*:</b>		<b>280</b>
<b>Impoundment 13</b>	Nitrobenzene	2.1
<b>Hazard Index Total*:</b>		<b>2.1</b>
<b>Impoundment 24</b>	1,2-Dichlorobenzene	1.3
<b>Hazard Index Total*:</b>		<b>1.3</b>
Footnote: (*) The Exposure Route Total was based upon the health endpoint that is driving the risk. Hazard Indices were reported to two significant figures; therefore, the non-carcinogenic risk exposure route totals for individual COCs may not add up to the Total Non-Cancer Hazard Index. The Total Non-Cancer Hazard Index will be underestimated since other chemicals for which the risk is driven by the cancer health endpoint, but also have a non-cancer health endpoint, are not identified on this table.		

**Table 5B: Non-Carcinogenic Risk Characterization Summary Table for North Area Soils**

<b>Scenario Timeframe: Current/Future</b> <b>Receptor Population: Industrial/Commercial</b> <b>Receptor Age: Adult</b>				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Non-Carcinogenic Risk Exposure Route Total*
Soil	Surface Soil	North Area	Xylene	5.0
			Nitrobenzene	2.1
			Antimony	61
			Cadmium	4.9
			Cobalt	75
			Cyanide	4.5
			Mercury	13
<b>Hazard Index Total*:</b>				<b>170</b>
<b>Scenario Timeframe: Current/Future</b> <b>Receptor Population: Trespasser</b> <b>Receptor Age: Adolescent</b>				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Non-Carcinogenic Risk Exposure Route Total*
Soil	Surface Soil	North Area	Antimony	290
			Cadmium	2.4
			Chromium VI	330
			Cobalt	350
			Copper	1.7
			Cyanide	21
			Iron	3.8
			Mercury	44
			Thallium	3.8
<b>Hazard Index Total*:</b>				<b>1000</b>
Footnote: (*) - The Exposure Route Total was based upon the health endpoint that is driving the risk. Hazard Indices were reported to two significant figures; therefore, the non-carcinogenic risk exposure route totals for individual COCs may not add up to the Total Non-Cancer Hazard Index. The Total Non-Cancer Hazard Index will be underestimated since other chemicals for which the risk is driven by the cancer health endpoint, but also have a non-cancer health endpoint, are not identified on this table.				

**Table 5C: Non-Carcinogenic Risk Characterization Summary Table for Groundwater**

Scenario Timeframe: Future				
Receptor Population: Resident				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Non-Carcinogenic Risk Exposure Route Total*
Groundwater	Groundwater	Overburden	Chlorobenzene	5.7
			1,2-Dichlorobenzene	1.6
			Aniline	150
			Iron	1.9
			Manganese	4.1
			Thallium	1.2
<b>Groundwater Hazard Index Total*:</b>				<b>160</b>
Groundwater	Groundwater	Bedrock	Carbon Disulfide	1.9
			Chlorobenzene	3.2
			1,2,4-Trichlorobenzene	7.0
			Manganese	1.8
<b>Groundwater Hazard Index Total*:</b>				<b>14</b>
Footnote: (*) - The Exposure Route Total was based upon the health endpoint that is driving the risk. Hazard Indices were reported to two significant figures; therefore, the non-carcinogenic risk exposure route totals for individual COCs may not add up to the Total Non-Cancer Hazard Index. The Total Non-Cancer Hazard Index will be underestimated since other chemicals for which the risk is driven by the cancer health endpoint, but also have a non-cancer health endpoint, are not identified on this table.				

**Table 6A: Carcinogenic Risk Characterization Summary Table for Impoundment Media**

Scenario Timeframe: Current/Future Receptor Population: Industrial/Commercial Worker Receptor Age: Adult				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Carcinogenic Risk Exposure Route Total*
Impoundment	Impoundment	Impoundment 3	Benzene	6.4E-03
			Naphthalene	1.2E-03
			n-Nitrosodiphenylamine	5.1E-06
<b>Cancer Risk Total *:</b>				<b>7.6E-03</b>
Impoundment	Impoundment	Impoundment 4	Benzene	3.8E-03
			Naphthalene	2.1E-06
<b>Cancer Risk Total *:</b>				<b>3.8E-03</b>
Impoundment	Impoundment	Impoundment 5	Benzene	1.3E-03
			Naphthalene	1.2E-02
			n-Nitrosodiphenylamine	8.6E-05
<b>Cancer Risk Total *:</b>				<b>1.3E-02</b>
Impoundment	Impoundment	Impoundment 13	Benzene	1.8E-06
			Naphthalene	4.7E-04
			n-Nitrosodiphenylamine	1.7E-06
<b>Cancer Risk Total *:</b>				<b>4.7E-04</b>
Impoundment	Impoundment	Impoundment 17	Naphthalene	1.5E-05
<b>Cancer Risk Total *:</b>				<b>1.5E-05</b>
Impoundment	Impoundment	Impoundment 24	Benzene	1.6E-05
			Naphthalene	4.4E-04
			n-Nitrosodiphenylamine	3.4E-06
<b>Cancer Risk Total *:</b>				<b>4.6E-04</b>
Footnote: (* ) The Exposure Route Total was based upon the health endpoint that is driving the risk. The carcinogenic risks were reported to two significant figures; therefore, the carcinogenic risk exposure route totals for individual COCs may not add up to the Cancer Risk Totals. The Total Non-Cancer Hazard Index will be underestimated since other chemicals for which the risk is driven by the cancer health endpoint, but also have a non-cancer health endpoint, are not identified on this table.				

**Table 6B: Carcinogenic Risk Characterization Summary Table for North Area Soils**

Scenario Timeframe: Current/Future Receptor Population: Industrial/Commercial Receptor Age: Adult				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Carcinogenic Risk Exposure Route Total*
Soil	Surface Soil	North Area	Ethylbenzene	5.2E-05
			Trichloroethylene	5.7E-06
			Benzo(a)anthracene	6.2E-04
			Benzo(a)pyrene	2.9E-04
			Benzo(b)fluoranthene	2.3E-05
			Benzo(k)fluoranthene	2.9E-06
			Bis(2-ethylhexyl)phthalate	1.0E-06
			Dibenzo(a,h)anthracene	2.0E-05
			Hexachlorobenzene	3.6E-05
			Indeno(1,2,3-cd)pyrene	1.1E-05
			Naphthalene	1.5E-05
			n-Nitrosodiphenylamine	4.0E-05
			Total PCBs	7.6E-04
			Arsenic	2.4E-04
			Chromium Total	1.5E-04
Chromium VI	1.1E-03			
<b>Total Cancer Risk (Chromium Total)<sup>1</sup>:</b>				<b>2.3E-03</b>
<b>Total Cancer Risk (Chromium VI)<sup>1</sup>:</b>				<b>3.2E-03</b>
Scenario Timeframe: Current/Future Receptor Population: Trespasser Receptor Age: Adolescent				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Carcinogenic Risk Exposure Route Total*
Soil	Surface Soil	North Area	Ethylbenzene	7.6E-06
			Benzo(a)anthracene	1.1E-04
			Benzo(a)pyrene	5.1E-05
			Dibenzo(a,h)anthracene	3.5E-06
			Indeno(1,2,3-cd)pyrene	2.0E-06
			N-Nitrosodiphenylamine	7.0E-06
			Total PCBs	1.3E-04
			Arsenic	4.2E-05
			Chromium Total	2.5E-06
			Chromium VI	1.7E-05
<b>Total Cancer Risk (Chromium Total)<sup>1</sup>:</b>				<b>3.6E-04</b>
<b>Total Cancer Risk (Chromium VI)<sup>1</sup>:</b>				<b>3.7E-04</b>
Footnotes: (1) Due to the differing toxicity criteria used to calculate the RSL for Chromium VI and Total Chromium, the Total Cancer Risk was calculated separately. (*) The Exposure Route Total was based upon the health endpoint that is driving the risk. The carcinogenic risks were reported to two significant figures; therefore, the carcinogenic risk exposure route totals for individual COCs may not add up to the Cancer Risk Totals. The Total Cancer Risk will be underestimated since other chemicals for which the risk is driven by the non-cancer health endpoint, but also have a cancer health endpoint, are not identified on this table.				

**Table 6C: Carcinogenic Risk Characterization Summary Table for Groundwater**

Scenario Timeframe: Future Receptor Population: Resident				
Medium	Exposure Medium	Exposure Point	Chemical of Concern	Carcinogenic Risk Exposure Route Total*
Groundwater	Groundwater	Overburden	1,2-Dichloroethene	2.8E-04
			Benzene	3.4E-03
			Chloroform	1.2E-04
			Ethylbenzene	9.7E-06
			Methylene chloride	2.0E-06
			Tetrachloroethylene	2.9E-05
			1,4-Dichlorobenzene	1.8E-04
			Benzo(a)anthracene	1.3E-06
			Bis(2-ethylhexyl)phthalate	2.1E-06
			Indeno(1,2,3-cd)pyrene	1.1E-06
			Naphthalene	5.8E-03
			Nitrobenzene	4.8E-05
			n-Nitrosodiphenylamine	7.1E-06
			Pentachlorophenol	5.3E-06
Arsenic	3.6E-04			
<b>Cancer Risk Total *:</b>				<b>1.0E-02</b>
Groundwater	Groundwater	Bedrock	Benzene	8.3E-04
			Carbon Tetrachloride	1.3E-05
			Chloroform	4.1E-06
			Ethylbenzene	3.5E-06
			Tetrachloroethylene	6.6E-05
			Trichloroethylene	1.6E-06
			Vinyl chloride	1.6E-05
			4-Chloroaniline	1.8E-06
			Benzo(a)pyrene	3.5E-05
			Benzo(b)fluoranthene	4.0E-06
			1,4-Dichlorobenzene	3.2E-05
			Nitrobenzene	4.8E-05
Arsenic	4.3E-05			
<b>Cancer Risk Total *:</b>				<b>1.1E-03</b>
Footnote: (* ) - The Exposure Route Total was based upon the health endpoint that is driving the risk. The carcinogenic risks were reported to two significant figures; therefore, the carcinogenic risk exposure route totals for individual COCs may not add up to the Cancer Risk Totals. The Total Non-Cancer Hazard Index will be underestimated since other chemicals for which the risk is driven by the cancer health endpoint, but also have a non-cancer health endpoint, are not identified on this table.				



**Table 7A: Impoundments**

Direct Contact Control	
<i>Numerical Values not Applicable</i>	
Vapor Control (mg/kg) <sup>1</sup>	
Benzene	4.23
Toluene	11,110
Xylene	4,470
Chlorobenzene	2,590
Naphthalene	948
Movement Control <sup>2</sup>	
<i>Tarry substances of Impoundments 3, 4, and 5 – Numerical Values not Applicable</i>	

**Table 7B: North Area Soils**

Direct Contact Control (mg/kg) <sup>3</sup>	
Antimony	410
Arsenic	19
Benzo(a)anthracene	2.1
Benzo(a)pyrene	0.21
Cadmium	800
Chromium (total)	NC <sup>4</sup>
Chromium VI	5.6
Cobalt	300
Cyanide	20,000
Lead	800
Mercury	43
Nitrobenzene	24
Total PCBs	0.74
Xylene (total)	2,700
Vapor Control (mg/kg) <sup>1</sup>	
Benzene	4.23
Toluene	11,110
Xylene	4,470
Chlorobenzene	2,590
Naphthalene	948
Movement Control (mg/kg) <sup>2</sup>	
Benzene	4,460
1,2 Dichlorobenzene	98,400
n-Nitrosodiphenylamine	352,000
Nitrobenzene	12,300
Naphthalene	6,180

**Table 7C: South and West Area Soils**

Direct Contact Control (mg/kg) <sup>3</sup>	
Chromium VI	5.6
Lead	800
Mercury	43
Vapor Control (mg/kg) <sup>1</sup>	
Benzene	4.23
Toluene	11,110
Xylene	4,470
Chlorobenzene	2,590
Naphthalene	948
Movement Control (mg/kg) <sup>2</sup>	
Benzene	4,460
1,2 Dichlorobenzene	98,400
n-Nitrosodiphenylamine	352,000
Nitrobenzene	12,300
Naphthalene	6,180

**Table 7D: Groundwater**

	NJ GWQS (µg/l) <sup>5</sup>	NJ MCL (µg/l) <sup>5</sup>	EPA MCL (µg/l) <sup>5</sup>
Benzene	1	1	5
1,2-Dichlorobenzene	600	NC	600
2-Methylnaphthalene	30	NC	150
Naphthalene	300	300	0.14
Nitrobenzene	6	NC	0.12
n-Nitrosodiphenylamine	10	NC	NC
Toluene	600	1000	1000
Xylene	1,000	1,000	10,000

**Notes:**

- (1) These values are preliminary and a more refined assessment method will be developed and implemented during the Remedial Design phase to appropriately delineate areas requiring vapor control.
- (2) While numerical criteria were developed to aid in defining the extent of contaminated media requiring movement control, visual observation of tarry substances will also be utilized to identify these areas, regardless of whether the tarry substances exceed the numerical criteria.
- (3) Soil remediation goals were selected based upon consideration of both risk-based concentrations and promulgated NJDEP Non-Residential Direct Contact Soil Remediation Standards. NJDEP Impact-to-Groundwater Soil Screening Criteria were also evaluated as "To-Be-Considered" criteria.
- (4) NC denotes no criteria available.
- (5) The more stringent of the EPA federal MCLs, NJDEP groundwater quality criteria, NJDEP MCLs, and site-specific, risk-based concentrations will be utilized as the remediation goal for groundwater.

**Table 8: ARARs, Criteria, and Guidance**

<u>STANDARD, REQUIREMENT OR LIMITATION</u>	<u>CITATION</u>	<u>MEDIUM</u>	<u>REQUIREMENTS</u>	<u>COMMENTS</u>
<b><u>CHEMICAL-SPECIFIC</u></b>				
<b><i>FEDERAL</i></b>				
Clean Air Act	42 USC 7401 et seq. as amended	Air	Provides provisions for air pollution prevention and control utilizing air quality criteria and emission limitations.	
Federal Water Pollution Control Act	33 USC 1251 et seq. as amended by the Clean Water Act of 1977 (40 CFR Part 131)	Surface water Ground water	Provides guidance for both the elimination of toxic discharge in toxic amounts and for waste treatment management planning processes.	
National Primary Drinking Water Standards	40 CFR Part 141	Ground Water and Surface Water	Establishes maximum contaminant levels (MCLs) applicable to water used in public water systems.	
Identification And Listing Of Hazardous Waste, 40 CFR Part 261	40 CFR Part 261	Soil and Sediment	Identifies those solid wastes which are subject to regulation as hazardous wastes and sets forth the criteria used to identify characteristics of hazardous waste and to list particular hazardous wastes	
RCRA MCL for Ground Water	40 CFR 264.94	Ground water	Provides maximum concentration of constituents for ground water protection.	RCRA MCLs for barium, chromium, selenium, and silver are more stringent than New Jersey Ground Water Quality Standards, NJAC 7:9-6.
Ecological-based surface water screening criteria	Ecological Screening Values for Surface Water and Sediment (February 1998)	Surface water and Sediment	Provide surface water and sediment screening criteria	Currently incorporated into the BERA for the Floodplain portion of the site.
1998 Guidance for Sediment Quality Criteria		Sediment	Provides sediment screening criteria	Currently incorporated into the BERA for the Floodplain portion of the site.

Ecological-based soil screening criteria (Ecological Soil Screening Level Guidance (USEPA 2000); Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision. (Efroymsen et al. 1997); Toxicological benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision. (Efroymsen et al. 1997a))		Soil	Collectively provide soil screening criteria relative to ecological risk	Currently incorporated into the BERA for the Floodplain portion of the site.
Corrective Action Management Unit (CAMU) Requirements under the Group III ROD	Group III ROD	Soil	Bioremediation Treatment Objectives (Material Category B) and Low Temperature Treatment Objectives (Material Category A)	
New CAMU Requirements		Soil	Material and Technology-specific Treatment Objectives	Would require bench- and pilot-testing to establish.
<b>STATE</b>				
New Jersey Air Pollution Control Regulations	NJAC 7:27	Air	Provides regulations that govern the emitting of and such activities as result in the introducing of contaminants into the ambient atmosphere.	
New Jersey Surface Water Quality Standards	NJAC 7:9B	Surface water	Provides surface water quality standards	The Raritan River and Cuckolds Brook are classified as a FW2-NT (non-trout associated waterway).
New Jersey Ground Water Quality Standards	NJAC 7:9C	Ground water	Provides ground water quality criteria and constituent standards.	Site bedrock ground water is classified as Class II, therefore, the Class II criteria and standards apply. Requires ground water discharging to surface water to achieve the surface water quality standards.
New Jersey Safe Drinking Water Act	NJAC 7:10	Ground water	Provides drinking water quality criteria and constituent standards.	
New Jersey Remediation Standards	NJAC 7:26D	Soil Ground water Surface water	Establishes minimum standards for remediation of contaminated ground water and surface water, and establishes minimum residential direct contact and non-residential direct contact soil remediation standards.	Direct-contact residual risks would be eliminated by excavation and/or capping. Groundwater residual risks would be controlled by collection/treatment system.
New Jersey Location Standards for New Hazardous Waste Facilities	NJAC 7:26-10.3	Soil Ground water Surface water Sediment	Provides guidance for locating new hazardous waste facilities in relation to potential impacts to adjacent media.	This ARAR would be met by specifying the substantive requirements in the remedial action contract and by maintaining compliance with the requirements through remedial action monitoring.

**LOCATION-SPECIFIC**

**FEDERAL**

Location Standards (Floodplains)	40 CFR 264.18(b)	100-year floodplains	Requires design, construction, operation, and maintenance to avoid washout of RCRA hazardous waste	
Floodplain Management	Executive Order 11988	Floodplains	Requires evaluation of alternatives that impact floodplains, and a floodplain value assessment	
Protection of Floodplains	40 CFR 6 Appendix A	Floodplains	Actions to avoid adverse effects, minimize potential harm, restore and preserve natural and beneficial values of lowlands and flood prone areas.	
Wild and Scenic Rivers Act	36 CFR Section 297.4Bridgewater	Wild and Scenic rivers	Requires determination of affects of project on free-flowing characteristics, scenic, or natural values of a designated river.	The Raritan is not a Wild and Scenic River based on the National Wild and Scenic Rivers System web page located at <a href="http://www.nps.gov/rivers/">http://www.nps.gov/rivers/</a> .
Cultural Resource/Archaeological Resource Protection Requirements		Historic area	Action to preserve historic properties; planning of action to minimize harm to National Historic Landmarks. Avoid impacts on cultural resources. Where impacts are unavoidable, mitigate through design and data recovery.	The ERA concluded no cultural resources existed on the property.
Endangered Species Act	16 USC Sec. 1531	Critical habitat	Action to preserve endangered species or threatened species, including consultation with the Department of Interior. Identify activities that may affect listed species. Actions must not threaten the continued existence of a listed species. Actions must not destroy critical habitat.	The ERA concluded that there are no endangered species on the site.  Incorporated in the BERA.
Protection of Wetlands	Executive Order 11990	Wetlands	Requires consideration of factors relevant to project's effects on survival and quality of wetlands.	Enhancement of existing, unimpacted wetlands and habitats and/or creation of new wetlands/habits would be employed to mitigate impacts.
Wetlands and Floodplains Assessment of CERCLA sites.	EPA Statement of Policy	Wetlands	Requires consideration of factors relevant to project's effects on survival and quality of wetlands.	Enhancement of existing, unimpacted wetlands and habitats and/or creation of new wetlands/habits would be employed to mitigate impacts.
401 Water Quality Certification	33 U.S.C. 1314	Wetlands	Requires, as a condition of federal permit approvals, state certification that the federal permit issued under Section 404 meets state water quality standards. Includes all wetlands that may be affected by a federally permitted activity.	

**STATE**

New Jersey Location Standards for New Hazardous Waste Facilities	NJAC 7:26-10.3	Soil Ground water Surface water Sediment	Provides guidance for locating new hazardous waste facilities in relation to potential impacts to adjacent media.	This ARAR would be met by specifying the substantive requirements in the remedial action contract and by maintaining compliance with the requirements through remedial action monitoring.
New Jersey Flood Area Hazard Control Act Regulations	NJAC 7:13	Floodplains	Requires a permit for all development within a flood hazard area. Flood hazard area means land, and the space above that land, which lies below the flood hazard area design flood elevation. The flood hazard design flood is a flood equal to the 100-year flood plus an additional amount of water in fluvial areas.	Both the area between the flood control dike and river and the area within the flood control dike are within the flood hazard area, one being a floodway and one a flood fringe, respectively.
New Jersey Freshwater Wetlands Protection Act Rules	NJAC 7:7A	Wetlands	A person proposing to engage in a regulated activity, as described at N.J.A.C. 7:7A-2.2, shall first obtain a general permit authorization or an Individual freshwater wetlands or open water fill permit. A person proposing to engage in a prohibited activity, as described at N.J.A.C. 7:7A-2.6, in a transition area shall first obtain approval from the Department through a transition area waiver or general permit authorization.	Regulated activities generally refer to such activities as removal/disturbance of sediments, drainage of water, disturbance of water levels, filling, driving of piling, placement of obstructions.  Activities such as placing pilings for bridges, elevated walkways are not regulated (see NJAC 7.7A-2.2 (c) 5 I (1)). Remedial actions at the site have generally required a transition area waiver or general permit.  For wetlands, if any, within the Main Plant Area, general permit #27 – Redevelopment of Previously Disturbed Areas may be appropriate to use.
<b>LOCAL</b>				
Bridgewater Township Land Use	Ordinance Article XXXIX, Sections 126-289	Floodplains	Specifies requirements for development in a floodplain. Provides performance standards for evaluation of land use. Requires flood-proofing requirements for structures constructed in the flood fringe.	

**ACTION-SPECIFIC**

**FEDERAL**

RCRA Hazardous Waste Facility Requirements	40 CFR Parts 264/265, Subparts A-E	General	Provides requirements for capping wastes in place, closure of wastes in place, container storage, construction of new landfills, land treatment, excavation, and incineration.	
Land Disposal Restrictions (LDRs)	40 CFR 268	General	Provides restrictions to any land disposal activities by establishing treatment standards for hazardous wastes that must be achieved prior to disposal.	Granting a CAMU and developing alternative treatment standards to comply with these regulations.
Nationwide Permit Program	Clean Water Act Section 404 and 33 CFR Part 330	Wetlands	Permit required for discharge of fill material in wetland. Nationwide permit exists for hazardous and toxic waste cleanup.	Conditions related to permits must be met.
Clean Water Act	40 CFR Part 131	Surface water Ground water	Provides regulations for discharges of pollutants to Waters of the U.S. and water quality standards for all contaminants in surface waters.	
Fish and Wildlife Coordination Act	16 USC 661, 40 CFR 6.302(e)	Stream or River	Action to protect fish or wildlife during diversion, channeling or other activity that modifies a stream or river.	No stream/brook modifications are envisioned.
Capping (RCRA Subtitle C)	40 CFR Part 264.310	Cover	Placement of a cap over waste requires a cover designed to : <ul style="list-style-type: none"> <li>• provide long-term minimization of migration of liquids through the capped area,</li> <li>• function with minimum maintenance,</li> <li>• promote drainage and minimize erosion or abrasion of the cover,</li> <li>• accommodate settling and subsidence so that the cover's integrity is maintained, and</li> </ul> have a permeability less than or equal to the permeability of any bottom liner system or natural sub-soils present.	TSCA requirements not applicable when sources of PCBs had concentrations of less than 50 ppm. Outlines action levels above which action (i.e., treatment or containment) should be considered.
Ground Water Protection (RCRA Subtitle C)	40 CFR Part 264 Subpart F	Cover	Ground water protection requirements include: <ul style="list-style-type: none"> <li>• establishment of a detection monitoring program (264.98)</li> <li>• establishment of a compliance monitoring program (264.99), and</li> <li>• a corrective action monitoring program (264.100) when required by 40 CFR 264.91.</li> </ul> All monitoring programs must meet RCRA general ground water monitoring requirements (264.97).	

Corrective Action Management Unit Regulations	40 CFR 264.552	Cover/ Excavation	Provides regulations related to placement of a cap over a corrective action management unit (CAMU). A CAMU is defined as an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.	
Design Criteria	40 CFR 258.40	Cover	<p>Requires that the final cover system be designed to minimize infiltration and erosion. The cover system must be designed and constructed to:</p> <ul style="list-style-type: none"> <li>▪ Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than <math>1 \times 10^{-5}</math> cm/sec, whichever is less, and</li> <li>▪ Minimize infiltration through the closed MSWLF by the use of an infiltration layer that contains a minimum 18-inches of earthen material, and</li> <li>▪ Minimize erosion of the final cover by the use of an erosion layer that contains a minimum of 6-inches of earthen material that is capable of sustaining native plant growth.</li> </ul>	
Closure Criteria	40 CFR 258.60	Cover		
Post-Closure Care	40 CFR 258.61		Post-closure care must be conducted for 30-years unless demonstrated otherwise by the owner. Post-closure care must include maintenance of cover integrity and effectiveness and monitoring of ground water.	
National Air Quality Standards	40 CFR Part 50	Excavation, grading, soil cover	Provides national primary and secondary ambient air quality standards.	
Department of Transportation Regulations	49 CFR 172 – 174 and 177 – 179	Transportation	Hazardous waste transport to off-site disposal facilities must be conducted in accordance with applicable DOT requirements.	
Standards Applicable to Generators of Hazardous Waste	40 CFR Part 262	Transportation of hazardous waste	If a hazardous waste is transported for off-site treatment, storage, or disposal, a manifest shall be prepared and distributed in accordance with 40 CFR 262.20 through 262.23.	
Occupational Safety and Health Standards and 29 CFR Part 1926 – Safety and Health Regulations for Construction	29 CFR Part 1910	Construction	Remedial construction activities must be conducted in accordance with applicable OSHA requirements.	



<b>STATE</b>				
New Jersey Spill Compensation and Control Act	NJSA 58:10-23.11	Cover	Requires former industrial sites that remain vacant or underutilized in part because they have been contaminated by a discharge of a hazardous substance be cleaned up sufficiently so that they can be safely returned to productive use.	Applicable; Consent Order requires remediation in accordance with this Act.
New Jersey Solid and Hazardous Waste Regulations	NJAC 7:26 – 1-8	General	Regulations that govern the registration, operation, and maintenance of solid waste transporting operations and facilities.	
NJDEP Regulations (Division of Waste Management)	Title 7 in Chap. 26 of the NJAC	General	Provides standards for owners and operators of solid waste and hazardous waste treatment, storage and disposal facilities.	
New Jersey Flood Area Hazard Control Act Regulations	NJAC 7:13	Floodplains	Requires a permit for all development within a flood hazard area. Flood hazard area means land, and the space above that land, which lies below the flood hazard area design flood elevation. The flood hazard design flood is a flood equal to the 100-year flood plus an additional amount of water in fluvial areas.	Both the area between the flood control dike and river and the area within the flood control dike are within the flood hazard area, one being a floodway and one a flood fringe, respectively.
Water Quality Permits Requirements	NJAC 7:14 et. seq.	General	Sets forth rules concerning implement and operation of NJ Permit Discharge Elimination Systems. Discharge to water permits are administered in accordance with approved industrial pretreatment programs and requirements of NJAC 7:14A.	
NJDEP Hazardous Waste Regulations (e.g. New Jersey Closure and post closure care of sanitary landfills)	NJAC 7:26 (NJAC 7:26 – 2A.9)	Cover	Requires preparation of a Closure and Post-Closure Plan that includes a soil erosion and sediment control plan, a final cover design, final cover vegetation, maintenance plan, ground water monitoring, and facility access control.	
Brownfield and Contaminated Site Remediation Act	NJSA 58:10B	Excavation	Requires remediation of Brownfields.	Technical requirements are provided under NJAC 7:26E
New Jersey Technical Requirements for Site Remediation	NJAC 7:26E	Site Investigation/ Remediation	Provides minimum technical requirements to investigate and remediate contamination at any site.	Requires Department oversight, RI if unrestricted use remediation standards are exceeded, remedial action selection report or FS/CMS, remedial action work plan. Also provides remediation requirements for post-excavation sampling, backfilling, and deed restrictions.

New Jersey Air Pollution Control Regulations	NJAC 7:27-13.3	Excavation, grading, soil cover	Provides ambient air quality standards for suspended particulate matter. Primary air quality standards state that, during any 12-consecutive months, the geometric mean value of all 24-hour averages of suspended particulate matter concentrations in ambient air shall not exceed 75 micrograms per cubic meter. And, during any 12-consecutive months, 24-hour average concentrations may exceed 260 micrograms per cubic meter no more than once.	Primary air quality standards means an ambient air quality standard intended to protect the public health.
New Jersey Soil Erosion and Sediment Control Action Requirements	NJAC 2:90, et-seq, and 4:24 management	Excavation, Construction, Storm water	Provides vegetative, engineering, and runoff treatment standards to prevent or limit soil erosion and promote sediment control on and off-site.	
New Jersey Solid and Hazardous Waste Regulations	NJAC 7:26, 7:26G	Excavation /Cover	NJAC 7:26 provides regulations for registration, operation, maintenance, and closure of solid waste facilities. Regulations applicable to generators of hazardous waste are provided in NJAC 7:26G-8. These regulations reference 40 CFR Part 264.	Solid waste is defined in NJAC 7:26-1.6. Hazardous waste. Federal regulations 40 CFR 124, 260 – 266, 268, and 270 are incorporated into NJAC 7:26G by reference. Hazardous waste is defined in 40 CFR 261.3. New Jersey incorporates 40 CFR Part 264 by reference into NJAC 7:26G-8. Therefore, New Jersey cover requirements are the same as the Federal cover requirements.
New Jersey 1998 Revised Guidance Document for the Remediation of Contaminated Soils		Cover and Remediation of soils	Pursuant to the provisions of the N.J.A.C. 7:26E-5.1(d)3, the use of engineering and/or institutional controls must be commensurate with the degree of risk associated with the contaminants left on-site and must be reviewed and approved by the Department.	Under Chapter VIII – Remedial Action 4 – Containment and Exposure Controls, D – Containment System Design Construction, 1 – Native Soil Covers states that “the use of native soil as a cover for containment of hazardous materials may be appropriate where surface water infiltration and subsequent leachate generation are not controlling factors.” It also states that “a typical soil cover...is 18 to 24 in thick with 6 in of topsoil for vegetation purposes.”
New Jersey 2007 Guidance for Beneficial Use of Soil and Non-Soil Material in the Remediation of Contaminated Sites and Closure of Solid Waste Landfills		Placement of fill	Provides guidance on the use of alternative fill material at remediation and landfill sites in a way that is protective of human health and the environment.	Allows for use or reuse of a contaminated soil or non-soil material, exhibiting contaminant concentrations above the most restrictive soil standard or guidance value, for fill and/or capping material, as an effective alternative for a commercial product. Beneficial use material may be used at a contaminated site or a landfill as a constructive part of a remedial action or closure with written approval of the NJDEP pursuant to Solid Waste Regulations at N.J.A.C. 7:26-1.7(g).

<b><u>Table 9: Summary of the Cost Estimates for the Selected Remedy</u></b>	
<u>Direct Capital Costs</u>	
Deed Restrictions	\$100,000
Mobilization/Demobilization	\$250,000
Soil Cover System for Direct Contact Control (113 acres)	\$16,927,220
Excavation and Relocation of Site-wide Soils to Impoundments 3, 4, & 5 (1 acre)	\$1,937,210
Impermeable Cap for Vapor and Movement Control (66 acres)	\$14,226,480
In-situ S/S for Impoundments 3, 4, 5 and other Movement Control Materials (36 acres)	\$40,077,960
Excavation and Relocation of Impoundments 13, 17, & 24 to the North Area (if necessary)	\$20,809,272
Excavation and Relocation of Drying Bed Hot Spot Area (1,000 CY)	\$67,000
Site Restoration for North Area	\$300,000
Overburden Groundwater Control System: Impoundments 3, 4, & 5 Area	\$5,848,167
Overburden Groundwater Control System: North Area	\$2,298,983
Overburden Groundwater Control System: South & West Areas	\$2,066,200
Improvements to Existing Bedrock Groundwater Collection System	\$53,000
Wetlands Mitigation (8.4 acres)	\$672,000
<u>Indirect Capital Costs</u>	
Contingency (25% Direct Capital Cost)	\$26,408,373
Project Management (5% Direct Capital Cost)	\$5,281,675
Remedial Design (10% Direct Capital Cost)	\$10,563,349
Construction Management (6% Direct Capital Cost)	\$6,338,010
<u>Operation &amp; Maintenance Costs</u>	
Operation & Maintenance (Annual O&M of \$1,665,779 for 30 Years)	\$49,973,383
<b>Total Present Worth (Rounded):</b>	<b>\$205,000,000</b>

APPENDIX III: ADMINISTRATIVE RECORD INDEX



# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114064

**Bates:** R2-0000172      **To:** R2-0000695

**Date:** 03/01/1992

**Pages:** 524

**Title:** BASELINE SITE-WIDE ENDANGERMENT ASSESSMENT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** FIGURE  
CHART / TABLE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	BLASLAND, BOUCK & LEE, INC.

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	AMERICAN CYANAMID CO.

---

**Region ID:** 02

**Doc ID:** 114065

**Bates:** R2-0000696      **To:** R2-0001493

**Date:** 05/01/1992

**Pages:** 798

**Title:** SOILS REMEDIAL INVESTIGATION REPORT/FEASIBILITY STUDY WORK PLAN FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** MAP  
FIGURE  
PLAN  
LETTER  
CHART / TABLE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	BLASLAND, BOUCK & LEE, INC.

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	AMERICAN CYANAMID CO.

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114066

**Bates:** R2-0001494      **To:** R2-0001555

**Date:** 09/28/1993

**Pages:** 62

**Title:** RECORD OF DECISION FOR OU1, GROUP I IMPOUNDMENTS (11, 13, 19 AND 24) FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** REPORT

INDEX

MAP

DECISION DOCUMENT

LETTER

CHART / TABLE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY

<u>Name</u>	<u>Organization</u>
-------------	---------------------

---

**Region ID:** 02

**Doc ID:** 114067

**Bates:** R2-0001556      **To:** R2-0001893

**Date:** 04/01/1994

**Pages:** 338

**Title:** NATURAL RESOURCE ASSESSMENT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** REPORT

CHART / TABLE

FIGURE

MAP

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	BLASLAND, BOUCK & LEE, INC.

<u>Name</u>	<u>Organization</u>
-------------	---------------------

**Addressee:** , AMERICAN CYANAMID CO.

---

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114063

**Bates:** R2-0000165      **To:** R2-0000171

**Date:** 05/04/1994

**Pages:** 7

**Title:** ADMINISTRATIVE CONSENT ORDER AMENDMENT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** ADMIN. ORDER  
LEGAL DOCUMENT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02

**Doc ID:** 106489

**Bates:** R2-0001894      **To:** R2-0002075

**Date:** 07/12/1996

**Pages:** 182

**Title:** RECORD OF DECISION FOR OU2, GROUP II IMPOUNDMENTS (15, 16, 17 AND 18) FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** MAP  
PUBLIC MEETING TRANSCRIPT  
LETTER  
FORM  
REPORT  
DECISION DOCUMENT  
CHART / TABLE  
OTHER

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION
<u>Name</u>	<u>Organization</u>

---



# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 99461

**Bates:** R2-0002076      **To:** R2-0002143

**Date:** 07/12/1996

**Pages:** 68

**Title:** RECORD OF DECISION FOR OU6, HILL PROPERTY SOILS FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** PUBLIC MEETING TRANSCRIPT  
DECISION DOCUMENT  
REPORT  
LETTER  
CHART / TABLE  
MAP

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02

**Doc ID:** 109482

**Bates:** R2-0002144      **To:** R2-0002225

**Date:** 09/28/1998

**Pages:** 82

**Title:** RECORD OF DECISION FOR OU3, GROUP III IMPOUNDMENTS (1, 2, 3, 4, 5, 14, 20, & 26) FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** CHART / TABLE  
DECISION DOCUMENT  
MAP  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION
<u>Name</u>	<u>Organization</u>

---

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02  
**Doc ID:** 106459  
**Bates:** R2-0002226      **To:** R2-0002242  
**Date:** 11/30/1998  
**Pages:** 17  
**Title:** EXPLANATION OF SIGNIFICANT DIFFERENCE FOR THE RECORD OF DECISION, AMERICAN CYANAMID COMPANY SITE  
**Doc Type:** REPORT  
MAP  
DECISION DOCUMENT  
CHART / TABLE  
LETTER

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02  
**Doc ID:** 139635  
**Bates:** R2-0002243      **To:** R2-0002258  
**Date:** 09/30/1999  
**Pages:** 16  
**Title:** FIRST FIVE-YEAR REVIEW REPORT FOR THE AMERICAN CYANAMID COMPANY SITE  
**Doc Type:** REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02  
**Doc ID:** 114074  
**Bates:** R2-0002259      **To:** R2-0002281  
**Date:** 05/01/2004  
**Pages:** 23  
**Title:** COMPREHENSIVE SITE-WIDE FEASIBILITY STUDY WORK PLAN FOR THE AMERICAN CYANAMID COMPANY SITE  
**Doc Type:** CHART / TABLE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OUID:** 04  
**SSID:** 022H  
**Action:**

---

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

---

**Region ID:** 02

**Doc ID:** 114075

**Bates:** R2-0002282      **To:** R2-0002297

**Date:** 09/30/2004

**Pages:** 16

**Title:** SECOND FIVE-YEAR REVIEW REPORT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY

<u>Name</u>	<u>Organization</u>
-------------	---------------------

---

**Region ID:** 02

**Doc ID:** 114076

**Bates:** R2-0002298      **To:** R2-0003004

**Date:** 01/01/2005

**Pages:** 707

**Title:** BASELINE ECOLOGICAL RISK ASSESSMENT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** CHART / TABLE  
FIGURE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

---

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OUID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114077

**Bates:** R2-0003005      **To:** R2-0003180

**Date:** 02/01/2005

**Pages:** 176

**Title:** IMPOUNDMENT REMEDY APPROPRIATENESS EVALUATION FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** REPORT

CHART / TABLE

FIGURE

LETTER

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

---

**Region ID:** 02

**Doc ID:** 114078

**Bates:** R2-0003181      **To:** R2-0003824

**Date:** 06/01/2005

**Pages:** 644

**Title:** DATA ADEQUACY REVIEW FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** FIGURE

LETTER

REPORT

CHART / TABLE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114079

**Bates:** R2-0003825      **To:** R2-0003941

**Date:** 07/01/2005

**Pages:** 117

**Title:** IDENTIFICATION AND SCREENING OF TECHNOLOGIES FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** CHART / TABLE  
FIGURE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

---

**Region ID:** 02

**Doc ID:** 114080

**Bates:** R2-0003942      **To:** R2-0004054

**Date:** 08/01/2005

**Pages:** 113

**Title:** FINAL IMPOUNDMENTS 13, 17, AND 24 AIR EMISSIONS EVALUATION FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** CHART / TABLE  
LETTER  
FIGURE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114081

**Bates:** R2-0004055      **To:** R2-0004772

**Date:** 02/01/2006

**Pages:** 718

**Title:** REMEDIAL INVESTIGATION REPORT FOR GROUNDWATER FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** FIGURE  
CHART / TABLE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	WYETH HOLDINGS CORPORATION
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02

**Doc ID:** 114082

**Bates:** R2-0004773      **To:** R2-0004820

**Date:** 05/01/2006

**Pages:** 48

**Title:** DEVELOPMENT AND SCREENING OF SITE-WIDE REMEDIAL ALTERNATIVES FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** CHART / TABLE  
REPORT  
FIGURE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC
<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OUID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 114083

**Bates:** R2-0004821      **To:** R2-0005251

**Date:** 12/01/2006

**Pages:** 431

**Title:** FINAL HUMAN HEALTH RISK ASSESSMENT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** FIGURE  
CHART / TABLE  
REPORT  
LETTER

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	O BRIEN & GERE ENGINEERS INC

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	WYETH HOLDINGS CORPORATION

---

**Region ID:** 02

**Doc ID:** 114084

**Bates:** R2-0005252      **To:** R2-0005341

**Date:** 04/03/2007

**Pages:** 90

**Title:** SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT FOR GROUNDWATER FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** FIGURE  
CHART / TABLE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	WYETH HOLDINGS CORPORATION

<u>Name</u>	<u>Organization</u>
-------------	---------------------

---

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OUID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 105096

**Bates:** R2-0005342      **To:** R2-0005379

**Date:** 09/23/2009

**Pages:** 38

**Title:** THIRD FIVE-YEAR REVIEW REPORT FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** MAP  
FORM  
CHART / TABLE  
REPORT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02

**Doc ID:** 113247

**Bates:** R2-0005380      **To:** R2-0005512

**Date:** 03/01/2010

**Pages:** 133

**Title:** NATIONAL REMEDY REVIEW BOARD INFORMATION PACKAGE FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** REPORT  
CHART / TABLE  
LETTER  
FIGURE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>

---



# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 113248

**Bates:** R2-0005513      **To:** R2-0005516

**Date:** 04/23/2010

**Pages:** 4

**Title:** NATIONAL REMEDY REVIEW BOARD RECOMMENDATIONS MEMORANDUM FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** MEMORANDUM

	<u>Name</u>	<u>Organization</u>
<b>Author:</b>	LEGARE, AMY R	EPA
<b>Addressee:</b>	MUGDAN, WALTER E	EPA, REGION 2

---

**Region ID:** 02

**Doc ID:** 114086

**Bates:** R2-0005517      **To:** R2-0005718

**Date:** 10/07/2010

**Pages:** 202

**Title:** SUMMARY MEMO, SITE WIDE CHARACTERIZATION PROGRAM FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** REPORT  
CHART / TABLE  
MEMORANDUM  
FIGURE

	<u>Name</u>	<u>Organization</u>
<b>Author:</b>	,	O BRIEN & GERE ENGINEERS INC
<b>Addressee:</b>	,	WYETH HOLDINGS CORPORATION

---

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 113246

**Bates:** R2-0005719      **To:** R2-0005760

**Date:** 07/19/2011

**Pages:** 42

**Title:** ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION FOR THE AMERICAN CYANAMID COMPANY SITE - DOCKET NO. CERCLA-02-2011-2015

**Doc Type:** MAP  
SETTLEMENT AGREEMENT  
CHART / TABLE  
LEGAL DOCUMENT

<u>Name</u>	<u>Organization</u>
<b>Author:</b> KEMP, STEVEN F	WYETH HOLDINGS CORPORATION
MUGDAN, WALTER E	EPA, REGION 2

<u>Name</u>	<u>Organization</u>
-------------	---------------------

---

---

**Region ID:** 02

**Doc ID:** 113249

**Bates:** R2-0005761      **To:** R2-0005766

**Date:** 10/17/2011

**Pages:** 6

**Title:** NATIONAL REMEDY REVIEW BOARD RESPONSE MEMORANDUM FOR THE AMERICAN CYANAMID COMPANY SITE

**Doc Type:** MEMORANDUM

<u>Name</u>	<u>Organization</u>
<b>Author:</b> FRISCO, JOHN	EPA

<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> LEGARE, AMY R	EPA

---

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**      **Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02  
**Doc ID:** 114087  
**Bates:** R2-0005767      **To:** R2-0005818  
**Date:** 02/01/2012  
**Pages:** 52  
**Title:** COMMUNITY INVOLVEMENT PLAN FOR THE AMERICAN CYANAMID COMPANY SITE  
**Doc Type:** PLAN  
CHART / TABLE  
FIGURE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>
<b>Addressee:</b> ,	PFIZER, INC.

---

**Region ID:** 02  
**Doc ID:** 113250  
**Bates:** R2-0005819      **To:** R2-0007075  
**Date:** 02/09/2012  
**Pages:** 1257  
**Title:** SITE WIDE FEASIBILITY STUDY FOR THE AMERICAN CYANAMID COMPANY SITE  
**Doc Type:** REPORT  
CHART / TABLE  
FIGURE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ROLAND, STEVEN J	O BRIEN & GERE ENGINEERS INC
<u>Name</u>	<u>Organization</u>

---

**Region ID:** 02  
**Doc ID:** 114975  
**Bates:** R2-0007076      **To:** R2-0007107  
**Date:** 02/15/2012  
**Pages:** 32  
**Title:** PROPOSED PLAN FOR THE AMERICAN CYANAMID COMPANY SITE  
**Doc Type:** PLAN

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>

# ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

**FINAL**  
**09/19/2012**

**Region ID: 02**

**Site Name:** AMERICAN CYANAMID CO  
**CERCLIS:** NJD002173276  
**OID:** 04  
**SSID:** 022H  
**Action:**

---

**Region ID:** 02

**Doc ID:** 141608

**Bates:** R2-0007108      **To:** R2-0007108

**Date:** 02/16/2012

**Pages:** 1

**Title:** US EPA INVITES PUBLIC COMMENT ON THE PROPOSED PLAN FOR OU4 FOR THE AMERICAN CYANAMID SUPERFUND SITE

**Doc Type:** NOTICE

<u>Name</u>	<u>Organization</u>
<b>Author:</b> ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>

---

APPENDIX IV: STATE LETTER OF CONCURRENCE



State of New Jersey

CHRIS CHRISTIE  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Site Remediation Program  
Floor 6 East, P.O. Box 420, Mail Code 401-06  
401 East State Street, Trenton, NJ 08625

BOB MARTIN  
Commissioner

KIM GUADAGNO  
Lt. Governor

Mr. Walter Mugdan, Division Director  
USEPA-Region 2  
290 Broadway, Floor 19  
New York, NY 10007-1866

September 20, 2012

Re: American Cyanamid (Wyeth/Pfizer) Superfund Site  
Bridgewater Township, Somerset County  
Preferred Identification Number: 001000

The New Jersey Department of Environmental Protection (Department) has reviewed the September 2012 Site-wide (excluding Impoundments 1 & 2), Operable Unit 4, Superfund Record of Decision (ROD) prepared by the United States Environmental Protection Agency (EPA). The Department concurs with the selected remedy (Alternative 4A).

The selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended. This decision is based on the Administrative Record file for this site. The response action selected in this ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

The selected remedy, Remedial Alternative (4A), consists of consolidation, treatment, solidification, and capping along with hydraulic control and treatment of groundwater. The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost effective, and uses permanent solutions and treatment technologies to the maximum extent practicable.

NJDEP appreciates the opportunity to participate in the decision making process to select an appropriate remedy. If you have any questions, please call me at 609-292-1250.

Sincerely,

David Sweeney  
Assistant Commissioner  
Site Remediation Program

C: Mr. Haiyesh Shah-NJDEP-SRP-BCM

R2-0007250

APPENDIX V: RESPONSIVENESS SUMMARY

## Introduction

This Responsiveness Summary provides a summary of the public's comments and concerns regarding the Proposed Plan for Operable Unit 04 of the American Cyanamid Superfund Site (Site), and EPA's responses to those comments.

All comments summarized in this document have been considered in EPA's final decision for the selection of the remedy for the Site.

This Responsiveness Summary is divided into the following sections:

### I. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

This section provides the history of community involvement and interests regarding the Site; and

### II. COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, CONCERNS AND RESPONSES

This section contains summaries of verbal and written comments received by EPA at the public meeting and during the public comment period, and EPA's responses to these comments.

The last section of this Responsiveness Summary includes attachments, which document public participation in the remedy selection process for the Site. They are as follows:

**Attachment A** contains the Proposed Plan that was distributed to the public for review and comments;

**Attachment B** contains the public notice that appeared in the *Courier News* on February 16, 2012;

**Attachment C** contains the transcript from the public meeting held on March 8, 2012 at the Somerset County Technical and Vocational High School; and

**Attachment D** contains the public comments received during the public comment period. (Note that personal information, such as the names, email addresses, mailing addresses and phone numbers of private residents, contained in the letters and emails were redacted to protect the privacy of the commenters).

EPA received written comments from 39 individuals or parties during the public comment period.



## ACRONYM LIST

ARAR	Applicable or Relevant and Appropriate Requirement
BEA	Baseline Endangerment Assessment
BERA	Baseline Ecological Risk Assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DSW	Discharge to Surface Water
EPA	Environmental Protection Agency
ESD	Explanation of Significant Differences
FFS	Focused Feasibility Study
FS	Feasibility Study
LTTD	Low Temperature Thermal Desorption
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NJDEP	New Jersey Department of Environmental Protection
NJPDES	New Jersey Pollution Discharge Elimination System
NPL	National Priorities List
NRRB	National Remedy Review Board
OIG	Office of the Inspector General
O&M	Operation and Maintenance
OSWER	Office of Solid Waste and Emergency Response
OU	Operable Unit
PRP	Potentially Responsible Party
PTW	Principal Threat Waste
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
ROD	Record of Decision
RD	Remedial Design
S/S	Solidification/Stabilization
SVOC	Semi-Volatile Organic Compound
SWQS	Surface Water Quality Standard
TAG	Technical Assistance Grant
UCS	Unconfined Compressive Strength
VOC	Volatile Organic Compound
WQBEL	Water Quality Based Effluent Limit

## I. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

Since the placement of the American Cyanamid site on the National Priorities List (NPL) in 1983, public interest in the Site has been very high. The U.S. Environmental Protection Agency (EPA) has strongly encouraged and received public input throughout the history of the Site. A Community Involvement Plan was established in 1988 by the New Jersey Department of Environmental Protection (NJDEP). This 1988 Community Involvement Plan outlined specific outreach tools to facilitate communication with the community in the decision-making process and was implemented for a series of records of decision (RODs) in the 1990s. An updated Community Involvement Plan was established in January 2011 to serve as a guide for the current Site owner (Pfizer, Inc.) and EPA in sharing information and obtaining public input on the Site-wide remedy for the Site. This Community Involvement Plan includes outreach tools to ensure a transparent and accessible decision-making process and meaningful community stakeholder participation.

In 1992, EPA awarded a technical assistance grant (TAG) to CRISIS. Since that time, CRISIS has been the primary community based group serving as a liaison between the NJDEP, EPA and the community. CRISIS has, and continues to, consistently participate in monthly project calls and serves in a technical review capacity on behalf of the community. CRISIS membership includes representatives from Bridgewater Township, Bound Brook Borough, Somerset County and other community groups. CRISIS regularly engages local media outlets to ensure project information is broadcast widely. In addition, CRISIS maintains an email listserv to disseminate project-related information, including the dates of upcoming meetings and milestones.

On February 16, 2012, EPA released the Proposed Plan and supporting documentation for this action, operable unit 4 (OU4), to the public for review. EPA made these documents available to the public in the administrative record repositories maintained at the EPA Region 2 office located at 290 Broadway, New York, New York, the NJDEP Office of Records at 401 East State Street, Trenton, New Jersey and the Bridgewater Township Library at 1 Vogt Drive, Bridgewater, New Jersey. A subset of these documents was made available online ([http://www.epa.gov/region02/superfund/npl/american\\_cyanamid/docs.html](http://www.epa.gov/region02/superfund/npl/american_cyanamid/docs.html)). EPA published a notice of availability for these documents in the *Courier News*, and provided a public comment period from February 16, 2012 to March 31, 2012.

On March 8, 2012, EPA held a public meeting at the Somerset County Technical and Vocational High School in Bridgewater Township to inform local officials and interested citizens about the Superfund process, to review the planned remedial activities at the Site and to respond to questions from area residents and other attendees.

Several attendees at the March 8<sup>th</sup> meeting asked that EPA extend the comment period beyond 45 days. At the March 8<sup>th</sup> meeting, EPA announced that it would extend the comment period 45 days beyond March 31, 2012. EPA also announced the public comment period extension on EPA's American Cyanamid website on March 9, 2012.

The sign-in sheet from the March 8, 2012 public meeting identified that 183 persons, not including federal and state officials, attended the meeting. The meeting attendees included residents, interest groups, local business representatives, elected officials and members of the Site owner's project team and their consultants.

EPA received written comments from 39 individuals or parties in addition to verbal comments made during the public meeting. The transcript and written public comments are found in Attachments C and D, respectively. Responses to the comments received at the public meeting are included in this Responsiveness Summary. Many of the comments simply expressed support of the Proposed Plan, without providing further comment requiring a response from EPA.

## II. COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, CONCERNS AND RESPONSES

### PART 1. Written Comments

#### Support for Alternative 4A

1.1 Several commenters, such as, but not limited to elected officials, the Site owner, interest groups and residents, expressed support for Alternative 4A.

Response: Comment noted.

#### Opposition to Alternative 4A

2.1 Several commenters provided comments expressing opposition to Alternative 4A, such as it is not protective of human health and the environment, is inappropriate, utilizes inexpensive, outdated technologies, is not a permanent remedy, is not effective over the long-term and is not in the best interest of public health.

Response: The selected remedy for the 435-acre American Cyanamid Superfund site will be protective of human health and the environment, will comply with applicable or relevant appropriate requirements (ARARs), will be cost-effective and will utilize permanent solutions and alternative treatment technologies to the maximum extent practicable. The selected remedy provides the best balance of tradeoffs among the alternatives based on the information available to EPA at this time. EPA followed current guidance when developing remedial alternatives in the Site-wide Feasibility Study (FS). This requires: identifying remedial action objectives (RAOs); identifying potential treatment, resource recovery and containment technologies that will satisfy these objectives; screening the technologies based on their effectiveness, implementability and cost; and assembling technologies and their associated containment or disposal requirements into alternatives for the contaminated media at the Site. Specifically, the alternatives were developed to address contaminated media and their specific locations within the American Cyanamid site.

Once the potential alternatives were developed, a number of the options were screened out due to their ineffectiveness, poor implementability and/or cost, consistent with EPA

guidance. For the remaining alternatives, a detailed analysis was performed. EPA determined that sufficient information was available for these alternatives to be evaluated in detail with respect to nine evaluation criteria identified in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). These nine criteria include:

- overall protection of human health and the environment;
- compliance with ARARs;
- long-term effectiveness and permanence;
- reduction of toxicity, mobility or volume;
- short-term effectiveness;
- implementability;
- cost;
- state acceptance; and
- community acceptance.

The alternatives were then analyzed individually against each criterion and compared against one another to determine their respective strengths and weaknesses and to identify the key trade-offs that must be balanced for the Site. As a result, EPA concluded that Alternative 4A is the appropriate remedy consistent with CERCLA.

Regarding comments that Alternative 4A is not an effective long-term solution, EPA has concluded that Alternative 4A meets EPA's criteria for long-term effectiveness and permanence. When evaluating the long-term effectiveness and permanence of a remedy, EPA considers many factors, including the magnitude of potential residual risk from materials remaining at the conclusion of the remedial activities. The characteristics of the remaining materials are considered to the degree that they remain hazardous, taking into account their mobility, toxicity and volume, as well as their propensity to bioaccumulate. When evaluating long-term effectiveness and permanence, EPA also considers the adequacy and reliability of controls, such as containment systems and institutional controls, necessary to manage materials left on-site.

Regarding the comment that Alternative 4A is inexpensive and outdated, EPA believes that the cost-effectiveness and proven success of the stabilization/solidification (S/S) component of the remedy is a positive element. The fact that in-situ S/S is one of the most common source control treatment technologies and has been utilized for decades allows the observance of the long-term effectiveness and

protectiveness of this technology. The cost-effectiveness and long-term effectiveness were two of the nine evaluation criteria utilized by EPA to compare the remedial alternatives and select a remedy.

- 2.2 A commenter asked why the lowest cost and least protective technology is being offered as the only practical and cost-effective solution.

Response: At approximately \$205 million, the selected remedy was not the lowest cost alternative. For example, the cost estimates for Alternatives 3 and 4 are \$138 million and \$180 million, respectively. The selected remedy will be protective of both human health and the environment. All alternatives presented in the Site-wide FS are required to meet the threshold evaluation criteria of overall protection of human health and the environment and compliance with ARARs. The "Detailed Analysis of Alternatives" section of the Site-wide FS provides a detailed comparison of all of the remedial alternatives with EPA's nine evaluation criteria, which includes cost-effectiveness and the protection of human health and the environment.

- 2.3 A commenter stated that cost should not be a consideration when selecting a remedy.

Response: When selecting a remedy, EPA considers the factors set out in CERCLA §121, 42 U.S.C. §9621, by conducting a detailed analysis of the viable remedial response measures pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulation (CFR) 300.430(e)(9)(iii) and Office of Solid Waste and Emergency Response (OSWER) Directive 9355.3-01. The detailed analysis consists of an assessment of the individual response measure against each of nine evaluation criteria and a comparative analysis focusing upon the relative performance of each response measure against the criteria. The cost of an alternative, which includes the estimated capital costs, the operation and maintenance (O&M) costs and the net present worth value of the capital and O&M costs, is one of the five "primary balancing criteria" that EPA uses to assess response measures. Primary balancing criteria are factors with which tradeoffs between response measures are assessed so that the best option will be chosen, given Site-specific data

and conditions. A Detailed Analysis of Alternatives can be found in the Site-wide FS Report.

### Flooding & Capping Comments

3.1 Several commenters stated that the containment of contaminants is an appropriate component for remedial action at the Site. One commenter noted that caps designed, constructed and maintained in accordance with current good engineering practices and regulatory guidance have functioned as required over time, in a manner that eliminates a potential exposure pathway to Site materials, and poses no unacceptable risk to human health and the environment. The commenter also noted that the design and construction of each cap system must be tailored to each site's unique circumstances, and with selection of proven construction materials, both natural and synthetic, along with rigorous construction quality control, a cap system can be expected to perform over time, when subject to routine post-construction inspection and maintenance. The commenter acknowledged that regular inspections and maintenance consistent with best practices will be conducted to ensure that the caps perform as intended. It is also noted that the design of the caps for the Site will be designed and constructed to protect against all Site-specific hazards which may pose a threat to their integrity, such as flooding, inadequate drainage, slope instability, erosion, freeze/thaw cycle effects, surface vegetation and any other risks associated with being located in a flood hazard area. The commenter noted that caps can be designed and maintained to withstand frequent flooding and that there are several examples of cover and cap systems being installed within a flood plain. It is noted that all caps would be designed for a 500-year flood event.

Response: Comment noted. EPA agrees that cap and cover systems can be successfully implemented within a flood hazard area with the appropriate design and maintenance. The factors mentioned above will be considered in the remedial design (RD) phase.

3.2 Several commenters expressed concern over the design of the capping systems and the practicability of capping in a flood hazard area. Several commenters also expressed concern over the permanence, cost-effectiveness or protectiveness of capping.

Response: All engineered caps will be designed and constructed to withstand a 500-year flood event at a minimum and to incorporate all Site-specific hazards that pose a threat to their integrity. In addition, a strict inspection and maintenance program will be developed as part of the on-going operation plan for the engineered capping systems.

During flood events, the North Area would not regularly be subject to high-velocity water flows. All of the impacted media that are addressed in the Proposed Plan and ROD are located in the North Area, with the exception of Impoundments 13, 17 and 24; however, these three impoundments may be excavated and relocated to the North Area if an ecological risk assessment determines that an unacceptable risk is present. The waste material in the North Area is nearly 500 yards from the Raritan River at the closest point. The North Area is located in the flood fringe area, not the floodway which is the main flowing part of the river during a flood event. The flood fringe area is not typically subject to extensive erosive forces, even during large flood events such as Hurricane Irene. However, if portions of the capped areas and the flood control berm were observed to be subject to erosive forces during future flood events, modifications would be evaluated and implemented, as necessary, to account for these forces and to ensure the durability of the capped areas and the berm.

Engineered capping systems have been successfully utilized in flood hazard areas at a number of Superfund sites. The most relevant example is the Sharkey Landfill Superfund site in Parsippany, New Jersey, which consists of a 26-acre landfill located on an island in the middle of the Rockaway River. A portion of the remedy for this site included the installation of an engineered capping system over this 26-acre area. The engineered capping system was completed in March 2004 and was protected by armoring above the river's base flow. This engineered capping system has successfully withstood several major flood events since its completion in 2004, including Hurricane Irene and Tropical Storm Lee in 2011, with no damage or release of contaminants to the environment.

Regarding the concerns over the permanence, cost-effectiveness and protectiveness of capping, the Proposed



Plan and this ROD have both concluded that the selected remedy would be protective of human health and the environment, comply with ARARs, be cost-effective and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

- 3.3 A commenter stated that the capping systems must be designed, engineered and constructed for the maximum resistance to floodwaters, regardless of the cost to the Site owner.

Response: As discussed in the response to Comment 3.2 above, all engineered capping systems constructed as part of the selected remedy will be designed to withstand the effects of a 500-year flood event at a minimum. The details of the design for the engineered capping systems will be developed during the RD phase.

- 3.4 A commenter stated that the remedy must be designed and implemented without impacts to the flooding of the Raritan River.

Response: As noted in the response to Comment 3.2, all engineered capping systems will be constructed to withstand the effects of a 500-year flood event at a minimum. The details of the design for the engineered capping systems will be developed during the RD phase. EPA will consider potential flooding impacts throughout the design of the selected remedy.

- 3.5 A commenter recommended that all impacted areas be able to withstand a 500-year storm, in terms of leaching, scouring, erosion or uplifting.

Response: As discussed in the response to Comment 3.2 above, all engineered capping systems constructed as part of the selected remedy will be designed to withstand the effects of a 500-year flood event at a minimum. The details of the design for the engineered capping systems will be developed during the RD phase.

- 3.6 Several commenters stated that the flood control berm should be improved to protect impoundments and better control large storm events. One commenter specifically stated that the flood control berm should be improved to withstand a 500-year flood, both in terms of height and strength of the berm.

Response: As a result of Hurricane Irene in August 2011, several activities have been completed or are ongoing that will reduce impacts from future flooding events, improve pre-flood preparedness efforts and reduce the need for post-flood response efforts. The flood control berm has been improved in several areas and critical infrastructure has been redesigned/relocated to reduce flood impacts to Site operations. Once the remedy outlined in this ROD has been fully implemented, maintaining the berm structure would not be necessary. In fact, eliminating the berm completely will result in an increase to the Site's flood storage capacity, thereby positively affecting the surrounding communities. As discussed in the response to Comment 3.2, all engineered capping systems constructed as part of the selected remedy will be designed to withstand the effects of a 500-year flood event at a minimum. A strict inspection and maintenance program will also be developed as part of the ongoing operation plan for the engineered capping systems.

- 3.7 Several commenters noted that the filling of a flood plain is subject to both New Jersey and federal regulations. The commenters noted that these regulations specify that there can be no net fill in a flood zone. Several commenters also discussed the original terminologies used to divide the Site and noted that the entire Site lies within a flood hazard area. In addition, several commenters stated that the claims that there will be no net filling are not true because they fail to recognize that the entire area lies within the flood plain.

Response: It has been clarified and recognized previously that the entire Site lies within the flood hazard area of the Raritan River, with the exception of the on-site disposal facility (referred to as the Impoundment 8 Facility). At the March 8, 2012 Public Meeting, EPA confirmed that the entire Site is subject to flooding on a regular basis. In the past, the Site was generally divided into two main portions, referred to as the Main Plant and the Flood Plain. The Main Plant area referred to the portion of the Site within a flood control berm, where manufacturing activities were conducted historically. The Flood Plain area referred to the portion of the Site outside of the flood control berm. These terms were derived when the facility was operational and fail to recognize that both of these areas lie within the flood hazard area

of the Raritan River. EPA has re-designated the Site into five new areas for ease of understanding. As shown on Figure 2 in Appendix I of the OU4 ROD, the Site is now divided into the following five areas: North Area, South Area, West Area, East Area and the Impoundment 8 Facility. The North Area, which was referred to as the Main Plant area in previous documents, refers to that portion of the Site property within a flood control dike. The portion of the Site previously referred to as the Flood Plain area has been separated into the following three areas: West Area, South Area and East Area. The West Area refers to the portion of the Site bounded by the Somerset County Recycling Center to the north, the Raritan River to the west, the Port Reading rail line to the south and the flood control berm to the east. The South Area refers to the portion of the Site located west of Interstate-287 between the Port Reading rail line and the Raritan River. The East Area, which is the only portion of the Site located in the Borough of Bound Brook, refers to the small triangular portion of the Site located to the east of Interstate-287. The Impoundment 8 Facility, which is designated as a corrective action management unit (CAMU) under the Resource Conservation and Recovery Act (RCRA), is located to the northwest of the Site across Polhemus Lane. The entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility. The "Site Name, Location and Description" section in the Decision Summary of the ROD includes an explanation of these new areas and explicitly acknowledges that the entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility. Please see the response to Comment 3.9 in the written comments section, which addresses concerns over net fill requirements and the loss of flood storage capacity.

- 3.8 The Site owner noted that the Site can be capped without a significant loss in flood storage capacity. The Site owner cited several specific examples of ways that the flood storage capacity could be increased so that there is little to no net loss of flood storage. It was also acknowledged that the design will follow New Jersey Flood Hazard Control Act Rules regarding filling in a flood hazard area.

Response: Comment noted.

- 3.9 Several commenters expressed concern over the placement of fill throughout the Site as part of the selected remedy.

The commenters expressed concern that the addition of fill would reduce the Site's flood storage capacity and exacerbate flooding in the local community. Several commenters also noted that there can be no net filling of a flood hazard area under New Jersey and federal regulations. One commenter stated that the appropriate means to evaluate the impact of the Proposed Plan's flood plain filling is to use the HEC-RES model, which is a standard tool used by the U.S. Army Corps of Engineers to evaluate the impacts of changes on a river basin's flooding. The commenter stated that a comprehensive assessment of the flood plain impacts must be modeled to ensure that the selected remedy does not exacerbate flooding in the Raritan River Basin.

Response: It is currently estimated that the flood storage capacity of the Site for a 500-year flood would be about 1.5 billion gallons. Current estimates indicate that the selected remedy will include the placement of approximately 578,000 cubic yards of clean fill, which is equivalent to about 116 million gallons of water. Therefore, this would result in less than an 8 percent decrease in the Site's flood storage capacity if no actions were taken to mitigate the placement of clean fill. A major goal of the selected remedy's design will be to minimize the loss of flood storage at the Site. While capping and filling will reduce the Site's flood storage capacity, other aspects of the remedy will create flood storage capacity, such as the construction of a natural stormwater management system and the potential removal of the Site's flood control berm. Even if minor changes to the Site's flood storage capacity were to occur, the Site would have little to no impact on downstream flood elevations and the surrounding community. A previous preliminary evaluation conducted by the Site owner indicated that the potential removal of the Site's flood control berm (or portions of it) would actually increase the Site's flood storage capacity by over 200 million gallons for more common flood events. The design of the selected remedy will comply with the substantive requirements of the New Jersey Flood Hazard Control Act.

- 3.10 A commenter referenced page 94 of the Site-wide FS, which states "a permit for placement of the fill for capping within a flood plain has already been obtained from NJDEP." The commenter stated that the permits obtained from NJDEP are for the area outside the berm and that NJDEP has not provided a permit for the importation of 600,000 cubic yards of fill into the bermed area. The commenter asked for

clarification on the permits that have been obtained for filling in a flood plain.

Response: On January 30, 2008, a stream encroachment permit was obtained by the Site owner granting permission to place temporary stockpiles of fill in the flood hazard area in connection with a future CERCLA remedial program for installation of engineered protective covers as part of a Site-wide remedy. Therefore, the Site-wide FS correctly states that a permit has been obtained for the placement of fill for capping within a flood plain. This 2008 permit was originally set to expire in January 2013, but an extension was granted under the Permit Extension Act through June 2013. In order for the Site owner to utilize this permit for the placement of fill in the flood plain, the Site owner would need to begin Site improvements (construction) prior to the permits' expiration date. If construction of the Site-wide remedy does not begin prior to the expiration date, it is anticipated that the Site owner will be required to work with EPA and NJDEP to secure a permit equivalence for the placement of fill in the flood plain. The ROD contains details on the status of the statutory requirements for the placement of fill for the selected remedy.

To clarify the commenter's reference to volume of clean fill to be imported to the Site under the selected remedy, the cost estimates in Appendix G of the Site-wide FS indicate that approximately 578,000 cubic yards of fill would be placed throughout the Site.

- 3.11 A commenter noted that Table 16 of the Site-wide FS presents "ARAR's, Criteria and Guidance" for evaluating and selecting a remedy. The commenter noted that flood plain management is identified as a "Standard Requirement" to be considered and Executive Order #11988 requires an evaluation of alternatives that impact flood plains, and a flood plain value assessment. The commenter stated that no discussion has been provided on how the flood plain ARAR would be met or what the potential impact would be if it were not met. The commenter stated that this was only partially fulfilled.

Response: Comment noted. The RD will address flood plain impacts to ensure that the remedy meets the requirements set forth in Executive Order #11988.

- 3.12 Several commenters noted that the U.S. Army Corps of Engineers is actively working on flood control projects in the Raritan River Watershed to help alleviate flooding in Manville, Bound Brook, Bridgewater and the surrounding towns. The commenters suggest that the Site would be a natural fit for a regional flood control project and can be an environmental benefit to the region if the proper remedy is selected.

Response: EPA is aware of the US Army Corps of Engineers' (USACE) project within the Raritan River watershed and EPA plans to discuss the remedy with USACE during the RD phase to accommodate any overlapping work, if possible. As noted in the response to Comment 3.9, a major goal of the selected remedy's design will be to minimize the loss of flood storage at the Site. The selected remedy can be designed to minimize the loss of flood storage so that it would have little to no impact on downstream flood elevations and the surrounding community.

- 3.13 A commenter asked if the presence of standing water over the capped areas provides a hydraulic head to the movement of impacted waters.

Response: In addition to the installation of the on-site capping systems, a drainage system would be installed throughout the Site. The final Site topography will be shaped to handle runoff conditions from both rain and flooding, thereby reducing the likelihood of any standing water on-site.

- 3.14 A commenter noted that burrowing animals may pierce the capping systems and expose waste to the surface. The commenter stated that the Proposed Plan must ensure that exposure via this mechanism would not occur.

Response: The engineered capping system will have an O&M plan to address these possible intrusions. In addition, this O&M plan will include Site-specific hazards that may pose a threat to the capping and/or remedies in general. The details of the maintenance and monitoring requirements for the engineered capping systems will be addressed in the RD phase.

- 3.15 A commenter stated that the remedial design must specify a means to secure the S/S material under the soil caps to

prevent contaminants from being washed out in serious, repeated floods.

Response: The principal threat waste (PTW) material slated for in-situ S/S within Impoundments 3, 4 and 5 will undergo an extensive mixing and stabilization process. The in-situ S/S treatment of this material will be designed to immobilize the waste, thereby fixing it in place and limiting the migration of contaminants. Materials that are treated via in-situ S/S will be required to meet several performance measures to verify the effectiveness of the remedy. In areas requiring treatment via in-situ S/S, an impermeable vapor control cap would be installed to reduce further the potential for contaminants to migrate. The details of the design of the engineered capping systems will be developed during the RD phase. It is anticipated that the design would consist of standard construction technologies, such as the addition of amendments, stabilizing agents and/or the installation of a physical structure (i.e., geogrids).

- 3.16 Several commenters expressed concern over how flooding would affect the Site's bedrock groundwater pumping system. The commenters also made several more specific recommendations regarding the design of the groundwater pumping system to ensure that it is not compromised by adverse weather, flood or power interruption.

Response: In response to the Hurricane Irene-related flooding in August 2011, the existing bedrock groundwater containment system was modified so that operations could continue without interruption should another extreme flood event occur. Critical infrastructure, such as extraction system controls and the electrical distribution system, were redesigned above anticipated future flood elevations. The gravity discharge line from the bedrock extraction wells to the Building 104 pump station was upgraded to include a pressure force main bypass that will enable extraction well operations in a flood event. The pumps for the extraction wells were replaced with submersible pumps that can continue to function throughout a flood event. A similar system would be installed and operated as part of the Site-wide groundwater remedy.

## Alternatives & Technologies Not Selected in this ROD

- 4.1 Several commenters expressed opposition to the selection of a remedy involving low temperature thermal desorption (LTTD). The commenters cited several specific reasons why LTTD would be inappropriate for the Site, including LTTD's inefficiency for the waste materials at the Site and the potential increase in worker and community exposure compared to in-situ alternatives.

Response: Comment noted. EPA agrees that LTTD would not be an effective treatment technology for the waste materials to be addressed by the remedy under consideration (OU4).

- 4.2 Several commenters expressed support for Alternative 7 or a modified version of Alternative 7. Several commenters stated that LTTD has been successfully implemented at other Superfund sites, specifically at the Cornell-Dubilier site, with similar types of waste without disturbing the community.

Response: It is true that LTTD has been selected as an appropriate remedy at other Superfund sites. However, EPA does not believe that it would be effective in remediating the specific waste materials to be addressed in OU4. As identified in the ROD, Alternative 7 includes the excavation and on-site treatment using LTTD for approximately 66 acres of the Site. This alternative was not selected because the particular waste materials to be addressed contain high concentrations of tars and other organics, elevated sulfur levels, large quantities of heterogeneous debris and have a high moisture content, all of which limit the effectiveness of LTTD.

In order to implement LTTD technologies successfully, the materials would require a significant amount of pre-treatment to control air emissions and are anticipated to result in more than a 40 percent increase in the volume of materials requiring treatment due to post-excavation "fluff" factor and reagent addition. Extensive materials handling would also be required prior to LTTD treatment due to the high moisture content and heterogeneity of the materials in Impoundments 3, 4 and 5. In addition, the results of previous field studies conducted at the Site indicate that the air emissions generated from excavation, pre-treatment and treatment would be difficult to contain within acceptable levels. LTTD was tested on Impoundment 3,



one of three impoundments requiring remediation under the Proposed Plan, and was not effective due, in part, to the high levels of air emissions, even with extensive controls.

EPA recognizes that LTTD was implemented at the Cornell-Dubilier site; however, the waste materials treated at Cornell-Dubilier are not similar to the waste materials at the American Cyanamid site in terms of moisture content, sulfur levels, heterogeneity and the presence of high concentrations of tarry substances. In addition, LTTD technologies have not generally been used on a large scale to treat materials similar to those found at the American Cyanamid site. The 2004 ROD for the Cornell-Dubilier site called for the excavation and treatment of approximately 87,300 cubic yards of contaminated soil using LTTD, while Alternative 7 would involve the excavation and LTTD treatment of over 730,000 cubic yards of contaminated material, which represents more than an 8-fold volume increase. In addition, it is estimated that the 730,000 cubic yards of material that would be treated with LTTD under Alternative 7 would increase approximately 43% to over 1.05 million cubic yards due to post-excavation "fluff" and reagent addition required for treatment.

Under Alternative 7, over 1.05 million cubic yards of contaminated material would be transported to the Impoundment 8 Facility following treatment with both LTTD and ex-situ S/S. The volume of this treated material is significantly greater than the estimated remaining capacity of 650,000 cubic yards in the Impoundment 8 Facility. In addition, utilizing the Impoundment 8 Facility to its maximum capacity would result in more than a 60-foot increase in the height of the landfill to over 100 feet, which would have a significant aesthetic impact on the surrounding community. The current height of the RCRA (Resource Conservation and Recovery Act) facility does not cause an obstruction to the sightlines of the surrounding communities. EPA believes that a significant increase in the height of this landfill would negatively impact the surrounding community and cause considerable disturbance to nearby residents, particularly those in the Finderne section of Bridgewater, New Jersey.

In addition, the implementation time frame of 20 years for Alternative 7 is also significantly longer than the implementation time frame of 10 years for Alternative 4A. There is also a greater potential for an increase in the

implementation time frame for Alternative 7 due to the possible road reconstruction necessities to handle truck traffic, extensive materials handling, challenges in controlling air emissions within acceptable levels and the extensive pre-design testing required for LTTD. The 10+ year difference in the implementation time frames also exposes the Site to a greater vulnerability to flooding during construction.

- 4.3 Several commenters expressed support for an alternative that utilizes LTTD in combination with other technologies, such as bioremediation and off-site disposal.

Response: A number of alternatives were developed in the Site-wide FS that included LTTD in combination with other technologies, such as bioremediation and off-site disposal.

Alternatives 7 and 8 include a combination of LTTD and ex-situ S/S technologies to address various contaminated areas of the Site, with some of the treated materials being disposed in the Impoundment 8 Facility. Alternatives 9 and 10 utilize a combination of bioremediation and ex-situ S/S to address various areas of contamination, with a portion of the treated materials also being disposed in the Impoundment 8 Facility. Alternative 11 includes a combination of LTTD and ex-situ S/S technologies, and also requires the off-site treatment and disposal of some materials. This alternative also utilizes the Impoundment 8 Facility for the disposal of treated materials, as well as the off-site disposal of some treated and untreated materials.

Enhanced bioremediation was also specifically included in the identification and screening of technologies process, as indicated in the Site-wide FS. Enhanced bioremediation was included as a representative process option for both impoundment contents and Site-wide soils in the Identification and Screening of Technologies Report, where it was determined that it would need to be combined with other technologies to address the contaminants at the Site effectively. Enhanced bioremediation was included in the development of Alternatives 9 and 10; however, these alternatives were not retained for further evaluation in the screening process for a number of reasons. The effectiveness of enhanced bioremediation was evaluated and determined to be inappropriate for both impoundment contents and soils due to the technology's inability to

treat inorganic contaminants adequately. Enhanced bioremediation effectively treats nonhalogenated solvents and other organic chemicals, but is not generally applicable to the treatment of the inorganic contaminants found at Site. Furthermore, a previous 1998 ROD at the Site included biotreatment as a component of the selected remedy and it was later determined that this technology was technically infeasible for the type of contamination at the Site. For more information on the identification and screening of technologies and the development and screening of alternatives, please see Exhibits 1 and 2 of the Site-wide FS.

Alternatives involving off-site disposal generally have longer implementation time frames and higher costs due to the significant challenges in controlling air emissions throughout extensive excavation activities. A remedy involving off-site disposal would also result in the transportation of large quantities of highly contaminated material through the community.

- 4.4 Several commenters noted that a permitted, hazardous waste disposal facility exists on-site, but is not being utilized to its permitted capacity to reduce the amount of waste left on the Site. Several commenters recommended that EPA utilize the Impoundment 8 Facility for the disposal of the wastes at the Site.

Response: The maximum allowable capacity of the Impoundment 8 Facility is approximately 1 million cubic yards under the RCRA permit. The facility is currently utilized to about 35 percent of the maximum capacity and is roughly 50 feet in height on average. The volume of material expected to be treated under the selected remedy would significantly increase the height of this facility. If the Impoundment 8 Facility were utilized to its maximum capacity, it would result in more than a 60-foot increase in the height of the landfill to over 100 feet, causing a significant obstruction to the sightlines of the surrounding communities, particularly nearby residents in the in the Finderne section of Bridgewater, New Jersey. In addition, the selected remedy does not require the off-site disposal of any waste materials since contaminated materials would be treated and/or capped. The selected remedy has less impact on the community because it does not require the utilization of the remaining capacity of the Impoundment 8

Facility, in addition to not requiring the transportation of hazardous materials through the community.

- 4.5 A commenter noted that the 1998 ROD successfully treated and removed a "stringy, tacky tar" from Impoundments 4 and 5 under a Fuel Blending/Recycling program. The commenter stated that the characteristics of those tars appear similar to the tars and organic wastes that the Proposed Plan intends to address by in-situ S/S. The commenter suggested that these wastes could be destroyed as opposed to being contained under the Proposed Plan. The commenter asked why fuel blending/recycling was not considered in the Site-wide FS.

Response: The commenter's characterization assumptions between the materials are incorrect. Between July 1991 and October 1994, approximately 3.8 million gallons of pumpable tars from Impoundments 4 and 5 were removed from the Site and treated through fuel blending operations and recycling/reuse. The tar and sludge material removed under this program represented the total amount of flowable material present in these impoundments. While the materials currently present in Impoundments 3, 4 and 5 have a high moisture content, they are not pumpable as the materials removed under the early 1990s Fuel Blending/Recycling Program were. Excavation and off-site incineration/recycling were considered as a component of Alternative 11 in the Site-wide FS but were not selected.

- 4.6 A commenter noted that off-site incineration was not given serious consideration in the Site-wide FS. The commenter stated that the Site has access to a major freight rail line and waste could be transported by rail to an off-site, permitted hazardous waste incinerator, such as Waste Management in Emille, Alabama. The commenter stated that it would have a higher initial capital cost, but no long-term O&M (operation and maintenance) cost.

Response: Off-site incineration was considered in the Site-wide FS and included as a component of Alternative 11. Ultimately, this alternative was not selected by EPA due to the reasons mentioned within the ROD, such as community concerns and the increases in cost and implementation time frames compared to other alternatives. Please see the response to Comment 4.3, which further discusses why EPA did not select a remedy involving off-site disposal. Also, see the "Comparative Analysis of Alternatives" Section in

the Decision Summary of the ROD for a further discussion of why Alternative 4A was selected over Alternative 11.

- 4.7 A commenter asked if on-site thermal destruction had been considered at the Site, citing that it would be the cleanest most time-efficient method for remediating the Site.

Response: On-site thermal destruction, also referred to as incineration, was included in the identification and screening of technologies process, as indicated in the Comprehensive Site-wide FS. On-site incineration was not retained for further consideration in this process based upon past public opposition to it. However, off-site incineration of both impoundment contents and Site-wide soils was retained for further evaluation. Ultimately, off-site incineration of movement control areas was included in Remedial Alternative 11; however, this alternative was not selected by EPA because it did not meet EPA's criteria for short-term effectiveness and implementability. Please see the "Comparative Analysis of Alternatives" section in the Decision Summary of the ROD for a further discussion of this alternative.

- 4.8 Several commenters questioned the cost estimates for LTTD and in-situ S/S in the Site-wide FS. One commenter specifically questioned the validity of the unit cost for LTTD found in Appendix G of the Site-wide FS.

Response: EPA reviewed the cost estimates for Alternatives 4A and 7 in the Site-wide FS upon receiving the above comment and concluded that the cost estimates for both alternatives are within the accuracy range of -30 to +50 percent of the original estimates. The estimated capital, O&M and present worth cost estimates are based on the best available information at the time.

The unit costs for LTTD utilized in Appendix G of the Site-wide FS are within the range of costs for direct-fired LTTD systems based upon a review of published literature. The costs for indirect-fired LTTD systems, which are anticipated to be required based upon the high organic content of the material, are generally reported to be higher than direct-fired systems. Also, the costs provided in the Site-wide FS for Alternative 7 are sufficiently accurate and may even be underestimated for actual

implementation due to the complexities of the extensive materials handling required prior to treatment.

The unit cost for LTTD in Alternative 7 is expected to be significantly higher than the LTTD unit costs at other Superfund sites for a number of reasons. The impoundment contents and soils at the Site have a high organic content and would likely require indirect thermal treatment, which generally has higher costs than direct-fired LTTD systems utilized at other Superfund sites. Intrusive excavation and extensive pre-treatment and materials handling resulting from the moisture content would be required for the implementation of LTTD at the Site, which also contribute to the higher unit cost rates for LTTD in comparison to other Superfund sites. Alternative 7 also involves the off-site disposal of condensate, purge water and debris, as well as the disposal of solid residuals either on-site or off-site. For the reasons cited above, the unit costs for LTTD in Appendix G of the Site-wide FS are believed to be accurate based upon the information available to EPA at this time.

#### Groundwater & Surface Water Comments

- 5.1 Several commenters indicated a preference for the construction of an on-site groundwater treatment plant as a component of the remedy as opposed to a reliance on the local municipal wastewater treatment system. Several commenters suggested that EPA had already made the decision to construct an on-site treatment plant.

Response: The Proposed Plan indicated that several groundwater treatment options would be evaluated in the RD phase. However, based upon a number of comments received indicating a preference for the construction of an on-site treatment plant and an EPA review of the treatment options, EPA has decided that the waters collected at the Site will be discharged to surface water following complete on-site treatment. However, if it is determined that this treatment method is not appropriate or feasible, then collected groundwater will either be re-injected into the ground following complete on-site treatment or be discharged to the local sewerage authority directly or following pre-treatment.

- 5.2 The Site owner recommended that "recharge to groundwater following on-site complete treatment" also be evaluated as

a potential discharge option for the treatment of contaminated groundwater. The Site owner stated that this option presents the advantage of reducing the impact on groundwater storage on the State of New Jersey aquifers through on-site replenishment (i.e. recycling groundwater after treatment) and also mentioned that groundwater reinjection can create hydraulic control boundaries at appropriate locations that will slow groundwater movement, and subsequent contaminant transport across the Site.

Response: EPA agrees that "recharge to groundwater following on-site complete treatment" should be included as a potential discharge option. At this time, EPA believes that discharge to surface water following complete on-site treatment is the most appropriate treatment option; however, a different treatment/discharge method can be selected in the RD phase, if it is determined that a different method is more appropriate. Recharge to groundwater following complete on-site treatment has been included as a contingency treatment option in the Decision Summary of the ROD.

- 5.3 Several commenters expressed concern over the discharge limits of the interim treatment plant constructed under EPA's removal program, as well as the discharge limits of a potential on-site treatment plant for the Site-wide remedy. Several commenters specifically stated that the discharge levels for arsenic and benzene should be set at the New Jersey surface water quality standards (SWQS) of 0.017 and 0.15 micrograms per liter, respectively. A commenter stated that the discharge should be required to satisfy all NJ SWQS and expressed concern that generic, pre-defined, non-site-specific effluent standards would be applied to the interim treatment plant. The commenter stated that if such effluent standards are applied, given the very small amount of assimilative capacity in Cuckel's Brook under critical low flow conditions, stream standards will be violated. The commenter stated that water quality based effluent limits (WQBELs) must be established for this discharge.

Response: An interim groundwater treatment plant was constructed as part of an EPA Removal Action to address groundwater discharges into the Raritan River. A permit equivalency for the interim treatment plant was issued by NJDEP on May 7, 2012 and EPA provided the permit equivalency to the Site owner on May 10, 2012, along with a compliance schedule for arsenic. Because the Raritan River

has been identified as impaired for arsenic and benzene, the discharge limits imposed for these two constituents must be equal to the New Jersey SWQS of 0.017 and 0.15 micrograms per liter, respectively. However, the NJ SWQS for arsenic and benzene is more stringent than the quantification limit. Therefore, the enforceable daily maximum concentration is 8 micrograms per liter for arsenic and 7 micrograms per liter for benzene. Operation of the interim treatment plant commenced in May 2012 with treated groundwater subsequently being discharged in compliance with the New Jersey Pollution Discharge Elimination System (NJPDES) permit equivalent to Cuckel's Brook. The permit equivalency for the interim treatment plant is not classified as a general permit equivalency, but, rather, is classified as individual because it establishes individual discharge effluent limits and monitoring requirements. This permit equivalency will be utilized for the duration of the Removal Action provided that no significant changes occur to the influent water characteristics or discharge flow rate. A new permit equivalency would be required when the interceptor trench and interim treatment plant are incorporated into the Site-wide remedy.

As indicated in the response to Comment 5.1 above, groundwater collected as part of the Site-wide remedy would be discharged to surface water following complete on-site treatment unless it is determined that another treatment option (re-injection into groundwater following complete on-site treatment or discharge to the local sewerage authority, directly or following pre-treatment) is more appropriate. An individual NJPDES discharge to surface water (DSW) permit equivalent would be required for the Site-wide remedy if any treatment option involving discharge to surface water is implemented.

- 5.4 Several commenters expressed concern over the remedy's compliance with the Clean Water Act ARARs, such as NJ SWQS and NJPDES permit requirements. A commenter stated that any discharge to the river must comply with NJ SWQS and NJPDES effluent limits at the point of discharge. The commenter stated that EPA has failed to demonstrate how all discharges will comply with the Clean Water Act in the form of EPA delegated NJ SWQS and NJPDES permit requirements, such as WQBEL's and industrial storm water requirements. The commenter stated that the NJPDES General Permit fails to include effluent limitations for all parameters discharged, as required by NJ SWQSs, NJPDES regulations and



the Clean Water Act. The commenter also stated that this is a key Clean Water Act compliance issue because no permit may be issued that would violate a state ambient water quality standard. The commenter stated that it should be noted that any discharges to the river will comply with NJ SWQSS and NJPDES WQBELs at the point of discharge, with no mixing zone.

Response: As indicated in the Decision Summary of the ROD, the selected remedy will comply with all substantive federal and state requirements which are applicable or relevant and appropriate to its implementation. As indicated in the response to Comment 5.3 above, the permit equivalency for the interim treatment plant is not classified as a general permit equivalency, but, rather, is classified as individual because it establishes individual discharge effluent limits and monitoring requirements.

- 5.5 Several commenters expressed concern over the treatment of Site groundwater at the local sewerage authority. Specifically, commenters were concerned that the local sewerage authority's treatment process may not be capable of treating the range of contaminants found at the Site. Several commenters recommended that the effluent limits for Site-related contaminants, such as volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), be imposed at the local sewerage authority's discharge for the extent that they are used for the treatment of the Site's stormwater and groundwater.

Response: Comment noted. The local sewerage authority has a specific operating permit issued by the NJDEP. This permit contains conditions (i.e., capacity constraints, treatment equipment requirements, etc.) and water quality standards or levels that must be met by the authority. Based upon a number of comments received indicating a preference for the complete on-site treatment of collected groundwater, EPA has decided to proceed with "discharge to surface water following complete on-site treatment" as the preferred treatment method. The selected remedy will comply with all substantive requirements of federal and state requirements which are applicable or relevant and appropriate to its implementation.

- 5.6 A commenter inquired about the status of the interim groundwater remediation facility.

Response: In May 2012, the construction of the interim groundwater treatment plant was completed under EPA's removal program. This groundwater removal system, which also includes a collection trench and containment wall, was designed to intercept and capture or otherwise prevent releases of groundwater originating from the Site into the Raritan River. The interim groundwater treatment plant is currently operated by Wyeth Holdings Corporation, a subsidiary of Pfizer, Inc, under a NJPDES DSW permit equivalency with discharge to Cuckel's Brook.

- 5.7 A commenter asked how EPA is proposing to monitor the discharge's impact on the receiving streams once the proper effluent limits are set.

Response: A permit equivalency was issued by NJDEP's Bureau of Surface Water Permitting for the interim treatment plant in May 2012. Operation of the interim treatment plant commenced in May 2012 with treated groundwater subsequently being discharged in compliance with the NJPDES permit equivalent to Cuckel's Brook. The NJDEP's Site Remediation Program is responsible for monitoring compliance with the conditions of this permit equivalency. The permit equivalency requires continuous monitoring for flow and either monthly or quarterly monitoring for toxic parameters. EPA's removal program is expected to independently sample and analyze the effluent for Site-related contaminants of concern prior to transferring those responsibilities over to EPA's remedial program for continued sampling and analysis oversight. In addition, a comprehensive Site-wide surface water and sediment monitoring program will also be utilized to monitor the potential impacts of the Site and other possible sources of impacts on the Raritan River and Cuckel's Brook.

- 5.8 A commenter asked if EPA has collected baseline water quality data in Cuckel's Brook and the Raritan River to have a means of comparison with water quality in the future. The commenter also indicated that he would like to be provided with these data if they exist.

Response: Surface water quality data have been collected in both the Raritan River and Cuckel's Brook as part of several sampling efforts dating back to the early 1980's. In 1982, NJDEP ordered American Cyanamid to develop and implement a surface water sampling program to quantify the levels of toxic chemicals in the Raritan River. This

sampling program was completed in October 1983. Surface water quality data were collected in both Cuckel's Brook and the Raritan River in a 1994 Raritan River Assessment. Data were also collected as part of a surface water and sediment monitoring program from 2005 to 2009. Finally, surface water quality data have been collected as part of the EPA Removal Action. A summary of the historical surface water and sediment data were provided to the commenter via email on April 9, 2012.

- 5.9 A commenter asked if EPA will be monitoring the receiving streams to evaluate the benefit of removing the contaminated seeps, treating the contaminated groundwater and discharging it to Cuckel's Brook.

Response: In August 2012, an updated, more comprehensive Site-wide surface water and sediment monitoring program was approved by EPA and NJDEP. Under this plan, several additional surface water and sediment sampling locations (some located upstream and downstream of the Site) were added to the previous Site sampling plan. In addition, a number of Site-related contaminants of concern will be analyzed on a quarterly basis. Sampling will be conducted under this program to monitor the potential impacts of the Site and other possible sources of impacts on the Raritan River and Cuckel's Brook.

- 5.10 A commenter expressed concern over potential seepages or other flood-related distribution of contaminants from the Site into the Raritan River. The commenter stated that there must be a means of testing the efficacy of the slurry walls and reporting the results to the community on a quarterly basis, along with a description of the response actions to address the seeps. Because potential seepages directly affect the river, the commenter suggested that surface water quality monitoring data also be reported to the community on a quarterly basis, with an explanation for any levels that exceed NJ surface water quality standards.

Response: Regarding the commenter's concern over the flood-related distribution of contaminants, EPA believes that the selected remedy will perform as intended, even under significant flooding events. Please see the response to Comment 3.2 in the written comments section for a further discussion of the design of the capping systems.

Under the selected remedy, the existing bedrock groundwater collection system will be improved by relocating the primary extraction wells to a more central location and through the placement of additional extraction wells, as necessary, to ensure that all Site-related groundwater is captured. In addition, a recovery system (such as trenches, wells and/or containment walls) will be constructed for collection of overburden groundwater at several locations. The details of these improvements and the treatment of collected groundwater will be developed during the RD phase. Any containment walls constructed as part of this remedy will require ongoing maintenance and monitoring to ensure that they are functioning as intended. The details of the maintenance and monitoring requirements for any containment walls constructed on-site will be determined in the remedial design phase.

Regarding the commenter's request that EPA provide the community with an update on the status of the work to address the seeps, EPA began issuing detailed quarterly updates to the community via email in July 2012. The quarterly updates document the project status and focus on major tasks completed over the past quarter, as well as anticipated tasks for the upcoming quarter. The most recent quarterly update distributed in July 2012 included an update on the status of the EPA Removal Action to address groundwater discharges into the Raritan River.

- 5.11 A commenter, representing the local sewerage authority, stated that the sewerage authority has been collecting water quality data in Cuckel's Brook and the Raritan River for over two decades and has used these data to develop water quality models of the system. The commenter noted that a consultant to the sewerage authority performed a Total Maximum Daily Load study for the Raritan River Basin, but was not able to finalize the segment near the Site due to unexplained dissolved oxygen dynamics, which the commenter suggested may be caused by potential contamination from the Site. The commenter offered to share the sewerage authority's water quality data with EPA.

Response: EPA received a compilation of water quality data collected by the sewerage authority on April 24, 2012 via email. EPA provided these data to the Site owner electronically on May 1, 2012 and recommended that the Site owner review these additional data. These data were

reviewed by the Site owner and considered when developing the updated surface water and sediment monitoring program.

- 5.12 A commenter, who resides in Franklin Township, expressed concern about the Site's effect on his neighborhood's well water supply. More specifically, the commenter expressed concern over whether the Site has contaminated private wells in his neighborhood through either bedrock migration or as a result of previous flooding events. He also asked if EPA could sample private wells in his neighborhood as part of the proposed cleanup.

Response: To address the commenter's concerns, EPA first reviewed all available Site-related information, which included groundwater sampling results in the surrounding area. EPA then consulted with NJDEP to obtain any information that it may have on file. Finally, EPA's team assigned to the Site, which includes a hydrogeologist, reviewed the approximate location of the commenter's neighborhood and how it may relate or connect to the American Cyanamid Superfund site.

In response to the commenter's concern over the effects of recent flooding on his neighborhood and the surrounding community, EPA reviewed the results of several rounds of surface water sampling conducted on the floodwaters from the most recent flooding events, i.e., Hurricane Irene and Tropical Storm Lee. The North Area of the Site where the majority of waste disposal activities occurred is surrounded by a flood protection berm. During the Hurricane Irene storm event, flood waters overtopped this berm and flooded the North Area of the Site. The flood protection berm prevented flood waters in this portion of the Site from receding and created a large area of standing water. Sampling results of this standing water confirmed that contaminant concentrations were below levels of concern which also provided an indication of the water quality conditions during and immediately after flooding. Using these data and applying them to nearby conditions, it is unlikely that Site contaminants affected any adjacent communities both during and after the flood event.

In response to the commenter's concern over whether the Site has contaminated private wells in his neighborhood through bedrock migration, EPA reviewed all available Site-related information and determined that the bedrock groundwater in this neighborhood, as well as the

surrounding communities, flows naturally from east to west under uninfluenced conditions. Since the Site is located to the west-northwest of the commenter's home, this flow is away from the commenter's neighborhood and towards the facility.

Additionally, the Site itself has its own groundwater containment system which pumps a minimum of 650,000 gallons of groundwater from the bedrock area per day. This containment system was implemented to address the contaminated groundwater plume that exists in the bedrock under the Site. Routine semi-annual groundwater monitoring confirms that the majority of this contamination is captured by the Site's containment system. Any contamination not captured by the current system has been shown to be localized and there are indications that it is migrating to the south, which would not affect the community's wells. It should also be noted that most if not all of the private wells in this community are screened in the bedrock. Based on this information, the current understanding is that the groundwater that property owners from this community extract using their private wells would not be affected by the Site even if the Site's own containment system were shut down.

Lastly, a separate evaluation was recently conducted to assess the potential for groundwater to flow south of the Raritan River into the communities of Franklin Township and South Bound Brook. Based upon both regional and local groundwater characteristics, this evaluation concluded that a complete pathway does not exist for the transport of Site-related contaminants beyond the Raritan River to the south. Therefore, there is no indication that Site-related contamination is impacting public water supply wells in both Franklin Township and South Bound Brook neighborhoods.

Based upon the discussion of findings in the preceding paragraphs, the sampling of private wells in this community is not warranted at this time.

- 5.13 A commenter noted that the cost analysis in the Site-wide FS includes the total annual O&M costs for the groundwater treatment systems and the multi-layer caps for a 30-year period, but does not incorporate any costs beyond this time period. The commenter stated that the costs should be adjusted to reflect the Site owner's true obligation. The

commenter stated that the cost estimates should incorporate the O&M costs beyond the 30-year period.

Response: When developing the cost estimates for an alternative, it is important to define a reasonable period of analysis, which in this case is 30 years. The project duration generally involves the planning, design and construction of the remedial alternative, continues through short- and long-term O&M and ends with project completion and closeout. For the purposes of understanding and comparing the alternatives outlined within the Site-wide FS, a 30-year period was used.

- 5.14 A commenter emphasized the importance of preventing the off-site migration of contaminants into the Raritan River.

Response: The groundwater component of the selected remedy will address potential contamination that is migrating from the Site to the Raritan River. Ongoing monitoring and maintenance of the Site will also be required following the remedy implementation to ensure long-term effectiveness.

#### Comments on In-situ Solidification/Stabilization (S/S)

- 6.1 A commenter asked whether the principle threat waste (PTW) is to be stabilized or solidified and noted that there is a big difference given the mobility of the PTW material. The commenter stated that the Proposed Plan should indicate which is being done and the technical details, such as percent cement and strength of solidified mass to be achieved. The commenter then stated that merely stabilizing the waste does not limit mobility.

Response: The term "solidification/stabilization" refers to a general category of processes that are used to treat a wide variety of wastes, including solids and liquids. EPA is aware that solidification and stabilization are each distinct technologies. Solidification refers to processes that encapsulate waste to form a solid material and restrict contaminant migration by decreasing the surface area exposed to leaching and/or by coating the waste with low-permeability materials. Solidification can be accomplished by a chemical reaction between a waste and binding (solidifying) reagents or by mechanical processes. Stabilization refers to processes that involve chemical reactions that reduce the leachability of a waste. Stabilization chemically immobilizes hazardous materials or

reduces their solubility through a chemical reaction. The physical nature of the waste may or may not be changed by this stabilization.

A combination of both solidification and stabilization will be implemented as part of the selected remedy and treatability testing will be conducted in the RD phase to optimize the in-situ S/S mixture and determine the extent that each of these distinct technologies will be implemented. Materials that are treated with in-situ S/S will be required to meet performance measures for minimum unconfined compressive strength (UCS), maximum permeability and leachability testing for Site-related constituents.

- 6.2 A commenter asked how the in-situ S/S component of Alternative 4A reduces the toxicity of contaminants.

Response: Stabilization refers to techniques that chemically reduce the hazard potential of a waste by converting the contaminants into less soluble, mobile or toxic forms. Chemical reagents, such as thermoplastic polymers, thermosetting polymers and other proprietary additives, are often utilized with S/S to react with and chemically adsorb to contaminants to immobilize them. Many chemical reagents have also been found to transform successfully some toxic contaminants into less toxic or nontoxic forms. One example is lime, which is commonly used as an additive in S/S. Lime converts many metals to a more chemically stable form and neutralizes acidic materials, thereby reducing the toxicity of the waste. During the RD phase of the selected remedy, the use of chemical reagents will be evaluated and treatability studies (both in lab and pilot forms) will be conducted to confirm success.

- 6.3 Several commenters recommended that treatability testing (simulation, bench and/or field testing) be conducted during the RD phase to determine the most effective combination of amendments, stabilizing agents and geogrids to be utilized in the in-situ S/S process.

Response: Treatability testing for in-situ S/S will be conducted prior to full-scale implementation to optimize the in-situ S/S mixture and demonstrate a correlation between leachability, UCS and permeability performance criteria. Materials that are treated with in-situ S/S will be required to meet performance measures for minimum UCS, maximum permeability and leachability testing for Site-



related constituents. Testing of the performance measures will be required periodically during the remedial action to maintain the integrity of the remedy. The frequency and nature of the performance measures testing will also be determined during RD. During implementation of the full-scale remedial action, performance measures would be used for the purposes of mix optimization, quality assurance and verification that the remedy is effective.

- 6.4 Several commenters recommended that comprehensive treatability studies for in-situ S/S be performed on the various wastes prior to the selection of a remedy. A commenter stated that a comprehensive study and bench-scale testing using the best available cleanup technologies should be performed to determine which technologies should be used for the various wastes. In addition, a commenter stated that the Proposed Plan pushes the testing of these materials off until the design phase, but there is no discussion of what will happen if S/S does not work.

Response: There have been several studies performed on the various contaminated materials on-site over the past 15 years. Of note, S/S technologies have been successfully implemented at the Site for several impoundments containing similar materials to those present in Impoundments 3, 4 and 5. In 2003, S/S was successfully implemented to remediate a portion of Impoundment 5, which was about 2.5 acres and contained tar-like materials similar to those of Impoundments 3 and 4, as well as the remaining materials in Impoundment 5. S/S was also utilized successfully to remediate Lagoon 6 under the Resource Conservation and Recovery Act (RCRA) in 1999.

Because S/S has been successfully implemented for several impoundments containing similar materials, it was concluded that additional treatability studies were not necessary prior to the selection of a remedy. Treatability testing for in-situ S/S will be conducted prior to full-scale implementation to optimize the in-situ S/S mixture and demonstrate a correlation between leachability, UCS and permeability performance criteria. For more information on the treatability studies for in-situ S/S, please see the response to Comment 6.3 above.

- 6.5 A commenter stated that S/S actively drives VOCs from the wastes due to physical mixing and heat generation and, therefore, S/S must be conducted under the same controls as

excavation. The commenter stated that the selection of treatment only requires explanation as the benefits of leaving the wastes at the Site are questionable.

Response: Emissions during both in-situ S/S and some identified excavation locations are expected. Appropriate uses of water, foam or other types of available surfactants will be determined during the design phase. The need for any additional engineering controls will also be evaluated. Field investigations will also be utilized to identify and verify the potential air risks prior to the start of remedial activities.

- 6.6 A commenter stated that the justification for containing PTW at the Site instead of providing treatment or off-site removal is concerns over vapor emissions during excavation. The commenter noted that the proposed S/S will have vapor emissions that must be controlled. The commenter stated that no quantitative evaluation of the emissions from these options was provided in the Site-wide FS or the Proposed Plan. The commenter asked what amount of VOC releases are expected with Alternative 4A in comparison to other alternatives.

Response: When any type of excavation activity is being conducted at the Site, there is a concern with emissions whether it is dust or vapors. All alternatives have a degree of risk associated with excavation and the handling of the materials. This was weighed out in the comparison of the alternatives sections of both the ROD and Proposed Plan. The selected remedy was chosen due to a number of factors, including the concern of emissions being generated during remedial activities.

As stated in the Site-wide FS, the air emissions generated from Alternatives 7 and 11 would be higher than those from Alternative 4A. Because specific analytical data or treatability studies were not necessary to complete the alternative analysis and, therefore, have not been conducted to quantitatively estimate the emissions, a qualitative assessment was utilized in the Site-wide FS. This qualitative assessment for identifying emissions is called the emission "drop" factor method. This method is approved by NJDEP for use in developing air permits and consists of developing a unitless emission (drop) factor and applying it to the identified process steps. The standard drop factor is based on the lifting and dropping

of a unit mass of material. Each process step is assigned a multiplication factor to represent better the extent of agitation and therefore higher emissions generated. For example, unloading a dump truck would use a multiplication factor of 1 because it is a single drop, whereas a pug mill would be assigned a multiplication factor of 50 based on the rigorous agitation. These factors have been corroborated based on field observations during previous full-scale operations at the Site. For a more detailed description of the development of air emissions based on the drop factor method, please reference the Impoundment Remedy Appropriateness Evaluation (O'Brien & Gere, February 2005). This report is available in the information repositories maintained at the EPA Region 2 office located at 290 Broadway, New York, New York, the NJDEP Office of Records at 401 East State Street, Trenton, New Jersey and the Bridgewater Township Library at 1 Vogt Drive, Bridgewater, New Jersey.

### Cleanup Timeline & Pace

7.1 Several commenters, including elected officials and interest groups, expressed concern over the slow pace of the cleanup efforts. One commenter asked why EPA allowed the Site owner to stop the cleanup midstream after the ROD was signed and then let the Site languish for another eight years.

Response: As described in the "Site History and Enforcement Activities" section of this ROD, the Site was previously addressed under seven independent operable units (OUs) each on different time lines from one another. This approach did not achieve the desired cleanup results nor were the activities performed in an expeditious manner. Under this new approach of remediating the entire Site all at once, with the exception of Impoundments 1 and 2, EPA believes that the impoundments, Site-wide soils and groundwater can be addressed in a timely manner and will be protective of human health and the environment, will comply with ARARs, will be cost-effective and will utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

As discussed in the Proposed Plan and this ROD, in June 2004, all on-going remedial activities at the Site, with the exception of other ongoing investigation and remediation activities associated with Impoundments 14, 15,

16 and 20 and the bedrock groundwater capture system, were suspended pending the completion of a remedy review report to evaluate the appropriateness of the remaining impoundment remedial programs. Based upon this report, referred to as the 2005 Impoundment Remedy Appropriateness Evaluation, it was determined that the conditions for Impoundments 1, 2, 3, 4, 5, 13, 17 and 24 had changed, in some cases significantly, since their respective RODs were issued. Wyeth undertook completion of a Comprehensive Site-wide FS designed to address all remaining contamination within the various media on-site through a single comprehensive program under OU4.

EPA disagrees that the Site has languished over the past eight years. In support, a number of activities were completed from 2004 to 2012. In 2005, a Data Adequacy Review (DAR) was completed to assess the adequacy of existing soil and groundwater data assembled through previous investigatory and monitoring programs at the Site. A Baseline Ecological Risk Assessment (BERA) was completed in January 2005 and a Human Health Risk Assessment (HHRA) was completed in December 2006. A groundwater remedial investigation (RI) report was completed in February 2006 and a supplemental groundwater RI was completed in February 2008. Impoundments 14 and 20 were remediated under CERCLA per a 2007 Explanation of Significant Differences (ESD) and completed in August 2010. This example further illustrated the need for a reevaluation of all previously approved remedies to be completed on-site. In March 2010, EPA presented the proposed alternatives of the Comprehensive Site-wide FS to EPA's National Remedy Review Board (NRRB) to evaluate the appropriate remedy for the remainder of the Site and ensure the selected remedy is consistent with national policy. The Comprehensive Site-wide FS was completed in February 2012 and the Proposed Plan was released for public comment on February 16, 2012.

- 7.2 Several commenters indicated that they were pleased to see the cleanup process beginning to accelerate and indicated that they would like to see recent momentum continue. One commenter expressed appreciation and support for the current Site owner's efforts to remediate the Site. The commenter also expressed a desire for the cleanup efforts to proceed in a reasonable time frame in order to protect the community.

Response: Comment noted. EPA will continue to work to remediate the Site in a time-efficient manner, while taking the necessary precautions to ensure the protection of human health and the environment. The estimated implementation time frame of 10 years for the selected remedy is relatively short in comparison to the estimated implementation time frame of 20+ years for other alternatives.

- 7.3 A commenter questions the estimated implementation time frames for Alternatives 4A and 7. The commenter stated that it should not take 10 years to cap the Site and suggested that the implementation time frames for all of the alternatives are likely exaggerated.

Response: In addition to what was discussed in the response to Comment 4.8 and based upon a review of the estimates in the Site-wide FS, EPA does not believe that the implementation time frames are overestimated for any of the alternatives. If any inaccuracies do exist, the implementation time frames for some of the alternatives may be slightly underestimated. The pre-design testing required for S/S has the potential to affect the schedule for Alternatives 4A and 5. Because of the heterogeneity and nature of the contamination at the Site, extensive pre-design testing would be required for the treatment technologies employed with Alternatives 5, 7 and 11. The extensive pre-design testing required for these alternatives would have significant potential to result in delays in the schedule. For Alternative 7, it is estimated that an LTTD unit would be required to operate 24 hours per day, 365 days per year for at least 14 years in order to treat movement control areas, which comprise approximately 37 acres. Additional time would be required for the treatment of vapor control areas, which comprise about 34 acres. Based upon this information, the estimated implementation time frame for Alternative 7 is not overestimated and may, in fact, be underestimated.

To address the comment regarding capping, the caps identified in the selected remedy also require a detailed design to incorporate all Site-specific hazards that pose a threat to their integrity. There are three caps, which are identified in detail within the ROD, to be utilized over approximately 200 acres. In some areas, a vapor mitigation system will be required to capture and treat emissions. All engineered caps will be designed and constructed to

withstand the effects of at least a 500-year flood event and to incorporate all Site-specific hazards that pose a threat to their integrity.

- 7.4 A commenter noted that Alternative 4A has a 10-year time line for completion and stated that a detailed schedule for this project and the justification for its length of time should be provided prior to the selection of a remedy.

Response: A detailed schedule for the selected remedy will be developed during the remedial design phase. Many of the complex technical details of the remedy will be developed during this phase of work. Any schedule developed prior to performing a detailed design would be highly inaccurate.

#### Post Remedy Maintenance, Future Use and Financial Assurance

- 8.1 Several commenters expressed concern over the long-term monitoring of the Site, particularly with the remedy's engineering controls. The commenters stated that the Site should be monitored in perpetuity or until the waste no longer poses a threat to human health and the environment. A commenter recommended that the Proposed Plan explicitly state that maintenance will be required in perpetuity so that all stakeholders understand that waste will remain on the Site. The commenter also recommended that it be explicitly stated that any alterations or modifications to the engineering controls will require approval from EPA.

Response: As part of the selected remedy, ongoing monitoring and maintenance of the Site, including engineering controls, will be required to ensure that the remedy is functioning as intended. The details of the maintenance and monitoring requirements for the engineering controls will be determined in the design phase. A statutory review will also be required to be conducted five years after initiation of the remedial action to ensure that the remedy is, or will be upon completion, protective of human health and the environment. The performance and the protectiveness of the remedy will continue to be monitored, and a formal report of this review will be documented every five years.

As discussed in the Decision Summary of the ROD, monitoring of the engineered capping systems, sediment, surface water and groundwater will be required as part of the on-going operation plan at the Site. The details of the inspection

and maintenance program for the engineered capping systems will be developed in the remedial design phase.

- 8.2 Several commenters expressed an interest in the beneficial reuse of the Site. Some commenters mentioned more specific preferences for the reuse of the Site, such as the creation of a Raritan River greenway along the Raritan River, reuse consistent with the Bridgewater Cyanamid Oversight Committee "Return to Use" principles, reuse of portions of the Site for business or recreational purposes in the near future and the reuse of a portion of the Site adjacent to the Bridgewater train station.

Response: Since the future use of the Site is determined by the Site owner, EPA will communicate the commenter's preferences for the reuse of the Site to the Site owner. The current Site owner has discussed a number of potential future uses for the Site ranging from light industrial use to recreational use. It should be emphasized that reuse of any portion of the property would not occur until either the remedy is complete in its entirety or it is determined that reuse would not interfere with the implementation of remediation activities. Please see the "Current and Potential Future Site and Resource Use" section of the Decision Summary of the ROD for a further discussion of the future use of the Site.

- 8.3 A commenter noted that American Cyanamid transferred a property along East Main Street in Bridgewater (Block 347, Lot 1.02) to Bridgewater Township and Somerset County in the mid-1990s. This transferred property, now owned by Somerset County, contains wetlands which remain a critical element in the planned future development of this land. The commenter indicated that the mitigation of the wetlands on Lot 1.02 during the remediation effort would represent an essential milestone in the County's efforts to return this property to environmental acceptability and public use.

Response: As discussed in the response to Comment 8.2 above, the future use of the Site is determined by the Site owner; however, EPA will communicate the commenter's desire for the mitigation of the wetlands on Block 347, Lot 1.02. The selected remedy would be consistent with the County's efforts to return this property to environmental acceptability and public use.

- 8.4 A commenter stated that a deed notice for the property should be required to identify the wastes left behind and the restrictions of future use that will assure the engineering controls are maintained in perpetuity. The commenter believes that this should be explicitly stated so that current and future stakeholders understand the specific restrictions on the Site.

Response: As indicated in the Decision Summary of the ROD, the following institutional controls will be required: deed restrictions to maintain the protectiveness and functional integrity of engineered capping systems; restrictive covenants to prevent future land uses that interfere with the implementation or protectiveness of the selected remedy; and a groundwater classification exception area and well restriction area (CEA/WRA) to prohibit future use of the groundwater in this area and to restrict the installation of wells (other than for monitoring or remediation purposes) in the area for the duration of the CEA. The specific details of the institutional controls will be developed following the issuance of the ROD.

- 8.5 The Site owner noted that the vapor control areas outlined on Figure 8 of the Site-wide FS are preliminary and a more refined assessment method will be developed and implemented during the remedial design phase to delineate areas appropriately. The Site owner's understanding is that once these areas are defined, they will then be addressed with vapor controls which can consist of engineering controls, such as active or passive vapor mitigation systems, institutional controls or a combination, as appropriate. The Site owner recommended that the remedy description include a clarifying statement that the final definition of the limits of areas requiring vapor control will be determined through a more refined assessment implemented during the design phase.

Response: EPA agrees that the vapor control areas identified in the Site-wide FS are preliminary and a more refined assessment method will be developed and implemented during the RD phase. EPA disagrees that the vapor control areas could be addressed solely by institutional controls. As indicated in this ROD, an impermeable multi-layered engineered cap, which will include a vapor mitigation system, will be constructed over areas requiring vapor controls. Institutional controls would then be utilized to



ensure the protectiveness of the remedy and its compatibility with future reuse.

- 8.6 Several commenters recommended that EPA require the Site owner to post a bond for financial assurance to ensure the continuous operation, monitoring and maintenance of the Site. One commenter asked what mechanism will be used by EPA to assure that the Site owner continues to fund the project.

Response: Pursuant to the Superfund law, any agreement between the Site owner and EPA requires the Site owner to obtain financial assurance for the work to be performed. The financial assurance can be in the form of an insurance policy, guarantee, surety bond, letter of credit or qualification as a self-insurer. The financial assurance presented by the Site owner must be acceptable to EPA in order to ensure that the work will be completed.

#### Community Impacts

- 9.1 Several commenters expressed support for the Site's current TAG recipient and issued support for the organization's recommendations on the Proposed Plan.

Response: Comment noted.

- 9.2 Several commenters expressed opposition to the role of the TAG recipient as an advocacy group that is responsible for the dissemination of information and cleanup options on the Site. The commenters stated that the technical assistance grant (TAG) recipient has spent over \$235,000 of federal taxpayer money to have a technical advisor review documents and evaluate cleanup options. The commenters asked why the TAG recipient has not come up with a permanent solution with all of the taxpayer money spent. The commenters also questioned the technical competency of the TAG recipient's technical advisor.

Response: EPA Region 2 conducted a review of the TAG recipient in Spring 2012 to determine whether any TAG requirements had been violated per Title 40, part 30 of the CFR. This review concluded that the TAG recipient was in compliance with all TAG requirements per 40 CFR, part 30. In addition, EPA has conducted several random audits of the TAG recipient since the TAG was issued, including one in

October 2012, and they have been found to be in compliance with all TAG requirements for all audits.

- 9.3 An elected official asked that EPA consider the health and welfare of the surrounding community during the cleanup efforts.

Response: The mission of EPA is to protect both human health and the environment. The safety of Site workers and the surrounding community will be of the utmost concern to EPA throughout the implementation of the remedy. Routine air, groundwater, surface water and sediment monitoring will be conducted throughout the implementation of the remedy to ensure that Site workers and the community are not exposed to unacceptable risks.

- 9.4 A commenter stated that it is essential that the vapors from all areas be measured and reported to anyone interested on a regular basis. The commenter also recommended that the remediating party secure the contact information (email or other) for all interested parties, and that EPA provide quarterly reports on the progress of remediation efforts. The commenter requested that all of the updates provided to community be in "plain language" without undue ambiguity and with opportunities for further information clearly available.

Response: As an important part of EPA's oversight, air emissions will be monitored throughout the implementation of the selected remedy to ensure that the surrounding community and Site workers are not exposed to unacceptable risks. The Site will have several sampling points on the property boundaries as well as more intensive points near the areas within the Site under construction. The appropriate response measures will be developed during the RD phase, including community and regulatory notifications that may be necessary.

Regarding the request for reporting on a regular basis, EPA began issuing detailed quarterly updates via email to the community in July 2012. In a clear and concise manner, the quarterly updates document the project status and focus on major tasks completed over the past quarter, as well as anticipated tasks for the upcoming quarter. The commenter's email address has been added to the distribution list for the quarterly updates.

9.5 A commenter urged EPA to be transparent and communicate with the community in a timely matter throughout the remediation process. The commenter asked that EPA appoint a community liaison to interface with and be available to the community throughout the duration of remedial activities. The commenter asked that this liaison provide the community with periodic updates on all remedial activities and advance notice of all scheduled activities pertaining to the remediation. The commenter asked that the liaison also provide advance notice of activities that may adversely affect the health, welfare and property of the citizenry, as well as adverse impacts on business operations or community activities. The commenter stated that this person should have the primary responsibility to work with the community, business operators and governmental representatives to mitigate or eliminate any potential adverse impacts of the remedial activities.

Response: EPA has assigned a Community Involvement Coordinator, whose primary responsibility is to involve and inform the public about the Superfund process and the response actions conducted at the Site. The current Community Involvement Coordinator for the Site is Melissa Dimas, who can be contacted via phone at 212-637-3677 or via email at [dimas.melissa@epa.gov](mailto:dimas.melissa@epa.gov). Any questions, comments or concerns related to the Site may be directed to the EPA Community Involvement Coordinator. EPA also maintains a Community Involvement Hotline for the general public to call regarding issues and concerns regarding the Site. The toll-free hotline is 1-800-346-5009.

As mentioned in the response to Comment 9.4 above, EPA began issuing detailed quarterly updates via email to the community in July 2012. The quarterly updates document the project status and focus on major tasks completed over the past quarter, as well as anticipated tasks for the upcoming quarter. The commenter's email address has been added to the distribution list for the quarterly updates.

9.6 A commenter requested that the community be compensated for the loss of resources over the years that the Site has not been remediated. The commenter then acknowledged that her request was addressed in the Executive Summary of the Site-wide FS, which states the "remedial program will also be designed to allow for concurrent planning and implementation of prospective Natural Resource Damage restoration measures."

Response: Comment noted.

- 9.7 The commenter recommended that two neighboring businesses, the local sewerage authority and the local water utility, be protected from contamination found on the Site.

Response: The impact to the surrounding commercial and residential areas has been and will continue to be given serious consideration throughout the implementation of the selected remedy. To ensure that the surrounding community members are not exposed to unacceptable risks, air emissions will be monitored throughout the implementation of the selected remedy. A 2008 assessment concluded that there is no risk of vapor intrusion via the groundwater pathway for residential and commercial areas nearby the Site. The surrounding commercial properties are currently serviced by a public water supply that is not connected with the contaminated groundwater beneath the Site; therefore, employees of these businesses are not exposed to the contaminated groundwater beneath the Site. In addition, the groundwater component of the selected remedy will address any potential contamination that may be migrating from the Site to the Raritan River.

- 9.8 The Site owner stated that the use of both freight trains and trucks will be evaluated for the transportation of materials during the design phase. The Site owner also noted that the potential impacts to the community will be considered in the evaluation process and mentioned that rail transportation has been successfully used in past remediation activities at the Site.

Response: Comment noted. EPA agrees with this approach.

- 9.9 Several commenters recommended that EPA consider utilizing the active rail line on the Site for the transportation of materials to and from the Site. One commenter noted that the Proposed Plan calls for the importation of approximately 960,000 tons of fill materials, which represents about 48,000 truckloads into the Site, or 96,000 truck movements.

Response: EPA acknowledges that increases in truck traffic through the local community will occur during the implementation of the selected remedy. In fact, increases in truck traffic through the community would be experienced

to some degree for all of the alternatives, with the exception of Alternative 1. However, EPA will evaluate all transportation options, including the use of rail and trucks, during the RD phase to minimize the impact on the surrounding community. Under the selected remedy, if transportation via trucks is selected, it is anticipated that trucks would carry only S/S admixtures, clean fill and construction materials, as opposed to the transportation of highly contaminated material under other alternatives that called for off-site disposal or treatment.

#### Principal Threat Waste (PTW)

10.1 A commenter stated that all PTW should be consolidated in Impoundments 3, 4 and 5 for treatment with in-situ S/S.

Response: As noted in the Decision Summary of the ROD, the selected remedy will in fact address all PTW found on-site (with the exception of Impoundments 1 and 2) by consolidating them into Impoundments 3, 4 and 5 and treating these materials via in-situ S/S followed by capping.

10.2 A commenter asked how the characteristics of the Site's wastes could be unknown at this juncture in the project and states that areas containing PTW should be known. The commenter asked how a remedy can be selected when the waste types are not ascertained.

Response: In the Proposed Plan and Site-wide FS, the impacted media was delineated at the Site based upon several previous RIs. EPA has recognized that conditions at the Site may have changed in some locations since sampling was conducted as part of these historical investigations; therefore, the selected remedy requires the completion of a pre-design investigation to confirm the identified areas and further delineate areas containing PTW.

Based upon the nature and extent of contamination identified by the historical investigation, the process of selecting a remedy was completed. As previously noted in the response to Comment 2.1, the selected remedy will be protective of human health and the environment, will comply with ARARs, will be cost-effective and will utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

10.3 A commenter stated that principle threat waste is typically removed or treated. The commenter noted that about 145,000 cubic yards of PTW are to be consolidated under the selected remedy. The commenter estimated that it would be about \$50 million to remove and treat/dispose these materials off-site, which would be about a 25% increase in the capital cost for the remedy. The commenter noted that PTW has been removed from several other Superfund sites throughout Region 2, such as Cornell-Dubilier, Chemical Insecticide, Horseshoe Road, Ventron/Velsicol, White Chemical and Bayonne Barrel and Drum, and recommended that EPA take the same approach with the American Cyanamid site.

Response: The excavation and off-site treatment or disposal of this material was considered but not selected by EPA for a number of reasons stated in both the Proposed Plan and the ROD. The intrusive excavation activities that would be required for off-site disposal/treatment could last for over 20 years, which is more than double the implementation time frame of the selected remedy. Because of the intrusive excavation activities required for removal of the PTW, there would be significant challenges in controlling air emissions within acceptable levels. A remedy involving off-site disposal would require the transportation of highly contaminated material through the community. EPA estimates that the volume of PTW to be treated via in-situ S/S under the selected remedy is approximately 230,000 cubic yards. The estimated cost for excavation and off-site disposal of this volume of material would exceed \$150 million using unit costs similar to those of the excavation and off-site disposal component utilized in Alternative 11. This would result in about a 75 percent increase to the cost of the selected remedy, not the 25 percent as suggested.

EPA believes that the selected remedy will meet the remedial action objectives (RAOs) created to address the human health risks and environmental concerns at the Site. The RAOs for PTW are to remove or treat material that meets the definition of PTW, to the extent practical, and prevent current or potential future migration of material that meets the definition of PTW from the Site that would result in direct contact or inhalation exposure, to the extent practicable. The selected remedy calls for the treatment of PTW via in-situ S/S, followed by containment using an engineered capping system. Under the selected remedy, the RAOs will be met by treating materials that meet the definition of PTW to prevent the migration this material

from the Site. While PTW has been removed from other Superfund sites in Region 2, EPA believes that the selected remedy will effectively meet the RAOs and minimize the impact to workers and the surrounding community.

National Remedy Review Board (NRRB or Board)

11.1 A commenter asked that the NRRB's role be clarified so that the public may better understand the scientific and regulatory basis for EPA's Proposed Plan. Specifically, the commenter asked that EPA outline the membership, transparency, accountability, policies and decision-making procedures of the NRRB.

Response: EPA created the NRRB in January 1996 as part of a comprehensive package of reforms designed to make the Superfund program faster, fairer and more efficient. The NRRB is a peer review group comprised of managers and senior technical or policy experts from EPA offices across the nation that understand both the EPA regional and headquarters perspectives in the remedy selection process. The Board reviews proposed Superfund cleanup decisions that meet cost-based review criteria to assure they are consistent with Superfund law, regulations and guidance. Please see the following link for more information on EPA's NRRB: <http://www.epa.gov/superfund/programs/nrrb/index.htm>

11.2 A commenter asked how NRRB reviews are triggered.

Response: The NRRB typically reviews proposed interim and final Superfund response decisions at NPL sites for which the estimated remedial action costs exceed \$25 million. On March 16, 2010, EPA presented the proposed alternatives of the Comprehensive Site-wide FS to the Board to evaluate the appropriate remedy. For more information on the NRRB review criteria, please visit the following link: <http://www.epa.gov/superfund/programs/nrrb/reviewcr.htm>

11.3 A commenter asked how NRRB members are selected.

Response: NRRB members are appointed by senior management officials of the offices they represent. The members are selected based on their extensive experience and are considered national experts in their respective fields. The Board includes one representative from each the ten EPA regional offices. The regional representatives are typically senior-level technical staff/managers with

significant remedy selection expertise. In addition, there are about ten or more policy and technical experts from various EPA program offices nation-wide which also are selected based on their significant remedy selection experience.

- 11.4 A commenter asked about the qualifications and affiliations of the NRRB members.

Response: The NRRB is a technical and policy review group made up of members that have significant experience with both regional and Headquarters perspectives in the Superfund remedy selection process. Its members include senior managers and technical experts from each EPA region, as well as senior technical and policy experts from other EPA national offices. These include the Office of Superfund Remediation and Technology Innovation, Office of Research and Development, Office of Radiation and Indoor Air, Federal Facilities Restoration and Reuse Office, Office of Site Remediation Enforcement and the Office of General Counsel. The Board is chaired by the Office of Superfund Remediation and Technology Innovation. The following link contains a list of the NRRB members:

<http://www.epa.gov/superfund/programs/nrrb/members.htm>

- 11.5 A commenter asked what ethical standards govern the NRRB.

Response: The Board is charged with carrying out its duties with the highest degree of ethical standards. If, for example, a member has an actual or even perceived conflict of interest in connection with a site coming to the Board, he/she would not participate in that review.

- 11.6 A commenter asked how NRRB recommendations are developed.

Response: The NRRB reviews proposed Superfund cleanup decisions that meet cost-based review criteria to assure they are consistent with Superfund law, regulations, guidance and national policy. Board members develop their recommendations based upon their experience and expertise involving Superfund cleanup decisions.

- 11.7 A commenter asked how the NRRB deliberates.

Response: The NRRB generally meets quarterly to review proposed decisions that meet its cost-based review criteria. The product of the review is a memorandum sent



from the NRRB to the regional Superfund Division Director that documents the Board's recommendations about the proposed cleanup strategy for a particular site. The NRRB review process allows full input from EPA regional site managers and other site team members as deemed appropriate by the region whose site is under review.

11.8 A commenter asked if the NRRB conducts peer review.

Response: Yes, as previously mentioned, the NRRB is a peer review group that reviews proposed Superfund cleanup decisions that meet cost-based review criteria to assure they are consistent with Superfund law, regulations and guidance.

11.9 A commenter asked if the NRRB is subject to the Federal Advisory Committee Act.

Response: The NRRB is an internal advisory group and not subject to the Federal Advisory Committee Act.

11.10 A commenter asked how the NRRB could first engage on March 16, 2010 and develop the selected alternative proposed on February 2012, after EPA and NJDEP have been involved at the Site for almost 30 years.

Response: EPA Region 2 presented the proposed remedial alternatives from the Site-wide FS to the NRRB in March 2010. At this presentation, EPA Region 2 recommended Alternative 4 as the preferred remedial alternative. The NRRB completed its review of the remedy in April 2010 and provided Region 2 with several recommendations. As a result, an additional alternative, Alternative 4A, was developed in response to the Board's advisory recommendations. The remedy selected in the ROD reflects this new alternative with NRRB's input. The NRRB Information Package developed for the Site, the Board's recommendations letter and the Region's response are all included in the Administrative Record for the Site.

11.11 A commenter asked if the NRRB recommendations are subject to the same scientific and regulatory standards of EPA Region 2.

Response: The NRRB reviews the proposed response decisions of response actions that meet the cost-based review criteria. The NRRB provides recommendations to the

individual EPA regions; however, these recommendations do not change the agency's delegations or alter in any way the public's role in site decisions. Ultimately, the EPA regions have the final decision-making authority. The remedies proposed by any EPA region are still required to comply with, or waive, the substantive requirements of ARARs.

11.12 A commenter asked what explains the NRRB's deviation from EPA Region 2.

Response: As discussed above, the NRRB is a technical and policy review group comprised of senior managers and technical experts from each EPA region, as well as senior technical and policy experts from other EPA national offices. The NRRB provides its recommendations to the individual EPA Regions; however, these recommendations do not change the agency's delegations or alter in any way the public's role in site decisions. Ultimately, the EPA regions have the final decision-making authority. Please see the following link, which is a memorandum regarding the formation of the NRRB:  
<http://www.epa.gov/superfund/programs/nrrb/11-28-95.htm>.

#### South and West Area Impoundments & Ecological Risk Assessments

12.1 The Site owner commented that Alternative 4A will minimize disruption to existing wetlands and that the targeted remedy for Impoundments 13, 17 and 24 located within the flood fringe and outside the Main Plant area will be based upon the results of an ecological risk assessment. The Site owner discussed why this is the most appropriate approach for these impoundments.

Response: Comment noted. EPA agrees that this is the best approach for Impoundments 13, 17 and 24.

12.2 A commenter stated that materials in the Flood Plain area requiring direct contact, vapor or movement control should be relocated to the Main Plant area and covered by the appropriate engineered multi-layered cap.

Response: As indicated in the Decision Summary of the ROD, the impoundments in the South and West Areas will undergo an ecological risk assessment. Based upon the results of this assessment, the South and West Area impoundments will either remain as is if it is demonstrated that there is no

unacceptable risk or be excavated and consolidated in the North Area in areas where the same types of controls are warranted.

- 12.3 A commenter stated that the scope of the ecological screening and assessment was too narrow spatially, ecologically and in terms of all discharges. The commenter also stated that the 1992 BEA and the 2005 BERA were limited to on-site habitat and did not consider all ecological values and functions. The scope of the assessment was not Site-wide and did not consider off-site impacts to sediments and biota, including downstream and estuarine impacts.

Response: The ecological risk assessments included sampling in the Raritan River as well as on-site habitats. As discussed in the response to Comment 5.9 in the written comments section, additional off-site sampling in the Raritan River is planned as part of ongoing efforts.

- 12.4 A commenter stated that the Raritan River is impacted by surface discharges, in addition to groundwater discharges from the Site. The commenter stated that the ecological assessments did not evaluate surface discharges, such as stormwater runoff, point source discharges, failure of impoundments/seepage/breakout and other impacts associated with flood events.

Response: The media sampled from the Raritan River are expected to serve as reservoirs of contamination derived from a variety of sources including those identified in the comment above. As discussed in the response to Comment 5.9 in the written comments section, additional evaluation of Raritan River media is planned as part of ongoing efforts at the Site.

#### Hill Property

- 13.1 A commenter noted that the TD Bank Ballpark was formerly considered part of the Site and asked what remediation activities were conducted on the Hill Property.

Response: The TD Bank Ballpark is part of the former Hill Property, which was addressed under OU6. The Hill Property was separated from the former Main Plant area of the Site and consisted of administrative buildings and a research laboratory. Historical records, aerial photographs and

sampling efforts have all indicated that no waste disposal activities were ever conducted on any portion of the Hill Property. In 1996, NJDEP, with EPA concurrence, issued a no further action ROD with groundwater monitoring and institutional controls. In 1998, EPA deleted 140 acres of the Site from the Superfund National Priorities List and the property has since been redeveloped for commercial use.

- 13.2 A commenter asked what tests have been conducted to ensure the safety of workers on the former Hill Property.

Response: A quantitative analysis of the risks associated with the Hill Property soils was conducted in the 1992 Baseline Endangerment Assessment (BEA) to evaluate risks associated with exposure through incidental ingestion, dermal contact and inhalation as a result of intermittent maintenance employees performing work activities. This assessment concluded that the risks associated with baseline and future land use conditions at the Hill Property are below levels for concern for carcinogenic and noncarcinogenic health effects. Soil sampling was also conducted on the Hill Property as part of the 1996 OU6 ROD. The results of this sampling effort indicated that no soil contamination was present above NJDEP soil cleanup criteria (both residential and nonresidential) or background levels at the Hill Property.

Previous air monitoring conducted at the Site indicated that contaminants above levels for concern are not migrating off-site. During the implementation of the selected remedy, air emissions will be monitored to ensure the public's safety.

All of the businesses located on the former Hill Property are currently serviced by a public water supply that is not connected with the contaminated groundwater beneath the Site. A 2008 assessment concluded that there is no risk of vapor intrusion via the groundwater pathway for residential and commercial areas north of the Site.

- 13.3 A commenter stated that flooding occurs frequently in this area and asked if soil and water had been tested since the Hurricane Irene flooding to ensure that contamination did not migrate off-site to nearby areas.

Response: During the Hurricane Irene storm event, flood waters overtopped the flood control berm surrounding the North Area and flooded the Hill Property. The flood protection berm prevents flood waters in this portion of the Site from receding and created a 'bathtub' of standing water. Several rounds of sampling were performed on this standing water to ensure that it did not impact the water quality of Cuckel's Brook and the Raritan River. After the sampling results confirmed that contaminant concentrations were below levels of concern, the standing water was released under controlled conditions so that local communities downstream were not affected. This standing water was released to Cuckel's Brook several weeks after the Hurricane Irene storm event in a manner that did not cause flooding in downstream communities. The sampling conducted on this standing water within the bermed area provides an indication of the water quality conditions during and immediately after flooding. Based upon the results of this sampling, it is unlikely that Site contaminants affected any nearby communities both during and after the flood event.

The flood waters associated with Hurricane Irene resulted in the accumulation of sediments in three areas outside the American Cyanamid site (Blue Lot parking area; New Jersey Transit Railroad Platform and pedestrian entrance, and; Railroad Underpass to the Blue Lot and main entrance to the Former Plant Area). These sediment accumulations were found to have elevated levels of metals (arsenic, lead) and it is unclear whether the source of these elevated concentrations is related to the Site. Regardless, after flood waters receded, the Site owner restricted access to these areas until the sediments were removed and disposed of off-site.

All of the businesses located on the former Hill Property are currently serviced by a public water supply that is not connected with the contaminated groundwater beneath the Site.

- 13.4 A commenter asked if the air inside the TD Bank Ballpark offices and the Somerset Medical Center Sports Performance and Rehabilitation Center had been tested for vapor intrusion.

Response: A preliminary assessment (Vapor Intrusion Assessment Work Plan, October 2008) was conducted to

evaluate the potential for a vapor intrusion pathway. The first stage of this assessment determined that overburden groundwater (known as shallow groundwater) is the only vapor source with the potential for a complete pathway to off-site potential receptors. The second stage determined that a rapid action was not warranted based upon Site conditions. The third stage of the assessment compared existing overburden groundwater data to general vapor intrusion screening levels. Concentrations exceeding these screening levels were not identified in any areas of potential receptors. Particularly, four off-site monitoring wells to the north of the Site were sampled for VOCs and SVOCs. Several rounds of sampling were conducted on these monitoring wells from 2005 to 2008. The closest of these monitoring wells, Monitoring Well-15, is located approx 400 feet from the TD Bank Stadium. Two of these monitoring wells are located to the west of the stadium and one is located southeast of the stadium on the STS property. Groundwater concentrations at all of these monitoring wells were below the screening levels. Therefore, the assessment determined that there is no risk of vapor intrusion via the groundwater pathway for residential and commercial areas north of the Site.

In 2011, another assessment was completed which included the installation and sampling of three additional monitoring wells. Two of these additional monitoring wells were installed along the northern property line and sampling also indicated that concentrations were less than the screening levels.

- 13.5 A commenter asked if frequent hand-washing and/or showering at the TD Bank Ballpark posed any risk to human health.

Response: The TD Bank Ballpark is currently serviced by a public water supply that is not connected with the contaminated groundwater beneath the Site. New Jersey American Water, the local public water utility, is required to comply with federal drinking water regulations established by the EPA. The water supplied by NJ American Water is treated to ensure that it complies with state and federal standards before distribution to local homes and businesses. The drinking water supplied by NJ American Water is monitored regularly for a number of drinking water contaminants including Site constituents. The following link provides more information on the

contaminants that suppliers of drinking water, such as NJ American Water, are required to sample for and meet federal maximum contaminant levels:

<http://water.epa.gov/drink/contaminants/index.cfm>.

NJ American Water is also required to mail water quality reports to their customers annually. These annual reports can also be found on their website using the following link: <http://amwater.com/ensuring-water-quality/water-quality-reports.html>.

- 13.6 A commenter asked if there are any long-term exposure concerns for employees of the TD Bank Ballpark.

Response: The highest potential carcinogenic risk calculated in the 1992 BEA was  $1.0 \times 10^{-6}$ , and the highest potential Hazard index calculated was 0.0002, which were associated with the future use scenario of an individual ingesting Site soils. Based upon the results of the BEA and the vapor intrusion assessments, the human health risks at the Hill Property are below levels of concern for Site-related carcinogenic and noncarcinogenic health effects.

- 13.7 A commenter stated that the Hill Property is zoned for commercial use; however, the commenter asked if this property could potentially be zoned as residential given the current levels of soil contamination on this property.

Response: Current Bridgewater Township zoning maps indicate that the Hill Property is zoned as "Planned Retail Commercial and Public Development." The Hill Property was historically zoned for commercial/industrial use, as it was formerly used by the American Cyanamid Company for administrative buildings and a research laboratory. Historical records, aerial photographs and sampling efforts have all indicated that no waste disposal activities were ever conducted on any portion the Hill Property. It is stated in Section 6 of the 1996 OU6 ROD that "there is no soil contamination above the NJDEP cleanup criteria (both residential and nonresidential) or background... at the Hill Property." Based upon this statement, the Hill Property could potentially be zoned for residential use given the results of historical soil sampling. The concentrations of detected contaminants are compared to NJDEP soil cleanup criteria in Table 1 of the OU6 ROD.

## Office of the Inspector General Report

- 14.1 Several commenters referenced a 2008 Office of the Inspector General (OIG) Report, which evaluates EPA's management of the backlog of Superfund sites. The objective of this report was to determine why some Superfund sites, listed on the NPL prior to October 1986, have not reached construction completion or achieved key environmental indicators. Several commenters noted that the 2008 OIG Report concluded that NJDEP and EPA caused unnecessary delays in cleaning up sites and concluded that timely and protective actions were not taken. A commenter stated that the Report's findings are relevant and should be discussed and applied to the proposed cleanup plan. The commenter stated that it is impossible to determine if the OIG findings have been addressed if the Proposed Plan does not mention this Report.

Response: As indicated in Region 2's response to the 2008 Report, there are a number of reasons for the delayed cleanup pace at the Site. The primary issues are the volume, location and complexity of waste materials at the Site. The Site is approximately 435 acres and contained 27 impoundments at the time of its listing on the NPL. Approximately 1.13 million cubic yards of impoundment material have been addressed to date and approximately 426,750 cubic yards of impoundment material still require remediation; therefore, about 73 percent of impoundment material at the Site has been addressed to date. It is estimated that the volume of contaminated soils on-site is approximately 3.34 million cubic yards. The quantity and complexity of the contamination at the Site are the primary reasons for the delays encountered. For a more detailed discussion of the slow pace of cleanup efforts at the Site, please see the Region 2 and NJDEP responses, which can be found in Appendices B and C of the 2008 OIG Report, respectively.

### Impoundments 1 & 2

- 15.1 A commenter agreed that Impoundments 1 and 2 should be addressed in a separate FS.

Response: As indicated in the Proposed Plan and this ROD, EPA and NJDEP agreed to separate Impoundments 1 and 2 from the Site-wide FS and Site-wide remedy decision in 2009. The waste in these two impoundments has different



characteristics than much of the waste materials on the Site. It is more highly concentrated and complex. In addition, the two impoundments are located immediately adjacent to the Raritan River. As a result, they are the subject of a separate Focused Feasibility Study (FFS) which is currently underway; a remedy specific to the two impoundments will follow.

- 15.2 Several commenters recommended that Impoundments 1 and 2 be fully remediated immediately.

Response: As indicated in the response to Comment 15.1 above, Impoundments 1 and 2 are being addressed in a separate FFS due to the highly concentrated and complex nature of their waste contents as well as their close proximity to the Raritan River. Because they are different, further study is necessary to determine the most effective and safe method to address the waste materials in the two impoundments. Meantime, a number of interim measures have been taken to reduce the threats to human health and the environment associated with these impoundments until a long-term solution can be developed. The measures include a series of berm improvements, the placement of a water cap over each impoundment, as well as the installation of a synthetic cover over the two impoundments. The Site owner will be required to conduct routine and regular inspections of these protective measures.

#### Minor Proposed Plan Revisions

- 16.1 The Site owner noted that the groundwater component of the proposed remedy includes groundwater collection and treatment. As stated in the Proposed Plan, "Conceptual improvements to the bedrock collection system include placing of the primary extraction well(s) in a more central location of the impacted bedrock and placing targeted bedrock extraction wells to address localized impacts such as in the vicinity of Lagoons 6 and 7/Impoundment 24." The Site owner recommended that the Proposed Plan be revised to clarify that the proposed remedy will address the bedrock groundwater from the Impoundments 1 and 2 area, other groundwater impacts located in the eastern part of the Site, as well as any other groundwater impacts that would be identified during the pre-design investigation preceding the RD. This approach is consistent with the installation of "targeted

bedrock extraction wells to address localized impacts." As for the entire groundwater control system "additional details of these improvements would be developed during remedial design."

Response: Comment noted. The remedy will address the bedrock and overburden groundwater over the entire Site as well as from the South Area where Impoundments 1 and 2 are located. The Decision Summary of the ROD discusses the scope of the groundwater remedy.

- 16.2 The Site owner referenced page 16 of the Proposed Plan, where the remedy for Flood Plain soils (now referred to as South and West Area soils) and the Drying Bed Area for Alternative 4A are discussed. The Proposed Plan states, "These areas identified in the FSR requiring direct contact, movement and vapor control would be excavated and consolidated at the Main Plant in areas where the same types of controls are warranted." The commenter recommended that this sentence be revised to: "These areas identified in the Site-wide FS requiring direct contact, movement and vapor control (i.e., the area south of Impoundment 13 and the former Drying Bed Area depicted on Figure 4 of the Proposed Plan) would be excavated and consolidated at the Main Plant in areas where the same types of controls are warranted."

Response: EPA agrees with this comment. For clarification purposes, this sentence has been revised in the Decision Summary of the ROD.

- 16.3 The remedial action description for Impoundments 13, 17 and 24 under Alternative 4A on page 16 of the Proposed Plan, states "an ecological risk assessment would be conducted during the RD phase to identify if any material requires relocation and consolidation in the Main Plant in areas requiring direct contact control." For clarification purposes, the Site owner recommended that the Proposed Plan should reflect that the materials in these three impoundments are the only materials at the Site requiring additional ecological risk assessment.

Response: Comment noted. The ROD has been revised to provide a more detailed explanation of how the impoundments in the South and West Areas will be addressed. An ecological risk assessment will be conducted for Impoundments 13, 17 and 24 to confirm the appropriate

treatment for these materials. If the ecological risk assessment identifies that any impoundment contents present an unacceptable risk, these materials would be relocated and consolidated in the North Area in areas where the same types of controls are warranted. Any impoundment contents that do not present an unacceptable risk could remain in their current location.

- 16.4 The Site owner identified an error in the "Corrective Action on Groundwater Discharges" section. The statement that "after sampling was performed and laboratory analysis was completed in December 2010" is incorrect. The sampling was performed in December 2010, but the laboratory data were not available to Wyeth Holdings Corporation until January 6, 2011, the same day that the data were reported to EPA and NJDEP. The Site owner recommended that this statement be revised to read: "after sampling was performed and preliminary laboratory analytical results were reported on January 6, 2011."

Response: Comment noted. This error has been corrected and reflected in the ROD.

- 16.5 In the "Previously Remediated Impoundments" section on page 5 of the Proposed Plan, there is a reference to 50,000 cubic yards of highly mobile material from Impoundments 1, 2, 4 and 5 being treated on-site through recycling as a fuel source. The Site owner clarified that all of this light oil material was treated off-site for energy recovery, not on-site.

Response: Comment noted. This sentence has been revised in the Decision Summary of the ROD.

- 16.6 On page 7 of the Proposed Plan under the heading "Investigation Summary," the first sentence of the first paragraph indicates that all remedial activities were suspended in 2004, however, this is not completely accurate. It was suggested that this sentence be modified to read: "Remedial activities were suspended in 2004 pending the completion of a Site-wide Feasibility Study (FS), with the exception of other ongoing investigation and remediation activities associated with Impoundments 14, 15, 16 and 20 and continued bedrock groundwater extraction and treatment."

Response: Comment noted. This sentence was revised in the Decision Summary of the ROD.

- 16.7 On page 9 of 21 under the heading "Scope and Role of Action," the Site owner recommended that the fourth bullet be deleted referencing Impoundments 1 and 2 since the eighth bullet calls out a new operable unit, OU8, which is specifically for Impoundments 1 and 2. Also, the fourth paragraph of this section indicates that all ongoing remedial activities were suspended when, in fact, remediation of Impoundments 14, 15, 16 and 20 and groundwater extraction/treatment continued.

Response: The Site-wide ROD indicates that Impoundments 1 and 2 are being addressed under the recently created OU8. The fourth paragraph of this section in the Site-wide ROD has been revised to clarify that remediation continued for Impoundments 14, 15, 16 and 20, as well as the bedrock groundwater extraction system.

- 16.8 On page 16, the Site owner recommended that the first sentence be revised as follows: "This alternative would provide a combination of caps over impacted areas in the Main Plant to control the potential for direct contact with impacted soils/impoundment contents, which is one of the primary RAOs for the Site, with the addition of excavation and consolidation in the Main Plant for areas in Impoundments 13, 17 and 24 as determined by an ecological risk assessment."

Response: The Decision Summary of the ROD accurately states that Impoundments 13, 17 and 24 would be excavated and consolidated into the North Area (former Main Plant area) if determined to be necessary by an ecological risk assessment.

- 16.9 On page 20, in the second paragraph of the "Implementability" section, it is stated that "...however, Alternative 4A provides more protection through relocation of the Impoundment material in the flood plain to the Main Plant." The site owner recommended that this statement be revised to read: "...however, Alternative 4A provides more protection through relocation of the Impoundment material in the flood plain to the Main Plant if required by results of an ecological risk assessment."

Response: Comment noted. Impoundments 13, 17 and 24 would be excavated and consolidated into the Main Plant area (now referred to as the North Area) if determined to be necessary by an ecological risk assessment. The Decision Summary of the ROD specifically states this approach.

16.10 The Site owner noted that the second paragraph in the second column of page 16 is misplaced in the Proposed Plan. The Site owner stated that this paragraph is in reference to determining what materials meet the definition of PTW and should be placed after the second paragraph under "Main Plant Soils, Impoundments 3, 4 and 5."

Response: Comment noted. The paragraph referenced above has been revised and relocated to the appropriate location under "North Area Soils, Impoundments 3, 4 and 5."

#### Inaccuracies in Public Comments

17.1 A commenter stated that the Site is adjacent to the Rahway River.

Response: For clarification purposes, the American Cyanamid Superfund site is located adjacent to the Raritan River.

17.2 Several commenters inaccurately referenced the acreage of the Site.

Response: For clarification purposes, the American Cyanamid Superfund site comprises approximately 435 acres.

17.3 A commenter stated that the Pfizer Corporation left the toxins behind.

Response: For clarification purposes, the commenter's statement that the toxins were left behind by the Pfizer Corporation is inaccurate. Pfizer, Inc. assumed responsibility for the American Cyanamid Superfund site as part of its larger acquisition of Wyeth Holdings Corporation in October 2009. The American Cyanamid Company was responsible for most of the contamination at the Site.

#### Other Comments

18.1 Several commenters requested an extension of the public comment period.

Response: The public comment period began on February 16, 2012 and was initially scheduled to conclude after 45 days on March 31, 2012. In response to several requests for an extension of the public comment period, a 45-day extension was announced by EPA at the March 8<sup>th</sup> public meeting. Therefore, the public comment period began on February 16, 2012 and concluded on May 15, 2012, resulting in a 90-day public comment period.

- 18.2 The Site owner recommended that EPA encourage the beneficial reuse of soil from other development projects in the area as a goal during the design and implementation of the proposed remedy.

Response: Comment noted. The beneficial reuse of soil will be evaluated in the RD phase.

- 18.3 A commenter requested that EPA formally consult with U.S. Fish and Wildlife on the ecological basis of the proposed cleanup plan. The commenter stated that formal consultation should include *de novo* Site-wide ecological impact assessment (including off-site and down-river impacts) in order to assess natural resource injuries and require mitigation, restoration and compensation for all natural resource injuries, as required by law.

Response: The U.S. Fish and Wildlife Service is one of several agencies that have been involved in the remedial investigation of the Site. An informal consultation with the US Fish and Wildlife was conducted through the Endangered Species Act (Section 7). Formal consultation is not typically conducted under CERCLA.

- 18.4 Several commenters inquired about bid information and contact information for any future work at the Site.

Response: The American Cyanamid Superfund site is a PRP-lead site. Pfizer, Inc. assumed environmental liability for the cleanup of the Site through its purchase of Wyeth Holdings Corporation in 2009 and is anticipated to be in charge of bidding for this project. Therefore, please contact Russell Downey, the Director of Pfizer Environmental Engineering, Remediation and Transactions for Pfizer Global Engineering at:

Russell Downey, Director  
Environmental Engineering, Remediation and Transactions  
Pfizer Global Engineering  
100 Route 206 North, m.s. 6/610  
Peapack, New Jersey 07977  
email: [russell.g.downey@pfizer.com](mailto:russell.g.downey@pfizer.com)

- 18.5 A commenter stated that the Proposed Plan's ability to work must be ascertained before it is selected. The commenter stated that EPA issued a ROD for the same impoundments in 1998 and that remedy was found to be wrong after subsequent work during the design phase. The commenter recommended that EPA re-evaluate the Proposed Plan to ensure that history does not repeat itself.

Response: As discussed within the history section of the ROD, a re-evaluation of several of the remedies has already been conducted at the Site. As a result, a Site-wide FS was performed utilizing all the data and information previously obtained at the Site. EPA is confident that the Site-wide FS provides adequate assurance that the selected remedy will be successful in addressing all Site-wide contamination (with the exception of Impoundments 1 and 2 as discussed previously). EPA also re-evaluated the preferred remedy after reviewing all of the written and verbal comments received from the public during the public comment period and concluded this alternative was appropriate for addressing the contamination at American Cyanamid. EPA is confident that the selected remedy will be protective of human health and the environment, while complying with ARARs, being cost-effective and utilizing permanent solutions and alternative treatment technologies to the maximum extent practicable.

- 18.6 A commenter stated that EPA has a "suspicious record" when it comes to protecting big corporations and suggested that the financial status of big corporations affects the development of feasibility studies and the extent that EPA forces responsible parties to cleanup a Superfund site.

Response: Comment noted.

## Part 2. Verbal Comments

- 1.1 Several commenters from the March 8, 2012 Public Meeting expressed support for EPA's preferred remedy, Alternative 4A.

Response: Comment noted.

- 2.1 A commenter expressed support for the continued involvement of the current TAG (technical assistance grant) recipient as the community watchdog for the Site.

Response: Comment noted.

- 2.2 A commenter expressed support for any plans that provide the community with greater access to the Raritan River. The commenter also noted that there is a portion of the Site adjacent to the Bridgewater train station that would be attractive for redevelopment.

Response: As discussed earlier in the response to written Comment 8.2, the future use of the Site will be determined by the Site owner; however, EPA will communicate the commenter's preferences for the reuse of the Site to the Site owner. The current Site owner has discussed a number of potential future uses for the Site ranging from light industrial use to recreational use. It should be emphasized that reuse of any portion of the property would not occur until either the remedy is complete in its entirety or it is determined that reuse would not interfere with the implementation of remediation activities. Please see the "Current and Potential Future Site and Resource Use" section of the Decision Summary of the ROD for a further discussion of the future use of the Site.

- 3.1 A commenter expressed a desire for the establishment of some kind of public green space as a future use of the Site.

Response: Comment noted. As discussed earlier in the response to written Comment 8.2, the future use of the Site will be determined by the Site owner; however, EPA will communicate the commenter's preferences for the reuse of the Site to the Site owner. Based upon the anticipated remedial completion of the Site, green space is highly likely to be a part of the future redevelopment plans.



Please see the response to written Comment 8.2 for further discussion of the future use of the Site.

- 3.2 A commenter asked if there were any proposed time frames for returning portions of the property to make it available for future uses, either business or public recreational purposes.

Response: This comment was addressed at the March 8<sup>th</sup> Public Meeting and the response can be found in Attachment C. EPA anticipates that it will take a number of years to design the selected remedy following the issuance of this ROD. The Site will likely be addressed in phases and some areas may be remediated earlier than others. EPA anticipates that portions of the Site may be made available for public use towards the end of the selected remedy's 10-year implementation time frame. However, it is conceivable that portions of the property could be made available earlier. It should be noted that the reuse of any portion of the property would not occur until either the remedy is complete in its entirety or it is determined that reuse would not interfere with the implementation of remediation activities.

- 4.1 A commenter asked that as the remediation is undertaken, that it be done in a way that recognizes and minimizes or avoids adverse impacts to the community.

Response: EPA will consider the impacts to the community throughout the remedial process to ensure that impacts to the community are minimized. The safety of Site workers and the surrounding community will be of the utmost concern to EPA throughout the implementation of the remedy. Routine air, groundwater, surface water and sediment monitoring will be conducted throughout the implementation of the remedy to ensure that Site workers and the community are not exposed to unacceptable risks. In addition, all future truck traffic will be analyzed for road and safety impacts within the community.

- 4.2 A commenter asked that EPA consider appointing a liaison to the community to interface with the community so that a person is available to contact when remedial action activities are undertaken.

Response: This comment was addressed at the March 8<sup>th</sup> Public Meeting and EPA's verbal response can be found in

Attachment C. EPA has assigned a Community Involvement Coordinator, whose primary responsibility is to involve and inform the public about the Superfund process and the response activities conducted at the Site. Please see the response to written Comment 9.5, which provides contact information for the Community Involvement Coordinator and further discusses the role of this liaison and several of the other community involvement tools utilized by EPA.

- 5.1 A commenter, who was representing a local Bridgewater committee, stated that the committee was dedicated to working with the Site owner to have an effective, responsible cleanup.

Response: Comment noted.

- 6.1 A commenter, representing the local sewerage authority, stated that he was very pleased to see the cleanup moving forward, but had several concerns. These individual concerns are addressed below in the responses to Comments 6.1A-6.1C.

- 6.1A The commenter stated that EPA and the Site owner decided to construct their own treatment plant in July 2012 without notifying the local sewerage authority, which the commenter considers a significant stakeholder in the Site's cleanup.

Response: This information is not correct as stated. At the time of the March 8<sup>th</sup> public meeting, there had been some preliminary discussion on the possibility of the Site owner constructing and operating a groundwater treatment facility; however, the Site owner did not approach EPA with planning documents for an on-site treatment facility prior to the issuance of this ROD and EPA did not decide to proceed with "discharge to surface water following complete on-site treatment" as the preferred treatment method until September 2012. Based upon a number of comments received indicating a preference for the construction of an on-site treatment plant and an EPA review of the treatment options, EPA decided in September 2012 that the waters collected at the Site will be discharged to surface water following complete on-site treatment. If it is determined that this treatment method is not appropriate or feasible, then collected groundwater will either be re-injected into the ground following complete on-site treatment or be

discharged to the local sewerage authority directly or following pre-treatment.

EPA will provide the local sewerage authority information pertaining to the Site's groundwater treatment decisions and also provide a copy of the quarterly progress reports to inform the authority of the Site's progress throughout design and implementation of the remedy.

- 6.1B The commenter stated that it makes sense and is logical for the Site owner to construct an on-site treatment plant due to the wide range of contaminants found at the Site.

Response: Comment noted.

- 6.1C The commenter noted that a Site owner submitted an application to NJDEP for permit equivalency under a General Groundwater Remediation Permit and that this is not appropriate or protective of the river. The commenter stated that a General Permit is not appropriate because of the size, complexity and scope of the groundwater remediation at the Site. The commenter also stated that the permit should be based upon effluent water quality standards. Another commenter, also representing the sewerage authority, discussed how the Raritan River is listed as impaired for benzene and arsenic; therefore, the effluent limits for these constituents should be set to their respective surface water quality standards.

Response: As discussed earlier in the response to written Comment 5.3, a permit equivalency was issued to the Site owner in May 2012. The permit equivalency for the interim treatment plant is not classified as a general permit equivalency, but, rather, is classified as individual because it establishes individual discharge effluent limits and monitoring requirements. Because the Raritan River has been identified as impaired for arsenic and benzene, discharge limits were imposed for these two constituents. The discharge limits imposed for these two constituents must be equal to the New Jersey surface water quality standards of 0.017 and 0.15 micrograms per liter, respectively. However, the NJSWQS for arsenic and benzene are more stringent than the quantification limit. Therefore, the enforceable daily maximum concentration is 8 micrograms per liter for arsenic and 7 micrograms per liter for benzene. Please see the response to written

Comment 5.3 for a further discussion of the permit equivalent for the interim treatment plant.

- 7.1 A commenter stated that the Site owner was not forthcoming and claimed that the Site owner only reported the benzene seeps to EPA after the commenter's organization identified the issue.

Response: The commenter's statement above is inaccurate. On December 6, 2010, investigations were conducted by the Site owner's contractors to evaluate possible discharges of groundwater to surface water bodies in the vicinity of Impoundments 1 and 2. This evaluation included a seep reconnaissance, well inspections for nonaqueous phase liquid and a groundwater/surface water temperature evaluation in standing water south and east of Impoundments 1 and 2. On December 6, 2010, the Site owner's contractor collected a surface water sample from the Raritan River immediately adjacent to a seep in the bank of the river downgradient of Impoundments 1 and 2. This sample was received by the laboratory on December 8, 2010. Preliminary laboratory analytical results were reported to the Site owner on January 6, 2011 indicating that the discharges contained up to 20,000 parts per billion of benzene. The preliminary laboratory results were reported to both EPA and NJDEP on the same day that the results were received by the Site owner.

- 7.2 A commenter stated that he is opposed to Alternative 4A and that EPA should be looking at all the remedies that could possibly be used on the wastes at the Site.

Response: As discussed previously, several alternatives were developed to address contaminated media and their specific location within the Site. These alternatives were analyzed individually against EPA's nine evaluation criteria to determine the appropriate remedial action consistent with CERCLA. Please see the response to Comment 2.1 in the written comments section for a further discussion of why Alternative 4A was selected over other alternatives.

- 7.3 A commenter stated that the contaminants should not be stabilized and left on-site in a cement matrix.

Response: EPA believes that in-situ S/S and capping is an appropriate component of the remedy to address the

contamination at the Site. The selected remedy will be protective of human health and the environment, will comply with ARARs and will meet the remainder of EPA's nine evaluation criteria. See the "Comparative Analysis of Alternatives" section in the Decision Summary of the ROD for a further discussion of why Alternative 4A was selected over other alternatives.

- 7.4 A commenter questioned EPA's assurances that Alternative 4A, which includes the placement of additional fill in the flood plain, will not impact flooding.

Response: As discussed previously, the Site owner will be required to comply with the substantive requirements of the New Jersey Flood Hazard Control Act Rules regarding filling in a flood hazard area. The Site owner has indicated that a major goal of the selected remedy's design will be to minimize the loss of flood storage at the Site. A preliminary evaluation conducted by the Site owner indicated that the potential removal of the Site's flood control berm (or portions of it) would actually increase the Site's current flood storage capacity by over 200 million gallons for more common flood events. Even if minor changes to the Site's flood storage capacity were to occur, the Site would have little to no impact on downstream flood elevations and the surrounding community. Please see the response to Comment 3.9 in the written comment section for a further discussion of the Site's flood storage capacity.

- 7.5 A commenter stated that EPA has the opportunity to improve the Site so that it can be used to actually prevent flooding elsewhere.

Response: As discussed in Comment 3.9 in the written comments section, the eventual removal of the Site's flood control berm would increase the Site's current flood storage capacity by over 200 million gallons during common flood events. This will have a positive impact on the immediate surrounding areas during typical flooding because the removal of the berm around the North Area will increase the storage capacity for Raritan River flood waters.

- 7.6 A commenter questioned the implementation time frame for Alternative 4A.

Response: As discussed previously, EPA does not believe that the implementation time frames are overestimated for

any of the alternatives. If any inaccuracies do, in fact, exist, the implementation time frames for some of the alternatives may be slightly underestimated. Please see the response to Comment 7.3 in the written comments section for a further discussion of the accuracy of the implementation time frames.

- 7.7 A commenter recommended that EPA select a modified version of Alternative 7, which incorporates thermal desorption.

Response: As discussed previously, alternatives involving low temperature thermal desorption were not selected for a number of reasons, the most significant being the limited effectiveness of LTTD on the types of waste at the Site. Also increased air emissions associated with such a remedy may be difficult to control. Please see the response to Comment 4.2 in the written comments section for a further discussion of why a modified version of Alternative 7 was not selected.

- 7.8 A commenter stated that soils were being remediated under a previous ROD until the cleanup was stopped midstream so that a better approach could be developed. The commenter stated that the approach developed eight years later is the least protective for the community and the least cost for the Site owner.

Response: Please see the response to Comment 7.1 in the written comments section, which explains why remedial activities were suspended in 2004 and discusses some of the remedial activities conducted between 2004 and 2012. Please see the response to Comment 2.1 in the written comments section, which explains that Alternative 4A is not the least protective and lowest cost alternative.

- 7.9 A commenter expressed concern over changes in EPA's regulatory authority and funding in the future and how that might affect the long-term monitoring for the Site.

Response: Funding under "Superfund" is replenished primarily from general tax revenues and from settlements with potentially responsible parties (PRPs) at Superfund sites, which reimburse EPA for its past costs in cleaning up sites. EPA funds 90 percent of actual remediation costs at sites where no viable PRPs are available, and the individual states provide the remaining 10 percent. At many sites with viable PRPs, EPA seeks settlements whereby the

PRPs either perform the cleanup work themselves or fund the work, with EPA oversight. At the American Cyanamid site, EPA will pursue the PRPs to fund the remediation with EPA oversight.

- 7.10 A commenter noted that the entire Site is a flood plain, yet EPA and the Site owner only want people to think that part of the Site is located in the flood hazard area.

Response: As discussed in the response to Comment 3.7 in the written comments section, it has been clarified and recognized previously that the entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility. EPA has also re-designated the Site into five new areas for ease of understanding. As shown on Figure 2 in Appendix I of the OU4 ROD, the Site is now divided into the following five areas: North Area, South Area, West Area, East Area and the Impoundment 8 Facility. The North Area, which was referred to as the Main Plant area in previous documents, refers to that portion of the Site property within a flood control dike. The portion of the Site previously referred to as the Flood Plain area has been separated into the following three areas: West Area, South Area and East Area. The West Area refers to the portion of the Site bounded by the Somerset County Recycling Center to the north, the Raritan River to the west, the Port Reading rail line to the south and the flood control berm to the east. The South Area refers to the portion of the Site located west of Interstate-287 between the Port Reading rail line and the Raritan River. The East Area, which is the only portion of the Site located in the Borough of Bound Brook, refers to the small triangular portion of the Site located to the east of Interstate-287. The Impoundment 8 Facility, which is designated as a corrective action management unit (CAMU) under RCRA, is located to the northwest of the Site across Polhemus Lane. The entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility. The "Site Name, Location and Description" section in the Decision Summary of the ROD includes an explanation of these new areas and explicitly acknowledges that the entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility.

- 7.11 A commenter expressed concern over whether an engineered capping system designed for a 500-year flood will be capable of withstanding the frequent flooding at the Site.

Response: Please see the response to Comment 3.2 in the written comments section, which discusses the design of the capping systems and the practicability of capping in a flood hazard area.

- 7.12 A commenter stated that EPA should do a cleanup in two to five years and clean it up once and for all.

Response: EPA does not believe that completing a cleanup within five years is feasible due to the Site's size and complexity. The Site contains approximately 284 acres of impacted soils and about 23 acres of contaminated impoundments, as well as the contaminated groundwater beneath the Site. These impacted media are contaminated with a wide range of contaminants, such as VOCs, SVOCs and metals. The implementation time frame for the selected remedy is 10 years for impoundments and soils and 30 years for groundwater. The 10-year implementation time frame for impoundments and soils is significantly shorter than several of the other alternatives, such as Alternatives 7 and 11, which have estimated implementation time frames of 20 or more years.

- 7.13 A commenter stated that a cap is not a permanent solution, but, rather, is an engineering control that will eventually fail.

Response: EPA is confident that the use of engineered caps in the selected remedy will be protective of human health and the environment in both the short-term and the long-term. Please see the response to Comment 2.1 in the written comments section, which addresses concerns that Alternative 4A is not a long-term solution. Please also see the response to Comment 3.2 in the written comments section, which discusses the design details of the engineered capping systems and concerns over the practicability of capping in a flood plain, respectively.

- 8.1 A commenter stated that the entire Site needs to be recognized as being within the flood hazard area of the Raritan River.



Response: The Decision Summary of the ROD acknowledges that the entire Site lies within the flood hazard area of the Raritan River, with the exception of the Impoundment 8 Facility. Please see the response to Comment 3.7 in the written comments for further discussion of the terminologies used to delineate the Site.

- 8.2 A commenter stated that a permit is needed from NJDEP for the placement of fill in a flood plain, which is a component of Alternative 4A. The commenter noted that the Site-wide FS claims that a permit has already been obtained for the placement of fill in the flood hazard area.

Response: As noted in Comment 3.10 in the written comments section, a stream encroachment permit was obtained by the Site owner in January 2008 granting permission to place temporary stockpiles of fill in the flood plain in connection with a future CERCLA remedial program for installation of engineered protective covers as part of a Site-wide remedy. Therefore, the Site-wide FS correctly states that a permit has been obtained for the placement of the fill for capping within a flood plain. Please see the response to Comment 3.10 in the written comments section for further discussion of the permit requirements for the placement of fill in a flood hazard area.

- 8.3 A commenter provided an estimate of the number of trucks that will be needed to transport clean fill to the Site under Alternative 4A. The commenter stated that this is a short-term adverse impact that was not addressed in the Site-wide FS. The commenter recommended that EPA consider the use of rail transportation.

Response: As previously discussed, all transportation options, including the use of trucks and rail, will be evaluated in the remedial design phase to minimize the impact on the community. Please see the response to Comment 9.9 in the written comments section, which further discusses the transportation of materials under Alternative 4A.

- 8.4 A commenter mentioned another Superfund site in New Jersey where the principle threat waste was removed and the remainder of the site was stabilized and capped. The commenter noted that PTW is to be stabilized under the proposed remedy and recommended that treatability studies be conducted prior to the selection of a remedy.

Response: Please see the response to Comment 4.3 in the written comment section for a discussion of why EPA did not select a remedy involving excavation and off-site disposal. Please also see the response to Comment 6.4 in the written comments section, which discusses why treatability studies were not conducted prior to the selection of a remedy.

- 8.5 A commenter stated that the Impoundment 8 Facility is not utilized under Alternative 4A and suggested that this facility could be used to minimize the volume of material remaining in the flood plain. The commenter also stated that this facility's use should be maximized under any alternative selected.

Response: Please see the response to Comment 4.4 for an explanation of why EPA is not utilizing the Impoundment 8 Facility for the disposal of a large quantity of material.

- 9.1 A commenter noted that EPA has concern over the air emissions for Alternatives 7 and 11. The commenter stated that there would be an impact with transporting clean fill to the Site. The commenter stated that 48,000 trucks bringing in clean fill will also result in 48,000 trucks taking out toxic waste and the commenter stated that this needs to be considered.

Response: For clarification purposes, Alternative 4A does not call for the transportation of hazardous materials through the community. Please see the response to Comment 9.1 in the written comments section, which discusses concerns over increases in truck traffic through the community.

- 9.2 A commenter expressed concern over the frequent flooding at the Site and the ability of the engineered capping systems to withstand flooding. The commenter stated that all impacted material in the flood plain needs to be removed. The commenter expressed concern about potential scouring and lift causing failure of the caps.

Response: Please see the response to Comment 3.2 in the written comment section, which further discusses the design of the engineered capping systems and the practicability of capping in a flood hazard area. Also, see the response to Comment 4.3 in the written comments section for an

explanation of why EPA did not select an alternative involving off-site disposal.

- 9.3 A commenter stated that slurry walls and other mechanisms to control groundwater could work; however, the commenter stated that this needs to be looked at in more detail, particularly with respect to the impact of flooding on these systems.

Response: Comment noted. The design details of all components of the selected remedy, including the groundwater component, will need to be developed during the RD phase. The frequent flooding conditions experienced at the Site will be incorporated into the design of all components of the selected remedy, as necessary.

- 9.4 A commenter stated that the Site is a "time bomb," particularly Impoundments 1 and 2, and needs to be addressed quickly before a more serious problem arises.

Response: EPA agrees that the Site needs to be addressed in a time-efficient manner. The implementation time frame for the selected remedy is shorter in comparison to several of the other remedial alternatives that were not selected. As noted in the response to Comment 15.2 in the written comments section, Impoundments 1 and 2 are being addressed in a separate FFS due to their waste characteristics and proximity to the Raritan River. A number of protective measures have been taken at Impoundments 1 and 2 to reduce their threats to human health and the environment until a long-term solution can be developed. Please see the response to Comment 15.2 in the written comments section for a further discussion of the status of Impoundments 1 and 2.

- 9.5 A commenter expressed concern over the Site's impact on the Raritan River, particularly with the use of downstream water intakes and the recreational use of the river.

Response: In May 2012, the construction of a groundwater removal system was completed to address groundwater discharges into the Raritan River in the vicinity of Impoundments 1 and 2. Please see the response to Comment 6.4 in the written comments section for the status of this response action conducted under EPA's removal program.

EPA anticipates that the selected remedy will address

contamination that may be migrating from the Site into Cuckel's Brook and the Raritan River. The existing bedrock groundwater collection system will be improved by relocating the primary extraction wells to a more central location and through the placement of additional extraction wells, as necessary, to ensure that all Site-related groundwater is captured. In addition, a recovery system (such as trenches, wells and/or containment walls) will also be constructed for collection of overburden groundwater at several locations. The details of these improvements will be developed during the remedial design phase.

In addition, an updated surface water and sediment monitoring program was completed in August 2012 with the primary objective of better characterizing the potential impacts of the Site on the Raritan River and Cuckel's Brook. The monitoring program, along with historical surface water and sediment data, will also be used to determine if water quality conditions improve following the response actions conducted under EPA's direction.

- 9.6 A commenter recommended that any discharges from the Site meet all surface water quality standards.

Response: Please see the response to Comment 5.3 in the written comments section, which discusses the effluent limits for the interim treatment plant.

- 9.7 A commenter encouraged EPA to keep the Site owner accountable and make sure the Site is cleaned up properly.

Response: EPA will continue working with the Site owner to remediate the Site according to the remedy selected in a time-efficient manner, while taking the necessary precautions to ensure the protection of human health and the environment.

- 10.1 A commenter noted that he walked through several of the towns impacted by the August 2011 flooding and observed the destruction to these communities. The commenter noted that the U.S. Army Corps of Engineers is constructing flood prevention mechanisms in these towns to reduce flooding impacts. The commenter stated that the placement of fill for the selected remedy will displace flood waters and increase flooding in the area. The commenter stated that the remediation effort should be geared towards mitigating

flood impacts, along with addressing the contamination. The commenter also urged that EPA look at the entire Site as a flood plain.

Response: Please see the response to Comment 3.9 in the written comments section, which discusses the placement of fill as part of the selected remedy and its impact on the Site's flood storage capacity. Please see the response to Comment 3.12 in the written comments section for a discussion of the use of the Site as a flood storage project. Please also see the response to Comment 3.7 in the written comments for clarification of what portions of the Site are located in the flood hazard area of the Raritan River.

- 11.1 A commenter, representing the TAG recipient, stated that he prefers treatment technologies that are proven, reliable and can be implemented within a relatively short period of time. Based upon this, the commenter endorsed Alternative 4A.

Response: Comment noted.

- 11.2 A commenter recommended that there be pilot testing of the waste impoundment material to optimize the type of solidification/stabilization that is used and to find the most effective composition of S/S mixture.

Response: As discussed previously, treatability testing for in-situ S/S will be conducted prior to full-scale implementation. Please see the response to Comment 6.3 in the written comments section for more information on the treatability studies for S/S.

- 11.3 A commenter recommended that the materials in Impoundments 13, 17 and 24 be classified in the three categories: direct contact control, vapor control and movement control. The commenter recommended that any materials classified in anyone of these three categories be excavated and addressed appropriately in the Main Plant area.

Response: For Impoundments 13, 17 and 24 (located in the South and West Areas), an ecological risk assessment would be conducted during the design phase to identify if any material requires relocation and consolidation in the North Area where the same types of controls are warranted. For example, if any materials in Impoundments 13, 17 and 24

require movement control, they will be excavated and placed into Impoundments 3, 4 and 5 for treatment via in-situ S/S and capping.

- 11.4 A commenter recommended that principle threat waste, no matter where it is located in the Site, should be consolidated into Impoundments 3, 4 and 5 for treatment via in-situ S/S.

Response: Under the selected remedy, any materials identified as principle threat waste, with the exception of Impoundments 1 and 2 as described earlier, will be excavated and relocated to Impoundments 3, 4 and 5 for treatment, regardless of their location.

- 11.5 A commenter stated that he favors and recommends the construction of an on-site treatment plant designed specifically for the contaminants found at the Site.

Response: Comment noted. Please see the response to Comment 5.1 in the written comments section, which discusses the preference for the construction of an on-site treatment plant indicated by several other commenters.

- 11.6 A commenter stated that he generally endorses the groundwater component of the remedy; however, the commenter expressed concern over the reliance upon the local sewerage authority for the treatment of contaminated groundwater. The commenter stated that he has seen no evidence that the local sewerage authority is capable of treating the range of contaminants found at the Site. The commenter recommended that effluent limits for Site-related contaminants be imposed for the local sewerage authority's discharge for the extent that the authority's treatment facility is used for the treatment of the Site's stormwater and groundwater.

Response: Comment noted. Please see the response to Comment 5.5 in the written comments section, which discusses concerns over the treatment of Site groundwater at the local sewerage authority.

- 11.7 A commenter provides several reasons why he does not believe that LTTD will effectively treat the wide range of contaminants found at the Site.

Response: As discussed previously, EPA agrees that low temperature desorption technology would not be effective in treating the wide range of waste materials to be addressed by the OU4 remedy. Please see the response to Comment 4.2 in the written comments section for a further discussion of why alternatives involving LTTD were not selected.

- 12.1 A commenter indicated that he would like to see treatment where the contaminants are eliminated rather than contained.

Response: EPA has determined that S/S technologies are considered a form of treatment. The ROD provides an in-depth analysis through the nine evaluation criteria for remedy selection that the EPA developed to address the statutory requirements and preferences of CERCLA. Please see the responses to Comments 4.2 and 4.3 in the written comments section for a further discussion of why alternatives involving other treatment technologies were not selected.

- 12.2 A commenter stated that he believes specific bioremediation products were not considered when developing a remedy.

Response: Enhanced bioremediation was included in the identification and screening of technologies process and was included as a representative process option for both impoundment contents and Site-wide soils in the Identification and Screening of Technologies Report. Because it was determined that bioremediation would need to be combined with other technologies to address effectively the contaminants at the Site, this technology was included in the development of Alternatives 9 and 10. These alternatives, however, were not retained for further evaluation in the screening process for a number of reasons. In addition, a 1998 ROD at the Site included biotreatment as a component of the selected remedy and it was later determined that this technology was technically infeasible for the wastes at the Site. Please see the response to Comment 4.3 in the written comments section for a further discussion of why alternatives involving bioremediation were not selected.

- 12.3 A commenter expressed concern that "the treatment facility that Pfizer implemented for the groundwater is contaminated."

Response: This statement is incorrect and unfounded as implied. Up until May 2012, no treatment facilities were operated on-site by Pfizer. When making this statement at the March 2012 public meeting, the commenter was likely referring to the effluent limits for the interim groundwater treatment plant being constructed at that time. Please see the response to Comment 5.6 for the status of the removal action to address the groundwater seeps in the Raritan River in the vicinity of Impoundments 1 and 2. Please also see the response to Comment 5.3, which discusses concerns over the effluent limits for the interim treatment plant.

- 13.1 A commenter stated that any proposed remediation plan that leaves waste on-site will continue to leak volatile organic compounds and any engineered solution will fail at some point.

Response: EPA disagrees with this statement. EPA is confident that the selected remedy would be protective of human health and the environment, would comply with ARARs, would be cost-effective and would utilize permanent solutions and alternative treatment technologies to the maximum extent practicable. Please see the response to Comment 2.1 in the written comments section for a further discussion of the selection of Alternative 4A over other alternatives. Please also see the response to Comment 3.2 in the written comments section for a further discussion of the practicability of capping in a flood hazard area.

- 13.2 A commenter expressed concern over the Site's impact on flooding for downstream communities. The commenter also stated that he is not sure whether NJDEP will approve filling in a flood plain.

Response: As discussed previously, the Site owner has indicated that a major goal of the selected remedy's design will be to minimize the loss of flood storage at the Site. The selected remedy can be designed to minimize the loss of flood storage so that it would have little to no impact on downstream flood elevations and the surrounding community. The remedy will comply with the substantive requirements of the New Jersey Flood Hazard Control Act Rules regarding filling in a flood hazard area. Please see the response to Comment 3.9 in the written comments section for a further discussion of the concerns over the placement of fill and



the remedy's impact on the flood storage capacity of the Site.

- 13.3 A commenter stated that the volatile organic compounds at the Site have to be disposed of.

Response: The volatile organic compounds associated with the Site will be treated as discussed in the ROD. VOCs found in the Site groundwater will be captured and treated. VOCs found in soils will either be capped with an engineered capping system (including a vapor mitigation system in some areas, as required) or treated via in-situ S/S followed by capping. VOCs in Impoundments 3, 4 and 5 will also be treated via in-situ S/S followed by capping. Please see the response to Comment 4.3 in the written comments section, which discusses why alternatives involving off-site disposal were not selected.

- 13.4 A commenter discussed the benzene effluents limits for the interim groundwater treatment plant.

Response: Please see the second paragraph in the response to Comment 5.3 in the written comments section, which discusses the effluent limits for the interim treatment plant.

- 13.5 A commenter, who identified himself as an Environment Trustee for a local Bridgewater community group, noted that his community helped supply some of the clean fill for some historical capping activities. The commenter indicated that his community has clean fill and would be glad to talk to any stakeholders in this process.

Response: Comment noted. Sources for clean fill will be identified during either the remedial design or remedial action work plan.

- 14.1 A commenter asked whether any sampling data were collected during and/or following the Hurricane Irene-related flooding. The commenter stated that he is concerned about some of the tests and studies conducted and urged EPA to make the data from these studies available.

Response: Several rounds of surface water sampling were conducted on the floodwaters from the most recent flooding events, i.e., Hurricane Irene and Tropical Storm Lee. The North Area, where the majority of waste disposal activities

occurred, is surrounded by a flood protection berm. During the Hurricane Irene storm event, flood waters overtopped this berm and flooded the North Area of the Site. The flood protection berm prevented flood waters in this portion of the Site from receding and created a 'lake' of standing water. Several rounds of sampling were performed on this standing water to ensure that it would not impact the water quality of Cuckel's Brook and the Raritan River. After the sampling results confirmed that contaminant concentrations were below levels of concern, the standing water was released under controlled conditions so that local communities downstream were not affected. This standing water was released to Cuckel's Brook several weeks after the Hurricane Irene storm event in a way that did not cause flooding in downstream communities. The sampling conducted on this standing water within the bermed area provided an indication of the water quality conditions during and immediately after flooding. Based upon the results of this sampling, it is unlikely that Site contaminants affected any nearby businesses or communities both during and after the flood event.

On September 13, 2012, a CD-ROM containing Hurricane Irene-related sampling data were mailed to the commenter.

- 14.2 A commenter asked whether there was subsequent cooperation between EPA and all of the stakeholders, such as American Water.

Response: EPA began issuing detailed quarterly updates via email to the community and all interested stakeholders in July 2012. The quarterly updates document the project status and focus on major tasks completed over the past quarter, as well as anticipated tasks for the upcoming quarter. To date, all stakeholders have been receptive to the Site owner activities and supportive of EPA and NJDEP oversight.

- 14.3 A commenter expressed concern over air emissions and noted that people live near the Site.

Response: It was mentioned briefly at the March 8<sup>th</sup> public meeting, that an Ambient Air Monitoring Plan was currently under review. This plan was approved by EPA and NJDEP in June 2012 and the first round of air sampling occurred in July 2012. The purpose of this monitoring plan is to collect baseline ambient air sampling data on a quarterly

basis for at least two years. The results of this monitoring will be utilized to ensure that the community is not exposed to unacceptable risks, as well as to use as a baseline during the implementation of the Site-wide remedy in the future.

Air emissions will also be monitored on an activity-basis throughout the implementation of the selected remedy to ensure that the surrounding community is not exposed to unacceptable risks.

15.1 A commenter asked a series of questions regarding air emissions, which are addressed below in the responses to Comments 15.1A-15.1E.

15.1A The commenter noted that one of the reasons EPA rejected several of the alternatives was due to the air emissions associated with them. The commenter asked whether EPA is currently conducting air sampling at the Site.

Response: Please see the response to Comment 14.3 in the verbal comments section.

15.1B The commenter stated that EPA does not have baseline air emissions data to compare with post-remedy emissions data. The commenter also asked how some remedial alternatives could be dismissed based upon air emission impacts, when baseline data have not been collected.

Response: As discussed previously, the purpose of the ambient air sampling effort initiated in July 2012 is to ensure that the community is not exposed to unacceptable risks, as well as to use as a baseline during the implementation of the Site-wide remedy in the future. Please see the response to Comment 14.3 in the verbal comments section for a further discussion of the ambient air monitoring program.

Also discussed previously, a qualitative assessment was utilized to estimate the air emissions for the remedial alternatives in the Site-wide FS. This qualitative assessment for identifying emissions is called the emission "drop" factor method. This method is approved by the NJDEP for use in developing air permits and consists of developing a unitless emission (drop) factor based on the lifting and dropping of a unit mass of material. Please see the response to Comment 6.6 in the written

comments section for a further discussion of the air emissions calculations for the remedial alternatives.

- 15.2 A commenter mentioned the Crown Vantage Landfill Superfund site, which is located in Hunterdon County near the Delaware River. The commenter stated that the Crown Vantage site is not as flood-prone as the American Cyanamid site, yet the scouring associated with flooding at the Crown Vantage site contributed to the selection of a remedy that primarily involved excavation.

Response: For clarification purposes, the selected remedy at the Crown Vantage Superfund site called for institutional controls and five-year reviews, as well as the maintenance of the forested cover and stabilization wall. The ROD did not call for excavation. Prior to the construction of a stabilization wall in the remedial investigation phase, a high flow event resulted in landfill material falling into the Delaware River and an EPA Removal Action was carried out to excavate exposed drum material.

EPA is confident that the waste at the American Cyanamid site can be successfully contained, following treatment and/or capping in some areas, without presenting an unacceptable risk to human health and the environment. Please see the response to Comment 4.3 in the written comments section for a discussion of why EPA did not select a remedy involving excavation and off-site disposal.

- 15.3 A commenter expressed concern over leaving material in the flood plain and stated that there should be a maximal effort to excavate and dispose of the materials off-site.

Response: Please see the response to Comment 3.2 in the written comments section, which discuss the design of the engineered caps and the practicability of capping in a flood hazard area. Please also see the response to Comment 4.3 in the written comments section, which further discusses why EPA did not select a remedy involving off-site disposal.

- 15.4 A commenter expressed concern over the effluent limits for the interim treatment plant constructed as part of an EPA Removal Action.

Response: Please see the second paragraph in the response to Comment 5.3 in the written comments section, which

discusses the effluent limits for the interim treatment plant.

- 15.5 A commenter stated that he does not believe it is credible that the BERA determined that the Site is not impacting the health and diversity of aquatic communities in the Raritan River and Cuckel's Brook. The commenter requested that the BERA and its findings be reviewed by U.S. Fish and Wildlife Service.

Response: Based on review of the 2005 BERA by both NJDEP and EPA's Biological Technical Assistance Group, it was concluded that the Site is not impacting the health and diversity of aquatic communities. The U.S. Fish and Wildlife Service is one of several agencies that have been involved in the remedial investigation of the Site. A comprehensive Site-wide surface water and sediment monitoring program will continue to be utilized to monitor the potential impacts of the Site and other possible sources of impacts on the Raritan River and Cuckel's Brook.

- 16.1 A commenter cited the heterogeneity of the wastes and stated that LTTD is not geared to address or remediate the wastes at the Site.

Response: Comment noted.

- 16.2 A commenter stated that bioremediation is not appropriate for the Site and was unsuccessful after being selected in the 1998 ROD.

Response: Comment noted.

- 16.3 A commenter expressed concern of interminable delays which caused the first iteration of the Site-wide FS because EPA failed to respond to comments in a time-efficient manner and that EPA may not have directed the proper resources to this project. The commenter also expressed concern over communication between different divisions of EPA, such as the lack of communication between the Superfund Program and the Division of Environmental Planning and Protection regarding the impairment designation of the Raritan River in 2006. Finally, the commenter asked that EPA move forward with this project as expeditiously as possible.

Response: EPA recognizes the critical remedial measures to be implemented at the Site and understands that the

remedies will need to be carried out as soon as practicable while taking the necessary precautions to ensure the protection of human health and the environment.

In regard to the concern over the resources directed toward the Site, which was addressed at the March 8, 2012 public meeting, EPA noted that multiple Superfund remedial project managers and a community involvement coordinator are assigned to the American Cyanamid site; they are coordinating with other regional staff as necessary. In addition, senior Superfund program management is also closely involved.

- 17.1 A commenter stated that it cannot be denied that the site is located in a flood plain and the site will continue to flood frequently in the future. The commenter stated that the Proposed Plan does not deal with the fact that the entire Site is located in a flood plain.

Response: This comment was partially addressed at the March 8<sup>th</sup> public meeting, where EPA acknowledged that the entire Site is located in the flood hazard area of the Raritan River. Please see the response to Comment 3.7 in the written comments section, which explains what portions of the Site are located within a flood hazard area and clarifies the historical terminologies used to divide the Site. Please also see the response to Comments 3.2 in the written comments section for a discussion of the design of the engineered caps and the practicability of capping in a flood hazard area.

- 17.2 A commenter asked if the total environmental impact of the remediation has been calculated, such as the trucks and the production of concrete.

Response: This comment was addressed at the March 8, 2012 public meeting. EPA indicated that this type of calculation has not been performed. This type of calculation is not typically performed when selecting a remedy for Superfund sites. However, EPA did conduct a detailed analysis of the individual response measures against each of EPA's nine evaluation criteria and completed a comparative analysis focusing upon the relative performance of each response measure against the criteria. Please see the "Comparative Analysis of Alternatives" section of the Decision Summary in the ROD for a comparison of all of the remedial

alternatives with respect to the EPA's nine evaluation criteria.

- 17.3 A commenter asked who is going to pay for the degradation of downstream ecosystems caused by the Site.

Response: This comment was addressed at the public meeting held on March 8, 2012 when it was noted that there are Natural Resource Trustees that seek compensation for damages to natural resources which have occurred as a result of releases of hazardous substances or as a result of resource injury related to the implementation of the response action. EPA indicated that some of these trustees typically include the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration and the State of New Jersey. A goal of the remedial program will be concurrent planning and implementation of prospective Natural Resource Damage restoration measures with the implementation of the selected remedy. This could involve the enhancement and preservation of ecological habitat and recreational resources at the Site.

- 18.1 A commenter, who identified himself as a member of several local committees, noted that he has lived within three miles of the Raritan River his entire life and that he has had the opportunity to visit the Site and observe its size and complexity. The commenter stated that the Proposed Plan appears to be a balanced approach that utilizes proven conventional technologies, minimizes risks during construction, minimizes surface disturbance and can be implemented within a reasonable time frame. The commenter also stated that it permits future use for parts of the Site, including ecological restoration for 370 acres, 30 acres for potential commercial usage and 36 acres for alternative energy generation.

Response: Comment noted. Please see the response to Comment 8.2 in the written comments section, which discusses the future use of the Site.

- 18.2 A commenter noted that some people have indicated that they would like to see more studies before taking action. The commenter then stated that he thinks that the treatability studies conducted during the design phase will clear up some of the uncertainties of the Proposed Plan and allow EPA to design a remedy that is protective of human health and the environment.

Response: Comment noted.

- 19.1 A commenter, who identifies himself as the chairman of the TAG-recipient, discussed some of the history of the Site and the role of the TAG-recipient over the last eighteen years. The commenter also noted that Impoundments 1 and 2 still need to be addressed.

Response: Comment noted.

- 19.2 A commenter indicated that he would like to see the interim treatment plant's discharge be controlled for benzene and other VOCs.

Response: Please see the response to Comment 5.3 in the written comments section, which discusses concerns over the effluent limits for the interim treatment plant.

- 19.3 A commenter asked if the interim treatment plant is going to become operational soon.

Response: The interim treatment plant began operating in May 2012. Please see the response to Comment 5.6 in the written comments section for more information on the status of the interim treatment plant constructed under EPA's removal program.

- 19.4 A commenter encouraged EPA and the Site owner to seek measures to expedite the Site cleanup.

Response: EPA will continue to work with the current Site owner to remediate the Site in a time-efficient manner, while taking the necessary precautions to ensure the protection of human health and the environment.

- 19.5 A commenter indicated that he is in favor of implementing Alternative 4A.

Response: Comment noted.

- 19.6 A commenter asks why it is going to take 10 years to implement Alternative 4A.

Response: Based upon the estimates described in the Site-wide FS, the remedy under Alternative 4A will require 10 years to implement in its entirety. The design phase of the



remedy, which is anticipated to be about 2 to 3 years, includes conducting pre-design investigations to confirm the delineation of the areas requiring movement, vapor and direct contact controls. In addition, treatability testing for in-situ S/S will be required prior to the full-scale implementation to optimize the in-situ S/S performance. The remedial action phase of the selected remedy would also take a number of years to complete, primarily due to the size of the Site. The selected remedy addresses nearly 200 acres of potentially impacted soil and 23 acres of impoundments contents. The selected remedy is anticipated to include a 24-inch soil cap for about 190 acres of the Site, with some areas receiving a vapor control cap and vapor mitigation system prior to the installation of a soil cover system. This will result in the transportation of over 577,000 cubic yards of clean fill to the Site. The transportation of such a large volume of soil is a major effort and may be required to occur over an extended period of time to minimize the impact to the community. It is also anticipated that the selected remedy will involve the in-situ S/S treatment of over 200,000 cubic yards of impoundment material. The size and complexity of the Site increases the duration of the design and remedial action phases and contribute to the 10-year implementation time frame of the selected remedy.

20.1 A commenter requested a 60-day extension of the public comment period.

Response: As addressed at the March 8, 2012 public meeting, EPA indicated that an additional 45-day extension would be granted.

20.2 A commenter asked to submit two petitions into the public record.

Response: These petitions were included in Attachment D of the Responsiveness Summary and were addressed in the written comments section of the Responsiveness Summary.

20.3 A commenter stated that she is in favor of using LTTD in areas of the Site where soils can be treated. The commenter discussed another Superfund site where LTTD has been implemented. The commenter also expressed concern over the cost estimates for LTTD in the Site-wide FS.

Response: See the response to Comment 4.2 in the written comments section, which explains why EPA believes that low temperature thermal desorption is not an appropriate technology for the wastes at the Site and discusses the use of LTTD at other Superfund sites in Region 2. As mentioned earlier, EPA reviewed the cost estimates for Alternatives 4A and 7 in the Site-wide FS and concluded that the cost estimates for both alternatives are within the accuracy range of -30 to +50% of the original estimates. Please see the response to Comment 4.8 in the written comments section for further discussion on the accuracy of the cost estimates in the Site-wide FS.

- 20.4 A commenter stated that there was not enough time for everyone in the room to provide verbal comments and suggested that there be a second public meeting or some other forum where people are able to provide verbal comments.

Response: EPA accepted both verbal and written comments at the public meeting held on March 8, 2012. EPA also accepted written comments throughout the 90-day, extended from the original 45-day, public comment period. EPA reviews and considers all of the information submitted during the three month long public comment period before selecting this remedy. No preference is given to verbal comments versus written comments, or vice versa, throughout EPA's review of the public comments. Therefore, EPA believes that members of the community have been granted sufficient time and opportunity to provide comments on the Proposed Plan.

- 20.5 A commenter stated that she supports Alternatives 7 and 11, or any alternative that treats and/or excavates soil as opposed to containing it.

Response: Please see the response to Comment 4.2 in the written comments section for a discussion of why EPA believes that LTTD is not an appropriate technology for the wastes at the Site. Please also see the response to Comment 4.3 in the written comments section, which further discusses why EPA did not select a remedy involving off-site disposal, such as Alternative 11.

- 20.6 A commenter stated that a cap is not a cleanup, noted that the Site is in a flood plain, and stated that toxic waste cannot be capped in a flood plain.

Response: EPA has utilized caps at many Superfund sites across the country and considers engineered capping as a viable remedy at Superfund sites. Please see the response to Comment 3.2, which discusses the design of the engineered caps and the practicability of capping in a flood hazard area.

- 21.1 A commenter expressed concern over the effluent limits for the interim groundwater treatment plant and the impact the discharge may have on downstream environments.

Response: Please see the second paragraph in the response to Comment 5.3 in the written comments section, which discusses the effluent limits for the interim treatment plant.

- 21.2 A commenter expressed concern over Impoundments 1 and 2 and stated that they are a major portion of what needs to be addressed. The commenter also stated that EPA does not have a plan for these two impoundments.

Response: As mentioned earlier, a separate focused feasibility study is being undertaken for Impoundments 1 and 2, given the characteristics of the waste in these impoundments. Once the study is completed, a remedy for Impoundments 1 and 2 will be proposed for public comment and subsequently selected. Also, see the response to Comment 15.2 in the written comments section, which discusses the status of Impoundments 1 and 2 and several of the interim measures taken to reduce the threats to human health and the environment until a long-term solution is developed and implemented.

- 21.3 A commenter stated that Alternative 4A is not enough.

Response: Please see the response to Comment 2.1 in the written comments section for a further discussion of why Alternative 4A was selected over other alternatives.

- 22.1 A commenter stated that there was not enough time for her to read something at the public meeting.

Response: As indicated in the press release, public notice, Proposed Plan and at the public meeting, in addition to accepting verbal comments on March 8, 2012 EPA also accepted written comments throughout the 90-day public comment period. Please see the response to Comment 20.4 in

the verbal comments section for more information about the community's opportunity to provide public comments.

ATTACHMENT A: PROPOSED PLAN

American Cyanamid Superfund Site  
Township of Bridgewater, New Jersey



February 2012

### EPA ANNOUNCES PROPOSED PLAN

This Proposed Plan identifies the preferred alternative for addressing the site-wide soils, groundwater, and the impoundment contents that have not yet been remediated with the exception of Impoundment 1 and 2 at the American Cyanamid Superfund Site (Site) and provides the rationale for those preferences.

Out of the existing 27 impoundments identified at the Site, 16 were determined to be potentially contributing to groundwater contamination and, therefore, deemed necessary to be addressed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or Superfund). Excluding Impoundments 1 and 2, there are six impoundments remaining on the Site that have not yet been addressed under CERCLA. These six impoundments were evaluated in a Comprehensive Site-wide Feasibility Study along with site-related soil and groundwater. The impoundments have been found to be contaminated with mainly volatile organic compounds (VOCs), semi-VOCs, and metals. Groundwater underlying the Site and nearby areas, not currently used as a source of drinking water, is contaminated with metals and VOCs, such as benzene, chlorobenzene, ethylbenzene, and xylene as a result of previous Site activities. Site-wide soils mainly contain polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and chromium.

The U.S. Environmental Protection Agency (EPA) is proposing active measures to address the contaminated impoundments and site-wide soils as the preferred alternative, along with a groundwater recovery and restoration action. EPA is recommending Remedial Alternative 4A, identified as Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Groundwater.

This Proposed Plan summarizes the data and rationale considered in making this recommendation. This document is issued by EPA, the lead agency for Site activities. EPA, in consultation with the New Jersey Department of Environmental Protection (NJDEP), the

### MARK YOUR CALENDAR

#### PUBLIC COMMENT PERIOD:

**February 16, 2012– March 31, 2012**, U.S. EPA will accept written comments on the Proposed Plan during the public comment period.

#### PUBLIC MEETING:

**March 8, 2012 at 7:00 P.M.**

U.S. EPA will hold a public meeting to explain the Proposed Plan and all of the alternatives presented in the Feasibility Study. Oral and written comments will also be accepted at the meeting. The meeting will be held at the Somerset County Vocational and Technical High School, 14 Vogt Drive, Bridgewater, New Jersey.

**For more information, see the Administrative Record at the following locations:**

#### U.S. EPA Records Center, Region 2

290 Broadway, 18<sup>th</sup> Floor  
New York, New York 10007-1866  
(212)-637-4308  
Hours: Monday-Friday, 9 AM to 5 PM

#### N.J. Department of Environmental Protection

401 East State Street, Trenton, New Jersey

#### Bridgewater Township Library

1 Vogt Drive, Bridgewater, New Jersey

support agency for Site activities, will select the remedy for the Site after reviewing and considering all information submitted during a 45-day public comment period. EPA, in consultation with NJDEP, may modify the preferred alternative or select another response action presented in this Proposed Plan based on new information or public comments. Therefore, the public is encouraged to review and comment on all the information presented in this Proposed Plan.

EPA is issuing this Proposed Plan as part of its community relations program under Section 117(a) of CERCLA. This Proposed Plan summarizes information that can be found in greater detail in several reports included in the Administrative Record.

## SITE DESCRIPTION

The Site, located in the central portion of New Jersey, is within the southeastern section of Bridgewater Township, Somerset County. It is bounded by Main Street to the north, the Raritan River to the west and south, and Interstate 287 to the east, as shown on Figure 1.

The Site encompasses approximately 435 acres and was used for numerous chemical and pharmaceutical manufacturing operations during the past 80-plus years. The facility was originally built in 1915 as Calco Chemical Company to manufacture intermediate chemicals and dyes. The plant expanded over the following 60 years to become one of the nation's largest dye and organic chemical plants, resulting in the production of thousands of chemical products. The majority of the expansion at the plant occurred after American Cyanamid purchased the facility in 1929 and was driven by the large increase in demand for chemicals in the United States, particularly during and immediately after World War II. The large increase in manufacturing capacity during the period from 1930 through 1970 required more buildings, support services, and disposal capabilities. As a result of past activities at the facility, a number of waste storage and disposal areas, referred to as "impoundments," were constructed. In addition, the surrounding soils and groundwater were eventually impacted. Throughout its more than 75-year manufacturing history, numerous organic and inorganic chemical raw materials were used at the facility to produce products including rubber chemicals, pharmaceuticals, dyes, pigments, chemical intermediates, and petroleum-based products.

The Site is generally divided into two main portions. The Main Plant area refers to that portion of the Site property within a flood control dike, and the Flood Plain area refers to that portion outside the flood control dike.

Approximately 50% of the Main Plant was used for production activities over the time the facility was active. Impoundments cover approximately 10 to 15% of the Main Plant area. The remaining 35 to 40% was used for storage of general equipment, raw material, and finished product, as well as incidental waste disposal. The majority of the Flood Plain, which consists of approximately 80% of this area, contains impoundments, while the remaining 20% continues to be virtually undisturbed. A map of the Site can be found in Figure 2.

The Hill Property, also considered a part of the Site, is 140 acres located in the northeastern portion of the Site. The Hill Property was separated from the former Main Plant area of the Site since it consisted of a research laboratory and administrative buildings. In December 1990 (amended March 1992), a Baseline Site-wide

Endangerment Assessment (BEA) Report established that there are no current or future unacceptable risks to human health and the environment associated with the Hill Property. Based on this finding, no remedial action was required other than the implementation of a Classification Exception Area (CEA) and a Well Restriction Area (WRA) for the groundwater.

In June 1999, all manufacturing ceased at the Site. By the end of November 2000, almost all buildings on-site were demolished.

In December 1994, American Home Products Corporation purchased the American Cyanamid Company. In December 2002, American Home Products Corporation changed its name to Wyeth. In October 2009, Wyeth was purchased by Pfizer Inc. and became a wholly owned subsidiary of Pfizer. Title to the Site property is held by Wyeth Holdings Corporation (Wyeth).

## SITE HISTORY

Preliminary investigations completed in 1981 verified that approximately one-half of the Site was utilized to support manufacturing, waste storage, or waste disposal activities, and that contaminated source areas were confined primarily to the main plant area and in the on-site waste storage areas (impoundments). Twenty-seven impoundments are believed to have been constructed for disposal purposes. Of the 27, 16 were identified to be CERCLA classified impoundments since they were used for storing by-products of rubber chemical production, dye production, and coal tar distillation, as well as for disposal of general plant waste and demolition debris. These impoundments were originally estimated to contain 877,000 tons of waste material. Hence, these impoundments, along with identified areas of contaminated soils, are the primary focus of current remedial activities. Both media have been found to be sources of groundwater contamination. On September 8, 1983, the site was placed on the National Priorities List (NPL).

The 16 impoundments being addressed under CERCLA have been identified using numbers, which include: Impoundments 1, 2, 3, 4, 5, 11, 13, 14, 15, 16, 17, 18, 19, 20, 24, and 26. More specifically, these sixteen CERCLA impoundments:

- were re-evaluated as part of the 2012 Comprehensive Site-wide Feasibility Study (Impoundments 3, 4, 5, 13, 17, and 24);
- are being re-evaluated as part of an ongoing Focused Feasibility Study due to their complexity, location, and volume (Impoundments 1 and 2);

- are currently undergoing remediation (Impoundments 15 and 16);
- were remediated in accordance with CERCLA closure plans (Impoundments 11, 14, 18, 19, 20, and 26).

Note: Impoundments 9, 10, and 12 were never used for waste disposal. Impoundment 21 was used to contain emergency fire water and Impoundments 22 and 23 were used to contain river silt from the facility's former river water settling operation. Lagoon 6 and Impoundments 8, 9A, and 25 were closed and classified as Treatment/Storage/Disposal (TSD) facilities pursuant to regulations issued under the Resource Conservation and Recovery Act (RCRA). Lagoon 7 is in the process of being closed in accordance with RCRA closure plans.

American Cyanamid entered into an Administrative Consent Order (ACO) with NJDEP (referred to as the 1988 NJDEP ACO) in May 1988 to address the sixteen impoundments, site-wide contaminated soils, and groundwater. In addition to the regulatory requirements established under the 1988 NJDEP ACO, a New Jersey Pollutant Discharge Elimination System/Discharge to Groundwater (NJPDES/DGW) permit was issued in 1987. This permit required American Cyanamid to conduct extensive groundwater monitoring on a quarterly basis and continue pumping bedrock production wells, at a minimum rate of 650,000 gallons per day. This action was designed to capture groundwater contamination within the Site boundaries.

In May 1994, American Cyanamid and NJDEP executed an ACO Amendment (1994 NJDEP ACO Amendment) which incorporated the existing groundwater pumping and monitoring requirements of the NJPDES/DGW permit and included additional groundwater monitoring requirements for the Impoundment 8 RCRA Facility.

Due to the complexity, size, and nature of contamination at the Site, all impacted and affected impoundments, site-wide soils and groundwater were originally separated into seven Operable Units (OUs). A summary of the specific OUs and their status are as follows:

OU1 (Group I): Impoundments 11, 13, 19, and 24

A Corrective Measures Study/Feasibility Study (CMS/FS) was completed for the Group I Impoundments in 1992 and the Record of Decision (ROD) was signed in September 1993. The remedies for Impoundments 11 and 19 were completed in November 1997 and November 1995, respectively. The remedial activities scheduled for Impoundments 13 and 24 were suspended in 2004 pending the completion of a remedy review report (Impoundment

Remedy Appropriateness Evaluation, 2005) and a subsequent Comprehensive Site-wide Feasibility Study report (2012).

OU2 (Group II): Impoundments 15, 16, 17, and 18

The CMS/FS for Group II Impoundments was completed in Nov 1993 and the ROD was signed in July 1996. The remediation of Impoundment 18 was completed in April 1998 per the selected remedy. The remedy for Impoundments 15 and 16 was modified by NJDEP with an Explanation of Significant Differences (ESD) on November 30, 1998. The ESD selected an alternative remedy consisting of recycling of the material (iron oxide) within both Impoundments 15 and 16. The recycling started in the spring of 2000 and is ongoing with an expected completion in 20 years. The remedial activities for Impoundment 17 were suspended in 2004 pending the completion of a remedy review report (Impoundment Remedy Appropriateness Evaluation, 2005) and a subsequent Comprehensive Site-wide Feasibility Study report (2011).

OU3 (Group III): Impoundments 1, 2, 3, 4, 5, 14, 20, 26

The CMS/FS for Group III Impoundments was completed in November 1997. A ROD followed in September 1998. As part of the 1998 ROD, EPA designated Impoundment 8 as a Corrective Action Management Unit (CAMU) in accordance with RCRA regulations.

The remedial activities for Impoundments 1 and 2 were suspended in 2004 and are being re-evaluated as part of a separate Focused Feasibility Study (FFS) due to the nature of their contents and their complexity. Remediation of Impoundments 3, 4, and 5 was suspended in 2004 pending the completion of a remedy review report (Impoundment Remedy Appropriateness Evaluation, 2005) and a subsequent Comprehensive Site-wide Feasibility Study report (2011). Impoundments 14 and 20 were remediated under CERCLA per a 2007 ESD and completed in August 2010. Impoundment 26 was excavated, solidified with cement, placed in the Impoundment 8. Remediation of Impoundment 26 was completed under CERCLA in May 2002.

OU4: Site Soils

A 1992 Surface Soil Remedial/Removal Action Program was completed addressing areas of soil contamination that pose a potential risk to worker health and safety. The program included excavation and off-site disposal of PCB-contaminated soil, excavation and disposal of PAH-contaminated soil, capping of another PAH-contaminated area, as well as placement of a geotextile, soil, and vegetative cover over a



chromium-contaminated area. This program, along with plans for an OU4 Surface Soils ROD, was suspended in 2004 and has been re-evaluated as part of the Comprehensive Site-wide Feasibility Study.

#### OU5: Site Groundwater

In accordance with the NJDEP ACO, a groundwater monitoring program was established and included site-wide groundwater pumping and monitoring. To control groundwater contamination related to the Site, Wyeth operates bedrock production wells with pumping at a minimum rate of 650,000 gallons per day and monitors groundwater quality on a semi-annual basis. The groundwater monitoring program was re-evaluated as part of the Comprehensive Site-wide Feasibility Study (2011). This program, including the frequency of groundwater monitoring events, will be reassessed throughout the remedy selection process with completion expected during site-wide Remedial Design activities.

#### OU6: Hill Property

In July 1996, a no further action with monitoring and institutional controls ROD was issued by NJDEP for this portion of the Site. As a result of the ROD and to maintain water use restrictions, NJDEP established a CEA/WRA for the Hill property, which was closed in June 2008 after residual groundwater contamination was recovered. The site-wide CEA/WRA is currently being developed with NJDEP. The Hill Property portion of the Site was deleted from the NPL on December 29, 1998. The Hill Property has been redeveloped for commercial use (i.e., retail stores, a professional baseball stadium, and a commuter/stadium parking lot).

#### OU7: Site-related Wetlands

A Baseline Ecological Risk Assessment (BERA) was completed in January 2005 and a Human Health Risk Assessment (HHRA) for the Flood Plain was completed in December 2006. Site-related wetlands were re-evaluated as part of site-wide soils in the Site-wide FS.

#### Non-CERCLA Impoundments (RCRA)

Lagoons 6 and 7 and Impoundments 8 and 9A are being addressed under RCRA. The Impoundment 8 Facility was developed into a RCRA Subtitle-C landfill in May 1991. The design included a triple liner, leachate detection and collection system and groundwater monitoring system. All of Lagoon 6 and approximately 95% of Lagoon 7 soils and silts have undergone remediation through excavation/solidification and were placed into Impoundment 8. Impoundment 8 accepts only site-related materials defined under RCRA Subtitle C landfill

requirements. Impoundment 9A was closed in-place by installing a double synthetic liner capping system.

#### Comprehensive Site-wide Feasibility Study

In Spring 2004, Wyeth submitted several documents to EPA and NJDEP seeking a suspension of remedial design and remedial action work on the OU3 remedy and proposed to reassess the entire Site through a Comprehensive Site-wide Feasibility Study. In its proposal, Wyeth stated that the remedy selected for the OU3 impoundments could not be performed as intended based on technical infeasibility. The difficulties mentioned included the impracticability of containing air emissions within permissible levels, a schedule to complete was estimated at 15 to 20 years, and a major cost escalation of over 100% higher than the original estimate provided in the September 1998 ROD. Based on these issues and the belief that previous decisions may also benefit from a comprehensive review, Wyeth proposed to reassess the OU3 remedial action and the other ROD remedies; complete the remedial investigations/studies for site-wide soils, groundwater, and wetlands; and evaluate potential future-use plans for the Site. All phases were to be combined into a single comprehensive program.

#### Impoundment 1 and 2 Focused Feasibility Study

In 2009, both EPA and NJDEP agreed to separate Impoundments 1 and 2 from the Site-wide Feasibility Study and site-wide remedy decision. Due to the highly complex nature of the contaminants within Impoundments 1 and 2 and their location in the flood plain, a Focused Feasibility Study is currently being performed on these impoundments with its own specific remedy to follow.

#### Corrective Action on Groundwater Discharges

In Fall 2010, Wyeth performed a site-wide inspection of the facility to note any environmental-related concerns. As a result, Wyeth observed groundwater discharge (referred to as seeps) from the Site banks in the vicinity of Impoundments 1 and 2 into the Raritan River. After sampling was performed and laboratory analysis was completed in December 2010, it was determined that the seeps contained up to 20,000 parts per billion (ppb) of benzene.

In February 2011, EPA and Wyeth developed an Interim Mitigation System (IMS) plan to immediately address the seeps while a longer term solution could be discussed, planned, and implemented. The IMS plan required the installation of activated carbon-filled sand bags along the River at the seep discharge points. These carbon bags continue to remain in place until the completion of a longer term solution expected in Spring 2012.

As part of a more effective engineered solution to address the seeps, Wyeth signed an Administrative Order on Consent (AOC) with the EPA on July 19, 2011 to address the seeps adjacent to Impoundments 1 and 2. The AOC required Wyeth to design and construct a Groundwater Removal System to intercept and capture or otherwise prevent releases of groundwater originating from the Site into the Raritan River. Wyeth proposed the construction of an interception trench along the Site banks of the Raritan River in the vicinity of Impoundments 1 and 2. The water captured in the interceptor trench would be treated and then discharged to Cuckhold's Brook after treatment. Both EPA and NJDEP have agreed to this approach and it is currently underway.

## **SITE CHARACTERISTICS**

The area surrounding the Site is an urban mixture of industrial and residential uses. The American Cyanamid Site is currently zoned for industrial use. The 435-acre Site is fenced and contains a large vacant factory-style building and a few small vacant buildings. The property is covered with a mixture of vegetation and asphalt patches. The surrounding community is serviced by a public water supply that is not connected with the contaminated groundwater beneath the Site.

Based on information provided in previous studies and reports, Site areas of concern include: impoundment contents, Main Plant soils, Flood Plain soils, and site-related groundwater.

### Impoundment Contents

The locations of the impoundments are shown on Figure 2. Out of the 27 impoundments constructed for waste storage or disposal, 16 were determined to potentially contribute to groundwater contamination and threaten human health and the environment. For a more comprehensive description and the current status of the impoundments, see Tables 1A-1F. These 16 impoundments are discussed as follows.

### *Previously Remediated Impoundments*

Numerous impoundments have been remediated or partially remediated. The total area remediated (Lagoons 6 and 7; Impoundments 8 and 9A; Impoundments 11, 14, 18, 19, 20, 25 and 26; and portions of Impoundments 1, 2, 4 and 5) is approximately 79.8 acres, with an approximate volume of 1,089,100 cubic yards (CY) of waste material addressed. Of this amount, approximately 50,000 CY consisted of the highly mobile and toxic material from Impoundments 1, 2, 4, and 5. This material, which was considered to meet the definition of principal threat wastes

(as defined by EPA under CERCLA), was treated on-site through recycling as a fuel source (*i.e.* destruction). Table 1 also provides the areas and volumes remediated by impoundment.

Impoundments 15 and 16 are currently undergoing remediation albeit on a slower pace. The current ongoing remedy for these impoundments is considered appropriate and consists of recycling/reuse of iron oxide. This remedy also includes the recycling/reuse of iron oxide located in a nearby area, referred to the former drying bed area. Therefore, Impoundment 15, Impoundment 16, and the former drying bed area are not included as part of this site-wide remedy, with the exception of a small portion of the former drying bed area which contains a tarry waste.

### *Remaining Impoundments*

The total area of the impoundments yet to be remediated (Impoundments 1, 2, 3, 4, 5, 13, 17 and 24) is approximately 27.7 acres, with an approximate volume of 387,700 CY. As previously stated, Table 1 shows the contaminants of concern (COCs) per impoundment. Impoundments 1 and 2 are being completed under a separate FFS and remedial action.

Based on historical analytical data and information provided in previous studies and reports, the waste material in the remaining impoundments will generally require some form of control to eliminate direct contact exposures and migration to groundwater. Two additional exposure routes, inhalation or ingestion of dust or vapors, and physical movement of the materials beyond their location and subsequent contact with receptors, must also be addressed.

### Site Soils

The term "Site soils" constitutes media that do not include impoundment contents or groundwater. The estimated total area of impacted surface and subsurface soils being addressed is approximately 284 acres; 194 acres in the Main Plant and 90 acres in the Flood Plain, with a total volume of approximately 3,339,000 CY.

### *Main Plant Soils*

Approximately 50% of the Main Plant area was used for active manufacturing and production operations. The remainder of the Main Plant was used for equipment and material storage, and waste disposal. As previously noted, soil impacts within the Main Plant are widespread and include VOCs, SVOCs, and inorganics with no discernable patterns or distinct areas of specific contamination.

### *Flood Plain Soils*

Manufacturing activities were never conducted within the Flood Plain. Disposal of wastes was limited to the impoundments, namely Impoundments 1, 2, 13, 15, 16, 17, 18, 24 and the former drying bed area. Therefore, the impacted soils in the Flood Plain are likely the result of incidental contamination, and have no discernible or specific sources.

The recent suspected groundwater discharges observed during the 2010 field investigation activities are indicative of potential contamination in the flood plain from Impoundments 1 and 2. Flood Plain soils were evaluated during the BERA and HHRA. The adequacy of the Flood Plain data will be re-evaluated during the Remedial Design Phase.

### Groundwater

Over the past 60 years, the Site originally withdrew water from the on-site bedrock production wells for use as non-contact cooling water in the production operations. In accordance with the 1982 and 1988 NJDEP ACOs (as amended in 1994), the current average withdrawal of over 650,000 gallons per day results in groundwater flow inward from the perimeter of the Site toward the pumping wells. This system contains the majority of the existing groundwater contamination within the Main Plant area of the Site. Recovered groundwater is discharged to the adjacent Somerset-Raritan Valley Sewerage Authority (SRVSA) wastewater facility for subsequent treatment and eventual release into Cuckhold's Brook.

Site groundwater quality is currently monitored as part of a semi-annual monitoring program. Historical data is generally clustered around the impoundments, because this is where much of the past work at the Site was focused. In November 2005, as part of the Groundwater Remedial Investigation (RI), a site-wide round of groundwater samples was collected with the objective of obtaining a site-wide understanding of groundwater quality conditions.

The contaminants found most frequently at concentrations above New Jersey Groundwater Quality Standards (GWQS) and Federal Maximum Contaminant Levels (MCLs) in the overburden aquifer are as follows:

- VOCs: benzene, chlorobenzene, toluene, and xylene
- SVOCs: aniline, 1,2-dichlorobenzene, and 1,4-dichlorobenzene

Overburden groundwater concentrations of VOCs and SVOCs are higher than those detected in bedrock groundwater. The contaminants found most frequently at

concentrations above the groundwater standards in the bedrock aquifer are as follows:

- VOCs: benzene, chlorobenzene, toluene, xylene, 1,2-dichloroethane, carbon tetrachloride, trichloroethene, and tetrachloroethene
- SVOCs: 1,2-dichlorobenzene and 1,4-dichlorobenzene

In both the overburden and bedrock aquifers, inorganic contaminants found at concentrations above either the GWQS or MCLs included manganese, iron, and arsenic. Other inorganic contaminants were occasionally found above the standards, although these were typically at concentrations close to the GWQS.

Overburden groundwater migrates horizontally due to natural hydraulic gradients near Cuckhold's Brook and the Raritan River, as well as vertically due to induced hydraulic gradients from pumping of production wells. As noted above, pumping of the production wells hydraulically controls bedrock groundwater north of the Port Reading rail line. A groundwater elevation contour map for the overburden aquifer is shown in Figure 3. Bedrock groundwater present south of the Port Reading rail line is not hydraulically controlled by the pumping of the production wells and discharges to the Raritan River.

## **GEOLOGY AND HYDROGEOLOGY**

### Geology

The Site is situated in the New Jersey Piedmont geomorphologic province, which is an area of rolling, low-lying terrain interrupted only by the Watchung Mountains, about 1.5 miles to the north. Overall, the Site is generally flat, with a natural slope and direction of approximately 2% to the south-southeast toward the Raritan River. The following paragraphs discuss the generalized stratigraphy of the Site.

### *Surface geology*

The natural soils of the Site are a mixture of sand, silt, and clay (loam). Man-made fill/general solid wastes and disturbed soil and gravel also exist at ground surface in portions of the Site.

### *Geology of unconsolidated deposits*

The general area of and around the Bound Brook facility is covered by naturally occurring unconsolidated sediments ranging in thickness from 5 to 30 feet. These sediments are either the weathering product (residual soils) of the underlying bedrock, or they are fluvial deposits related to the adjacent Raritan River.

The unconsolidated deposits are composed of a silt and clay sequence, a sand and gravel sequence, and a weathered shale layer. The silt and clay sequence acts as a hydraulic barrier, which can prevent the migration of contaminated groundwater due to its low permeability. The sand and gravel sequence underlies the silt and clay sequence, but it also penetrates upwards into the silt and clay sequence in some locations. The weathered shale layer underlies the sand and gravel sequence. The weathered shale layer was created by weathering of bedrock and consists of shale and siltstone fragments in a clay matrix. This layer acts as a low permeability boundary between the overlying deposits and the underlying bedrock. When viewing the overburden deposits from a site-wide perspective, it can be seen that the entire sequence of overburden deposits (silt and clay, sand and gravel, and residual soil) tend to be present across the Site, although the silt and clay layer is not continuous across the Site.

#### *Bedrock geology*

The unconsolidated deposits are underlain by bedrock. This bedrock layer is part of the Passaic Formation, which consists of a series of reddish-brown shale, siltstone, and fine-grained sandstone units. The bedrock contains highly fractured zones which allow vertical groundwater flow. These bedrock fractures control the composition and distribution of the overlying water-bearing units and the groundwater flow regime in the overburden aquifer system.

#### Hydrogeology

A principal objective for understanding the Site hydrogeology is to understand the potential for movement of Site contaminants from source areas. The chemistry data and interpreted distribution of key marker compounds indicates that there are a few reasonably well-defined areas of contamination in overburden groundwater as opposed to one or more gradational plumes. This distribution is likely caused by the generally downward hydraulic gradients between the overburden and the bedrock which is significantly influenced by the bedrock pumping at wells PW-2/PW-3. The overall transport of overburden impacts is horizontal, likely within the sand and gravel unit at the base of the overburden, until a hydraulic connection is made between overburden and bedrock. Across most of the Main Plant Area, impacts are further transported in the bedrock co-located with structural bedding planes and migrate within the overall capture of the groundwater collection system.

## **INVESTIGATION SUMMARY**

The impoundments and contaminated soils are the primary focus of current remedial activities since they have been found to be the contributing sources of groundwater contamination. An Impoundment Characterization Program was completed in 1990, which was intended to fulfill the requirements of an RI for the impoundments. A Soils RI was completed in May 1992 to characterize and delineate contaminated soils. Subsequent to the Impoundment Characterization Program, three CMS/FS reports were completed for the three impoundment groups between 1992 and 1997. RODs were issued for these impoundment groups consistent with the remedial alternatives recommended in the CMS/FS reports and remedial actions were completed in accordance with their respective RODs for Impoundments 11, 14, 18, 19, 20, and 26.

Remedial activities were suspended in 2004 pending the completion of a remedy review report. The remedy review report, referred to as the Impoundment Remedy Appropriateness Evaluation, was completed in July 2005 and concluded that the conditions for Impoundments 1, 2, 3, 4, 5, 13, 17, and 24 had changed, in some cases significantly, since their respective RODs were issued.

In 2005, a Data Adequacy Review (DAR) was completed to assess the adequacy of existing soil and groundwater data assembled through previous investigatory and monitoring programs at the Site. The DAR Report concluded that there was sufficient existing data related to Site soils and impoundment materials, but additional groundwater investigation was necessary to adequately characterize groundwater for the evaluation of remedial alternatives. Following the completion of a Groundwater RI Report in February 2006, NJDEP requested that additional monitoring wells be installed and additional data be collected. A Supplemental Groundwater RI Report, which included this additional data, was approved by NJDEP in February 2008; therefore, it was concluded that sufficient groundwater data exists for the completion of the Comprehensive Site-wide FS.

On March 16, 2010, EPA presented the proposed alternatives of the Comprehensive Site-wide FS to EPA's National Remedy Review Board (NRRB) to evaluate the appropriate remedy for the remainder of the Site. As a result of this review, an additional alternative was developed in response to the NRRB's advisory recommendations. The preferred remedy presented in this Proposed Plan reflects this new alternative and NRRB input.

## NATURE AND EXTENT OF CONTAMINATION

### Impoundment Contents

Of the six impoundments discussed previously and being addressed in this Proposed Plan, there are two general types of impoundments being addressed:

- Those used to dispose mainly process wastes.
- Those used to dispose wastewater sludge.

Impoundments 3, 4, and 5 were used for mainly process waste disposal, and Impoundments 13, 17, and 24 were used for disposal of wastewater sludge. VOCs, which are relatively mobile in the environment and are present in the impoundments, have been found in both the overburden and bedrock groundwater aquifers.

Overburden groundwater at the Site naturally flows toward the Raritan River and its tributaries. Under current conditions this natural groundwater flow direction is maintained only for the southern and eastern portions of the overall Site area. Bedrock groundwater pumping has resulted in local areas on-site with lower water table surface elevations, referred to as depressions, which indicates that groundwater flows downward into the bedrock aquifer at some locations. Bedrock groundwater pumping has also resulted in areas with elevated water table levels, referred to as mounds, specifically located in the northern and southern parts of the Site. The water table mounding directly influences the overburden groundwater towards the depressions thereby extending the overall capture of overburden groundwater by the bedrock extraction wells (PW-2 and PW-3). In addition, previous and current data indicates that overburden groundwater continues to migrate into the bedrock over most of the Site. Although part of overburden groundwater is discharging to Cuckhold's Brook, the results of the Main Plant overburden groundwater investigation indicated no significant impacts. The groundwater in the Impoundment 1 and 2 area is currently being addressed as part of the Removal Action and a separate pre-design investigation is being performed.

In 1985, a report prepared by Camp Dresser & McKee (CDM) indicated that overburden groundwater may be drawn downward into the bedrock system by production well pumping. As confirmed by the Groundwater RI, this capture is strongest in the northern areas of the plant and weakens to the south. Any VOCs present in overburden groundwater in northern areas of the Site, therefore, tend to be captured by the pumping wells. The impoundments where the disposal of production wastes and wastewater treatment sludges took place can act as potential sources of contamination to groundwater.

In the areas south of the Main Plant, bedrock groundwater that is not captured by the pumping wells eventually discharges to the Raritan River. Bedrock groundwater in the areas of Impoundments 1 and 2, and Impoundments 17 and 24, (all of which are south or southwest of the Main Plant), is outside the zone of influence of the pumping wells. Contaminants present in the bedrock groundwater in these areas discharge to the river. Bedrock groundwater concentrations in these areas, however, are generally lower than those detected in overburden groundwater. The quality of the bedrock in this area and, groundwater discharges to the river from the bedrock aquifer are subject to ongoing evaluations.

VOCs contained in impoundments may be released to the atmosphere through volatilization from impoundment solids or impoundment water covers. As previously noted, the physical characteristics of the impoundments do not allow for the contents of these impoundments to be transported by surface water runoff, thus significant overland transport of the chemicals of interest with stormwater runoff does not occur.

### Site Soils

In general, chemicals in the environment are likely to behave in rather specific ways. Chemicals such as PCBs or most heavy metals have an affinity to bind to material with high organic carbon content such as certain types of soil or sediment. Substances retained in soils are exposed to additional transport mechanisms. These include overland transport with stormwater runoff, atmospheric transport with dusts, biodegradation, and bioaccumulation in soil biota.

Other chemicals such as VOCs tend to either migrate towards groundwater or volatilize to the atmosphere.

Past leaks and spills have impacted soils generally in the production area of the Main Plant as well as soil areas in the western portion of the Site, also referred to as the West Yard. The environmental fate and transport of chemicals associated with the leaks and spills depends on the conditions described in the previous paragraphs. Chemicals in the Main Plant area reaching the overburden groundwater would be expected to migrate to pumping wells or, in those instances where groundwater is not controlled by the pumping wells, to the Raritan River. As noted in the Baseline Endangerment Assessment, 1992, contaminated soils may also serve as a source of contaminant movement into surface water and to the atmosphere. However, preliminary remediation activities have addressed the issue of soil contaminant migration in terms of erosion or volatilization processes and stormwater runoff.

Preliminary activities used to address these migration pathways were the addition of clean fill and gravel and paving some areas within the Main Plant. In addition, soil contamination is contained within the flood control berm surrounding the Main Plant area, generally preventing stormwater runoff from leaving the Main Plant area, as noted earlier. Runoff is collected and currently stored in Lagoon 7, thus preventing off-site migration of contaminants into surface waters by erosion and subsequent sedimentation processes. Chemical migration from both impoundments and soils to the groundwater is a primary transport mechanism at the Site. Dust generation, volatilization, and surface water runoff are considered secondary transport mechanisms at the Site.

### Groundwater

Overburden groundwater with contaminant concentrations above the GWQS where discharge is not controlled by the current bedrock pumping system is found in the following areas:

- between Impoundments 1 and 2 and the Raritan River to the south and Cuckhold's Brook to the west;
- between Lagoon 7/Impoundment 24 and the Raritan River to the southwest;
- between Impoundment 24/Lagoon 6 and New Jersey American Water to the south;
- between Impoundments 3, 4, and 5 and Cuckhold's Brook to the southwest; and
- between the Main Plant and Cuckhold's Brook to the south.

Organic chemical contaminants detected above the GWQS are present in bedrock groundwater north of the rail line. Main Plant bedrock groundwater is captured by production wells PW-2 and PW-3 and, therefore, is controlled and limits migration off-site.

Bedrock groundwater present south of the rail line is not captured by pumping of the production wells. Based on a review of bedrock groundwater monitoring analytical data, and with an understanding of groundwater flow (i.e., as bedrock groundwater approaches the Raritan River, flow paths are upward), groundwater impacts are primarily evident downgradient of Impoundments 1 and 2.

The bedrock zone of capture is not consistently attained near the southwest corner of Lagoon 7 and Impoundment 24, and water quality results obtained from near the southwest corner of Impoundment 24 indicates concentrations of VOCs, SVOCs, and inorganics above water quality standards.

### **SCOPE AND ROLE OF ACTION**

In order to remediate Superfund sites, work is often divided into OUs. The American Cyanamid site is divided up into eight OUs:

- OU1: Impoundments 11, 13, 19 and 24
- OU2: Impoundments 15, 16, 17 and 18
- OU3: Impoundments 1, 2, 3, 4, 5, 14, 20 and 26
- OU4: Site Soils
- OU5: Site Groundwater
- OU6: Hill Property
- OU7: Site-related Wetlands
- OU8: Impoundments 1 and 2

Note: The site-wide remedy presented in this Proposed Plan combines all previous OUs (OU1-OU7) and is being addressed under the existing OU4. As previously discussed, Impoundments 1 and 2 are being addressed separately and a new OU8 was recently created.

RODs have been signed for OU1 (9/28/93), OU2 (7/12/96), OU3 (9/28/98), and OU6 (7/12/96).

In June 2004, all ongoing remedial activities at the Site, with the exception of the groundwater capture system, were suspended pending the completion of a remedy review report to evaluate the appropriateness of the remaining impoundment remedial programs. Based upon this report, referred to as the 2005 Impoundment Remedy Appropriateness Evaluation, it was recommended that a Comprehensive Site-wide Feasibility Study be conducted.

Therefore, Wyeth undertook completion of a Comprehensive Site-wide Feasibility Study designed to address all remaining contamination within the various media on-site under a single comprehensive program. The final study would then be used for a site-wide ROD.

### **ENFORCEMENT**

American Cyanamid entered into ACOs related to investigation and remediation at the Site with NJDEP in 1982 and 1988 to address the 16 impoundments, site-wide contaminated soils, and groundwater. The 1988 NJDEP ACO was amended in 1994 which incorporated the existing site-wide groundwater pumping and monitoring requirements of the NJPDES/DGW permit and included further groundwater monitoring requirements for the Impound 8 Facility.

In December 1994, American Home Products Corporation purchased the American Cyanamid Company and assumed full responsibility for environmental remediation as required under the NJDEP ACO for this Site. In December 2002, American Home Products Corporation

changed its name to Wyeth. In October 2009, Wyeth was purchased by Pfizer Inc., and became a wholly owned subsidiary of Pfizer.

NJDEP was the lead agency for the Site until March 2009, when EPA assumed the lead role.

On July 19, 2011, Wyeth entered an Administrative Settlement Agreement and Order on Consent (EPA AOC) with EPA requiring Wyeth to design and construct a removal system engineered to intercept and capture contaminated groundwater in the overburden and prevent it from seeping into the Raritan River.

## SUMMARY OF SITE RISKS

### Baseline Risk Assessment

As part of the Site investigation process, a baseline risk assessment was conducted to determine the current and future effects of contaminants on human health and the environment.

A baseline risk assessment is an analysis of the potential adverse human health and ecological effects of releases of hazardous substances from a Site in the absence of any actions or controls to mitigate such releases, under current and future land, groundwater, surface water and sediment uses. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed by the remedial action.

### Human Health Risk Assessment (HHRA)

The potential non-carcinogenic hazards and carcinogenic risks associated with potential exposures to the impoundments, surface soil, and groundwater were evaluated in the BEA (BB&L, 1992) for the Main Plant and the HHRA (O'Brien & Gere, 2006) for the Flood Plain. EPA Region 2 prepared a streamlined HHRA in February, 2010 which evaluated additional pathways.

The objective of the streamlined HHRA was to determine the cancer risks and non-cancer hazards associated with exposure to contaminated surface soil (main plant area), groundwater (overburden and bedrock) and the impoundments. Since the current zoning of the Site is industrial, the streamlined HHRA evaluated the following receptors: Site workers exposure to surface soil and the impoundments. The groundwater is a designated potable water supply; therefore, the residential exposure pathway was also evaluated.

The maximum detected concentrations in each medium were compared to their respective Regional Screening Level (RSLs). The surface soil RSLs are based on a

## WHAT IS RISK AND HOW IS IT CALCULATED?

A Superfund baseline human health risk assessment is an analysis of the potential adverse health effects caused by hazardous substance releases from a site in the absence of any actions to control or mitigate these under current- and future-land uses. A four-step process is utilized for assessing site-related human health risks for reasonable maximum exposure scenarios.

*Hazard Identification:* In this step, the chemicals of potential concern (COPCs) at the site in various media (*i.e.*, soil, groundwater, surface water, and air) are identified based on such factors as toxicity, frequency of occurrence, and fate and transport of the contaminants in the environment, concentrations of the contaminants in specific media, mobility, persistence, and bioaccumulation.

*Exposure Assessment:* In this step, the different exposure pathways through which people might be exposed to the contaminants identified in the previous step are evaluated. Examples of exposure pathways include incidental ingestion of and dermal contact with contaminated soil and ingestion of and dermal contact with contaminated groundwater. Factors relating to the exposure assessment include, but are not limited to, the concentrations in specific media that people might be exposed to and the frequency and duration of that exposure. Using these factors, a "reasonable maximum exposure" scenario, which portrays the highest level of human exposure that could reasonably be expected to occur, is calculated.

*Toxicity Assessment:* In this step, the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure and severity of adverse effects are determined. Potential health effects are chemical-specific and may include the risk of developing cancer over a lifetime or other noncancer health hazards, such as changes in the normal functions of organs within the body (*e.g.*, changes in the effectiveness of the immune system). Some chemicals are capable of causing both cancer and noncancer health hazards.

*Risk Characterization:* This step summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site risks for all COPCs. Exposures are evaluated based on the potential risk of developing cancer and the potential for noncancer health hazards. The likelihood of an individual developing cancer is expressed as a probability. For example, a  $10^{-4}$  cancer risk means a "one in ten thousand excess cancer risk"; or one additional cancer may be seen in a population of 10,000 people as a result of exposure to site contaminants under the conditions identified in the Exposure Assessment. Current Superfund regulations for exposures identify the range for determining whether remedial action is necessary as an individual excess lifetime cancer risk of  $10^{-4}$  to  $10^{-6}$ , corresponding to a one in ten thousand to a one in a million excess cancer risk. For noncancer health effects, a "hazard index" (HI) is calculated. The key concept for a noncancer HI is that a "threshold" (measured as an HI of less than or equal to 1) exists below which noncancer health hazards are not expected to occur. The goal of protection is  $10^{-6}$  for cancer risk and an HI of 1 for a noncancer health hazard. Chemicals that exceed a  $10^{-4}$  cancer risk or an HI of 1 are typically those that will require remedial action at the site.

worker's direct exposure (via ingestion, inhalation, and dermal contact) while working at the Site (25 years). Since the groundwater at the Site is classified by NJDEP as a potable water supply, the RSLs represent a resident's exposure to groundwater contamination over a lifetime.

In general, the industrial worker's exposure to surface soil and the impoundments exceeded the acceptable risk range and the non-cancer hazard threshold of 1, and benzene, naphthalene, PCBs, arsenic, chromium, benzo(a)pyrene, and benzo(a)anthracene are the risk drivers. The trespasser's exposure to surface soil within the main plant area is at the upper bound of the acceptable risk range for chemicals in which cancer is the most sensitive health endpoint (attributable to benzo(a)anthracene and Total PCBs). However, the non-cancer threshold of 1 has been exceeded for several metals, notably cobalt, antimony, chromium, and lead detected in the surface soil. The cancer risks and non-cancer hazards associated with a resident's exposure to groundwater exceeded the acceptable risk range and the non-cancer threshold of 1, with thallium, manganese, cyanide, chlorobenzene, and 1,2-dichloroethane contributing most significantly to the non-cancer hazard. The risk drivers for a resident's exposure to groundwater are 1,4-dichlorobenzene, benzene, 1,2-dichloroethane, chloroform, 4-chloroaniline, aniline, bis(2-ethylhexyl)phthalate, and naphthalene. Receptors with reasonable maximum exposure (RME) cancer risk values above the acceptable risk range and receptors with non-cancer RME exposures greater than the non-cancer threshold of 1 are shown in Tables 13 and 14 of the Comprehensive Site-wide FS. It should be noted that other media (sediment and surface water) were not evaluated as part of this streamlined human health risk assessment, which could underestimate the cancer risks and non-cancer hazards. In regards to possible floodplain trespasser risks, an evaluation will be completed to determine if an additional risk assessment will be required during the Focused Feasibility Study for Impoundments 1 and 2. Overall, the streamlined risk assessment indicates that exposure to site-related contamination results in an excess lifetime cancer risk that exceeds EPA's target risk range of  $10^{-4}$  to  $10^{-6}$ , as well as NJDEP's acceptable cancer risk level of  $10^{-6}$ . Therefore, site-related contamination poses an unacceptable human health risk to current and potential future receptors.

### Ecological Risk Assessments

Ecological risks at the Site were addressed in two documents: the BEA approved by NJDEP and EPA in 1992, and the BERA in 2005. In the Qualitative Ecological Assessment section of the BEA, the results of a site-wide habitat survey, as well as evidence from direct field observations, were compared to the Natural Heritage

Data Base (NJDEP, 1991). The assessment indicated that, with the exception of the great blue heron, the on-site habitat does not support threatened or endangered species. Impoundments 13, 17, and 24 were not included in either the 1992 BEA or the 2005 BERA because the contents of these impoundments were scheduled to be remediated under the OU1 and OU2 RODs.

The most significant potential exposure pathway identified in the BEA involves aquatic biota exposure to Raritan River water. Site groundwater discharge mass loading calculations suggest that exposure to concentrations of Site chemicals of interest resulting from groundwater discharge is unlikely to affect the health and diversity of aquatic biota in the Raritan River.

### **REMEDIAL ACTION OBJECTIVES**

The following remedial action objectives (RAOs) address the human health risks and environmental concerns at the American Cyanamid Site. The RAOs are organized into three categories: principal threat waste, soil/impoundment material, and groundwater.

#### **Principal Threat Waste:**

- Remove or treat material that meets the definition of principal threat waste, to the extent practical, and
- Prevent current or potential future migration of material that meets the definition of principal threat waste from the Site that would result in direct contact or inhalation exposure, to the extent practicable.

Material that meets the definition of principal threat wastes exist at the Site that could pose potential risk of

#### **WHAT IS A "PRINCIPAL THREAT"?**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes an expectation that EPA will use treatment to address the principal threats posed by a Site wherever practicable (NCP Section 300.430(a)(1)(iii)(A)). The "principal threat" concept is applied to the characterization of "source materials" at a Superfund Site. A source material is material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to ground water, surface water or air, or acts as a source for direct exposure. Contaminated ground water generally is not considered to be a source material; however, Non-Aqueous Phase Liquids (NAPLs) in ground water may be viewed as source material. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained, or would present a significant risk to human health or the environment should exposure occur. The decision to treat these wastes is made on a site-specific basis through a detailed analysis of the alternatives using the nine remedy selection criteria. This analysis provides a basis for making a statutory finding that the remedy employs treatment as a principal element.



exposure if appropriate remedial actions are not implemented. Principal threat waste is material that includes or contains hazardous substances, pollutants, or contaminants that act as a reservoir for migration of contamination to groundwater, surface water, or air, or acts as a source for direct exposure. Without additional remedial action, there is the potential for these materials to migrate from their current locations to other on-site or off-site areas where unacceptable direct contact or air emission risks may result.

**Soil/Impoundment Material:**

- Prevent or minimize human and ecological exposure to contaminants in soils and impoundment materials at levels above relevant risk-based remediation criteria, and
- Prevent or minimize sources of groundwater impacts (*i.e.*, reduce chemical loadings to groundwater) resulting in long-term improvement of groundwater quality and eventual achievement of applicable regulatory standards.

Per the Site-wide FS and the HHRA, the soils and impoundments contain contaminants at concentrations in excess of regulatory criteria. The risk assessments (human health and ecological) concluded that in certain areas, exposure pathways (specifically direct contact and/or inhalation) between receptors and these contaminants are potentially complete and that the potential risks from exposure to these contaminants exceed acceptable levels. Outside of the Main Plant area, the risks are limited to isolated, relatively small areas.

**Groundwater:**

- Restore, as practicable, the overburden and bedrock aquifers within the area of attainment to its expected beneficial use and to concentrations below Federal MCLs and/or New Jersey GWQS within a reasonable period.
- Eliminate the migration of contaminants exceeding federal MCLs and/or NJ GWQS in the overburden and bedrock aquifers beyond the point of compliance through a combination of source actions and hydraulic controls to the extent practicable.

Groundwater at the Site contains contaminants at concentrations in excess of NJ GWQS. Although a groundwater collection system is in place that pumps on average about 20 million gallons per month, there is currently groundwater migrating from the Site. While it is not technically feasible to eliminate residual sources of groundwater impacts so as to allow for termination of hydraulic controls in the foreseeable future, source control

and eventual restoration of groundwater quality are important objectives of this Proposed Plan.

Note: The area of attainment is defined by EPA Guidance: Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites (OSWER Directive 9283.1-2) as “the area of the plume outside the boundary of any waste to be managed in place as part of the final remedy, *i.e.*, the point of compliance, and inside the boundaries of the contaminant plume.” The point of compliance for the Site is defined as the edge of the waste management area in accordance with EPA Guidance: Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, June 26, 2009.

**Remediation Goals**

To meet the RAOs defined above, EPA has identified remediation goals to aid in defining the extent of contaminated media requiring remedial action. In general, remediation goals establish media-specific concentrations of Site contaminants that will pose no unacceptable risk to human health and the environment. Remediation goals have also been developed to establish criteria to define the source areas deemed principal threats for the Site, areas for which EPA has concluded treatment should be considered as part of the remedy.

In addition, to develop remedial alternatives for the Site, impacted media are characterized based on the actions required to minimize potential exposures to human and ecological receptors.

These potential exposures consist of:

- Direct contact with impacted media and their contaminants (referred to as “direct contact control”)
- Inhalation or ingestion of impacted media or their contaminants, including those that emit dust or vapors at unacceptable levels (referred to as “vapor control” [airborne contaminants])
- Physical movement of media beyond their containment areas that could result in contact by receptors (referred to as “movement control” or “migration control”).

Likewise, potential adverse ecological impacts resulting from the remedial alternatives need to be assessed. Based on the data collected to date, impoundment contents, soils, and groundwater will require some form of control to address the potential exposure pathways. Addressing these exposure routes by providing direct contact, vapor,

and movement control, as appropriate, will result in applying different remedial approaches across the Site.

Below is a summary of the remediation goals for source areas; most notably the impoundments as well as some areas within the Main Plant soils, Flood Plain soils and groundwater established in the Site-wide FS.

Remediation goals for source areas, site-wide soils, and groundwater are presented in Tables 2A-2D.

#### Source Area Remediation Goals

Within the FS, the Source Area Remediation Goals are also referred to as areas requiring movement control and vapor control. Numerical criteria were developed to aid in defining the extent of contaminated media requiring movement control. The visual observation of tarry substances will also be utilized to identify areas requiring movement control, regardless of whether these tarry substances exceed the numerical criteria.

After reviewing the previous remedial investigations, 2006 Human Health Risk Assessment, and the Site-wide FS, EPA has identified that the sludges and tarry substances in Impoundments 3, 4 and 5 require a remedy for movement and vapor control. Additionally, some soils within the Main Plant, generally concentrated in the western portion of the Site, will also require movement control. A portion of the former drying bed was also identified as an area in the Flood Plain that would warrant movement control. Pre-design investigations will be conducted to confirm the identified areas and further delineate areas containing principal threat waste.

#### Site-wide Soil Remediation Goals

Within the FS, the Source Area Remediation Goals are also referred to as areas requiring direct contact and, in some select areas, vapor controls. Risk-based soil remediation goals were developed based on the potential exposure risks for ingestion, dermal contact, and inhalation human health exposure pathways. Industrial worker exposure was evaluated as a human health exposure pathway. Soil remediation goals were selected based upon consideration of these risk-based concentrations and promulgated NJDEP Non-Residential Direct Contact Soil Remediation Standards. NJDEP Impact-to-Groundwater Soil Screening Criteria were also evaluated as "To-Be-Considered" criteria.

Soils that exceed the soil remediation goal values, but do not constitute source areas, can generally be managed in place with engineering controls (capping) and proper land-use restrictions. As described earlier, soils/impoundment contents in the Main Plant area have

concentrations that warrant the limiting of direct contact. This includes soils/impoundment contents in the entire Main Plant area, with the exception of soils underneath Impoundments 14, 21, and 26, which have either never been used for waste disposal or were previously remediated. Existing data also indicates that some form of direct contact control is warranted in portions of the Flood Plain area. This includes Impoundments 13, 17, and 24, but not the impoundments that were never used for waste disposal (9, 10, 12, 21, 22, 23), were previously remediated (11, 18, 19, and Lagoon 6), are in the process of being closed in accordance with RCRA closure plans (Lagoon 7), or are currently being remediated (15 and 16). Additionally, direct contact control is required for the former drying bed, as well as the isolated area located between Impoundment 13 and the railroad tracks that was identified as a potential risk in the HHRA and BERA. Regarding the Site soil areas requiring vapor control, there are locations within the Main Plant soils with contaminant concentrations exceeding screening criteria. Data for the Flood Plain area indicates that vapor control is only warranted in the tarry waste portion of the former drying bed area. These areas are identified on Figures 8-10 within the Comprehensive Site-wide FS for reference.

#### Groundwater Remediation Goals

Remediation goals were developed for groundwater based on the RAOs discussed earlier. The more stringent of the EPA federal MCLs, NJDEP groundwater quality criteria, NJDEP MCLs, and site-specific, risk-based concentrations was selected as the remediation goal. Consistent with the RAOs for groundwater, these remediation goals will be used for developing use restrictions and other actions to prevent exposure, and for assessing potential restoration and containment of the groundwater.

## SUMMARY OF REMEDIAL ALTERNATIVES

### Common Elements

Many of these alternatives include common components. Because any combination of remedial alternatives will result in some contaminants remaining on the Site above levels that would allow for unrestricted use, a review of the remedy will be conducted every five years, at minimum. In addition, institutional controls such as a deed notice or restrictive covenant would be required for the property as one component of maintaining the long-term protectiveness of the implemented remedy.

All the alternatives, with the exception of the no further action alternative, include soil capping and institutional controls to prevent exposure to low-level waste and residual concentrations of chemicals of concern.

A total of seven of the eleven original alternatives were carried through the screening process presented in the Comprehensive Site-wide FS. Please refer to Tables 24-33 of the Comprehensive Site-wide FS for a more detailed discussion of all the remedial alternatives.

### Alternative 1 - No Action

<i>Capital Cost:</i>	\$0
<i>Annual O&amp;M Costs:</i>	\$0
<i>Total Present Worth:</i>	\$0
<i>Implementation Timeframe:</i>	Not Applicable

The NCP requires that a “No Action” alternative be developed as a baseline for comparing other remedial alternatives. Under this alternative, no action would be taken to remediate impacted soils and impoundment contents or groundwater at the Site. The current bedrock pumping system would be turned off. This alternative would only involve long-term monitoring of groundwater quality through a sampling program. Alternative 1 does not include institutional controls.

### Alternative 2 – Limited Action

<i>Capital Cost:</i>	\$683,283
<i>Annual O&amp;M Costs:</i>	\$32,399,257
<i>Total Present Worth:</i>	\$33,082,537
<i>Implementation Timeframe</i>	
<i>Soils/Impoundments:</i>	Not Applicable
<i>Groundwater:</i>	30 Years

Under this alternative, implementation of institutional controls as described above would be implemented. Groundwater monitoring would continue to be performed as a basis for evaluating the CEA and well restriction area (WRA) and assessing the added value of the bedrock pumping system on impacted groundwater. Restrictions

placed on the Site to limit its future use would be accomplished by recording in the property deeds that potentially hazardous media may be present and that use restrictions have been imposed. Should this alternative be implemented, the potential addition of monitoring wells to supplement the current monitoring scheme would be evaluated as part of the remedial action design development.

### Alternative 3 – Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Groundwater

<i>Capital Cost:</i>	\$87,976,060
<i>Annual O&amp;M Costs:</i>	\$49,973,383
<i>Total Present Worth:</i>	\$137,949,443
<i>Implementation Timeframe</i>	
<i>Soils/Impoundments:</i>	10 Years
<i>Groundwater:</i>	30 Years

This alternative would provide a combination of containment caps over impacted areas at the Site to control the potential for exposure to impacted soils/impoundment contents.

#### Main Plant Soils, Flood Plain Soils, and Impoundments

For areas identified as requiring direct contact control, a 24-inch soil cover would be utilized to provide a barrier to prevent direct contact exposure with impacted media. This soil cover system would be an engineered cap designed and constructed to withstand the effects of up to a 500-year flood event. Appropriate controls and engineered mechanisms will be included to safe guard against scouring, erosion or other effects from being constructed in a floodplain. In addition, a strict inspection and maintenance program will be developed as part of the ongoing operation plan for the soil cover system.

For the material located in the flood plain (Impoundments 13, 17, and 24), an ecological risk assessment would be conducted during the remedial design phase to identify if any material requires relocation and consolidation in the Main Plant in areas requiring direct contact control.

For areas identified in the FS as requiring both vapor and movement control, a multi-layer engineered cap would be used. Measures would be employed in accordance with New Jersey requirements for vapor control as part of future construction. Where additional structural stability is needed to support a multi-layer cap (namely impoundment contents), stabilization, or a similar physical process as determined to be appropriate during the conceptual design phase, would be employed prior to capping. This is anticipated to consist of the use of standard construction technologies such as the addition of amendments,

stabilizing agents, and/or the installation of physical structure (i.e., geogrids).

### Groundwater

The groundwater component consists of collection of bedrock groundwater within the Main Plant. While the existing bedrock groundwater collection system provides hydraulic control over much of the Main Plant groundwater, the effectiveness of the bedrock groundwater collection system can be improved to better achieve the groundwater RAOs. Conceptual improvements to the bedrock collection system include placing the primary extraction well(s) in a more central location of the impacted bedrock and placing targeted bedrock groundwater extraction wells to address more localized impacts, such as in the vicinity of Lagoons 6 and 7/Impoundment 24. Additional details of these improvements would be developed during remedial design. This remedy also includes institutional controls that would prohibit potable use of groundwater at the Site.

Additionally, localized collection of overburden groundwater in specific areas would be included, as required, to prevent migration of contaminants not currently captured by the existing collection system. Possible areas where localized overburden groundwater collection could be placed are:

- between Impoundments 1 and 2 and the Raritan River to the south (if not addressed as part of the ongoing removal action)
- between Lagoon 7/Impoundment 24 and the Raritan River to the southwest, and extending around to the area between Impoundment 24/Lagoon 6 and NJ American Water Company to the south
- between the Main Plant and Cuckhold's Brook to the south and extending around to the southwest.

Based on the information presented in the groundwater RI Report and Supplemental RI Report, the following presents the proposed collection component for these areas:

- Recovery system (trenches, wells, and/or containment walls) around Impoundments 1 and 2 and between these impoundments and the Raritan River.
- Recovery system (trenches, wells, and/or containment walls) to collect impacted overburden groundwater along the north side of the Main Plant flood berm, north of Cuckhold's Brook and the rail line.
- Recovery system (trenches, wells, and/or containment walls) trench between Lagoon 7/Impoundment 24 and

the Raritan River to the southwest, and extending around to the area between Impoundment 24/Lagoon 6 and New Jersey American Water to the south.

- Bedrock pumping well or a series of wells in the Lagoon 7 Area to capture bedrock groundwater not currently collected by the existing bedrock pumping system.

The waters collected at the Site will be appropriately treated or pre-treated, as necessary, for subsequent discharge in accordance with appropriate requirements. Treatment may occur on the combined waste stream or on individual streams as determined to be necessary. At this time, it is anticipated that discharge would be either to SRVSA, directly or following pre-treatment, or directly to surface water following on-site complete treatment.

### **Alternative 4 – Consolidation/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Groundwater**

<i>Capital Cost:</i>	<i>\$129,530,494</i>
<i>Annual O&amp;M Costs:</i>	<i>\$ 49,973,383</i>
<i>Total Present Worth:</i>	<i>\$179,503,877</i>

#### Implementation Timeframe

<i>Soils/Impoundments:</i>	<i>10 Years</i>
<i>Groundwater:</i>	<i>30 Years</i>

This alternative would provide a combination of caps over impacted areas at the Site to control the potential for direct contact with impacted soils/impoundment contents with the addition of excavation of the Flood Plain areas and consolidation in the Main Plant.

#### Main Plant Soils, Impoundments 3, 4, and 5

Includes same remedies as Alternative 3 with the exception of the Flood Plain area.

#### Flood Plain Soils and Drying Bed Area

The areas identified in the FS requiring direct contact, movement, and vapor control would be excavated and consolidated at the Main Plant in areas where the same types of controls are warranted.

#### Impoundments 13, 17 and 24

For the material in Impoundments 13, 17, and 24, an ecological risk assessment would be conducted during the remedial design phase to identify if any material requires relocation and consolidation in the Main Plant in areas requiring direct contact control.

#### Groundwater

Includes the same groundwater remedy as described in Alternative 3.

#### **Alternative 4A – Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Ground Water**

<i>Capital Cost:</i>	\$154,224,898
<i>Annual O&amp;M Costs:</i>	\$49,973,383
<i>Total Present Worth:</i>	\$204,198,282
<u><i>Implementation Timeframe</i></u>	
<i>Soils/Impoundments:</i>	10 Years
<i>Groundwater:</i>	30 Years

This alternative would provide a combination of caps over impacted areas at the Site to control the potential for direct contact with impacted soils/impoundment contents, which is one of the primary RAOs for the Site, with the addition of excavation of the Flood Plain areas and consolidation in the Main Plant. In addition, this alternative would address principal threat wastes found in the Main Plant areas and Impoundments 3, 4, and 5 by consolidating them in Impoundments 3, 4, and 5 and treating these materials before solidification and capping, thereby also addressing the RAOs. See Figure 4 for details on this alternative.

##### Main Plant Soils, Impoundments 3, 4, and 5

Includes same remedies as Alternatives 3 and 4 with the exception of the Flood Plain area and treatment of principal threat wastes.

For impoundment areas meeting the definition of Principal Threat Wastes, (namely, the contents of Impoundments 3, 4 and 5), *in-situ* solidification/stabilization (S/S), or a similar physical process, as determined to be appropriate during the conceptual design phase, would be employed for the full depth of the impoundment material prior to capping (the actual depth of treatment will be established and confirmed during the remedial design phase).

For Main Plant soils outside of the impoundment limits that meet the definition of Principal Threat Wastes, the material would be excavated to its full depth (confirmed in the remedial design phase) and consolidated within Impoundments 3, 4, and 5 for subsequent treatment with those wastes. These excavated areas outside Impoundments 3, 4, and 5 would then be backfilled and covered with the multi-layer engineered cap discussed above.

##### Flood Plain Soils and Drying Bed Area

The areas identified in the FS requiring direct contact, movement, and vapor control would be excavated and consolidated at the Main Plant in areas where the same types of controls are warranted.

##### Impoundments 13, 17 and 24

For the material in Impoundments 13, 17, and 24, an

ecological risk assessment would be conducted during the remedial design phase to identify if any material requires relocation and consolidation in the Main Plant in areas requiring direct contact control.

An evaluation would be conducted during the remedial design phase to identify those soils that could potentially meet the definition of Principal Threat Wastes. This evaluation would consist of first identifying areas where constituent concentrations, based on existing data, are above those presented within EPA's Soil Screening Guidance, when adjusted to  $1 \times 10^{-3}$  risk (future Site user). Following this, field investigations (*e.g.*, air sampling) would be conducted to verify the potential air risks. Those areas subsequently identified as potential Principal Threat Wastes (*i.e.*, presenting a  $1 \times 10^{-3}$  risk based on measured concentrations in the breathing zone) would be excavated and consolidated in the Impoundments 3, 4 and 5 area for subsequent treatment with those materials (see below). Excavation extent and depth would be determined based on sampling data in the breathing zone. These excavated areas outside Impoundments 3, 4 and 5 would then be backfilled and covered with the multi-layer engineered cap discussed above. Additionally, any future structures constructed within areas requiring vapor control at the Site would include a vapor mitigation system, as required.

##### Groundwater

Includes the same groundwater remedy as Alternative 3.

#### **Alternative 5 - Consolidation/Capping and In-Situ S/S with Hydraulic Control/Treatment of Groundwater**

<i>Capital Cost:</i>	\$257,918,074
<i>Annual O&amp;M Costs:</i>	\$49,973,383
<i>Total Present Worth:</i>	\$307,891,457
<u><i>Implementation Timeframe</i></u>	
<i>Soils/Impoundments:</i>	20 Years
<i>Groundwater:</i>	30 Years

This alternative would consist of a combination of technologies to address soils/impoundment contents.

##### Main Plant Soils, Impoundments 3, 4, and 5

In the areas identified in the FS requiring direct contact control, a 24-inch soil cover would be utilized to provide a barrier to prevent direct contact exposure with impacted media. This soil cover system would be an engineered cap designed and constructed to withstand the effects of up to a 500-year flood event. Appropriate controls and engineered mechanisms will be included to safe guard against scouring, erosion or other effects from being constructed in a floodplain. In addition, a strict inspection and maintenance program will be developed as part of the ongoing operation plan for the soil cover system.

Impoundments 3, 4, and 5 and a few areas located in the Main Plant area have been identified as requiring vapor and movement controls. These impoundments/areas would utilize *in-situ* S/S as a means to reduce contaminant mobility. During S/S activities, emissions would be collected and treated to the extent practicable.

Flood Plain Area (including soils, Impoundments 13, 17 and 24, and drying bed area)

The areas identified in the FS requiring direct contact control would be excavated and consolidated at the Main Plant.

Groundwater

Includes the same groundwater remedy as Alternative 3.

**Alternative 7 - Consolidation/Capping and Ex-Situ Low Temperature Thermal Desorption (LTTD) and S/S with Hydraulic Control/Treatment of Groundwater**

<i>Capital Costs:</i>	\$774,315,057
<i>Total Estimated O&amp;M Costs:</i>	\$ 49,973,383
<i>Total Present Worth:</i>	\$824,288,040
<u>Implementation Timeframe</u>	
<i>Soils/Impoundments:</i>	> 25 Years
<i>Groundwater:</i>	30 Years

This alternative would consist of a combination of technologies to address soils/impoundment contents.

Main Plant Soils, Impoundments 3, 4, and 5

In the areas identified in the FS requiring direct contact control, a 24-inch soil cover would be utilized to provide a barrier to prevent direct contact exposure with impacted media. This soil cover system would be an engineered cap designed and constructed to withstand the effects of up to a 500-year flood event. Appropriate controls and engineered mechanisms will be included to safe guard against scouring, erosion or other effects from being constructed in a floodplain. In addition, a strict inspection and maintenance program will be developed as part of the ongoing operation plan for the soil cover system.

Main Plant Soils, Impoundments 3, 4, 5, 13, 17 and 24, and drying bed area)

In the areas identified in the FS requiring vapor and movement controls, soils/impoundment contents would be excavated and transported to a central area at the Main Plant for consolidation and staging. *Ex-situ* treatment would then be applied on-site, via LTTD and S/S. LTTD is designed to reduce concentrations of organics and other constituents that can be volatilized. S/S would be used to provide appropriate geotechnical properties for backfilling treated materials as well as having the potential added

benefit of reducing the mobility of the remaining constituents.

Treated Materials:

Vapor Control: treated materials would be backfilled at the Main Plant

Movement Control: treated materials would be placed in the on-site RCRA facility, Impound 8. During S/S activities, emissions would be collected and treated, as practicable.

Flood Plain Area (including soils, Impoundments 13, 17 and 24, and drying bed area)

The areas identified in the FS requiring direct contact control would be excavated and consolidated at the Main Plant.

Groundwater

Includes the same groundwater remedy as Alternative 3.

**Alternative 11 – On-Site/Off-Site Treatment with Hydraulic Control/Treatment of Groundwater**

<i>Capital Costs</i>	\$ 1,750,292,506
<i>Total Estimated O&amp;M Costs</i>	\$ 49,973,383
<i>Total Present Cost</i>	\$ 1,800,265,890
<u>Implementation Timeframe</u>	
<i>Soils/Impoundments:</i>	> 25 Years
<i>Groundwater:</i>	30 Years

This alternative would consist of a combination of technologies to address soils/impoundment contents.

The main plant soils, flood plain soils, and all impoundment contents would be excavated and consolidated/staged at the Main Plant. *Ex-situ* treatment would then be applied on-site, via LTTD and S/S. Treated materials from areas at the Main Plant and Flood Plain where only direct contact control is warranted would be backfilled at the Main Plant, while treated materials from areas warranting vapor control would be placed in the on-site RCRA facility, Impoundment 8.

For areas identified in the FS requiring movement control, soils/impoundment contents would be excavated and transported to either an off-site incineration or recycling facility for treatment or beneficial re-use. During S/S activities, emissions would be collected and treated, as practicable.

Groundwater

Includes the same groundwater remedy as Alternative 3

## EVALUATION OF ALTERNATIVES

Nine criteria are used to evaluate the different remediation alternatives individually and against each other in order to select a remedy, (see table below, Evaluation Criteria for Superfund Remedial Alternatives). This section of the Proposed Plan describes the relative performance of each alternative against the nine criteria, noting how each compares to the other options under consideration. A Detailed Analysis of Alternatives can be found in the FS Report.

### 1. Overall Protection of Human Health & the Environment

Alternative 1 is used as a baseline for comparison of the alternatives and is designed to represent baseline conditions at the Site and would not meet the RAOs established for the Site. Alternative 2, by comparison, would be protective of human health and the environment for groundwater currently captured by the existing groundwater control system and SRVSA treatment, and would employ access restrictions and institutional controls to address potential exposures to other media and transport mechanisms, but would not meet RAOs for principal threat wastes and groundwater outside the current capture zone. Alternatives 3, 4, 4A, 5, and 7 include capping of material requiring direct contact control and groundwater collection/treatment, and, therefore, would be protective of human health and the environment. Alternatives 3 and 4 include capping of materials requiring vapor and movement control, which would prevent exposure to impacted materials. Alternative 4A would also prevent exposure to impacted materials through capping, as well

as treatment for the most-highly mobile materials, which would reduce toxicity and mobility of contaminants. Alternatives 3, 4, 4A, 5, 7, and 11 each meet the RAOs for principal threat wastes. However, alternatives 3 and 4 accomplish this primarily through containment while 4A, 5, 7, and 11, accomplish this primarily through treatment. Alternatives 5 and 7 include treatment of vapor and movement control material in both the Main Plant and Flood Plain as an element of protection of human health and the environment; however, their treatment components are not proven for all Site contaminants and RAOs may not be met for these contaminants. Alternative 11 removes the material requiring movement control from both the Main Plant and Flood Plain for off-site treatment/disposal, while treating direct contact and vapor control material on-site which would be protective of human health and the environment. However, capping, groundwater control and treatment-based remedy components essentially provide equivalent protection of human health and the environment by eliminating potential exposure pathways.

### 2. Compliance with ARARs

Applicable or Relevant and Appropriate Requirements (ARARs) would not be met for Alternative 1. ARARs would not be met for groundwater outside the current capture zone of the existing groundwater collection system or for soils/impoundments for Alternative 2. ARARs would generally be met for the remaining alternatives. However, more significant issues would be associated with location- and action-specific ARARs (e.g., stream encroachment, wetlands, flood hazard, etc.) in the Flood Plain for Alternatives 4, 4A, 5, 7, and 11; chemical-

<b>EVALUATION CRITERIA FOR SUPERFUND REMEDIAL ALTERNATIVES</b>
<b>Overall Protectiveness of Human Health and the Environment</b> evaluates whether and how an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.
<b>Compliance with ARARs</b> evaluates whether the alternative meets federal and state environmental statutes, regulations, and other requirements that are legally applicable, or relevant and appropriate to the site, or whether a waiver is justified.
<b>Long-term Effectiveness and Permanence</b> considers the ability of an alternative to maintain protection of human health and the environment over time.
<b>Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment</b> evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment, and the amount of contamination present.
<b>Short-term Effectiveness</b> considers the length of time needed to implement an alternative and the risks the alternative poses to workers, the community, and the environment during implementation.
<b>Implementability</b> considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.
<b>Cost</b> includes estimated capital and annual operations and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent.
<b>State/Support Agency Acceptance</b> considers whether the State agrees with the EPA's analyses and recommendations, as described in the RI/FS and Proposed Plan.
<b>Community Acceptance</b> considers whether the local community agrees with EPA's analyses and preferred alternative. Comments received on the Proposed Plan are an important indicator of community acceptance.

and action-specific ARARs associated with NJ Air Pollution Control Regulations may not be met for Alternatives 5, 7, and 11; and Alternative 7 would not meet the chemical-specific ARARs associated with the Treatment Objectives established in the Group III ROD/CAMU and LDRs.

### 3. Long-Term Effectiveness and Permanence

Long-term effectiveness and permanence do not apply to the baseline conditions represented by Alternative 1. By comparison, Alternative 2 would provide an effective long-term remediation for groundwater within the current capture zone of the existing bedrock groundwater pumping system, but would not specifically address other media or groundwater outside the current capture zone. The groundwater remedy components for Alternatives 3, 4, 4A, 5, 7 and 11 provide similar effectiveness of groundwater control over the long-term, and remedies that would be functionally permanent with proper maintenance. Capping of material requiring direct contact control associated with Alternatives 3, 4, 4A, 5, and 7 would be effective over the long-term in controlling potential direct contact exposure. A cap is functionally permanent with proper maintenance. Alternatives 3, 4, 4A, 5, 7, and 11 would result in making the Site available for beneficial community reuse, although the time required to achieve this would be longer for Alternatives 5, 7, and 11, compared to Alternatives 3, 4, and 4A. Alternatives 4 and 4A also utilize treatment of material and/or consolidation which would provide additional permanence over Alternative 3. Treatment associated with Alternatives 5, 7, and 11 has not demonstrated effectiveness for the full range of contaminants, which would likely prolong schedules and increase time before RAOs would be obtained, if they would be attained at all.

### 4. Reduction in Mobility, Toxicity or Volume through Treatment

Alternative 1 would provide no reduction in mobility, toxicity or volume. For Alternative 2 mobility, toxicity and volume of contaminants in groundwater within the capture zone of the existing groundwater collection system would be reduced, but not reduced outside the existing capture zone, or in other media. Groundwater collection and treatment associated with the remaining alternatives (3, 4, 4A, 5, 7, and 11) would control mobility of contaminants through capture, would reduce the volume and toxicity of contaminants through treatment and would be permanent. Capping associated with Alternatives 3, 4, and 4A would reduce mobility via control of vapor, movement and infiltration. *In-situ* S/S associated with Alternatives 3 and 4 would reduce contaminant mass through media transfer and mobility through binding the treated mass and limiting infiltration.

LTTD and S/S associated with Alternatives 4A, 5, 7, and 11 would reduce contaminant mass through the treatment and capture of contaminants; however, S/S associated with Alternatives 4A, 5, 7, and 11 would increase the total volume of material.

### 5. Short-Term Effectiveness

No short-term effects would be anticipated with implementation of Alternatives 1 or 2, and the implementation timeframes for both would be immediate. The duration of implementation for Alternatives 3, 4, and 4A would be relatively short. The implementation duration for Alternatives 5, 7, and 11 would be relatively long (over 20 years). Implementation of the remedial actions associated with Alternative 3 would be minimally disruptive, resulting in minimal short-term impacts and would be limited in wetland, ecological habitat and flood plain areas. Implementation impacts would occur in wetlands, ecological habitat and floodplain with implementation of Alternatives 4 and 4A; however, enhancement of existing, non-impacted wetlands and habitats and/or creation of new wetlands/habitats would be employed to mitigate impacts. Implementation of excavation, consolidation, and treatment activities associated with Alternatives 5, 7, and 11 would result in large-scale intrusions and material disturbances, increasing the opportunity for emission generation and material release to the environment with commensurate complexity in implementation of effective controls. Additionally, such large-scale intrusions as associated with Alternatives 5, 7, and 11 would result in destruction of existing wetlands and habitats; and, temporary, but detrimental, disruption of habitat and flora/fauna communities would occur in surrounding areas during implementation; however, enhancement of existing, non-impacted wetlands and habitats and/or creation of new wetlands/habitats would be employed to mitigate impacts.

Increases in truck traffic through the local community would occur during construction of Alternatives 3, 4, 4A, 5, 7, and 11. However, trucks would be carrying only S/S admixtures, clean fill and construction materials with implementation of Alternatives 3, 4, 4A, 5, and 7, while trucks would be carrying the most highly contaminated material from the Site to off-site treatment/disposal sites with implementation of Alternative 11. The potential for exposure to workers during construction for Alternative 3 would be minimal due to the minimally invasive nature of the construction. However, worker exposures would be increased with implementation of Alternatives 4, 4A, 5, 7, and 11, due to the increase in generation of air emissions related to excavation, consolidation and treatment.



## 6. Implementability

A review of the implementability of Alternatives 1 and 2 is not applicable since either no action is taken or the actions are largely already complete. Equipment, materials and personnel necessary to implement Alternatives 3, 4, 4A, 5, 7, and 11 are typically available in the marketplace; however, qualified contractors that would implement the types of remedial projects associated with Alternatives 5, 7, and 11 may not be available or accessible for the entire duration of construction due to their relatively long implementation timeframes. Additionally, the treatment components of Alternatives 5, 7, and 11 for the Site material are unproven.

Capping and groundwater collection/treatment associated with Alternatives 3, 4, 4A, 5, and 7 are proven, reliable technologies and would be readily constructed and maintained. Stabilization associated with Alternatives 3, 4, and 4A utilize proven geotechnical technologies; however, variability of materials on-site could require additional treatment and affect intermediate milestones in a construction schedule. Alternatives 3, 4, and 4A rely mainly on capping; however, Alternative 4A provides more protection through relocation of the Impoundment material in the floodplain to the Main Plant. Alternative 4A offers additional protection by also excavating materials which could meet the definition of principal threat waste with subsequent consolidation and treatment of material (*In-situ* S/S). *In-situ* S/S associated with Alternative 5 may prove difficult due to locations, nature of material and surroundings (*i.e.*, flood plain, wetlands, etc.). Monitoring for Alternatives 2, 3, 4, 4A, 5, 7 and 11 would be effective in identifying successful operation of the remedy. Although proven technologies, due to the range of contaminants to be addressed, extensive pre-design testing would be required for the treatment technologies employed with Alternatives 5, 7, and 11.

The excavation of material proposed in Alternatives 4, 4A, 5, 7, and 11 would trigger LDRs consequently, CAMU requirements would apply. The remaining capacity in Impoundment 8 may not be sufficient to receive treated material volumes resulting from implementation of Alternatives 7 or 11. Invasive construction activities in the regulated flood plain may increase the time required prior to initiation of the remedies employed by Alternatives 4, 4A, 5, 7, and 11. Regulatory review and approvals would be required from local, state and federal agencies; these would be of a standard, routine nature for Alternatives 3, 4, and 4A but would be more extensive for Alternatives 5, 7, and 11. Failures/iterations relative to S/S and LTDD associated with Alternatives 5, 7, and 11 could cause construction delays and may result in ARARs not being attained. Alternatives 3, 4, and 4A have the ability to

implement additional remedial actions if necessary. However, following S/S associated with Alternatives 5, 7, and 11, any additional manipulation of material would be more difficult.

## 7. Costs

The estimated capital cost, O & M, and present worth cost are discussed in detail in the Feasibility Study. The cost estimates are based on the best available information. Alternatives 1 (\$574,000) and 2 (\$33.1 M), No Action and Limited Action, respectively, would incur the least cost to implement. Alternative 3 would cost \$138 million. Alternative 4 (\$180 M) would cost 30% more than Alternative 3. Alternative 4A (\$205 M) would cost 49% more than Alternative 3 and 14% more than Alternative 4. Alternatives 5 (\$308 M) and 7 (\$825 M) are significantly more costly, at more than two and almost six times more costly than Alternative 3, respectively. Alternative 11 (\$1.8 B) would be the most costly, at more than twice the cost of the next most costly (Alternative 7), and would be at least an order of magnitude higher in cost than other alternatives that meet the RAOs.

## 8. State/Support Agency Acceptance

The State of New Jersey concurs with EPA's preferred alternative as presented in this Proposed Plan.

## 9. Community Acceptance

Community acceptance of the preferred alternative will be evaluated after the public comment period ends and will be described in the Record of Decision, the document that formalizes the selection of the remedy for the Site.

## PREFERRED ALTERNATIVE

Based upon an evaluation of the remedial alternatives, EPA recommends Alternative 4A as the Preferred Alternative. Alternative 4A has the following key components: Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Ground Water.

Alternative 4A is both a treatment- and a containment-based alternative consisting of proven technologies that would be effective in controlling and reducing the risks associated with the exposure pathways identified at the Site. The use of engineered capping systems would effectively control direct contact (soil cover in Main Plant and excavation and relocation of Flood Plain material to the Main Plant) and minimize the release of contaminants into the air (multi-layer cap for vapor control in Main Plant and Flood Plain). Additionally, excavating the materials in the Flood Plain

warranting movement control, and consolidating them at the Main Plant for *in-situ* S/S, as necessary, and multi-layer capping would address movement beyond those containment areas. *In-situ* S/S would reduce contaminant mass through media transfer (enhanced desorption), capture of the emissions, and destruction in a vapor treatment system. *In-situ* S/S would also serve to reduce mobility of contaminants through the binding of treated mass and the limiting of infiltration through the less permeable, treated waste material.

Although excavation of materials from the Flood Plain would remove the potential risks associated with the potential exposure pathways in those areas, there would be risks associated with excavation activities. These could include air emission and dust generation, damage to existing ecological systems, worker safety, and control of construction activities (*i.e.* erosion, materials storage, etc.) within a floodplain.

Hydraulic controls provided by improved collection/treatment of bedrock and overburden groundwater coupled with institutional controls that prohibit potable use of on-site groundwater would achieve the groundwater RAOs and would provide for protection of human health and the environment. The continued use of the groundwater extraction and treatment system, supplemented by additional measures to contain, and collect overburden groundwater in select areas, would provide for protection of human health and the environment by containing impacted groundwater.

This alternative would be readily implementable using conventional technologies, would be potentially cost effective, and would return the Site to beneficial reuse as soon as practicable with an estimated implementation timeframe of approximately 10 years for impoundments and soils and approximately 30 years for groundwater..

Excavating the impoundments in the Flood Plain and consolidation of the material on the Main Plant with placement of a soil cover will prevent direct contact exposure and the placement of a multi-layered engineered cap where required will provide vapor and movement control. The remedy would also be effective in reducing the risk of impoundments in the flood plain being compromised by any flooding.

The Preferred Alternative is believed to provide the best balance of tradeoffs among the alternatives based on the information available to EPA at this time. EPA believes that the Preferred Alternative would be protective of human health and the environment, would comply with ARARs, would be cost-effective, and would utilize permanent solutions and alternative treatment technologies to the maximum extent practicable. The

preferred alternative can change in response to public comment or new information.

## COMMUNITY PARTICIPATION

EPA encourages the public to gain a more comprehensive understanding of the Site and the Superfund activities that have been conducted there.

The dates for the public comment period, the date, location and time of the public meeting, and the locations of the Administrative Record files, are provided on the front page of this Proposed Plan. Written comments on the Proposed Plan should be addressed to one of the Remedial Project Managers listed on the right.

EPA Region 2 has designated a public liaison as a point-of-contact for the community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number that the public can call to request information, express their concerns, or register complaints about Superfund.

**For further information on the American Cyanamid Superfund Site, please contact:**

Joseph Battipaglia Remedial Project Manager (212) 637-4384 battipaglia.joseph@epa.gov	Cecilia Echols Community Involvement Coordinator (212) 637-3678 echols.cecilia@epa.gov
--	---

**Written comments on this Proposed Plan should be mailed to Mr. Battipaglia at the address below or sent via email.**

**U.S. EPA**  
290 Broadway, 19<sup>th</sup> Floor  
New York, New York 10007-1866

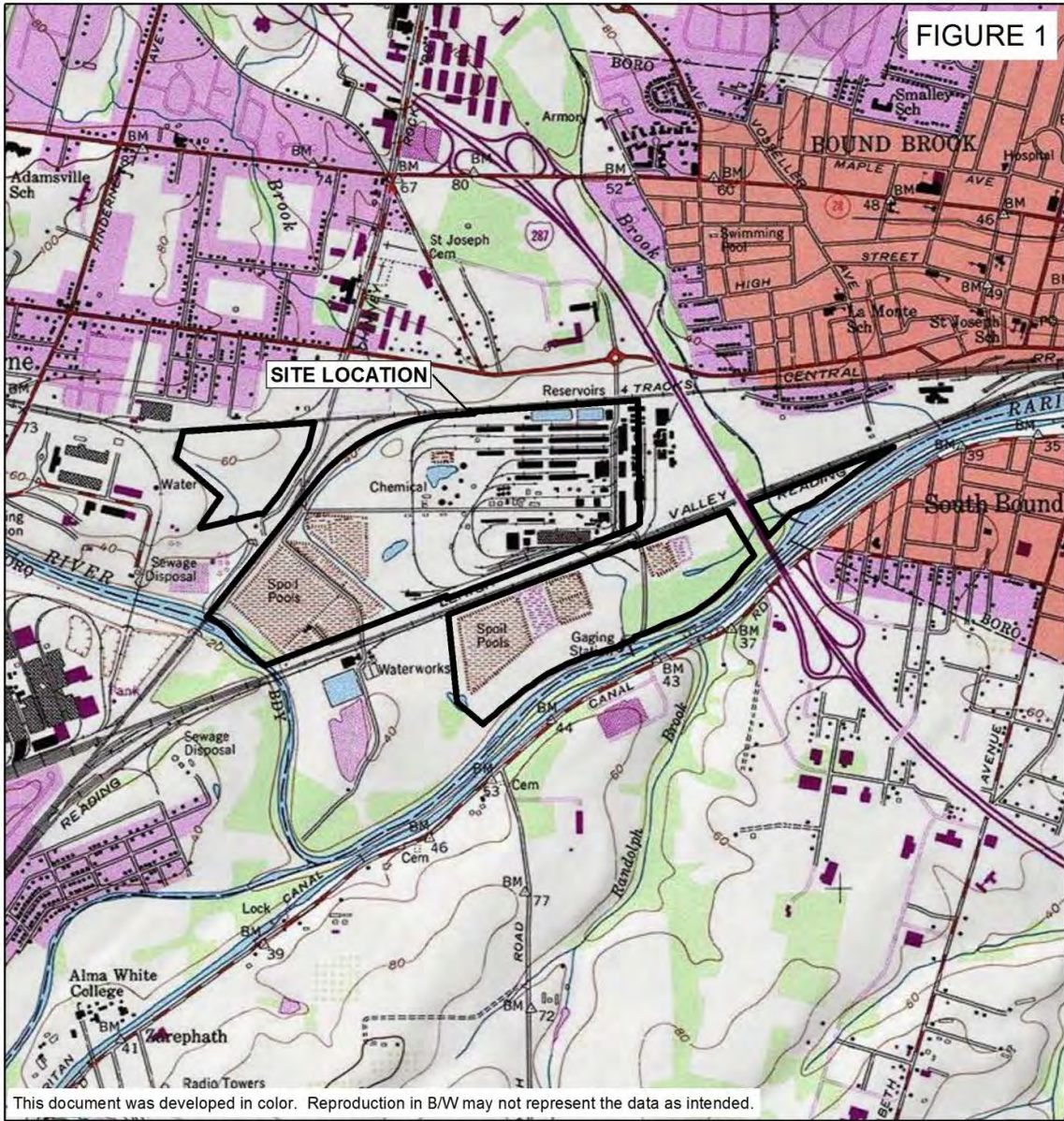
**The public liaison for EPA's Region 2 is:**

George H. Zachos  
Regional Public Liaison  
Toll-free (888) 283-7626  
(732) 321-6621

U.S. EPA Region 2  
2890 Woodbridge Avenue, MS-211  
Edison, New Jersey 08837-3679

PATH: I:\Pizer\_4529\STDSIGIS\Figures\FSP\ProposedPlan\BoundBrook\_Figure1\_SiteLocation.mxd

PLOT DATE: 12/12/2011 DRK

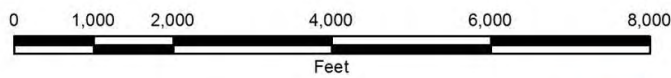


ADAPTED FROM: BOUND BROOK, NEW JERSEY USGS QUADRANGLE

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID  
 SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY



SITE LOCATION



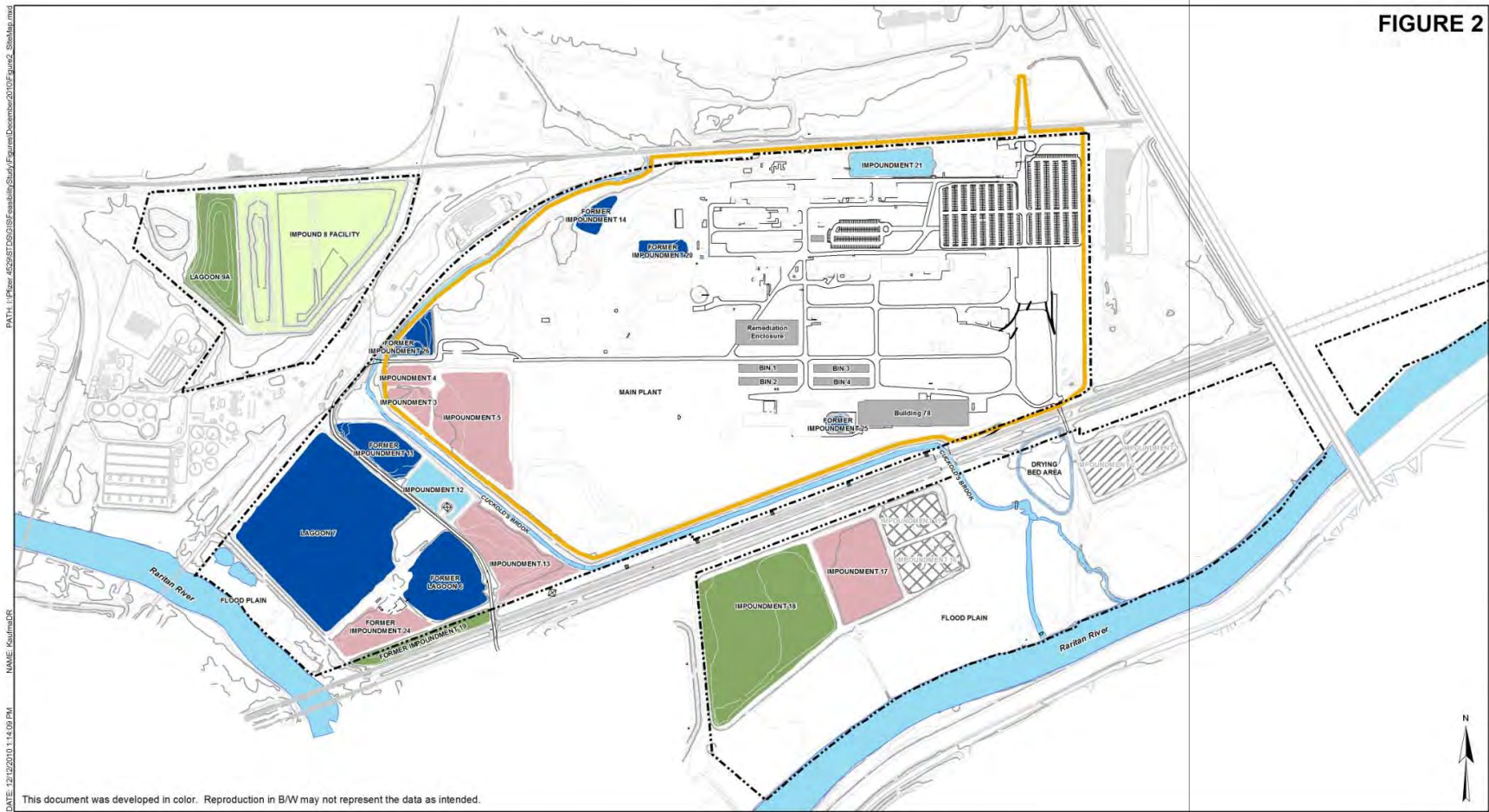
DECEMBER 2011  
4529/47194

1:24,000



R2-0007367

FIGURE 2



This document was developed in color. Reproduction in B/W may not represent the data as intended.

- Legend**
- Approximate Property Boundary
  - Flood Control Dike
  - Drying Bed Area
  - Impoundments to be Addressed
  - Impoundments to be addressed but not included in this SWFSR
  - Impoundments Never Used for Disposal & Contain Water
  - Remediated Impoundments / RCRA Lagoons & Contain Water
  - Remediated Impoundments / RCRA Lagoons
  - Impound 8 Facility
  - Remediation on-going; not included in this SWFSR

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY

0 300 600 1,200 Feet

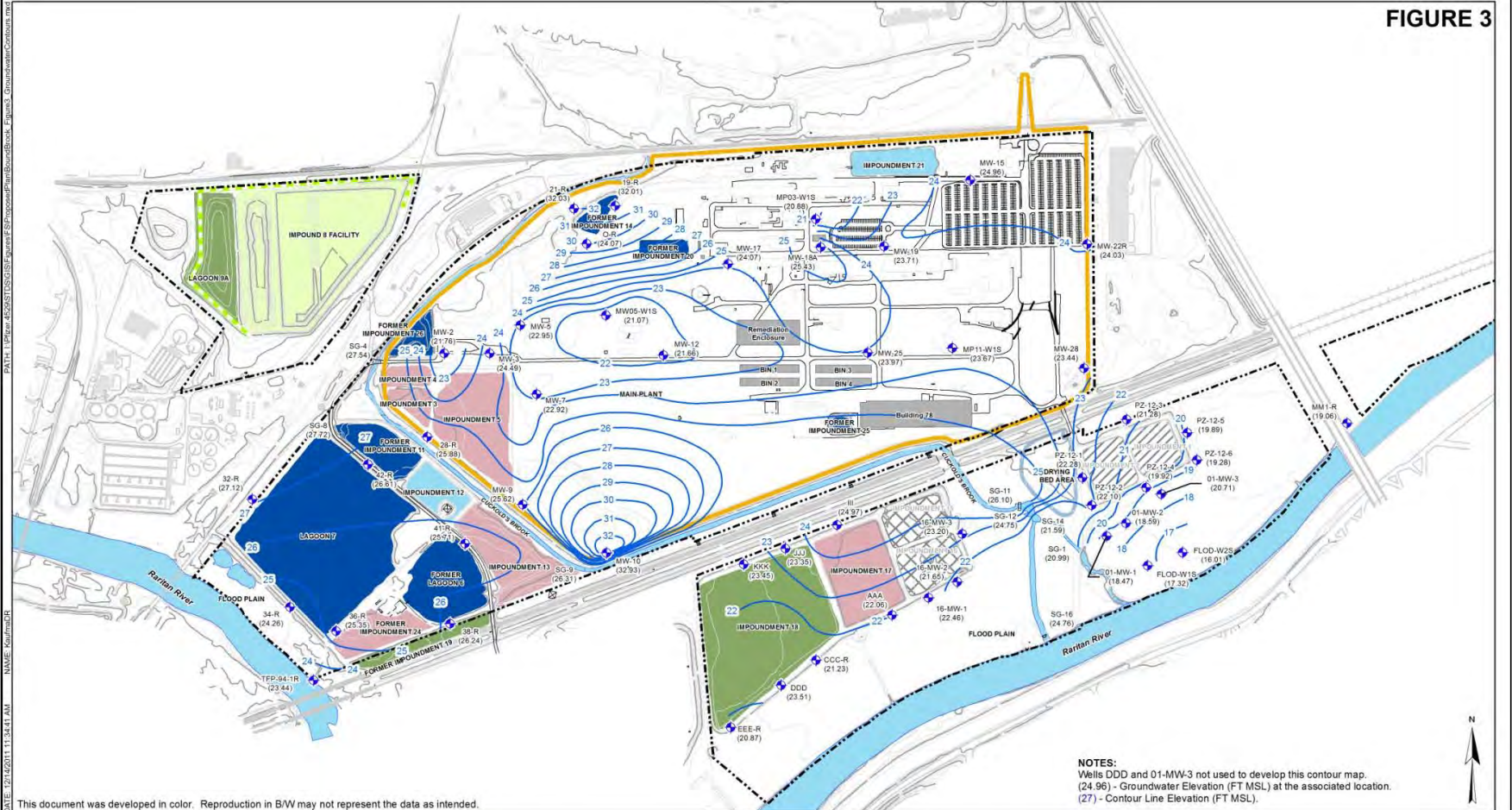
SITE MAP



FILE NO.  
 4529/45863  
 DATE  
 DECEMBER 2011

PATH: I:\Pizer\_4529\SET\060108\Feasibility Study\Figures\December2011\Fig2\_SiteMap.mxd  
 NAME: keumleDR  
 DATE: 12/12/2010 1:14:09 PM

FIGURE 3



NOTES:  
 Wells DDD and 01-MW-3 not used to develop this contour map.  
 (24.96) - Groundwater Elevation (FT MSL) at the associated location.  
 (27) - Contour Line Elevation (FT MSL).

This document was developed in color. Reproduction in B/W may not represent the data as intended.

- Legend**
- Stream Gauge
  - ⊕ Monitoring Well
  - Groundwater Elevation Contours
  - Groundwater Cut-Off Wall
  - Flood Control Dike
  - Approximate Property Boundary
  - Drying Bed Area
  - Impoundments to be Addressed
  - Impoundments to be addressed but not included in this SWFSR
  - Impoundments Never Used for Disposal & Contain Water
  - Remediated Impoundments / RCRA Lagoons & Contain Water
  - Remediated Impoundments / RCRA Lagoons
  - Impound 8 Facility
  - ⊗ Remediation on-going, not included in this SWFSR

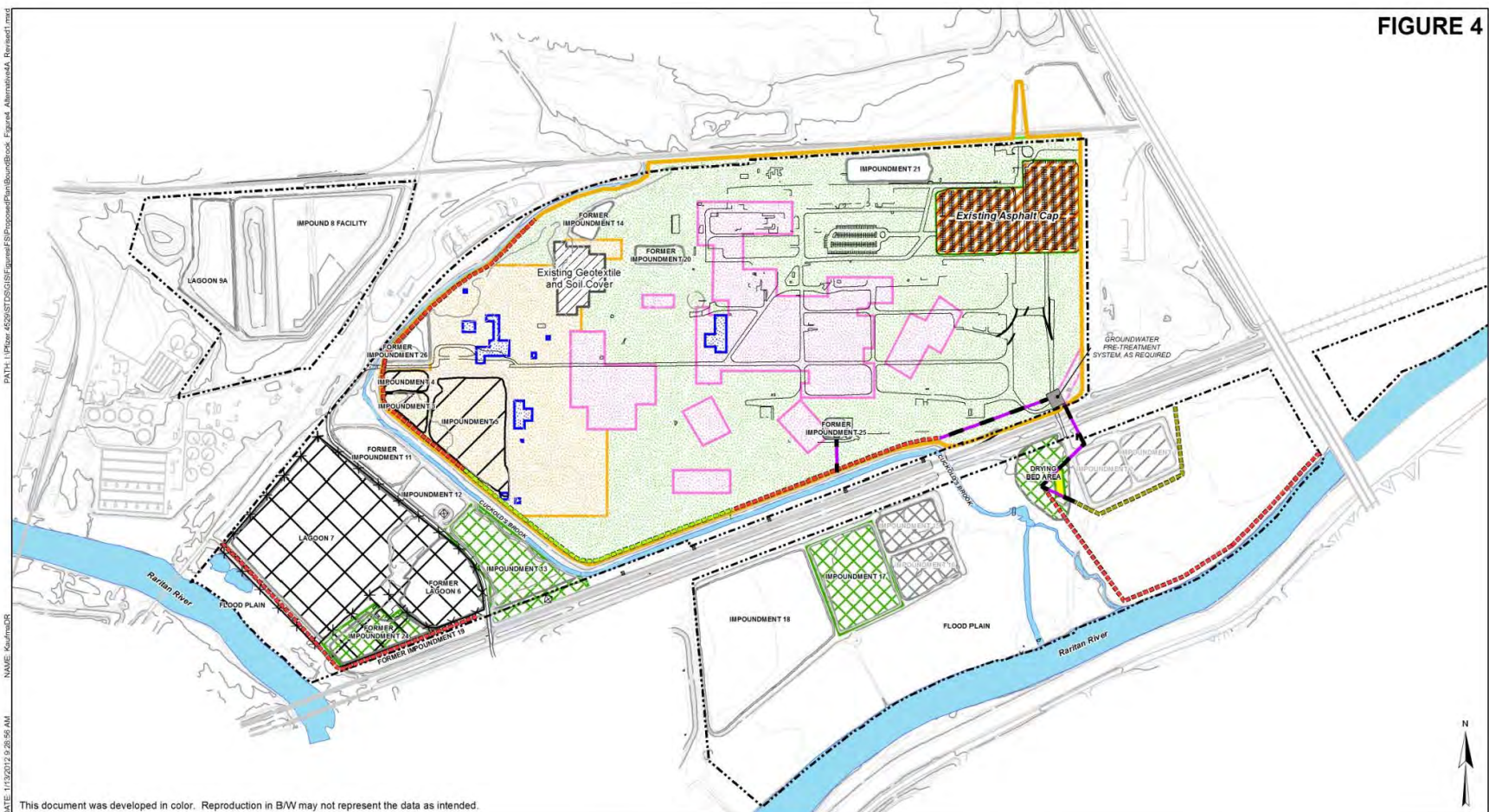
WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY

OVERBURDEN WATER TABLE  
 AUGUST 10 & 12, 2010

FILE NO.  
 4529/45863  
 DATE  
 DECEMBER 2011



FIGURE 4



DATE: 11/13/2012 9:26:56 AM  
 NAME: keurimdr  
 PATH: L:\Piper\_452947194\Site\Project\Site\Proposed\Plan\Bound\Book\_Engined\_Alternative4A\_Revised1.mxd

This document was developed in color. Reproduction in B/W may not represent the data as intended.

- Legend**
- Flood Control Dike
  - Approximate Property Boundary
  - Impoundment
  - In-situ Solidification
  - Proposed Area for Recovery Well
  - Conveyance Piping
  - Collection Trench
  - Higher Gradient Section
  - (Final Layout and Construction Details TBD During RA)
  - Impoundments to be addressed but not included in this SWFSR
  - Remediation on-going; not included in this SWFSR
  - Existing Geotextile and Soil Cover Installed in 1992 for Worker Direct Contact Control - Further Control Not Required
  - Existing Asphalt Cap Installed in 1999 for Hill Property Development - Further Control not Required
  - Existing Fence with Water Cover for Direct Contact Control - Further Control not Required
  - Excavation and Relocation to Impoundments 3, 4, & 5 - 2 Acres
  - Soil Cover for Direct Contact Control - 113 Acres
  - Excavation and Relocation to Main Plant for Direct Contact Control (Exc. of Imp. 13, 17, & 24 TBD by Eco. RA) - 20 Acres
  - Multi-layer Cap for Vapor Control - 33 Acres (Final area based on inhalation risk greater than 10<sup>-6</sup>)
  - Multi-layer Cap for Vapor and Movement Control - 36 Acres
  - Excavation and Relocation to Main Plant for Vapor and Movement Control - 0.2 Acres

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY



ALTERNATIVE 4A  
 CONSOLIDATION/TREATMENT/  
 SOIL COVER AND STABILIZATION/  
 CAPPING WITH HYDRAULIC CONTROL/  
 TREATMENT OF GROUND WATER

FILE NO.  
 4529/47194  
 DATE  
 JANUARY 2012



**Table 1A: Summary of CERCLA Impoundments to be addressed in Focused Feasibility Study**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <i>*Please note that this list may not be exhaustive</i>
Impoundment 1	2.1	3.0 MG (Approx 26,900 CY Remaining)	Storage of sludges from the coal oil ("light oil") refining process	Approx 3.0 million gallons (MG) of light oil sludge (LOS) layer removed and recycled; solids not yet remediated, to be addressed in a separate FFS	benzene, toluene, xylene, 1,2-dichlorobenzene, naphthalene, nitrobenzene, arsenic, barium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc. pH less than 2
Impoundment 2	2.3	3.1 MG (Approx 26,700 CY Remaining)	Storage of sludges from the coal oil ("light oil") refining process	Approx 3.1 MG of light oil sludge (LOS) layer removed and recycled; solids not yet remediated, to be addressed in a separate FFS	benzene, toluene, 1,2 -dichlorobenzene, naphthalene, chromium, copper, lead, mercury, nickel, selenium, zinc. pH less than 2

**Table 1B: Summary of CERCLA Impoundments Currently Undergoing Remediation**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <i>*Please note that this list may not be exhaustive</i>
Impoundment 15	2.8	58,750 CY (94,000 tons) remediated to date (Approx 39,050 CY Remaining)	Storage of iron oxide material resulting from iron use in aniline production	Remediation in progress - iron oxide materials being excavated and sent off-site for recycling	iron oxide, acetone, benzene, methylene chloride, xylenes, 4-chloroaniline, n-nitrosodiphenylamine, anthracene, naphthalene, phenanthrene, arsenic, copper, lead, zinc, PCBs
Impoundment 16	3		Storage of iron oxide material resulting from iron use in aniline production	Remediation in progress - iron oxide materials being excavated and sent off-site for recycling	iron oxide, acetone, benzene, methylene chloride, xylenes, 4-chloroaniline, n-nitrosodiphenylamine, anthracene, naphthalene, phenanthrene, pyrene, arsenic, copper, lead, zinc, PCBs

**Table 1C: Summary of CERCLA Impoundments Addressed in this Proposed Plan**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <i>*Please note that this list may not be exhaustive</i>
Impoundment 3	1.3	Not Yet Remediated (Approx 30,200 CY Remaining)	Storage of organic tars from the distillation of coal oil and consolidation of construction material, general plant debris and fill material	Not yet remediated; being addressed as part of this Proposed Plan	benzene, toluene, xylene, naphthalene, n-nitrosodiphenylamine, 2-methylnaphthalene, 1,2-dichlorobenzene, nitrobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, vanadium, pH of 4-8
Impoundment 4	1	18,700 CY Remediated (Approx 4,300 CY remaining in Impoundment 4 and 110,330 CY remaining in Impoundment 5)	Storage of sludges and organic tars from various production processes	Approximately 3.8 MG of pumpable sludge removed and recycled; remaining material not yet remediated, being addressed as part of this Proposed Plan	benzene, toluene, xylene, 1,2- dichlorobenzene, naphthalene, pH of 1-3
Impoundment 5 (wet)	5.2		Storage of sludges and organic tars from various production processes	Approximately 3.8 MG of pumpable sludge removed and recycled; remaining material not yet remediated, being addressed as part of this Proposed Plan	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, vanadium, zinc, pH of 3.7-9.0
Impoundment 5 (dry)	2.5	17,500 CY Remediated	Storage of sludges and, later, mixed fill materials (layered over the sludge)	Approximately 33% excavated, solidified and placed in Impound 8; remaining material not yet remediated, being addressed as part of this Proposed Plan	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, vanadium, zinc, pH of 3.7-9.0
Impoundment 13	3.9	Not Applicable (N/A) (Approx 55,000 CY Remaining)	Storage of lime and disposal of wastewater treatment sludges	Being addressed as part of this Proposed Plan	benzene, toluene, ethylbenzene, xylene, chlorobenzene, acenaphthalene, fluorine, 2-methylnaphthalene, naphthalene, 1,2,4-trichlorobenzene, arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, pH of 6.5-9.0
Impoundment 17	6.2	N/A (Approx 69,300 CY Remaining)	Storage of primary sludge from settlement of lime-neutralized effluent from on-site wastewater treatment	Being addressed as part of this Proposed Plan	acetone, toluene, ethylbenzene, and xylene, chlorobenzene, 1,2,4- trichlorobenzene, benzo(a)anthracene, bis(2-ethyl hexyl)phthalate, naphthalene, n-nitrosodiphenylamine, chromium, copper, lead, nickel, zinc. pH of 7-8
Impoundment 24	3.2	N/A (Approx 65,000 CY Remaining)	Storage of lime for primary treatment and, later, storage for sludges and general plant wastes	Being addressed as part of this Proposed Plan	acetone, chlorobenzene, methylene chloride, toluene, xylene, dibenzofuran, 1,2-dichlorobenzene, 2-methylnaphthalene, naphthalene, arsenic, chromium, copper, iron, lead, nickel, pH of 7-12.7



**Table 1D: Summary of CERCLA Impoundments with Remediation Completed**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <i>*Please note that this list may not be exhaustive</i>
Impoundment 11	2.6	25,000 CY	Disposal of sludges, furnace ash, and klinkers	Remediation completed; Closed with No Further Action per remedy selected in 1993 OU-1 ROD. Impoundment material removed and placed in Impoundment 8.	acetone, ethylbenzene, chlorobenzene, methylene chloride, toluene, xylenes, acenaphthalene, benzo(a)anthracene, fluorene, naphthalene, 2-methylnaphthalene, chromium, copper, lead, mercury, nickel, zinc
Impoundment 14	0.9	7,200 CY	Storage of organic tars	Remediation completed; Closed with No Further Action per remedy selected in 1998 OU-3 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methylnaphthalene, 1,2-dichlorobenzene, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc
Impoundment 18	15.4	217,000 CY	Storage of primary sludge from settlement of lime-neutralized effluent from on-site wastewater treatment	Remediation completed; Closed with No Further Action per remedy selected in 1996 OU-2 ROD	acetone, chlorobenzene, 2-methylnaphthalene, naphthalene, 4-chloroaniline, acenaphthalene, benzo(a)anthracene, phenanthrene, bis(2-ethyl hexyl)phthalate, fluorene, arsenic, chromium, copper, lead, zinc
Impoundment 19	2.3	12,000 CY	Storage of lime for use in wastewater treatment	Remediation completed; Closed with No Further Action per remedy selected in 1993 OU-1 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, ethylbenzene, chlorobenzene, methylene chloride, toluene, xylenes, 1,2-dichlorobenzene, 2-methylnaphthalene, naphthalene, 1,2,4- trichlorobenzene, arsenic, chromium, copper, iron, lead, magnesium, nickel
Impoundment 20	1.0	12,100 CY	Settling basin for on-site treatment of dye and pigment operation wastewater	Remediation completed; Closed with No Further Action per remedy selected in 1998 OU-3 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, cyanide, mercury, nickel, selenium, silver, vanadium, zinc
Impoundment 26	2.3	22,000 CY	Storage of organic tars and, later, construction material, general plant debris and fill material	Remediation completed; Closed with No Further Action per remedy selected in 1998 OU-3 ROD. Impoundment material removed and placed in Impoundment 8.	benzene, toluene, xylene, n-nitrosodiphenylamine, naphthalene, 2-methyl naphthalene, 1,2-dichlorobenzene, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc

**Table 1E: Summary of CERCLA Impoundments with No Remediation Required**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <i>*Please note that this list may not be exhaustive</i>
Impoundment 9	-	No Remediation Required	Never Used	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 10	-	No Remediation Required	Never Used	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 12	-	No Remediation Required	Never Used	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 21	-	No Remediation Required	Contains emergency fire water	No remediation required based on 1990 Impoundment Characterization Program	-
Impoundment 22	-	No Remediation Required	Previously contained emergency fire water	No remediation required based on 1990 Impoundment Characterization Program; Impoundment was backfilled with clean fill	-
Impoundment 23	-	No Remediation Required	Previously used to collect river sediment from the facility's former river water treatment plant	No remediation required based on 1990 Impoundment Characterization Program	-

**Table 1F: Summary of Impoundments Addressed under RCRA**

<b>Impoundment</b>	<b>Area (acres)</b>	<b>Volume Remediated</b>	<b>Description/Use</b>	<b>Current Status</b>	<b>COCs</b> <i>*Please note that this list may not be exhaustive</i>
Lagoon 6	5.5	113,500 CY	RCRA impoundment; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA. Waste in Lagoon 6 has been removed, solidified, and placed in the Impoundment 8 Facility.	NA
Lagoon 7	20.9	241,400 CY	RCRA impoundment; in the process of being closed in accordance with approved RCRA closure plan	Remediation partially completed; Approx. 95% of waste in Lagoon 7 has been removed, solidified, and placed in the Impoundment 8 Facility.	NA
Lagoon 8	11.5	60.8 MG	RCRA impoundment; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA. Waste in Impoundment 8 [Old] has been removed, solidified, and placed in the Impoundment 8 Facility.	NA for Lagoon 8 (Old); Impoundment 8 Facility COCs: chloroform, tetrachloroethene, trichloroethene
Lagoon 9A	4.1	52,900 CY	RCRA impoundments; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA; Impoundment 9A (plant effluent sludge) was closed in-place by installing a double synthetic liner capping system	chloroform, 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, carbon tetrachloride, iron, manganese
Impoundment 25	0.2	1,600 CY	RCRA impoundments; addressed in accordance with approved RCRA closure plan	Remediation completed under RCRA Effluent Collection Basin for Plant Effluent (sludge removed and closed in 1988 with NJDEP approval)	NA

**Table 2A: Impoundments**

Direct Contact Control	
<i>Numerical Values not Applicable</i>	
Vapor Control (mg/kg) <sup>1</sup>	
<b>Benzene</b>	4.23
<b>Toluene</b>	11,110
<b>Xylene</b>	4,470
<b>Chlorobenzene</b>	2,590
<b>Naphthalene</b>	948
Movement Control <sup>2</sup>	
<i>Tarry substances of Impoundments 3, 4, and 5 - Numerical Values not Applicable</i>	

**Table 2B: Main Plant Soils**

Direct Contact Control (mg/kg) <sup>3</sup>	
<b>Antimony</b>	410
<b>Arsenic</b>	19
<b>Benzo(a)anthracene</b>	2.1
<b>Benzo(a)pyrene</b>	0.21
<b>Cadmium</b>	800
<b>Chromium (total)</b>	NC <sup>4</sup>
<b>Chromium VI</b>	5.6
<b>Cobalt</b>	300
<b>Cyanide</b>	20,000
<b>Lead</b>	800
<b>Mercury</b>	43
<b>Nitrobenzene</b>	24
<b>Total PCBs</b>	0.74
<b>Xylene (total)</b>	2,700
Vapor Control (mg/kg) <sup>1</sup>	
<b>Benzene</b>	4.23
<b>Toluene</b>	11,110
<b>Xylene</b>	4,470
<b>Chlorobenzene</b>	2,590
<b>Naphthalene</b>	948
Movement Control (mg/kg) <sup>2</sup>	
<b>Benzene</b>	4,460
<b>1,2 Dichlorobenzene</b>	98,400
<b>n-Nitrosodiphenylamine</b>	352,000
<b>Nitrobenzene</b>	12,300
<b>Naphthalene</b>	6,180

**Table 2C: Flood Plain Soils**

Direct Contact Control (mg/kg) <sup>3</sup>	
Chromium VI	5.6
Lead	800
Mercury	43
Vapor Control (mg/kg) <sup>1</sup>	
Benzene	4.23
Toluene	11,110
Xylene	4,470
Chlorobenzene	2,590
Naphthalene	948
Movement Control (mg/kg) <sup>2</sup>	
Benzene	4,460
1,2 Dichlorobenzene	98,400
n-Nitrosodiphenylamine	352,000
Nitrobenzene	12,300
Naphthalene	6,180

**Table 2D: Groundwater**

	NJ GWQS (µg/l) <sup>5</sup>	NJ MCL (µg/l) <sup>5</sup>	EPA MCL (µg/l) <sup>5</sup>
Benzene	1	1	5
1,2-Dichlorobenzene	600	NC	600
2-Methylnaphthalene	30	NC	150
Naphthalene	300	300	0.14
Nitrobenzene	6	NC	0.12
n-Nitrosodiphenylamine	10	NC	NC
Toluene	600	1000	1000
Xylene	1,000	1,000	10,000

Notes:

- (1) These values are preliminary and a more refined assessment method will be developed and implemented during the Remedial Design phase to appropriately delineate areas requiring vapor control.
- (2) While numerical criteria were developed to aid in defining the extent of contaminated media requiring movement control, visual observation of tarry substances will also be utilized to identify these areas, regardless of whether the tarry substances exceed the numerical criteria.
- (3) Soil remediation goals were selected based upon consideration of both risk-based concentrations and promulgated NJDEP Non-Residential Direct Contact Soil Remediation Standards. NJDEP Impact-to-Groundwater Soil Screening Criteria were also evaluated as "To-Be-Considered" criteria.
- (4) NC denotes no criteria available.
- (5) The more stringent of the EPA federal MCLs, NJDEP groundwater quality criteria, NJDEP MCLs, and site-specific, risk-based concentrations will be utilized as the remediation goal for groundwater.

ATTACHMENT B: PUBLIC NOTICE



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
INVITES PUBLIC COMMENT ON THE  
PROPOSED PLAN FOR THE  
AMERICAN CYANAMID SUPERFUND SITE  
TOWNSHIP OF BRIDGEWATER, SOMERSET COUNTY, NEW JERSEY**

The U.S. Environmental Protection Agency (EPA) announces the opening of a **45-day comment period** on the Proposed Plan and preferred remedial alternatives to address contamination at the American Cyanamid site in Bridgewater Township, New Jersey. The comment period **begins on February 16, 2012 and ends on March 31, 2012**. As part of the public comment period, EPA will hold a public meeting on **Thursday, March 8, 2012** at 7:00 PM at the Somerset County Vocational and Technical High School, 14 Vogt Drive, Bridgewater, New Jersey. Please contact Ms. Cecilia Echols, EPA's Community Involvement Coordinator, at 212-637-3678 or 1-800-346-5009 for more information.

The site is listed on the Superfund National Priorities List. EPA, with NJDEP support, recently completed a Comprehensive Site-wide Feasibility Study to evaluate remedial alternatives for the site. The Proposed Plan identifies EPA's preferred remedial alternative for addressing site-wide soils, groundwater, and impoundments (waste disposal areas) that have not yet been remediated with the exception of Impoundments 1 and 2 and provides the rationale for proposing this alternative. EPA's preferred remedial alternative consists of the following components:

- Waste material located within Impoundments 3, 4, and 5 will be entirely treated in place through stabilization and solidification technologies to prevent movement. This treatment method is a proven technology that immobilizes contaminants. Following solidification, an engineered vapor control barrier will be installed. These waste materials typically consist of tarry substances or high-hazard materials defined by EPA as Principal Threat Waste.
- For site-wide soils that exhibit similar characteristics as identified within Impoundment 3, 4, and 5, complete excavation and relocation to Impoundments 3, 4, and 5 will be required along with the same treatment methods mentioned above.
- For site-wide soils determined to require a vapor control barrier, which also includes a vapor mitigation system, an impermeable multi-layered engineered cap will be constructed. These soils typically contain volatile and semi-volatile organic compounds that have the potential to migrate into the atmosphere.
- For site-wide soils determined to require a direct contact barrier, an engineered soil cover will be utilized. Soils requiring this engineered cover typically consist of low-level contaminated media above NJDEP soil remediation standards.
- An ecological risk assessment will be conducted on three impoundments located in the flood plain to confirm the appropriate treatment for these materials.
- The existing bedrock groundwater collection system will be improved by relocating the primary extraction wells in a more central location and by adding several new extraction wells to ensure that all site-related groundwater is captured. In addition, a recovery system (such as trenches, wells, and/or containment walls) will be constructed for collection of overburden groundwater at several locations. The details of these improvements will be developed during the remedial design phase.

Institutional controls, monitoring, and periodic reviews will also be required to ensure that the remedy remains protective of public health and the environment. During the **Thursday, March 8, 2012** public meeting, EPA representatives will be available to discuss EPA's rationale for recommending this remedial alternative and to receive public comments.

The Proposed Plan is available electronically at [http://www.epa.gov/region02/superfund/npl/american\\_cyanamid](http://www.epa.gov/region02/superfund/npl/american_cyanamid). The Proposed Plan summarizes information that can be found in greater detail in several reports, including the Comprehensive Site-wide Feasibility Study, located in the Administrative Record. The Administrative Record files are available for public review at the following information repositories established for the Site:

**Bridgewater Township Library:** 1 Vogt Drive, Bridgewater, NJ (908) 526-4016

**USEPA Region 2:** Superfund Records Center, 290 Broadway, 18<sup>th</sup> Floor, New York, NY (212) 637-4308

**NJ Department of Environmental Protection:** 401 East State Street, Trenton, NJ (609) 341-3121

EPA relies on public input to ensure that the selected remedial alternative for each Superfund site meets the needs and concerns of the local community. It is important to note that although EPA has identified a preferred remedial alternative for the site, no final decision will be made until EPA has considered all public comments received during the public comment period. EPA will summarize these comments along with EPA's responses in a Responsiveness Summary, which will be included in the Administrative Record file as part of the Record of Decision. **Written comments and questions regarding the American Cyanamid site, postmarked no later than March 31, 2012, may be sent to:**

Joseph Battipaglia, Remedial Project Manager  
U.S. Environmental Protection Agency  
290 Broadway, 19th Floor  
New York, New York 10007-1866  
Email: Battipaglia.joseph@epa.gov

**R2-0007379**

ATTACHMENT C: TRANSCRIPT FROM PUBLIC MEETING



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2

-----x

AMERICAN CYANAMID SUPERFUND SITE  
PUBLIC MEETING

-----x

Somerset County Vocational  
Technical High School  
14 Vogt Drive  
Bridgewater, New Jersey

March 8, 2012  
7:00 p.m.

P R E S E N T E R S :

JOSEPH BATTIPAGLIA,  
EPA Remedial Project Manager

MONICA BAUSSAN,  
EPA Remedial Project Manager

CECILIA ECHOLS,  
EPA Community Involvement Coordinator

WALTER MUGDAN,  
Division Director, Superfund Program

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

## 1 EPA REPRESENTATIVES - SUPERFUND PROGRAM

2 MARK AUSTIN,  
3 EPA Remedial Project Manager4 THOMAS BUDROE,  
5 On-scene Coordinator, Removal Program6 ANGELA CARPENTER,  
7 EPA Branch Chief, Special Projects8 JULIE McPHERSON,  
9 Risk Assessor10 MICHAEL SIVAK,  
11 Team Leader

## 12 EPA REPRESENTATIVES - PUBLIC AFFAIRS DIVISION

13 BONNIE BELLOW,  
14 Division Director, Public Affairs15 MELISSA DIMAS,  
16 Community Involvement Coordinator17 MIKE MCGOWAN,  
18 Community Affairs Team Leader19 ELIAS RODRIGUEZ,  
20 Press Officer

## 21 NJDEP REPRESENTATIVES:

22 HAIYESH SHAH,  
23 Project Manager24 ALLAN MOTTER,  
25 Technical Coordinator

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

MS. ECHOLS: Good evening.  
Thank you all for coming out to the  
American Cyanamid Public Meeting.

I'm Cecilia Echols, and I will  
be your moderator tonight. And I just  
want to let you know a little bit  
about why we're here, what our  
intentions are, how the program's  
going to go, the presentations, the  
question-and-answer period.

The purpose of the meeting is to  
discuss the proposed plan of cleanup  
for site-contaminated soils,  
groundwater, and six waste disposal  
areas. The soil, groundwater, and  
waste disposal areas, called  
impoundments, are contaminated with  
volatile organic compounds and other  
hazardous materials.

On the agenda, we have several  
people from EPA and DEP. My name,  
again, is Cecilia Echols. I'm the  
Community Involvement Coordinator.

We have Walter Mugdan, the  
Division Director for the Superfund

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

Program. He will discuss Part I,  
Superfund Overview.

Then we have Monica Baussan.  
She's a Remedial Project Manager. She  
will discuss Part II, Site History.

Joseph Battipaglia, he's also a  
Remedial Project Manager. He will  
discuss Part III, Remedial  
Alternatives.

Additional EPA representatives  
for the Superfund Program are Angela  
Carpenter, Branch Chief, Special  
Projects; Michael Sivak, Team Leader;  
Mark Austin, Remedial Project Manager;  
Thomas Budroe, On-scene Coordinator,  
he's down here, with the Removal  
Program; Julie McPherson, Risk  
Assessor, she's also down here.

Additional EPA representatives  
from the Public Affairs Division are  
Bonnie Bellow, Division Director,  
Public Affairs Division; Mike McGowan,  
Community Affairs Team Leader; Melissa  
Dimas, another Community Involvement  
Coordinator; and Elias Rodriguez, he's

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

the Press Officer.

Then we have two New Jersey DEP representatives; Haiyesh Shah, he is the NJDEP Project Manager, and Allan Motter, he is the Technical Coordinator.

Just to mention, the public comment period began on February 16 and it was to end on March 31; however, the Agency has received several inquiries to extend the public comment period, and it will end on May 15.

There are three information repositories; the Bridgewater Township Library, the NJDEP offices in Trenton, and the EPA office in New York City.

We have a stenographer. She's here to document the entire presentation, along with any questions, which will become part of the Responsiveness Summary.

After the public comment period, the Agency will review all comments and questions submitted tonight, as

1 well as those received within the  
2 Regional Office. Then a Record of  
3 Decision is signed by the Regional  
4 Administrator. This document will  
5 address the Agency's decision to clean  
6 up the site.

7 I hope everyone signed in  
8 tonight. I hope you signed in legibly  
9 so you can be recorded as part of our  
10 mailing list. More importantly, since  
11 we're in the electronic age, I hope  
12 you wrote your e-mail addresses very  
13 well.

14 We have proposed plans. I hope  
15 everyone received one who needed it.

16 There are mics that are going to  
17 be used; one here, and there will be  
18 one on the other side. And everyone  
19 who has a question should come up to  
20 the mic. And there will be -- there  
21 are so many people here, there will be  
22 three minutes per person to ask their  
23 question and to receive their answer  
24 so we can keep it moving.

25 We are here until 10 o'clock, so

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1 we may have to start wrapping it up  
2 around 9:50.

3 If there's anyone here who can't  
4 come to the mic but would like a card  
5 to write their questions down and have  
6 them stated, we have some in the back  
7 and some in the front. These are our  
8 comment cards, which will also be part  
9 of the Responsiveness Summary.

10 The bathrooms are in the back.  
11 If you would please turn off -- well,  
12 silence your cell phones so we won't  
13 be interrupted with the nice rings, we  
14 would appreciate that.

15 And please hold all of the  
16 questions until the last presenter has  
17 finished.

18 And now we will hear from our  
19 first presenter, which is Walter  
20 Mugdan.

21 MR. MUGDAN: Thanks, Cecilia.

22 So, just to review the agenda  
23 for this evening, as Cecilia  
24 indicated, we're going to go forward  
25 in three parts. First, we're going to

1 have a brief overview of the Superfund  
2 program. I'll give that.

3 Then we're going to move on to a  
4 discussion of the site background and  
5 the history of this site and some of  
6 the other investigations that have  
7 been carried out to characterize the  
8 site.

9 And then Part III, we'll move to  
10 a discussion of the objectives of the  
11 remediation that we intend to carry  
12 out and the proposed plan that we are  
13 putting forward tonight. We'll then  
14 move on to comments and questions.

15 So, we'll start with a brief  
16 overview of the Superfund program.  
17 This will be old information for some  
18 of you, but perhaps not for all of  
19 you.

20 What is it?

21 The Superfund is the colloquial  
22 name of a law that has a very long  
23 name; Comprehensive Environmental  
24 Response Compensation and Liability  
25 Act. You may hear it referred to by



1 its acronym CERCLA. You'll also hear  
2 it called Superfund.

3 The goals of the Superfund law  
4 are pretty straightforward. First,  
5 and most important, it is to protect  
6 human health and the environment by  
7 cleaning up polluted sites.

8 We want to make sure that we're  
9 involved in communities fully in the  
10 Superfund process, and we have a  
11 variety of mechanisms to do that. One  
12 of them is meetings of this sort that  
13 we're having here this evening. There  
14 are other mechanisms we will mention  
15 and that you may become familiar with.

16 Another major objective of the  
17 Superfund law is to have what are  
18 called "Responsible Parties" pay the  
19 cost of the cleanup. These cleanups  
20 can be extremely expensive and very  
21 complicated.

22 The name of the law, Superfund,  
23 the colloquial name, comes from the  
24 fact that originally, when the law was  
25 first passed by Congress in 1980,

1 Congress created a special fund, which  
2 was then colloquially called the  
3 Superfund. It's a trust fund that was  
4 established, and it was funded through  
5 certain taxes that were imposed upon  
6 the chemical and petroleum industry.

7 As a practical matter, those  
8 taxes lapsed. The legal authorization  
9 for those taxes lapsed in 1995, and  
10 Congress since that time declined to  
11 reauthorize the tax. In the last  
12 several years, the President has  
13 requested Congress to reauthorize that  
14 tax, but so far it hasn't happened.

15 Nonetheless, Responsible  
16 Parties, which are a group of defined  
17 classes of entity, if they can be  
18 identified by EPA and if they are  
19 viable, meaning if they have  
20 sufficient funding and capability to  
21 do that, EPA requires them to carry  
22 out the work in the first instance.

23 If they are unable or unwilling  
24 to do so, there is a fund still there.  
25 Thus, although the tax has sunset,

1 Congress continues to appropriate  
2 money for Superfund cleanups every  
3 year at about the same rate that it  
4 did back when the tax was in  
5 operation, but that money now comes  
6 out of the general revenues of the  
7 United States. All of us as taxpayers  
8 pay that rather than coming out of a  
9 specified tax upon certain industries.

10 So, these Responsible Parties  
11 fall into four classes, or four  
12 categories. They include whoever owns  
13 or operates the site in question that  
14 has to be cleaned up today; whoever  
15 owned or operated it in the past at a  
16 time when hazardous substances were  
17 disposed of or came to be on the  
18 property; people who generated  
19 hazardous wastes that were carried to  
20 a different location if that's the  
21 location of interest; and people who  
22 transported hazardous waste from a  
23 location to another site of interest,  
24 provided that they selected that site.  
25 So, these are the four legal

1 categories of persons who are  
2 responsible.

3 As most of you know tonight, we  
4 have been working for some time now  
5 with Pfizer. Pfizer is the current  
6 owner of the site, or is the ultimate  
7 corporate owner of the site, but you  
8 know the site as the American Cyanamid  
9 site. So, there's a corporate history  
10 here.

11 American Cyanamid owned and  
12 operated the factory that was at this  
13 location. The hazardous substances  
14 that are on the site, underneath the  
15 site, that are of concern were  
16 primarily generated by American  
17 Cyanamid when it operated this site.

18 In due course, American Cyanamid  
19 ceased to operate the site. The  
20 company was eventually purchased or  
21 acquired by another company called  
22 American Home Products. In due  
23 course, that company was acquired by  
24 Wyeth. And in due course, Wyeth was  
25 acquired by Pfizer.

1           So, historically, Pfizer has no  
2           particular corporate involvement with  
3           the generation of hazardous materials  
4           at this location, but under American  
5           Law of Corporate Successorship, if you  
6           buy a corporation, you buy not only  
7           its assets but also its liabilities.

8           So, that's how the  
9           responsible -- the liability scheme,  
10          as it's typically called in Superfund,  
11          that's how it works.

12          So, we call these either  
13          Responsible Parties or you may hear  
14          the term Potentially Responsible  
15          Party. That's a term we also use, and  
16          then we abbreviate that PRP.

17          We're a government bureaucracy,  
18          we tend to speak in acronyms. We'll  
19          try not to do that. But if we slip  
20          into it, PRP is our shorthand for the  
21          Primary Responsible Party.

22          So, those are the main goals of  
23          Superfund.

24          We use two different kinds of  
25          response actions to effectuate these

1 goals. They are called Removal  
2 Actions and Remedial Actions.  
3 Although there's some overlap, in  
4 general terms, a Removal Action is  
5 usually shorter, quicker, less  
6 expensive, and requires less detailed  
7 and elaborated study in order to  
8 figure out what to do.

9 The Removal Actions range from  
10 emergency actions -- so, if a truck or  
11 a tanker or a railroad car overturns  
12 with a hazardous chemical in it,  
13 that's an emergency, we need to deal  
14 with it right away. That's a species  
15 of Removal Action.

16 But Removal Actions can also be  
17 fairly elaborate, fairly extensive,  
18 and quite expensive. And there are  
19 Removal Actions that have taken place  
20 on the American Cyanamid site and  
21 that, indeed, are taking place as we  
22 speak.

23 And that takes months or even  
24 years to carry out and may take  
25 millions of dollars to implement. And

1                   you'll hear something about those this  
2                   evening. Those are Removal Actions.

3                   The other variety or flavor of  
4                   Superfund cleanup is called a Remedial  
5                   Action. These are limited by law to  
6                   be carried out only at a certain group  
7                   of sites, and those are sites that  
8                   have been placed on what is  
9                   colloquially known as the Superfund  
10                  List. It's formerly called the  
11                  National Priorities List, or NPL.  
12                  That's another acronym you may end up  
13                  hearing.

14                  So, there are about 1,700 sites,  
15                  give or take, across the United States  
16                  that have ever been placed on the NPL.  
17                  So, this list is a fairly exclusive  
18                  one of more important sites that  
19                  create greater risk and that generally  
20                  require more elaborate study in order  
21                  to figure out what it is that should  
22                  be done, and they're often much more  
23                  expensive than Removal Actions.

24                  This is a schematic or cartoon  
25                  that describes the Superfund process

1 primarily for remedial sites, although  
2 I'm going to show how Removal Actions  
3 may filter into it.

4 And it's a pathway. It starts  
5 down here in the lower left-hand  
6 corner with something called a PA/SI.  
7 That is a Preliminary Assessment and  
8 Site Investigation.

9 When we receive information  
10 through a variety of means about a  
11 site that, in our judgment, may  
12 require us to or may present some kind  
13 of risk that requires some kind of  
14 assessment, the first step in the  
15 process is to do a PA and an SI.

16 Historically, since the  
17 beginning of Superfund, around 1980,  
18 nationwide I think we have done  
19 something on the order of fifty or  
20 sixty thousand PA/SIs. And as you can  
21 see, it's a pretty narrow filter that  
22 you have to get through in order to  
23 get on the Superfund list with only  
24 1,700 sites, give or take, that have  
25 actually been placed on the Superfund



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

list.

We do Removal Actions at many more sites, sites that do not get on to the Superfund list. But that list of remedial sites is the one that we're talking about now.

So, there's the NPL listing process. There is a formal series of tests that we have to go through to evaluate a site to determine whether or not it should be placed on this list. And that involves a fairly elaborate story, a numerical ranking. And if a certain number of points are assigned to the site when it passes through this system, then it is eligible for placement on the list.

It doesn't mean it necessarily will be placed on the list. There may be other reasons why it would not. But at a minimum, it has to get that particular number of points on the score.

When the site is listed, the next step is to carry out some very

1 detailed studies. And they are the  
2 Remedial Investigation, or RI, and the  
3 Feasibility Study, or FS.

4 Again, typically, although they  
5 are nominally two different separate  
6 studies, they are usually bundled  
7 together, so we typically refer to  
8 them as the RI/FS. And that's a term  
9 you'll hear probably quite frequently.

10 Again, I'm trying to introduce  
11 you to these acronyms that we can't  
12 help from using.

13 The Remedial Investigation is a  
14 detailed assessment of the nature and  
15 extent of the contamination at the  
16 site. So, "nature" means what  
17 chemicals are there and what  
18 quantities, and "extent" means where  
19 have they come from and where are they  
20 going to; vertically, horizontally,  
21 across the landscape, down into the  
22 ground, into the air, into the water,  
23 into the groundwater, surface water,  
24 wherever it is.

25 So, what chemicals are there,

1                   where are they coming from, where are  
2                   they going to. That's the purpose of  
3                   the RI/FS.

4                   And one additional element of  
5                   the RI/FS is to do a Risk Assessment.  
6                   Once we know what chemicals there are,  
7                   where they're coming from, and where  
8                   they're going to, we then evaluate  
9                   what degree of risk do those chemicals  
10                  in those quantities and in those  
11                  pathways present to human beings and  
12                  to other bio; the critters and  
13                  vegetation and whole ecosystem.

14                  So, there's human health risk,  
15                  which is self-evident, the risk that  
16                  is posed to human beings, and there's  
17                  what we call ecological risk, which is  
18                  the risk to all the other biological  
19                  elements of the ecosystem. Both  
20                  assessments are part of the RI/FS.

21                  Once we have done that, it then  
22                  falls to EPA -- let me go on to the  
23                  FS, the Feasibility Study. I  
24                  apologize.

25                  The next step is having

1 identified what the problem is and  
2 what the risks are, the Feasibility  
3 Study is the next step to say: Here  
4 are a number of ways in which these  
5 risks can be addressed and in which  
6 these problems can be addressed.

7 And by law, we have to start  
8 with something called the no action  
9 alternative, which is kind of like a  
10 baseline. What would happen if we did  
11 nothing? What degree of risk is posed  
12 now and in the future? How would the  
13 groundwater contamination continue to  
14 move? And so on.

15 And then a series of engineering  
16 alternatives are identified which  
17 could potentially address these risks  
18 and minimize or eliminate them. And  
19 they're listed one after another.  
20 There may be a two-step process or may  
21 be a one-step process.

22 The two-step process might  
23 involve some of them being screened  
24 out with a relatively limited amount  
25 of analysis. If that limited analysis

1 shows that a certain alternative just  
2 isn't really going to cut it, it may  
3 be screened out for further  
4 evaluation.

5 But all the remaining  
6 alternatives then have to go through a  
7 detailed evaluation against nine legal  
8 criteria. These nine criteria are  
9 grouped into three groups.

10 The first two are the most  
11 important. They're the ones that  
12 every remedy has to fulfill, and the  
13 first of those is the most important,  
14 and that is that the remedy be fully  
15 protective of human health and the  
16 environment.

17 The second of those two most  
18 important criteria is a little bit  
19 more complicated, more legalistic. It  
20 requires that the remedy also satisfy  
21 existing regulatory or legal  
22 requirements that apply to the kind of  
23 problem at hand.

24 There are other criteria then,  
25 and they run down -- each one of them

1 has to be evaluated for every one of  
2 the alternatives that remains after  
3 any screening gets completed.

4 So, the full Feasibility Study  
5 goes into elaborate detail of each of  
6 the nine criteria for every one of the  
7 alternatives.

8 Once that study is completed,  
9 the RI and the FS is completed, then  
10 it's EPA's obligation to propose a  
11 remedy. So, we have to look through  
12 these alternatives from one to ten or  
13 twelve to fifteen or however many  
14 there are, and we come forward with a  
15 proposal. That is what we have done  
16 here today.

17 And that proposal gets put out  
18 for public comment. By law, we give a  
19 30-day public comment period. In the  
20 complicated cases, the cases that have  
21 a great deal of public interest, we  
22 extend that.

23 We started out here with a 45-  
24 day public comment period off the bat.  
25 We've already received, as Cecilia

1 indicated, an extension of that time,  
2 so we're doubling this period of time  
3 that's available to 90 days. That 90  
4 days will end on May 15.

5 So, we're in this green phase  
6 right now, proposed plan, public  
7 meeting, public comment period.

8 As Cecilia pointed out, we have  
9 a court reporter here who's taking  
10 down verbatim everything that's said.  
11 So, when we get to the Q&A session,  
12 when people come down and ask a  
13 question or make a statement, again,  
14 we ask that you limit it to three  
15 minutes because we have a lot of  
16 people here and we want to make sure  
17 everybody has a chance. That will be  
18 part of the Administrative Record.

19 MR. SPIEGEL: Why do we only get  
20 three minutes when you get to talk as  
21 long as you want?

22 MR. MUGDAN: What we're going to  
23 suggest is that we start with three  
24 minutes, we go through everybody; if  
25 we've gotten through everybody who

1 wants to talk and we have more time  
2 before we have to leave the  
3 facilities, we will be delighted to  
4 have people come down and amplify  
5 their comments.

6 But we have to leave the  
7 facility and be out not later than  
8 ten, and there are quite a lot of  
9 people here. I'm sure quite a lot of  
10 people want to be heard.

11 This, however, is not the only  
12 opportunity to comment. The comment  
13 period, as we said, is open until May  
14 15 and written comments can be  
15 submitted at any time throughout this  
16 period, and we encourage you to do  
17 that.

18 At the end of that time, we will  
19 respond to all the comments, we will  
20 prepare a Responsiveness Summary, and,  
21 eventually, at the end of that  
22 process, we'll make the decision.

23 Again, we're legally obligated.  
24 We will write that document in a  
25 Record of Decision, or ROD. Once that



1 ROD is issued, it becomes a legally  
2 binding obligation that we will  
3 request the Responsible Party to carry  
4 out.

5 The next step is to do a design,  
6 a Remedial Design, or RD. The design  
7 for this site and many sites are quite  
8 complicated and will take some number  
9 of years. And there will be a  
10 Remedial Action, or RA, that will  
11 follow the design.

12 Every step of the way, although  
13 we request the Responsible Party to do  
14 the work, EPA is overseeing every step  
15 of the way and every major element has  
16 to be approved by EPA. So, design and  
17 all actions under the design and under  
18 the remediation work have to get  
19 approved by EPA and observed and  
20 watched by EPA.

21 At some point, the construction  
22 will be complete, and that is a  
23 particular milestone that we take note  
24 of. That's the point at which we are  
25 satisfied that all the work that needs

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

to be done has been done.

There may be long-term monitoring, long-term management of groundwater, or things of that sort that have to happen. The remedy is likely to have to require operation and maintenance for years, decades, perhaps forever.

At some point, we may choose to delete the site from the National Priorities List, again, if it satisfies certain other criteria.

And one of the goals is, to the extent possible, to leave sites ready for reuse. Reuse can come in many different forms. It's typically up to the municipality in question to make the decisions in a zoning fashion as to what kinds of reuse they want to make on the site. They may also be limited on the kind of reuse that's possible or available based upon what the site looks like once the work is completed.

So, let's move on now. I'm

1 going to ask Monica to come up and  
2 talk about the site history and  
3 characterization.

4 MS. BAUSSAN: Hi, everyone. My  
5 name is Monica Baussan, and I'll be  
6 talking to you tonight about the site  
7 history and characteristics, the  
8 nature and extent of contamination,  
9 and a brief summary of the risk at the  
10 site.

11 So, let's start with site  
12 location. The site is located in the  
13 southeastern section of Bridgewater  
14 Township. As you can see over here,  
15 the site is outlined. It's  
16 approximately 435 acres big and it's  
17 divided mainly between the main plant  
18 and the flood plains. These two areas  
19 will be later discussed in detail as  
20 the presentation goes along.

21 Let's start with a little bit of  
22 history on the ownership and  
23 manufacturing at the site. As Walter  
24 already mentioned before, the site was  
25 originally built in 1915 as Calco

1 Chemical and then was later purchased  
2 by American Cyanamid in 1929.

3 Its operation went from the  
4 1930s all the way to 1999, when the  
5 facility became inactive. And  
6 throughout that time, 27 impoundments  
7 were constructed for waste disposal  
8 areas and lagoons.

9 In 1994, American Home Products  
10 Corporation, a/k/a Wyeth, purchased  
11 American Cyanamid. And in 2009,  
12 Pfizer purchased Wyeth.

13 Now, for enforcement history of  
14 the site, let's start with 1983. The  
15 site was located in the National  
16 Priorities List.

17 Later, in 1987, New Jersey  
18 Department of Environmental Protection  
19 issued a permit for American Cyanamid  
20 requiring pumping and monitoring of  
21 the groundwater.

22 In 1988, American Cyanamid  
23 entered into a legal agreement with  
24 New Jersey DEP to address the  
25 impoundments, the site soil, and the

1 groundwater. And later, this legal  
2 agreement was amended to include the  
3 existing groundwater pumping and  
4 monitoring treatment at the site.

5 In 2009, EPA assumed the lead  
6 role from NJDEP. And in July 2011,  
7 Wyeth entered into another legal  
8 agreement with EPA addressing the  
9 seeps into the Raritan River.

10 Now, moving off to a little bit  
11 of description of the site, as  
12 mentioned before the site had 27  
13 impoundments. Within these 27  
14 impoundments, 16 impoundments were  
15 addressed under CERCLA, 5 impoundments  
16 under another environmental law called  
17 the Resource Conservation and Recovery  
18 Act, 6 impoundments did not require  
19 any remediation.

20 Now, as for the impoundments  
21 addressed under CERCLA, six already  
22 have been remediated; 1 and 2 are  
23 being re-evaluated into a separate  
24 Focussed Feasibility Study;  
25 Impoundments 15 and 16 are undergoing

1 remediation; and Impoundments 3, 4, 5,  
2 13, 17, and 24 are currently being  
3 addressed under this proposed plan.

4 Now, as you can see over here in  
5 this site map, you can see some of the  
6 impoundments. But the ones that we  
7 want to focus on are the ones in the  
8 color pink, which are the impoundments  
9 that are currently being addressed  
10 under this Proposed Plan.

11 MR. SPIEGEL: Can you go back so  
12 we can see the map again?

13 Which lagoons are being  
14 addressed under this plan?

15 MS. BAUSSAN: The pink.

16 MR. SPIEGEL: What about the  
17 blue, the dark blue?

18 MS. BAUSSAN: The dark blue have  
19 already been remediated.

20 MR. SPIEGEL: Which are 1 and 2,  
21 on the far right?

22 MR. MUGDAN: 1 and 2 are here.

23 MS. BAUSSAN: But those are  
24 being addressed in a separate  
25 Feasibility Study.

1                   Now, the site was originally  
2 separated into seven phases which we  
3 call Operable Units. These included  
4 the impoundments, the site soils, the  
5 groundwater, the Hill's property, and  
6 the site wetlands.

7                   Let's start with Operable Unit  
8 1, which had a Record of Decision  
9 signed in 1993 and included  
10 Impoundments 11, 13, 19, and 24.

11                   This called for excavation,  
12 solidification, and consolidation into  
13 Impoundment 8 facility. Impoundments  
14 11 and 19 were completed in 1997 and  
15 1995, and Impoundments 13 and 24 have  
16 not yet been remediated, so they are  
17 being currently addressed in this  
18 Proposed Plan.

19                   For Operable Unit 2, a Record of  
20 Decision was signed in 1996 and it  
21 also called for excavation,  
22 consolidation, and solidification. It  
23 also added capping, fencing, and berm  
24 improvements.

25                   In 1998, a document called

1 Explanation of Significant Differences  
2 was signed in order to change the  
3 remedy for Impoundments 15 and 16 to  
4 include the recycling of iron oxide.

5 Impoundment 17 has not yet been  
6 remediated, so it's currently being  
7 addressed under this proposed plan.

8 And Impoundment 18 was completed  
9 in 1998 per its 1996 ROD.

10 For Operable Unit 3, a Record of  
11 Decision was signed in 1998 and  
12 included Impoundments 1 through 5, 14,  
13 20, and 26, and it called for a Low  
14 Temperature Thermal Desorption,  
15 biotreatment, and consolidation and  
16 designated Impoundment 8 as a RCRA  
17 facility.

18 Now, as mentioned before,  
19 Impoundments 1 and 2 are currently  
20 being re-evaluated in another  
21 Feasibility Study. Impoundments 3, 4,  
22 and 5 are currently being addressed  
23 under this Proposed Plan.

24 Impoundments 14 and 20 were  
25 completed in 2010, and 26 was



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

completed in 2002.

Operable Unit 4 included the site soils, which are also being addressed under this proposed plan.

Now, for Operable Unit 5, we're discussing the site groundwater. As mentioned before, in accordance with the legal agreement, a groundwater monitoring program was established and included the pumping of the site's groundwater, which includes 650,000 gallon a day of the groundwater.

A Remedial Investigation was completed in 2006; however, it concluded that additional investigation was needed; therefore, the groundwater is also part of this Proposed Plan.

For Operable Unit 6, the Hill's property, a Record of Decision was signed in 1996, and it called for a no further action. Later on, it was deleted from the NPL, in 1998, and then it was redeveloped for commercial use.

1                   For Operable Unit 7, it is the  
2                   site wetlands, which are also being  
3                   addressed under this Proposed Plan.

4                   Now, in this slide over here,  
5                   it's just to show you the volume  
6                   remediated versus the volume  
7                   remaining. Now, 73 percent of the  
8                   material in the impoundments has  
9                   already been remediated, and in volume  
10                  terms it's approximately 1.19 million  
11                  cubic yards versus 427,000 cubic  
12                  yards.

13                  Now, for those of you who are  
14                  football fans out there, in another  
15                  form of reference, the 1.1 million  
16                  cubic yards is equivalent to a  
17                  football field filled over two hundred  
18                  yards versus eighty yards high.

19                  In 2004, all remedial activities  
20                  on the site were suspended pending the  
21                  completion of a Remedy Review Report.  
22                  This was due to the technical  
23                  difficulties encountered in Operable  
24                  Unit 3, also the difficulties  
25                  containing air emissions with

1                   permissible levels and the increased  
2                   schedule for completion, as well as  
3                   the cost estimate, which escalated  
4                   over a hundred percent of the original  
5                   cost.

6                   In 2005, this report was  
7                   completed and determined that the  
8                   previously selected remedies for the  
9                   remainder of the site were  
10                  inappropriate and a reassessment of  
11                  the entire site was needed.

12                  In 2005, another report called a  
13                  Data Adequacy Report reviewed the  
14                  already existing soils and groundwater  
15                  data and concluded that there was  
16                  sufficient data for the impoundments  
17                  and the soils, but more additional  
18                  investigation was needed for the  
19                  groundwater.

20                  In 2009, EPA and New Jersey DEP,  
21                  as mentioned before, separated  
22                  Impoundments 1 and 2 to be re-  
23                  evaluated due to its location and  
24                  complexity.

25                  In 2010, the alternatives in the

1 sitewide Feasibility Study were  
2 presented to EPA's National Remedy  
3 Review Board, which is a group of  
4 EPA's very highly technical staff that  
5 are experienced in these type of  
6 Superfund sites, review large and very  
7 complex Superfund sites.

8 The Remedy Review Board  
9 evaluated the appropriate remedy for  
10 the remainder of the site and  
11 recommended that EPA develop a new  
12 alternative that specifically  
13 addressed the principal threat waste  
14 at the site, which in this proposed  
15 plan is Alternative 4A, and we'll give  
16 you more detail as the presentation  
17 moves along.

18 In February of this year, the  
19 sitewide Feasibility Study was  
20 completed, and it developed and  
21 evaluated remedial alternatives, and  
22 these addressed Impoundments 3, 4, 5,  
23 13, 17, and 24, the sitewide soils,  
24 and the groundwater.

25 Now, moving on to the content of

1 the impoundments, these impoundments,  
2 as mentioned before, were used as  
3 waste disposal or wastewater and  
4 sludge disposal. Contaminants in the  
5 impoundments include volatile organic  
6 compounds, which are better known as  
7 VOCs, semi-VOCs, and metals.

8 Here are some of the examples of  
9 these contaminants.

10 The contents of these  
11 impoundments have the potential to  
12 migrate into the groundwater or be  
13 released into the atmosphere through  
14 volatilization. However, due to their  
15 physical characteristics, these  
16 impoundments do not allow for the  
17 contents to be transported by  
18 stormwater run.

19 Now, for the sitewide soils,  
20 this includes the surface, the  
21 subsurface soils, as well as the site  
22 wetlands. These were impacted by past  
23 leaks and spills from the main plant,  
24 and contamination also includes VOCs,  
25 semi-VOCs, and metals.

1                   Now, the potential migration of  
2                   the contaminants in the soil have been  
3                   greatly reduced by previous remedial  
4                   activities at the site, such as clean  
5                   fill and gravel and paving of some  
6                   area within the main plant, a flood-  
7                   control berm that surrounds the main  
8                   plant, and the stormwater runoff is  
9                   collected and stored in Lagoon 7 prior  
10                  to treatment.

11                  Now, for the groundwater, we  
12                  have groundwater in the overburden and  
13                  in the bedrock. The overburden  
14                  groundwater moves vertically by the  
15                  bedrock groundwater pumping and  
16                  horizontally due to natural hydraulic  
17                  gradients near Cuckhold's Brook and  
18                  the Raritan River.

19                  The bedrock pumping system at  
20                  this site contains the majority of the  
21                  groundwater contamination, and the  
22                  recovered groundwater is treated at  
23                  Somerset-Raritan Valley Sewerage  
24                  Authority.

25                  The groundwater is monitored as

1 part of the semi-annual monitoring  
2 program.

3 Now, again, contamination in the  
4 groundwater also includes VOCs, semi-  
5 VOCs, and metals.

6 Now, in the fall of 2010, Wyeth  
7 performed a sitewide inspection and  
8 observed groundwater discharges --  
9 also called seeps -- from site banks  
10 into the Raritan River.

11 As a short-term solution, in  
12 February of 2011, Wyeth and EPA's  
13 Removal Program developed an interim  
14 plan which consisted of installing  
15 activated carbon-filled sandbags along  
16 the river at the seep discharge  
17 points.

18 The long-term solution was  
19 mentioned before. Wyeth entered into  
20 a legal agreement with the EPA  
21 requiring design and construction of a  
22 groundwater removal system, which  
23 consisted of a trench and containment  
24 wall, as you can see over here, and a  
25 groundwater treatment plant.

1           The water captured by the trench  
2 will be treated and then discharged  
3 into Cuckhold's Brook. And this is  
4 currently undergoing construction and  
5 is expected to be completed in spring  
6 of this year.

7           Now, for a brief summary of the  
8 risks. Let's start with human health.

9           Now, human health risk includes  
10 carcinogenic risks and noncarcinogenic  
11 hazards. A carcinogenic risk is  
12 considered unacceptable when a risk is  
13 greater than ten to the minus four,  
14 and a noncarcinogenic hazard is  
15 considered unacceptable when the  
16 hazard index is greater than one.

17           There have been three human  
18 health assessments at the site at  
19 different times, and they've all  
20 indicated that there are unacceptable  
21 risks for both current and future  
22 users.

23           Now, for ecological risks, there  
24 has been two documents completed. One  
25 was in 1992, which was the baseline



1                   Endangerment Assessment. This was  
2                   conducted for impoundments and soils  
3                   in the main plant.

4                   And the most significant  
5                   potential exposure pathway identified  
6                   involved aquatic biota, exposure to  
7                   the Raritan River water, but the  
8                   assessment concluded that the  
9                   groundwater discharges are unlikely to  
10                  affect the health and diversity of the  
11                  aquatic biota.

12                  In 2005, there was a Baseline  
13                  Ecological Risk Assessment, and the  
14                  BERA concluded that the habitats have  
15                  been impacted, but the ecological  
16                  risks were relatively low in the flood  
17                  plain soils, Cuckhold's Brook, and the  
18                  Raritan River.

19                  Now, Impoundments 13 and 14 were  
20                  not included in this 1999 BERA or the  
21                  2005 BERA because they were originally  
22                  from Operable Units 1 and 2, and these  
23                  have been suspended. And ecological  
24                  risk assessments of these impoundments  
25                  will be conducted during the remedy.

1                   Now, for Part III, I give you to  
2                   Joe Battipaglia, who will talk to you  
3                   about the following topic.

4                   MR. BATTIPAGLIA: Can you guys  
5                   hear me?

6                   My name is Joe Battipaglia. I'm  
7                   one of the Project Managers at the  
8                   site. I will be discussing the third  
9                   and final part of the presentation,  
10                  which should be about 25 minutes. And  
11                  then we will open up for questions and  
12                  comments.

13                  The Remedial Action Objectives,  
14                  or RAOs, are the goals to address  
15                  human health risks and environmental  
16                  concerns at the site.

17                  UNIDENTIFIED SPEAKER: A little  
18                  bit louder, please.

19                  MR. BATTIPAGLIA: Is that  
20                  better?

21                  I'll start that one over.

22                  RAOs, or Remedial Action  
23                  Objectives, are the goals to address  
24                  human health risks and environmental  
25                  concerns at the site. RAOs were

1 developed for principal threat wastes,  
2 impoundments, soils, and groundwater.

3 Now, principal threat waste is  
4 high hazard source materials that have  
5 a high risk to human health.

6 So, to summarize, the RAOs for  
7 this proposed plan are to treat  
8 principal threat waste, prevent  
9 exposure to soils and impoundments,  
10 and control and restore groundwater.

11 I'm going to skip this slide and  
12 move on to the next slide to explain  
13 how we develop remediation goals.

14 There are three types of  
15 impacted media at the site;  
16 impoundments, soils, and groundwater.  
17 First we'll discuss groundwater.

18 In order to meet the RAOs  
19 mentioned on the previous slide,  
20 remediation goals were developed for  
21 contaminants in groundwater using  
22 state and federal standards. So, for  
23 example, the remediation goal for  
24 benzene is one microgram per liter.

25 So, for soils and impoundments,

1 the potential exposures were divided  
2 into three categories for impoundments  
3 and soils.

4 The first category is areas  
5 requiring controls to prevent movement  
6 and exposure to principal threat  
7 waste. Areas requiring controls to  
8 prevent exposure to vapor or airborne  
9 contaminants is the second category.  
10 And the third category is areas  
11 requiring controls to prevent direct  
12 contact.

13 So, to address these three  
14 potential exposure pathways for soils  
15 and impoundments, remediation goals  
16 were developed using risk-based  
17 calculations, as well as using state  
18 and federal standards.

19 The light blue areas in this  
20 figure represent areas that require  
21 controls to prevent direct contact,  
22 which we refer to throughout this  
23 presentation as direct contact control  
24 areas. These direct contract control  
25 areas consist of approximately 190

1                    acres of the site and are primarily in  
2                    the main plant with a few areas in the  
3                    flood plains.

4                                       The purple areas in this figure  
5                    represent areas that require controls  
6                    to prevent exposure to vapors. These  
7                    vapor control areas make up  
8                    approximately 66 acres of the site.

9                                       And, finally, we have movement  
10                    control areas. The dark greenish  
11                    color in this figure represents areas  
12                    that require controls to prevent  
13                    exposure to principal threat waste and  
14                    movement of materials. These areas,  
15                    referred to as movement control areas,  
16                    make up approximately 38 acres of the  
17                    site.

18                                       It is important to note that all  
19                    of these areas -- direct contact  
20                    control area, vapor control area, and  
21                    movement control area -- all these  
22                    areas will be confirmed with predesign  
23                    sampling. So, if there are any soils  
24                    that meet the definition of principal  
25                    threat waste out in the white areas in

1 the main plant, they be will addressed  
2 appropriately.

3 So, a number of technologies  
4 were identified and screened based  
5 upon their technical feasibility and  
6 their ability to meet the RAOs that I  
7 discussed earlier.

8 So, this slide shows a list of  
9 technologies that were screened and  
10 retained to develop remedial  
11 alternatives. The purpose of this  
12 slide is to show you that many  
13 technologies were identified and  
14 evaluated. These technologies were  
15 used to develop eleven remedial  
16 alternatives.

17 So, of these eleven remedial  
18 alternatives that we developed, the  
19 eight shown here were retained for  
20 further consideration. I'll discuss  
21 those eight alternatives in detail in  
22 the following slides.

23 The first, Alternative 1,  
24 consists of taking no action and is  
25 only used as a baseline to compare

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

other alternatives.

Alternative 2 would take approximately thirty years to implement and cost about \$33 million. It would only consist of groundwater monitoring and institutional controls, such as deed restrictions.

Alternative 2 and all the alternatives that I discuss in the upcoming slides include institutional controls and five-year reviews to ensure that the selected remedy remains protective of human health and the environment.

Alternative 3 would take approximately ten years to implement and would cost \$138 million. And I'm going to skip to the figure to explain it further.

The direct contact control areas, shown in light green, would receive a 24-inch engineered soil cover to prevent direct contact.

An impermeable, multilayered, engineered vapor control cap, which

1 would include a vapor collection and  
2 treatment system, would be installed  
3 over the vapor control and movement  
4 control areas, shown in pink and  
5 yellow.

6 A 24-inch engineered soil cover  
7 would be placed over the flood plain  
8 areas requiring direct contact  
9 control, also shown in light green in  
10 the flood plain.

11 Please keep in mind that all the  
12 caps that I mention in this  
13 presentation for this alternative and  
14 all the other alternatives that I  
15 discuss from here on out, all of these  
16 alternatives will include a drainage  
17 system and will be designed to  
18 withstand a 500-year flood at a  
19 minimum.

20 The groundwater remedy for all  
21 of the remaining alternatives is the  
22 same, so I'm only going to discuss it  
23 once.

24 The existing bedrock groundwater  
25 remedy, which will be the same for all



1 the alternatives, the existing bedrock  
2 groundwater collection system would be  
3 improved through placement of  
4 additional extraction wells as  
5 necessary. And overburden groundwater  
6 will be collected and treated using  
7 recovery trenches, wells, or  
8 containment walls. And all of the  
9 groundwater collected, bedrock or  
10 overburden, would be treated.

11 So, let's move on to the next  
12 slide and talk about the details of  
13 some of the caps.

14 First, we have the soil cover  
15 system. For soils requiring direct  
16 contact control, an engineered soil  
17 cover system would be utilized. The  
18 soil cover system consists of a  
19 geotextile layer over the existing  
20 soils for stability, followed by  
21 eighteen inches of fill and six inches  
22 of vegetative soil.

23 So, let's move on to the vapor  
24 cap.

25 For soils and contaminants that

1 require controls to prevent exposure  
2 to vapors, a vapor cap would be  
3 installed over the existing soils,  
4 followed by a 24-inch layer of clean  
5 soil.

6 As shown here, the vapor cap  
7 consists of a geotextile for  
8 stability, an HDPE liner, which is a  
9 high density polyethylene liner, which  
10 is impermeable, so contaminants and  
11 rainwater are unable to penetrate it.  
12 HDPE is a very strong material that is  
13 resistant to chemicals and temperature  
14 variations.

15 The vapor cap also includes a  
16 drainage layer to help control runoff.

17 And, lastly, a vapor collection  
18 and treatment system, which is not  
19 shown here, would also be installed  
20 along with this cap.

21 And there is one more cap that  
22 is not used in Alternative 3 that I  
23 will discuss later on, but first let's  
24 move on to Alternative 4.

25 So, the blue text shown in this

1 slide shows the differences between  
2 Alternatives 3 and 4. The cost is a  
3 little higher, around \$180 million,  
4 and the difference between this  
5 alternative and Alternative 3 is that  
6 the flood plain areas would be  
7 excavated and relocated to the main  
8 plant under an engineered soil cap.

9 Let's skip to the figure.

10 As you can see, this figure  
11 looks very similar to Alternative 3.  
12 The engineered soil cover and the  
13 vapor control cap would be installed  
14 over the same areas, shown in the  
15 light green and pink. The groundwater  
16 remedy would be the same.

17 And the difference is that the  
18 checkered green areas in the flood  
19 plain would be excavated and relocated  
20 to the main plant under soil cover.

21 Now, Alternative 4A, this is  
22 EPA's preferred alternative, which was  
23 formed based upon the recommendation  
24 of EPA's National Remedy Review Board.  
25 Alternative 4A would take

1 approximately ten years to implement  
2 and would cost approximately \$205  
3 million.

4 Let's move on to the figure to  
5 discuss it further.

6 The direct contact control  
7 areas, shown in light green, and the  
8 vapor control areas, shown in pink,  
9 would be addressed in the same manner  
10 as Alternatives 3 and 4.

11 The difference is that movement  
12 control areas, which include principal  
13 threat waste, shown in yellow and  
14 blue, would be placed into  
15 Impoundments 3, 4, or 5.

16 Then the entire depths of these  
17 impoundments, which is approximately  
18 36 acres, would be treated using  
19 in-situ solidification/stabilization,  
20 or in-situ S/S for short.

21 In-situ S/S involves mixing a  
22 binding agent, such a concrete, into  
23 soils and impoundments to solidify  
24 them and prevent contaminants from  
25 migrating. After the soils and

1                   impoundments are solidified, a vapor  
2                   control cap would be installed,  
3                   followed by the placement of a 24-inch  
4                   soil cover.

5                   For the impoundments in the  
6                   flood plain, shown in checkered green,  
7                   an Ecological Risk Assessment would be  
8                   conducted to determine if excavation  
9                   and relocation to the main plant is  
10                  necessary.

11                  And the groundwater remedy for  
12                  Alternative 4A would be the same as  
13                  for Alternatives 3 and 4.

14                  So, let's move on to the next  
15                  slide and discuss in-situ S/S a little  
16                  further.

17                  This is a diagram showing what  
18                  in-situ S/S looks like. It involves  
19                  using a large auger, which is  
20                  typically three to twelve feet in  
21                  diameter, which mixes a binding agent  
22                  into the soils and impoundments. This  
23                  solidifies the soils and impoundments,  
24                  encapsulates the contaminants, and  
25                  prevents them from moving.

1                   A major benefit of in-situ S/S  
2                   is that the air emissions are  
3                   significantly lower because extensive  
4                   excavation of contaminated soils is  
5                   not required. So, worker and  
6                   community exposure to air emissions  
7                   are lower than many other  
8                   technologies.

9                   Solidification/stabilization is  
10                  a proven technology that has been  
11                  successfully used in Superfund,  
12                  including several impoundments at this  
13                  site. Particularly, solidification/  
14                  stabilization was successfully  
15                  implemented for a portion of  
16                  Impoundment 5, which contained tar-  
17                  like materials similar to those in  
18                  Impoundments 3 and 4, as well as the  
19                  remaining materials in Impoundment 5.

20                  So, as I discussed in the  
21                  previous slides, areas requiring  
22                  movement control would be solidified  
23                  and stabilized.

24                  The difference between the  
25                  movement control cap shown here and

1 the vapor control cap discussed  
2 earlier is that the existing soils and  
3 contaminant content beneath the cap  
4 would be stabilized to control  
5 movement to support the vapor control  
6 cap.

7 Like all the other caps I  
8 mentioned thus far, this cap would  
9 also be designed for a 500-year flood  
10 and would include a drainage system.

11 Alternative 5 would take an  
12 additional ten years to implement  
13 compared to Alternatives 3, 4, and 4A,  
14 and would cost approximately \$308  
15 million.

16 Let's move on to the figure to  
17 discuss it further.

18 The remedies for direct contact  
19 control areas, flood plain areas, and  
20 groundwater would be the same as  
21 Alternative 4. Like Alternative 4A,  
22 areas requiring vapor and movement  
23 control would be treated using in-situ  
24 solidification/stabilization, which is  
25 shown in the light blue on the figure,

1 and it makes up approximately 73 acres  
2 at the site.

3 These areas would not receive a  
4 vapor control cap and would only  
5 receive a 24-inch engineered soil  
6 cover following treatment.

7 So, let's move on to Alternative  
8 7.

9 Alternative 7 will take  
10 approximately twenty years, so ten  
11 years longer than Alternatives 3, 4,  
12 and 4A, and would cost approximately  
13 \$825 million.

14 Let's move on to the figure.

15 The direct contact control  
16 areas, flood plain areas, and  
17 groundwater would be addressed in the  
18 same manner as they were in  
19 Alternative 4.

20 The difference is that areas  
21 requiring vapor and movement control,  
22 shown in blue and purple, which make  
23 up approximately 72 acres of the site,  
24 these areas would be excavated and  
25 treated on site using a combination of



1 two technologies.

2 These materials would be  
3 excavated and treated using a  
4 combination of Low Temperature Thermal  
5 Desorption, or LTTD for short, and  
6 ex-situ solidification/stabilization.

7 LTTD, which is Low Temperature  
8 Thermal Desorption, is a technology  
9 that uses heat to physically separate  
10 contaminants from the excavated soils.

11 Following treatment, these  
12 materials would be placed in the on-  
13 site RCRA facility or would be  
14 backfilled on site and covered with a  
15 24-inch soil cap.

16 So, finally, we move on to  
17 Alternative 11, which is the final  
18 alternative. It would take  
19 approximately 25 years and would cost  
20 approximately \$1.8 billion.

21 Let's move on to the figure to  
22 discuss it more.

23 The areas requiring direct  
24 contact control and vapor control,  
25 shown in light blue and pink, and make

1 up approximately 147 acres of the  
2 site, it would be excavated and  
3 treated on the site using a  
4 combination of LTTD and ex-situ  
5 solidification/stabilization. Treated  
6 materials would be backfilled on site  
7 or placed in the on-site RCRA  
8 facility.

9 Areas requiring movement  
10 control, shown in the light brownish  
11 color, which makes up about 38 acres  
12 of the site, would be excavated and  
13 disposed offsite for incineration or  
14 recycling.

15 Flood plain areas would be  
16 excavated and relocated to the main  
17 plant for on-site treatment using  
18 thermal desorption and ex-situ S/S.

19 A 24-inch soil cover would then  
20 be placed over all of the excavated  
21 areas, and the groundwater remedy  
22 would be the same as all the previous  
23 alternatives.

24 So, now that we've gone over all  
25 the alternatives, let's discuss how

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

EPA evaluates them.

So, as Walter mentioned, EPA uses nine criteria to evaluate the alternatives and select a remedy. The first two are protectiveness of human health and the environment in compliance with ARARs or state and federal regulations.

These two -- these first two criteria are threshold criteria which must be satisfied. Alternatives that did not meet these two criteria were not retained for further evaluation in the alternative screening process. So, the eight alternatives I just discussed meet these first two criteria.

The next five criteria are balancing criteria which EPA uses to evaluate the alternatives that meet the first two criteria. These five criteria will be discussed in more detail in a few slides when we go over the comparison of alternatives.

And the last two criteria, state

1 and community acceptance, are  
2 evaluated in the public comment  
3 period.

4 So, using the first seven  
5 criteria, EPA developed a preferred  
6 alternative and presented it in the  
7 Proposed Plan, and that preferred  
8 alternative is Alternative 4A.

9 EPA believes that Alternative 4A  
10 most effectively meets the first seven  
11 evaluation criteria. This alternative  
12 was formed based upon the  
13 recommendations of EPA's National  
14 Remedy Review Board. It would take  
15 about ten years to implement and would  
16 cost approximately \$205 million.

17 Let's move on to the figure and  
18 go over 4A briefly one more time.

19 A 24-inch engineered soil cover  
20 would be placed over the light green  
21 direct contact control areas and an  
22 impermeable, multilayered, engineered  
23 vapor control cap would be placed over  
24 the vapor control areas.

25 The movement control areas and

1 the principal threat waste, shown in  
2 yellow and blue, would be placed into  
3 Impoundments 3, 4, 5, and would be  
4 treated using in-situ S/S.

5 After solidification, a vapor  
6 control cap would be installed,  
7 followed by the placement of 24-inch  
8 soil cover.

9 For the flood plain  
10 impoundments, shown in checkered  
11 green, an Ecological Risk Assessment  
12 would be conducted to determine  
13 whether excavation and relocation to  
14 the main plant is necessary.

15 And, finally, the groundwater  
16 remedy would involve improvement of  
17 the existing bedrock groundwater  
18 collection system and would involve  
19 collection and treatment of overburden  
20 groundwater using recovery trenches,  
21 wells, or containment walls.

22 Let's move on to the next slide  
23 for a comparison of alternatives using  
24 EPA's evaluation criteria.

25 Here, we have a table showing a

1 comparison of the remedial  
2 alternatives against one another.  
3 Along the top, we have the remedial  
4 alternatives.

5 Alternatives 1 and 2 are not  
6 shown because they did not meet the  
7 threshold criteria.

8 Along the left side are seven of  
9 the nine evaluation criteria. The  
10 last two criteria will be discussed on  
11 the next slide.

12 So, the green dots on this table  
13 are used for when an alternative meets  
14 the specific criteria. Yellow dots  
15 are used for alternatives that meet  
16 the criteria but recognize that there  
17 are some significant challenges with  
18 meeting these criteria. And, lastly,  
19 a red dot is used when an alternative  
20 does not meet the specific criteria.

21 All of the alternatives meet the  
22 first criteria, protection of human  
23 health and the environment.

24 Alternatives 5, 7, and 11 meet  
25 the second criteria but there would be

1 challenges with complying with ARARs,  
2 particularly with controlling air  
3 emissions within acceptable levels.

4 All of the alternatives would  
5 meet the third criteria, long-term  
6 effectiveness and permanence. And all  
7 of the alternatives would meet the  
8 fourth criteria, reduction of  
9 toxicity, mobility, and volume, with  
10 the exception of Alternative 3, which  
11 does not reduce the mobility of  
12 contaminants in the flood plain.

13 For short-term effectiveness,  
14 only Alternatives 3 and 4A would not  
15 result in impacts to the existing  
16 wetlands habitat, although Alternative  
17 4A could result in some impacts to  
18 wetlands, depending on the results of  
19 the Ecological Risk Assessment.

20 Alternatives 5, 7, and 11 do not  
21 meet this criteria because their  
22 implementation timeframe is  
23 significantly longer than the other  
24 alternatives; Alternatives 5 and 7  
25 would take 20 years, and Alternative

1 11 would take 25 or more years, versus  
2 ten years for the other alternatives.

3 For implementability,  
4 Alternatives 4 through 11 result in  
5 some form of invasive activity in the  
6 flood plain, which could delay the  
7 start of construction.

8 Alternatives 4 and 4A would  
9 require some predesign testing for  
10 in-situ S/S, while Alternatives 5, 7,  
11 and 11 would require more extensive  
12 predesign testing due to the use of  
13 thermal desorption, which could result  
14 in additional construction delays.

15 LTTD, used in Alternatives 5, 7,  
16 and 11, would also result in increased  
17 air emissions because excavation is  
18 required. The elevated air emissions  
19 may pose unacceptable risks to the  
20 site workers and to the community.  
21 Controlling air emissions within  
22 acceptable levels could be very  
23 challenging for Alternatives 5, 7, and  
24 11.

25 LTTD is also not effective at



1 treating the full range of  
2 contaminants found at the site and  
3 would be highly prone to schedule  
4 delays.

5 LTTD was tested on Impoundment 3  
6 in 2001, and it was not effective for  
7 the heterogeneous high moisture  
8 content material found in these  
9 impoundments.

10 In comparison to the other  
11 alternatives, Alternative 11 would  
12 generate the largest volume of truck  
13 traffic because it involves off-site  
14 disposal of a large volume of  
15 materials.

16 Under Alternatives 7 and 11,  
17 waste would be disposed in the outside  
18 RCRA facility. This facility may not  
19 have sufficient capacity to accept the  
20 waste and the waste may have to be  
21 shipped off site for disposal;  
22 therefore, Alternatives 7 and 11 could  
23 result in a large volume of truck  
24 traffic carrying contaminated material  
25 through the community.

1                   And, finally, if you look at the  
2 time frame and cost, Alternatives 7  
3 and 11 would take significantly longer  
4 than the other alternatives and their  
5 cost will be significantly higher.

6                   Now, to move to the next slide,  
7 the last two criteria that EPA uses to  
8 evaluate alternatives are state and  
9 community acceptance.

10                   EPA will seek state concurrence  
11 on the Record of Decision. Community  
12 acceptance is evaluated through our  
13 meeting tonight and throughout the  
14 public comment period. Therefore, we  
15 strongly encourage members of the  
16 community to comment on the proposed  
17 plan.

18                   EPA may modify the preferred  
19 alternatives or select another  
20 response action based upon new  
21 information or based upon your public  
22 comments.

23                   The Proposed Plan summarizes  
24 information from several reports which  
25 are included in the Administrative

1 Record in the Bridgewater Township  
2 Library.

3 Next slide.

4 Public comments will be accepted  
5 until May 15 -- not March 31 which is  
6 on the slide, so May 15 -- and can be  
7 submitted verbally tonight or  
8 submitted in writing via mail or  
9 e-mail. I have provided contact  
10 information for myself and Cecilia,  
11 the Community Involvement Coordinator.

12 We will address the public  
13 comments in the Responsiveness Summary  
14 and Record of Decision.

15 And I also provided EPA's  
16 American Cyanamid website, which  
17 contains more info and a link to the  
18 proposed plan. And the presentation,  
19 this presentation, will also be posted  
20 on the website soon.

21 So, thank you for attending  
22 tonight's meeting and listening  
23 through this rather lengthy  
24 presentation.

25 We'll up open up for comments

1 and questions, and I'll hand it over  
2 to Walter.

3 MS. ECHOLS: Before we open for  
4 any questions, we have some community  
5 leaders here tonight, and I just want  
6 to have you all acknowledge them.

7 Dan Hayes, he's the Mayor of  
8 Bridgewater.

9 (Applause)

10 MS. ECHOLS: Jim Naples, the  
11 Township Administrator.

12 (Applause)

13 MS. ECHOLS: John Schmitt, the  
14 Bridgewater Economic Development  
15 Commission.

16 (Applause)

17 MS. ECHOLS: Robert Albano,  
18 Bridgewater Steering Panel.

19 (Applause)

20 MS. ECHOLS: Michael Kerwin,  
21 Somerset County Business Partnership.

22 (Applause)

23 MS. ECHOLS: Ed Seliga, Somerset  
24 County Sustainability Commission.

25 (Applause)

1 MS. ECHOLS: Steve Tasher,  
2 Somerset Patriots.

3 (Applause)

4 MS. ECHOLS: Do any of you have  
5 a comment you would like to make about  
6 tonight's meeting?

7 Would you please come to one of  
8 the mics?

9 Please state your name so the  
10 stenographer can make a record of it.

11 MAYOR HAYES: Thank you. Dan  
12 Hayes, Mayor, Township of Bridgewater.

13 First, I'd like to thank  
14 everyone at the USEPA for holding this  
15 forum and allowing the perspective of  
16 effected Bridgewater residents and key  
17 stakeholders to be heard. Thank you.

18 This site has been designated as  
19 a Federal Superfund contaminated site  
20 for many years, and I am hopeful that  
21 the process that we are taking part in  
22 this evening leads us to the beginning  
23 of remediating the property and  
24 returning it to use.

25 My foremost concern is for the

1 health and safety of all Bridgewater  
2 residents. The site is located in our  
3 Binder neighborhood. It effects our  
4 homes, shopping areas, and  
5 recreational venues, including the  
6 ballpark of the highly acclaimed  
7 Somerset Patriots.

8 It is imperative that the site  
9 be remediated and that safety be a  
10 paramount concern throughout all  
11 aspects of the remediation process,  
12 including the site's alternate use.

13 The technical aspects of how the  
14 remediation of the property is  
15 accomplished will ultimately be  
16 debated and agreed upon by experts in  
17 the field under the watchful  
18 supervision of you, the USEPA. I have  
19 faith that you and those others will  
20 be diligent in this work and make  
21 certain that no corners are cut or  
22 shortcuts taken during the process.

23 I thank you for your efforts.

24 Since assuming ownership of the  
25 site, the Pfizer Corporation has

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1 demonstrated a sincere interest in  
2 working with the community. Pfizer  
3 has taken a site that they inherited  
4 through acquisition and demonstrated a  
5 willingness to invest significant  
6 capital resources immediately to begin  
7 the cleanup process.

8 We are eager to begin  
9 remediation and return the property to  
10 a purposeful use. The proposal the  
11 Pfizer Corporation outlined and  
12 presented to the USEPA, No. 4A, the  
13 implementation encompasses the safety,  
14 timeliness, and reused goals of the  
15 community -- and reused goals the  
16 Township holds for this site, and I  
17 recommend approval of the proposal for  
18 the benefit of Bridgewater and the  
19 surrounding community.

20 Thank you.

21 MS. ECHOLS: Thank you.

22 (Applause)

23 MS. ECHOLS: Please state your  
24 name.

25 MR. KERWIN: Good evening. My

1 name is Mike Kerwin, and I just want  
2 to echo Mayor Hayes' comments as well  
3 as add my own comments.

4 My name is Michael Kerwin, I am  
5 President of the Somerset County  
6 Business Partnership. The Business  
7 Partnership serves as Somerset  
8 County's Regional Chamber of Commerce  
9 and we also partner with the Somerset  
10 County Freeholders to provide economic  
11 development services to our community.

12 Our mission is to lead the  
13 business community to a prosperous and  
14 sustainable future. We take the  
15 sustainability part of our mission  
16 very seriously. The Business  
17 Partnership supports sustainable  
18 economic growth that creates a  
19 foundation for job creation and  
20 economic prosperity.

21 Business decisions need to be  
22 based on careful balance of the triple  
23 bottomline; the environment, the  
24 economy, and the community. Decisions  
25 must be based on reason, not emotion.

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500



1                   We have a Sustainable Somerset  
2                   Committee under the leadership of  
3                   Chairman Ed Seliga, who's here  
4                   tonight, that meets on a regular basis  
5                   and deliver a program of work that  
6                   benefits our members. Samples include  
7                   the creation of the Green Design Tool  
8                   Kit, the construction of buildings in  
9                   the private sector, the first of its  
10                  kind in New Jersey. We also work  
11                  closely with Somerset Energy Council  
12                  and support energy-efficient programs,  
13                  as well as the U.S. Green Building  
14                  Council, New Jersey Chapter, providing  
15                  training for LEED Certification.

16                  Our Sustainable Somerset  
17                  Committee reviewed the Proposed Plan  
18                  of the cleanup of the Cyanamid site on  
19                  January 10, 2012. We offer the  
20                  following comments.

21                  We appreciate and support  
22                  Pfizer's efforts to at long last clean  
23                  up this site. The Business  
24                  Partnership and our predecessor  
25                  organization have been supporting the

1 cleanup of this site for over twenty  
2 years.

3 We have seen more action towards  
4 achieving the goal of cleaning up the  
5 site since Pfizer assumed the control  
6 than in most of the prior decades. We  
7 want to see this momentum continue.  
8 We see significant risk to the  
9 community if the project is further  
10 delayed. The site has been under  
11 investigation since at least 1981. It  
12 is time for implementation.

13 Two, the Somerset County  
14 Business Partnership supports the  
15 implementation of remedial Alternative  
16 4A as summarized in the EPA report.  
17 While we do not present ourselves as  
18 experts in the area of environmental  
19 cleanup, the Proposed Plan appears to  
20 us as a reasonable approach to  
21 cleaning up the site.

22 We note that no matter what  
23 option is considered, the site will  
24 require ongoing remediation for the  
25 foreseeable future; therefore, we are

1 fortunate that we have a company with  
2 the resources of Pfizer to post the  
3 necessary guarantee to make sure that  
4 ongoing remediation will occur.

5 We do not see the environmental  
6 benefit of the more expensive options,  
7 but we do see considerable risk to  
8 cleanup workers and the neighboring  
9 community if the contaminated soil has  
10 to be exposed to the environment and  
11 transported off site.

12 MR. MUGDAN: Mr. Kerwin, if I  
13 might just ask you to wrap up quickly.

14 MR. KERWIN: Sure. One more  
15 minute and I'll be done.

16 We recognize the Proposed Plan  
17 is still conceptual and, upon  
18 approval, many details will need to be  
19 resolved and addressed.

20 We support the continued  
21 involvement of Crisis as the community  
22 watchdog to make sure that these  
23 concerns about implementation are  
24 addressed.

25 And, finally, while our primary

1 concern is that the site proceed to  
2 cleanup within a reasonable time, we  
3 also support the plans that give the  
4 community greater access to the  
5 Raritan River.

6 And we know there's a portion of  
7 the site adjacent to the Bridgewater  
8 Train Station that would be an  
9 attractive site for redevelopment.

10 We support the plan to open this  
11 area for smart development at some  
12 time in the future.

13 MR. MUGDAN: Do you want to  
14 leave the written?

15 MR. KERWIN: Sure.

16 (Applause)

17 MR. SELIGA: Good evening.

18 As Mike had mentioned, my name  
19 is Ed Seliga. I chair the Sustainable  
20 Somerset Committee at the Somerset  
21 County Business Partnership.

22 And I'll just summarize by  
23 saying we look for those opportunities  
24 to combine business activities with  
25 environment protection. And that's

1                    what appeals about the proposed  
2                    remediation and restoration plan here  
3                    at this facility and the site.

4                    Our committee actually has a  
5                    very extensive history with this  
6                    property and with this site. We, in  
7                    fact, participated at the early stage  
8                    of remediation -- I believe that was  
9                    1992 -- and we participated in a  
10                   meeting quite similar to this one in  
11                   the same timeframe, '92, '93.

12                   So, again, we find it very  
13                   gratifying from a twenty-year  
14                   perspective to see some significant  
15                   progress and really movement toward  
16                   restoration of the site, to actually  
17                   return this property to a beneficial  
18                   use.

19                   To us, this restoration would be  
20                   returning it to -- in a way that's  
21                   completely protective of health and  
22                   the environment. We're satisfied that  
23                   we see that in the planning phase,  
24                   that we would find suitable business  
25                   uses for some portion of it that's

1                   being considered as part of the  
2                   proposal.

3                   And most significantly, I think,  
4                   that we would eventually -- not  
5                   necessary immediately, but eventually  
6                   see the opportunity for some public  
7                   green space with the kind of  
8                   protective interventions that are  
9                   proposed that would be suitable.

10                  I look forward to being there at  
11                  some point once that work is  
12                  completed.

13                  In summary, we do support  
14                  Alternative 4A. We see it is  
15                  protective of the environment,  
16                  protective of human health, and  
17                  achieves the benefits for the  
18                  community that we're trying to  
19                  accomplish.

20                  I think we've discussed in our  
21                  own committee in terms of -- we  
22                  summarize this as: Clean it up and  
23                  put it to use.

24                  Very much in favor of that.

25                  I actually didn't expect to have

1 the opportunity to make any comments,  
2 but I actually did have a question. I  
3 don't expect an answer immediately.

4 Any proposed time frame, where,  
5 perhaps, in a stage manner, when the  
6 phasing would be to return portions of  
7 the property to make it available for  
8 future uses, either business or public  
9 recreation purposes?

10 So, when?

11 You can tell me later.

12 MR. MUGDAN: The very short  
13 answer to that question is in the  
14 process we laid out earlier. We  
15 expect the Record of Decision to be  
16 made towards the latter part of this  
17 time of the year. We hope to get it  
18 done by the end of the summer, but, in  
19 any event, in that timeframe.

20 The next step is then for the  
21 remediation to be designed. This is a  
22 very complex process. Whatever of  
23 these alternatives is selected, it  
24 will take time to do design; probably,  
25 I would imagine, a couple years before

1 work on one or another of the areas  
2 will start, might be a little faster.  
3 It will be phased, there will multiple  
4 steps going on simultaneously, and we  
5 project that the entire process will  
6 take about ten years.

7 It's conceivable that along the  
8 way some areas could be made available  
9 early, but I'm guessing that because  
10 there are so many pockets and so many  
11 parts of the site, that probably you  
12 won't really be able to reuse most of  
13 it for any kind of use, passive or  
14 active, for the better part of that  
15 entire period.

16 Maybe the flood plains earlier,  
17 I don't know. That depends a little  
18 on what choices are made about the  
19 flood plains.

20 MR. SELIGA: Thank you.

21 MS. ECHOLS: We have Senator  
22 Menendez' representative Carolyn  
23 Fefferman.

24 Do you have any statement for us  
25 at this time?



1 MS. FEFFERMAN: No, I don't, not  
2 at this time.

3 MS. ECHOLS: Okay.

4 Bob, one more second. There's a  
5 couple more people.

6 MR. SPIEGEL: Well, I represent.  
7 I'm a representative.

8 Don't I count for anything?

9 You recognized Crisis, you gotta  
10 recognize Edison Wetlands.

11 MS. ECHOLS: Yes, sir.

12 MR. TASHER: My name is Steven  
13 Tasher. I'm a member of the Board of  
14 Directors of the Somerset Patriots.  
15 I'm here to make a brief statement on  
16 behalf of Steve Kalafer, who  
17 apologizes for not being able to be  
18 here tonight.

19 We will be submitting more  
20 formal comments within the time  
21 period.

22 I think everybody in this room  
23 knows the integral economic impact the  
24 Somerset Patriots have had over the  
25 last twelve years. The philanthropy

1 and the big corporate citizenship of  
2 the Patriots is well recognized.  
3 We've been a very important forum for  
4 the community, and particularly a  
5 forum for nonprofits and associations  
6 like the American Cancer Society,  
7 American Diabetes Association,  
8 Operation Shoebox, and others who have  
9 been able to come to the ballpark and  
10 present the importance of their  
11 organizations to the more than 5,000  
12 people that have gone through the  
13 turnstiles at the Patriots Park, at  
14 the TD Ballpark, since it opened  
15 roughly twelve years ago.

16 The Somerset Patriots support an  
17 environmentally appropriate and  
18 expeditious remediation of the  
19 facility. We think that's very  
20 important.

21 We would ask that as the  
22 remediation is undertaken, that it be  
23 done in a way that recognizes and  
24 minimizes or avoids adverse impact or  
25 potential adverse impact upon the

1 community. We think that's very  
2 important.

3 We have received assurances from  
4 the Pfizer Corporation. And I just  
5 want to most particularly compliment  
6 Steve Kemp and Russ Downey of Pfizer,  
7 who have been very, very great  
8 corporate neighbors to the Somerset  
9 Patriots.

10 They have provided a number of  
11 assurances that as the remedial  
12 activities are undertaken, that they  
13 will not impact, interfere with, or  
14 otherwise obstruct the operations of  
15 the Somerset Patriots and of all the  
16 surrounding neighbors.

17 We also have been provided  
18 assurances that any development that  
19 may take place at the facility,  
20 whether it's ten years from now,  
21 Walter, as you said, or a little bit  
22 longer or a little bit shorter, that  
23 those developments will also not  
24 impact or obstruct the operations of  
25 the Patriots.

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1                   We also want to compliment the  
2 county officials and the Mayor, who  
3 have been quite transparent. They've  
4 been extremely responsive and  
5 cooperative and engaged in this  
6 process, and we think that's very  
7 important.

8                   We have one more request that we  
9 would like to make to USEPA.

10                   As it makes a determination of  
11 its Record of Decision, we would ask  
12 that you consider appointing a liaison  
13 to the community; some individual,  
14 whether it's a Pfizer representative  
15 or some other representative, acting  
16 on your behalf to interface with the  
17 community so that as remedial  
18 activities are undertaken, that person  
19 will be available to all of us in the  
20 community, provide us with advance  
21 notice of activities that are taking  
22 place, and will also be available to  
23 the extent that there are problems or  
24 issues along the way, that that person  
25 can be available to help smooth any

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1 differences, resolve any issues, and  
2 will be a very important factor.

3 We are grateful, again, to  
4 Pfizer. They provide a number of  
5 assurances not only to the Somerset  
6 Patriots but to other members of the  
7 community, and we are absolutely  
8 confident that they will abide by  
9 those assurances so that they will  
10 minimize any potential adverse  
11 environmental effects or any effects  
12 on all of our businesses and our  
13 community.

14 So, thank you very much.

15 MR. MUGDAN: Thank you.

16 (Applause)

17 MR. MUGDAN: Here with us  
18 tonight are two Community Involvement  
19 Coordinators, Cecilia Echols and  
20 Melissa Dimas. We will always have a  
21 Community Involvement Coordinator that  
22 will be identified for this site.  
23 That person will fulfill the role that  
24 you've just requested.

25 And you'll also, of course, be

1                   having a lot of opportunity to  
2                   interact with the Remedial Project  
3                   Managers that you've met here this  
4                   evening.

5                   MR. ALBANO: May I speak?

6                   MR. SPIEGEL: Wait. I think I  
7                   have the right to also speak. I've  
8                   been waiting.

9                   MS. ECHOLS: Bob, we have an  
10                  order here. We have ---

11                  MR. SPIEGEL: We asked if there  
12                  was a sign-in sheet, and we were told  
13                  there was no sign-in sheet for  
14                  speakers tonight.

15                  MS. ECHOLS: But this is -- how  
16                  we're running it here, we're allowing  
17                  the representatives of the Bridgewater  
18                  community to speak first and make  
19                  their statements.

20                  MR. SPIEGEL: You have done  
21                  everything you can to limit public  
22                  input.

23                  MR. MUGDAN: Sir, would you  
24                  please go over there?

25                  MR. SPIEGEL: You're limiting

1 public input here.

2 Who are you kidding?

3 MS. ECHOLS: No, we're not.

4 MR. SPIEGEL: Who are you  
5 kidding?

6 You are.

7 UNKNOWN SPEAKER: It's 8:30.

8 MR. SPIEGEL: It's 8:30, and you  
9 haven't let us speak.

10 MR. MUGDAN: There will be  
11 plenty of time for everybody to speak.

12 MR. SPIEGEL: He got five  
13 minutes.

14 UNKNOWN SPEAKER: You told us we  
15 gotta be out of here at 10:00.

16 (Pause in proceedings)

17 MS. ECHOLS: Could we allow him  
18 to speak, please?

19 MR. SPIEGEL: What are you  
20 afraid of?

21 MR. MUGDAN: We'll be hearing  
22 from everybody. And we have somebody  
23 here with an organization that has  
24 received a grant from EPA and has a  
25 formal role in this process. I'm

1 going to ask him to stay with the same  
2 three minutes that we've asked  
3 everybody else to stay with.

4 Again, once we get through a  
5 first round, where everybody's had a  
6 chance to speak for that three-minute  
7 period, if there's time left over, we  
8 will be asking --

9 MR. SPIEGEL: That was way more  
10 than three minutes they just went  
11 over.

12 MR. ALBANO: Thank you very  
13 much. I appreciate the EPA and the  
14 work done by Pfizer.

15 And despite this recent --

16 MS. ECHOLS: State your name,  
17 please.

18 MR. ALBANO: Robert Albano.

19 I worked in Bridgewater for 32  
20 years, back in the time when the site  
21 was an active, productive site. I've  
22 been a member of the Township Council  
23 for 24 years and involved with many of  
24 the major milestones at that site.

25 Currently, my involvement in the



1 site is as Chairman of the Bridgewater  
2 Steering Committee, working with the  
3 Cyanamid/Pfizer folks to have an  
4 effective, responsible cleanup at that  
5 site. Our representation of the  
6 community involves volunteers who are  
7 members of Crisis, which has been  
8 around watching the site for twenty  
9 years, when no one else was paying  
10 attention to it; of the Raritan Valley  
11 Sewerage Authority, who I consider a  
12 major stakeholder in this; Bridgewater  
13 Planning Board; Bridgewater  
14 Environmental Committee; Bridgewater  
15 Economic Development Commission;  
16 members of Bridgewater governing body.

17 We believe we have a very good  
18 feel into the importance of this site  
19 to the community, and we're dedicated  
20 to working with the Pfizer folks for a  
21 responsible reclamation of these  
22 extremely valuable lands.

23 Those are my comments for now.  
24 I reserve the right to speak again  
25 later.

1 I do appreciate the fact that  
2 everyone has come here. And although  
3 I sense there's antagonists, I hope it  
4 will be constructive.

5 Thank you.

6 (Applause)

7 MR. PETRAUSKI: Pardon me,  
8 you're going to hear from governmental  
9 officials first?

10 MS. ECHOLS: Yes.

11 MR. MUGDAN: We're going to hear  
12 from governmental officials first,  
13 then we'll open it up.

14 MR. PETRAUSKI: Well, then I  
15 guess that's us.

16 Hi. I am Glen Petruski. I am  
17 the Executive Director of the  
18 Somerset-Raritan Valley Sewerage  
19 Authority.

20 As you saw in your presentation,  
21 we are the people that have  
22 successfully treated that groundwater  
23 since probably this facility was named  
24 to the Superfund list.

25 With me tonight is Jim Cosgrove.

1 He is a principal with Omni  
2 Environmental. He is the water  
3 quality consultant to the Authority.

4 Let me start off by saying we're  
5 very pleased to see this project is  
6 moving forward, but we really have  
7 some concerns.

8 And one of them is that though  
9 we've treated the water successfully  
10 for thirty years, and, matter of fact,  
11 it's a very large piece in the  
12 document talking about the millions  
13 and millions of gallons that have been  
14 remediated, I was shocked to find out  
15 two weeks ago, after discussions with  
16 Pfizer, that EPA and them in July made  
17 a decision to build their own  
18 treatment plant.

19 Well, that's fine. I just wish  
20 somebody would have talked to us. As  
21 what we consider a significant  
22 stakeholder in the water quality of  
23 the Raritan River, we found that  
24 absolutely shocking.

25 We are the folks who have spent

1 about \$1.5 million since 1989  
2 analyzing, monitoring, studying,  
3 modeling the river. As a matter of  
4 fact, it was our studies in  
5 conjunction with NJDEP that found  
6 there were problems in the river being  
7 caused by the contaminants that were  
8 escaping from the Pfizer site. And  
9 our studies in '08, '09, '10 have  
10 shown there is an impact on that river  
11 by the benzene which is being  
12 discharged.

13 Now, to go forward here, if  
14 Pfizer chooses to build a treatment  
15 facility there, that makes sense and I  
16 can understand the logic when you look  
17 at six pages of contaminants on that  
18 site. And we all understand that the  
19 movement in the environmental  
20 regulations today is to deal with the  
21 exotic contaminants and the  
22 contaminants of concern. So, we see  
23 the logic of the necessity for them to  
24 build a facility.

25 Where we have great concern is

1                   that we found out on February 12,  
2                   2012, two weeks ago, EPA and DEP --  
3                   and Pfizer submitted an application to  
4                   DEP for a permit equivalency for a  
5                   NJPDES discharges surface water  
6                   groundwater remediation cleanup  
7                   Category BGR permit. And that permit  
8                   is looking for, based on the very  
9                   little evidence that is in the  
10                  application to DEP, to have the  
11                  standard set by 7:14, I think Subpart  
12                  B.

13                         We don't feel that is  
14                         appropriate or protective of the  
15                         river.

16                         One, a general permit,  
17                         considering the size of this site, the  
18                         complexity, and the scope of the  
19                         remediation of the groundwater, and,  
20                         yes, the sheer increase in the volume  
21                         of groundwater, which is going to go  
22                         from 650, 700 thousand gallons a day  
23                         to over 1.2 million gallons -- that's  
24                         almost a 25, 26 percent increase --  
25                         you should not be using a general

1 permit. It should be a specific  
2 permit.

3 More importantly, we believe  
4 that the permit should be based on  
5 effluent water quality standards, that  
6 you cannot just go out there and pick  
7 numbers off of a list on a standard  
8 document.

9 We will be submitting written  
10 comments on this, but due to the fact  
11 that we just found out most of this  
12 information -- and if it wasn't for  
13 Russ and his people at Pfizer when we  
14 spoke to them last week, we wouldn't  
15 have even had a copy of the  
16 Feasibility Study. We just got that  
17 Friday night.

18 So, we're very concerned and I  
19 would ask EPA to correct that and to  
20 please consider us a stakeholder in  
21 this.

22 At this time, I'm going to ask  
23 Mr. Cosgrove to fill in the detail --  
24 not real long -- as to what our  
25 concerns are.

1 MR. MUGDAN: If we can keep it  
2 short, because we've already gone over  
3 the time.

4 MR. PETRAUSKI: We'll try.

5 MR. MUGDAN: I'll ask you to  
6 really keep it short here because I'm  
7 sure we'll be getting written comments  
8 from you as well.

9 MR. COSGROVE: Yes, sir.

10 My name is Jim Cosgrove, Omni  
11 Environmental. Let me just give you  
12 one example that I think will bring  
13 the point home.

14 One of the critical pollutants  
15 of concern on the site in the shallow  
16 groundwater is benzene. Benzene has  
17 been found as high as four hundred and  
18 some odd thousand micrograms per liter  
19 in the shallow groundwater. It's been  
20 found as high as thirteen micrograms  
21 per liter in the Raritan River itself.

22 The stream standard for benzene  
23 is 0.15. We're measuring 13, the  
24 standard 0.15.

25 The effluent standard that's

1 being requested for benzene for the  
2 Pfizer treatment plant that would  
3 treat this contaminated benzene in  
4 this example is seven.

5 What our concern is is that we  
6 don't want the discharge to be allowed  
7 to discharge, using my example, seven  
8 micrograms per liter of benzene when  
9 we have a stream standard of .15 and  
10 the stream is listed as being impaired  
11 for benzene, I believe, due to the  
12 contamination.

13 This is just one example. There  
14 are many other parameters, I won't  
15 take the time tonight.

16 We're totally supportive, I  
17 agree with the approach that's being  
18 taken in terms of the cleanup. The  
19 issue is let's just make sure we spend  
20 the time to get the effluent quality  
21 from that plant right so that we  
22 improve the Raritan River, rather than  
23 either allow it to stay the same or  
24 get worse.

25 Thank you.

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

(Applause)

MR. SPIEGEL: My name is Robert Spiegel. I'm the Executive Director of the Edison Wetland Association.

And I am a regional stakeholder, as are many people in the room. This is a regional issue, it's a regional problem. The chemicals that are discharging from this site discharge into the Raritan River and are a problem regionally. And as this gentlemen just said, the benzene alone is a major issue.

And since we went to the site with Pfizer, Pfizer has not necessarily been the most honest. It was only after we confronted them that they fessed up to their supposed benzene seed that was twenty thousand times the cleanup standard. And then that was found, and now the emergency measures that EPA is trying to take are being implemented.

Now, I'm going to keep my comments short because there's a

1 number of people here.

2 I am completely against 4A as a  
3 remedy selection. EPA is taking a  
4 one-size-fits-all approach to this  
5 cleanup; solidify it, cap it, and  
6 leave it behind, okay?

7 What they should be talking is  
8 all of the above. They should be  
9 looking at all the remedies that they  
10 could possibly bring to bear on these  
11 various waste streams. And as they  
12 said, there's volatiles, semi-  
13 volatiles, metals, there's every  
14 chemical here known to mankind. And  
15 you can't just stabilize it and say:  
16 We're gonna make a big, giant piece of  
17 cement and leave it here.

18 Everybody remembers this. This  
19 was just recent. This was Hurricane  
20 Irene, this is the American Cyanamid  
21 site. This is what it looks like  
22 after you get some serious rainfall.  
23 And it housed, according to EPA, three  
24 hundred million gallons.

25 They're trying to tell us that

1 filling in the flood plain and putting  
2 a cap on it is not going to increase  
3 flooding.

4 Who do they think they're  
5 kidding?

6 Everybody in this room knows  
7 what it was like here just a few  
8 months ago, after Hurricane Irene.  
9 And EPA has the opportunity here to  
10 not only fix this problem and clean it  
11 up, but actually improve it and use it  
12 for additional flood storage to  
13 actually prevent additional flooding  
14 elsewhere.

15 And you think that you're gonna  
16 get this site back in ten years. This  
17 cleanup is not going to necessarily  
18 move forward on that timeline. Nobody  
19 knows -- I mean, you can't explain to  
20 me why it would take ten years to do  
21 the cleanup, why it would take twenty  
22 to really clean it up. Those  
23 timelines just don't make sense.

24 What they should be doing is  
25 seven or some version of seven with

1 thermal desorption.

2 They came here and originally  
3 signed a Record of Decision way back  
4 when and actually was doing that and  
5 cleaning up the soils. Then all of a  
6 sudden, they stopped the cleanup in  
7 midstream, said: We'll be back and  
8 we're going to come up with a better  
9 approach.

10 Eight years later, they come  
11 back with this garbage and they call  
12 it a cleanup. It's the least cost for  
13 Pfizer, it's the least protective for  
14 the community.

15 And guess what, folks? Once  
16 they do this and walk away, that's  
17 going to be it. They're telling you:  
18 We're gonna monitor this site forever.

19 But guess what?

20 In Washington now, there's the  
21 right wing and others are trying to  
22 get rid of the EPA, and there's no  
23 guarantee that you're gonna have an  
24 EPA that's gonna have regulatory  
25 authority or funding in the future.

1                   So, once they do this cleanup,  
2                   if they do it, and once they walk away  
3                   from it, there is no guarantee that  
4                   you're going to get a cleanup here.

5                   And look at this area. This is  
6                   the site. This entire area is the  
7                   flood plain, not just a small portion  
8                   of it. Pfizer and EPA would like you  
9                   to think that only a small portion is  
10                  the flood hazard area.

11                  And they're gonna build it to  
12                  withstand a 500-year flood?

13                  Are you kidding me?

14                  How often does it flood in this  
15                  area?

16                  How often, every year? Every  
17                  two years, it goes underwater?

18                  And they're going to build it  
19                  500-year flood?

20                  Good luck. This cap's gonna get  
21                  washed away, washed downstream, and  
22                  you guys better stand up and tell EPA  
23                  and Pfizer they need to go back and  
24                  re-think this approach.

25                  And they should do this cleanup

1 in two to five years, not ten years,  
2 not twenty years. Clean it up. Clean  
3 it up for once and all. This has been  
4 here for over twenty years polluting  
5 the Raritan River and poisoning your  
6 community.

7 There's no reason you have to be  
8 left with this cleanup. This is  
9 ridiculous and it's an insult to  
10 Bridgewater, it's an insult to this  
11 area, and it's an insult to the folks  
12 that have been fighting to protect the  
13 Raritan River and the health of the  
14 Raritan.

15 So, I would ask you to please  
16 come up and comment tonight, put in  
17 your comments, and tell EPA and Pfizer  
18 to go back, come up with a plan that's  
19 quicker, that's more effective, and,  
20 most of all, that's permanent, which  
21 is one of their mandates. It's  
22 supposed to be permanent. A cap isn't  
23 permanent, it's an engineering  
24 control. All engineering controls  
25 fail over time.

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1                   And who's gonna be here to watch  
2                   and make sure that gets done?

3                   Who knows?

4                   They can clean it up now and be  
5                   done with it and then be done with it  
6                   instead of monitoring it for the rest  
7                   of our lives.

8                   So, in the words of a famous  
9                   poet, you know, he said: This just  
10                  doesn't cut the cat.

11                  You know, this doesn't pass  
12                  muster. When you look at it and you  
13                  look at what they're planning to do,  
14                  they're gonna spend \$200 million.  
15                  \$200 million.

16                  And what are they gonna get?

17                  A piece of stone sitting in a  
18                  flood plain.

19                  How is that gonna help you?

20                  It'll help Pfizer's profit,  
21                  it'll help Ian Read's profits, whose  
22                  the CEO of Pfizer.

23                  By the way, Pfizer is, I think,  
24                  one of the largest biopharmaceutical  
25                  companies in the world. They have the

1 resources to clean up this site.

2 Please make sure that they do.

3 (Applause)

4 MR. CHAPIN: My name is Rich  
5 Chapin. I'm a consulting  
6 environmental engineer. I started to  
7 review the Feasibility Study on behalf  
8 Edison Wetlands. We will be  
9 presenting technical comments, but I'm  
10 here to pass a few preliminary  
11 technical comments tonight.

12 This site is adjacent to the  
13 Raritan River. In all the documents,  
14 there's this historical construct of  
15 flood plain versus main plant area.  
16 They built a flood wall around this  
17 facility back historically -- I don't  
18 know if Calco did it or Cyanamid did  
19 it; one of them did it -- to keep out  
20 the flood waters.

21 But the reality is the entire  
22 site is a flood plain, and we can't  
23 technically look at the site  
24 artificially as outside the wall being  
25 flood plain and inside the wall, the

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500



1 main plant, not being flood plain.  
2 You can't look at it differently.  
3 It's just all flood plain.

4 That's the first technical  
5 comment. The whole approach needs to  
6 be re-thunk of it all being flood  
7 plain.

8 The proposed remedy, if you  
9 total up the volumes that are used in  
10 the cost estimate, will place some  
11 600,000 cubic yards of fill in the  
12 main plant area. That's 600,000 cubic  
13 yards of fill in the flood plain.

14 I understand that there's  
15 equivalency of permits. You need a  
16 permit to do this. We called the DEP  
17 to get the permits, to see what they  
18 said. We were given two permits, both  
19 of which talk about excavation of  
20 materials outside the wall, bringing  
21 them inside the wall. There's nothing  
22 in the permits that we saw about  
23 placing 600,000 cubic yards of fill in  
24 the flood plain.

25 The FS also states: We have the

1 permits.

2 So, there's a dichotomy here  
3 that needs to be investigated because  
4 I didn't find a permit for 600,000  
5 cubic yards of fill, and that needs to  
6 be addressed.

7 On that same amount, 600,000  
8 cubic yards of fill, if you use the  
9 number for density of material that  
10 they use in their cost estimate, which  
11 is 1.69 tons per yard, translates to  
12 960,000 tons of fill being imported  
13 into the site.

14 Well, for a typical 20-ton  
15 truck, that's 48,000 truckloads of  
16 fill that are going to come from in  
17 the community, into that site. And  
18 then there's another 48,000 trucks  
19 that are going to drive back out.

20 That is a short-term adverse  
21 impact, an implementability factor  
22 that is not addressed at all in the  
23 feasibility study, and it must be.

24 I suggest looking at rail  
25 transport of any materials in, but

1 that needs to be addressed.

2 The last comment -- not the  
3 last, second to last.

4 Another major Superfund site,  
5 such as Ventron/Velsicol up in the  
6 Meadowlands, the principal threat  
7 wastes were removed and then the site  
8 was stabilized and capped for  
9 redevelopment.

10 Here, we seem to be stabilizing  
11 all the principal threat wastes. I  
12 think that needs to be re-thunk. And  
13 if there are testing that needs to be  
14 done, to make sure we can do it,  
15 because you're talking about using  
16 cement to make a solid block out of an  
17 organic tar. I don't want to bore  
18 anybody with chemistry, but sometimes  
19 those things are difficult to effect.

20 So, I think that needs to be  
21 tested. Before you select a remedy,  
22 you should be sure that it's going to  
23 work.

24 I understand we're twenty plus  
25 years down the road on this project

1 and everybody wants and deserves as  
2 expeditious a cleanup from this point  
3 forward as we can, but it's better to  
4 know what's going to work now than to  
5 pick it, to start it, and then, as the  
6 past Record of Decision, you picked  
7 something, you went to try it, it was  
8 like oops, and then they had to re-  
9 think the whole entire process, and  
10 that's why we're here today. So, I  
11 suggest that you take a look at that.

12 The other item that I'll add is  
13 the Impoundment 8 facility.

14 Impoundment 8 is a RCRA-permitted  
15 landfill. It's designed to hold the  
16 nasty stuff that's still there.

17 In the selected alternative, I  
18 didn't find any use of that facility  
19 to minimize the amount of fill in the  
20 flood plain. If the facility is there  
21 and its purpose when it was built was  
22 to contain wastes from this site as  
23 the cleanup goes forward, its use  
24 should be maximized in any alternative  
25 selected.

1                   As I said, thank you. There  
2 will be other technical comments that  
3 we'll submit.

4                   MR. MUGDAN: Thank you.

5                   MR. TITTEL: Hi. I'm Jeff  
6 Tittel, Director of New Jersey Sierra  
7 Club. We have about a hundred members  
8 here in Bridgewater, so I guess we are  
9 a part of --

10                  MS. ECHOLS: Sir, who are you  
11 again?

12                  MR. TITTEL: Jeff Tittel, T-I-T-  
13 T-E-L, Director of New Jersey Sierra  
14 Club.

15                  MS. ECHOLS: Thank you.

16                  MR. TITTEL: We are involved in  
17 Superfund issues, not just here but  
18 all around the state and the country.

19                  I want to say one nice thing.  
20 It's nice to be at a meeting where  
21 officials of government call the  
22 polluters Responsible Parties, versus  
23 the DEP, where they're now customers,  
24 so...

25                  There's only a few people who

1 get that. But dealing with DEP now --

2 UNKNOWN SPEAKER: We can't hear  
3 you.

4 MR. TITTEL: Sorry.

5 I said it's nice to be in a  
6 place where polluters are called  
7 Responsible Parties versus at the DEP  
8 now where they're called customers  
9 because of the changes that's  
10 happening in the state.

11 I just want to start out with a  
12 couple of points. And it's  
13 interesting 'cause one of the  
14 alternatives that you discussed, 7 and  
15 11, you talked about air quality  
16 impacts, but, yet, if you're going to  
17 be bringing in fill to a site, there  
18 will also be impact. So, 48,000  
19 trucks bringing in dirt would also be  
20 48,000 trucks taking out the toxic  
21 waste. So, that, in itself, I think,  
22 needs to be looked at.

23 The other real concern that I  
24 have is that when you cap in flood  
25 plains and areas that see systemic

1 flooding and flooding that's getting  
2 worse -- what was once a hundred-year  
3 storm probability is happening every  
4 two years, and some years more so, and  
5 what's the probability of a 500-year  
6 storm may happen next week -- it's a  
7 real concern that how do you armor  
8 plate a site to do that?

9 Anything that's in the flood  
10 plain needs to be removed, whether you  
11 take it to the RCRA site or something  
12 else because if you cap in an area  
13 where you can get scouring, you can  
14 get lift. This is illuvial land, so  
15 you're gonna have groundwater pushing  
16 up as well, you're gonna have  
17 movement, and you're going to have a  
18 failure of those institutional  
19 controls at some point. And I think  
20 that's a real concern, especially in  
21 the flood plain.

22 In the other areas, slurry walls  
23 and other things could work,  
24 especially if they're armor-plated,  
25 like bentonite, so that you're not

1                   gonna get the flood water in or  
2                   groundwater out, and I think that's  
3                   something that needs to be looked at  
4                   in a lot more detail as part of this.

5                   And I understand the problem  
6                   that you have here. I mean, you have  
7                   so many different types of  
8                   contamination, from metals and VOCs  
9                   and everything else, that this is  
10                  really a time bomb and you're trying  
11                  to diffuse it. The problem is that  
12                  unless you move quicker, that bomb can  
13                  go off; unless you deal with other  
14                  issues that aren't even on the table  
15                  today, like Lagoons 1 and 2, which are  
16                  six million gallons of toxic waste  
17                  sitting there, ready to go off at some  
18                  point -- the next great flood, the  
19                  next whatever -- you're gonna have a  
20                  real serious problem, a bigger  
21                  disaster than anything you've seen on  
22                  this site since or can see in the  
23                  future.

24                  And a concern that we have is  
25                  that the Raritan River, it is a used



1 river. Downstream, there are still  
2 backup water supply intakes and water  
3 supply intakes as far south as New  
4 Brunswick, the canal. You also have  
5 recreational use, you have people  
6 wanting to live along the river.

7 So, cleaning up this site and  
8 putting it back to productive use is  
9 important, but productive use doesn't  
10 mean leaving toxic waste under a cap  
11 that could leech out at some point.

12 You know, I coined a phrase  
13 "pave and wave" a few years ago. My  
14 concern is that this is going to be  
15 pave and float and you're gonna see  
16 when you go kayaking in this river  
17 chunks of the cap going past you and  
18 chemicals coming out.

19 And I'm also very concerned that  
20 any discharge from the site meet all  
21 surface water quality standards  
22 because I think that's also critical.

23 I just wanted to end with one  
24 thing for EPA to understand. To EPA,  
25 it means that even Pfizer is

1 accountable, so keep them accountable  
2 and make this site clean up properly.

3 Thank you.

4 MR. MUGDAN: Thank you.

5 (Applause)

6 MR. MUGDAN: I see we have a  
7 couple people coming down at the same  
8 time. Why don't you just take a seat  
9 right there, and we'll go back and  
10 forth on the mics.

11 MR. WHEELER: David Wheeler, I'm  
12 with Edison Wetlands Association.

13 We're talking about flooding  
14 here with this plan and with this  
15 site, and I want to kind of put that  
16 into real terms.

17 That flooding, I walked through  
18 the downtown communities right after  
19 the two storms last August; walked  
20 through Manville, through Bridgewater,  
21 through Bound Brook, and Middlesex  
22 Borough. And the real destruction  
23 from those floods was right out there  
24 on the curbs of people's homes, one  
25 after another, block after block,

1 entire neighborhoods, where if you  
2 walked or drove through that, you  
3 would see entire lives put right on  
4 the front yard, right up to the curb,  
5 piled up high like mountains.

6 That's the flooding that we're  
7 dealing with in this area right now.  
8 While this plan is being proposed here  
9 and the EPA wants to do this plan, at  
10 the same time we have the Army Corps  
11 of Engineers working with all these  
12 other government agencies to build  
13 huge floodgates in these towns, to  
14 build giant flood prevention walls,  
15 and everything they can come up with  
16 technologically to keep the flooding  
17 out of these towns.

18 Meanwhile, we're going to  
19 displace all that water that you see  
20 from the picture that literally covers  
21 the site. And, also, a few speakers  
22 have mentioned the Raritan River and  
23 Canal. The Delaware & Raritan Canal  
24 is a drinking water source. And with  
25 those storms, the water completely

1 covered everything from the lagoons on  
2 site, across the Raritan, right into  
3 the canal, all one water body for a  
4 long period of time.

5 So, everything that's done on  
6 the site should be geared not just  
7 towards the contaminants and  
8 remediation, but should also be geared  
9 towards the flooding, towards whatever  
10 could be done to prevent flood  
11 damages, not make them worse.

12 So, I strongly urge you to  
13 reconsider and to think about the fact  
14 that this is, like it was mentioned,  
15 all one big flood plain, not  
16 compartmentalize it and say some of  
17 it's okay, some's of it's not. It's  
18 all flood plain.

19 Thank you.

20 (Applause)

21 MR. MUGDAN: A number of people  
22 have mentioned flooding. There will  
23 be more people who will talk about it.  
24 We do have a number of slides to  
25 address some of the concerns about

1 flooding.

2           However, what I'd rather do at  
3 this moment is just keep the  
4 statements coming.

5           (Applause)

6           MR. MUGDAN: And we may find  
7 some time to share that with you. If  
8 we don't find time to share it with  
9 you this evening, this presentation, I  
10 take it, that we've given tonight will  
11 be on the website.

12           Is that correct?

13           MS. ECHOLS: Tomorrow.

14           MR. MUGDAN: That will include  
15 the additional slides that we didn't  
16 go into but that we have on this  
17 issue.

18           Well, we'll figure out some way  
19 to get it out to the public.

20           MR. GERMINARIO: Good evening.  
21 My name is Tom Germinario. I'm the  
22 technical advisor to Crisis, which is  
23 the local community group that has  
24 been monitoring the cleanup of this  
25 site since 1993 under a technical

1 assistance grant.

2 The comments I'm going to make  
3 are based on my review of the sitewide  
4 feasibility study on behalf of Crisis.

5 We're dealing in part with the  
6 cleanup of six impoundments, 3, 4, 5,  
7 13, 17, 24. We note that with respect  
8 to the Impoundments 3, 4, 5, the  
9 wastes are very heterogeneous, meaning  
10 that they're made up of a wide range  
11 of contaminants with a wide range of  
12 characteristics.

13 This poses particular treatment  
14 problems. Based on our experience  
15 with the site, we favor treatment  
16 technologies that have been proven and  
17 that are reliable and that can be  
18 implemented within a relatively short  
19 period of time.

20 From that perspective, we do  
21 endorse Alternative 4A that is being  
22 recommended in the FS and in the  
23 Remedial Proposal of the EPA. That  
24 alternative principally relies with  
25 respect to the impoundment materials

1 on in-situ stabilization/  
2 solidification.

3 We are recommending, however,  
4 that during the remedial design phase,  
5 that there be pilot testing of the  
6 impoundment material in order to  
7 optimize the type of S/S,  
8 solidification/stabilization, that is  
9 used, and to optimize and find the  
10 most effective combination of  
11 amendments, stabilizing agents, and  
12 geogrids that can be used in  
13 connection with the S/S process.

14 Regarding Impoundments 13, 17,  
15 and 24, we recommend that the material  
16 in those impoundments be classified in  
17 the same way as the general site soils  
18 are being classified in the three  
19 categories -- those require contact  
20 control, vapor control, or movement  
21 control -- and that those materials  
22 requiring any one of those three types  
23 of controls be removed from the flood  
24 plain, brought to the main plant area,  
25 and handled in accordance with those

1 three categories, under either the  
2 engineered covers or under the in-situ  
3 stabilization and solidification  
4 process.

5 Principal threat waste, no  
6 matter where located in the site,  
7 should all be consolidated in the  
8 Impoundment Areas 3, 4, 5 and  
9 subjected to the in-situ S/S treatment  
10 process.

11 With respect to sitewide  
12 groundwater, Crisis generally endorses  
13 the approach that EPA has recommended.  
14 We do have reservations, however, with  
15 respect to reliance on the Somerset-  
16 Raritan Valley Sewerage Authority  
17 Plant.

18 We have seen no evidence in the  
19 record that that plant is capable of  
20 treating this range of pollutants that  
21 is present on the site. We recognize  
22 they have been treating bedrock  
23 groundwater for a number of years, but  
24 that is at a much lower level of  
25 concentration than what we're going to



1 see in the coming phases of  
2 groundwater recovery on the site.

3 We very much favor and recommend  
4 the construction of a specifically  
5 designed on-site wastewater treatment  
6 plant specifically geared towards the  
7 contaminants found on this site.

8 And to the extent that the SRVSA  
9 must be used on an interim basis, we  
10 strongly urge that there be imposed  
11 enforcement level effluent discharge  
12 standards for all of the range of  
13 contaminants, SVOCs and VOCs, that are  
14 going to be treated at that plant on  
15 an interim basis.

16 With respect to the other  
17 alternatives, we do not believe that  
18 LTTD is a technology that will  
19 effectively deal with this type of  
20 heterogeneous waste.

21 We also note that LTTD is  
22 primarily geared toward a soil-type of  
23 treatment and requires a fine  
24 particulate consistency of the treated  
25 material, whereas the impoundment

1 materials here are highly plastic  
2 foreign materials and it would require  
3 extensive processing of that material  
4 even to make it and handleable, if you  
5 will, by an LTTD process.

6 And, also, because of the  
7 heterogeneity, there's a wide range of  
8 temperatures that would be needed to  
9 remove or resorb the contaminants here  
10 and would be difficult for the LTTD  
11 process to deal with that.

12 We also note that that process  
13 would take an implementation period of  
14 twenty years, which is double what the  
15 Alternative 4A would require.

16 So, just to sum up, we are  
17 conditionally endorsing Alternative  
18 4A. The issues we would like to see  
19 addressed in the Record of Decision  
20 are as follows.

21 Long-term groundwater treatment  
22 should rely on on-site treatment  
23 designed specifically for the site's  
24 contaminants, not on SRVSA's municipal  
25 treatment system.

1                   Secondly, interim groundwater  
2                   treatment at the SRVSA should be  
3                   subject to enforceable effluent limits  
4                   for VOCs and SVOCs.

5                   Third, materials in the flood  
6                   plain requiring direct contact, vapor,  
7                   or movement controls, should be  
8                   relocated to the plant area and  
9                   treated with appropriate engineered  
10                  caps and/or in-situ stabilization/  
11                  solidification.

12                  Fourth, all principal threat  
13                  waste on the site should be  
14                  consolidated in Impoundment 3, 4, 5  
15                  for in-situ S/S treatment.

16                  And, lastly, bench steel testing  
17                  should be conducted during the  
18                  remedial design phase to determine the  
19                  most effective combination of  
20                  amendments, stabilization agents, and  
21                  geogrids to be used in the in-situ S/S  
22                  process.

23                  Those are my comments. Thank  
24                  you very much.

25                  And I do have a written version

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

I'd like to give you.

(Applause)

MR. BOYLE: My name is Ryan Boyle. I'm an environmental science student at Rutgers University and I'm also a resident of Bridgewater for the majority of my life.

I think the greatest concern so far of everyone in this whole lecture hall is that we really want to see treatment. We really want to see the contaminants eliminated rather than to be contained. And looking at all the different options that you guys have proposed, all I really see for the most part, for the vast majority of the contaminants, is a practice of containing them.

And one thing I feel that has been failed to be looked at is specific bioremediation products; specifically, ones that contain microbes, surfactants, and various enzymes.

In my studies at Rutgers, the

1 focus of my studies have been towards  
2 soils and contaminants in those soils  
3 and how we eliminate the contaminants  
4 in those soils. I'm still pursuing my  
5 degree, but I have been networking, I  
6 have contacted many individuals, one  
7 of which is the President of Alabaster  
8 Corporation in Pasadena, Texas.

9 I provided -- I'm not too sure  
10 what's his name there -- a business  
11 card with his personal cell phone on  
12 it. And his products will take care  
13 of -- specifically, the main -- the  
14 original purpose of the creation of  
15 his bioremediation products are for  
16 hydrocarbons, which the majority of  
17 the contaminants in question are  
18 hydrocarbons, whether tar-based or in  
19 more of a liquefied form. They're  
20 geared towards handling those  
21 contaminants.

22 VOCs are also specialized as the  
23 products go, and, I mean, I see  
24 chlorinated hydrocarbons, PCBs, he has  
25 products that he reassures me will

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

take care of these contaminants.

And if we can eliminate the contaminants -- and he's also specified that in comparison to the excavation of soil that's regularly practiced to a cradle-to-grave technique, that his products can eliminate contaminants, eliminate the liability that Pfizer has on those contaminants, at a less expensive cost than the practice of cradle-to-grave.

Now, I understand, okay, we're not completely dealing with cradle-to-grave. We are relocating some soils and we're just implementing a cap, a clay cap.

But with all the different discussions, with all the different topics brought up by various members in the audience, and with the strategy that you guys are implementing, I'm sure that a combination of all these tactics and, you know, talking with the President of Alabaster Corp., that a much more effective, reasonable

1 treatment method could be established.

2 I mean, the treatment facility  
3 that Pfizer implemented for the  
4 groundwater is contaminated. That was  
5 pretty discerning. I was expecting a  
6 little more from that.

7 But everything else, I firmly  
8 believe you guys really are trying  
9 your best in trying to come up with  
10 the best treatment. And if everything  
11 is taken into consideration that's  
12 mentioned today, I'm pretty certain  
13 that we'll come up with an effective  
14 strategy.

15 But the -- there's so much stuff  
16 I want to talk about.

17 One of the other concerns, one  
18 of the strategies for the volatile  
19 organic compounds was to put it into  
20 cement where you're still having to  
21 put a clay cap over it to reduce it.

22 The products in question that  
23 I'm discussing, as soon as they're  
24 treated, as soon as the product is  
25 applied, all volatile organic

1 compounds will no longer emit  
2 hazardous emissions. They will be  
3 dealt with immediately. That's how  
4 effective these products are. We're  
5 talking about a treatment of a matter  
6 of months once its applied to the  
7 soils in question, rather than several  
8 years.

9 Now, you know, preparing the  
10 soil, yeah, it's a time-consuming  
11 process, but once it has been  
12 thoroughly mixed in with the soil  
13 that's going to be treated, that will  
14 take care of that problem.

15 The only other thing that, of  
16 course, the product will not take care  
17 of is the heavy metals. But as we  
18 discussed, there are other viable  
19 methods of dealing with those.

20 Thank you very much.

21 (Applause)

22 MR. ARCOLEO: My name is John  
23 Arcoleo, lifelong New Jersey resident,  
24 resident of Bridgewater for twenty  
25 years, and I'm Environment Trustee of



1                   Sunset Lake Community in Bridgewater,  
2                   which helped supply 20,000 cubic yards  
3                   of fill dirt for the first round of  
4                   capping in the mid nineties. And we'd  
5                   like to thank American Cyanamid for  
6                   helping us out like that in the past.

7                   I want to go back to my early  
8                   college years back at Rutgers as a  
9                   chemistry major. And some of the  
10                  chemistry majors, we'd sit down at  
11                  dinnertime after chemistry lab and  
12                  wonder why after spring rain the New  
13                  Brunswick drinking water tastes like  
14                  the chemical reagents that we were  
15                  using in the labs: Boy, that water  
16                  tastes like phenylsilane. Why would  
17                  that be? What's the water  
18                  purification process?

19                  It's obvious now that the  
20                  American Cyanamid site has been  
21                  leaking organic chemicals, volatile  
22                  chemicals, for decades, and, under any  
23                  proposed remediation plan you have  
24                  now, will continue to leak the  
25                  volatile organic compounds. It is

1                   obvious that any engineered solution  
2                   will fail at some point.

3                   Let's look at that picture over  
4                   there. The entire site is under seven  
5                   feet of water. It's very obvious that  
6                   the last hurricane, Irene, had a  
7                   fraction of the rain of the previous  
8                   hurricane in 1990.

9                   I don't remember what that  
10                  hurricane was called.

11                 UNKNOWN SPEAKER: Floyd.

12                 MR. ARCOLEO: Hurricane Floyd,  
13                 that had thirteen inches of rain.

14                 And I just was very curious, I  
15                 went down to Van Veghten House after  
16                 Hurricane Irene to see what it looked  
17                 like. And if anybody wants to go see  
18                 a nice flood plain, we're just off to  
19                 the right of that picture there that  
20                 you see over there. The curator at  
21                 Van Veghten House said: Oh, yeah, the  
22                 flood plain, you know, it's normally  
23                 getting up about six inches of  
24                 Hurricane Floyd's height.

25                 He showed me the high water mark

1 where Hurricane Floyd was right up to  
2 the Van Veghten House. So, any five-,  
3 six-inch rainstorm is going to  
4 innovate Pfizer plant to that level,  
5 especially since the Army Corps of  
6 Engineers' Bound Brook floodgate  
7 project was very successful. Bound  
8 Brook was almost totally immune to  
9 Hurricane Floyd.

10 It's just I feel sorry for  
11 people in Manville. They seem to have  
12 gotten a record flooding because  
13 water's got to go somewhere, and if it  
14 ain't going to Bound Brook and if it  
15 ain't gonna go to American Cyanamid's  
16 proposed concrete sarcophagus of  
17 600,000 cubic yards, it's definitely  
18 gonna go to Manville, the flooding.

19 So, you have major practical  
20 concerns there with the flooding issue  
21 that you have to deal with if you're  
22 gonna fill a flood plain. I don't  
23 know how New Jersey State DEP -- oh,  
24 they're still here, okay -- how  
25 they're gonna approve filling in a

1 flood plain and causing egregious  
2 flooding elsewhere.

3 I'm really, you know, not  
4 impressed with the proposal as it's  
5 written.

6 These volatile organic compounds  
7 have to be handled on site and  
8 disposed of, whether it's -- I don't  
9 know, I also have a Ph.D. from  
10 Columbia in biology, and I remember  
11 sitting in my freshman -- first year  
12 of grad school listening to the health  
13 safety officer at Columbia-  
14 Presbyterian Medical Center saying  
15 that if you had some hazardous  
16 creation that had to be dealt with and  
17 disposed of, he said, dilution is the  
18 solution, was his answer. He'd say  
19 poor enough tap water, get it into the  
20 Hudson River at a low enough  
21 concentration level so that we  
22 wouldn't have to worry about reporting  
23 it to any government entity.

24 And it's clear that seven parts  
25 per million benzene, you know,

1                   contamination that you're allowing  
2                   Pfizer to put down their wastewater,  
3                   dilution is the solution is the plan  
4                   for Pfizer.

5                   Because it's cheap. They have  
6                   record profits. They don't want to  
7                   spend any money here. They just  
8                   inherited this nightmare.

9                   But you have to deal with it.  
10                  Simple as that.

11                  I appreciate your time.

12                  Also, as Sunset Lake Environment  
13                  Trustee, I get to supervise the  
14                  dredging project every ten to twenty  
15                  years. And if you need clean fill  
16                  dirt to a large degree, we have it,  
17                  and we'd be glad to talk to any  
18                  stakeholders in this process.

19                  Because of the minor asphalt  
20                  milling problem, we had to truck a  
21                  hundred truckloads out to Ohio. It  
22                  cost us \$232,000. We'd like to see a  
23                  more cost-effective method of  
24                  disposing of our New Jersey soil which  
25                  is perfect except for that one part

1 per million benzo. And that's another  
2 crazy standard I would like to get  
3 into with DEP later.

4 Thank you.

5 (Applause)

6 MR. ADEWUNMI: My name is Wale  
7 Adewunmi. I'm a resident here. I'm  
8 also an environmental scientist.

9 So, I do understand what you  
10 guys are in for. I really pity you  
11 because you're between a rock and a  
12 hard place.

13 But nevertheless, as a resident,  
14 I am concerned by some of your tests  
15 and studies that you have done. And I  
16 want to encourage you or urge you or  
17 make available your data from some of  
18 these studies.

19 Several people talked about the  
20 flooding. I was here when Hurricane  
21 Floyd hit this area, and, of course,  
22 also Hurricane Irene. The drinking  
23 water supply system is nearby. It's  
24 one major system.

25 Now, I'd like to know if there

1 was any monitoring during this period.  
2 I'd like to see what the data looks  
3 like. I'd like to know if there were  
4 subsequent cooperation between EPA and  
5 all the different stakeholders and New  
6 Jersey American Water.

7 I think it's going to be  
8 encouraging if you make those type of  
9 data available rather than just  
10 written in a public release that the  
11 public is not effected. Well, that's  
12 conflicting to me, but I'd really  
13 prefer to see what your data looks  
14 like. It's not an indictment, it's  
15 just much more satisfying.

16 Also, when construction begins  
17 and the work that's been done so far,  
18 you do understand that there is  
19 potential for aerosol, for dust. And  
20 people live within concentric rings of  
21 this particular area. I don't know if  
22 your baseline Endangerment Assessment  
23 includes this. If you have any data  
24 on that...

25 You can see people come to the

1 shopping complex and they leave for  
2 whatever amount of time, but people  
3 live permanently within certain  
4 radius, even though it changes as you  
5 move further away.

6 But I wonder if you have any  
7 data or if people living in that area  
8 are really in danger of any sort of  
9 problem down the road.

10 Thank you.

11 (Applause)

12 MR. BATTIPAGLIA: Just to  
13 address that question quickly, we do  
14 have a plan under EPA review right now  
15 to conduct air sampling, baseline air  
16 sampling at the site.

17 MR. MUGDAN: That would be  
18 around the entire perimeter of the  
19 site.

20 MR. SIVAK: Any construction  
21 activities that we would engage in and  
22 we would implement, we would develop  
23 air monitoring safety plans specific  
24 to those activities as well.

25 MR. WOLFE: Just to jump in on



1 that question within a question for  
2 your question --

3 MS. ECHOLS: State your name.

4 MR. WOLFE: My name is Bill  
5 Wolfe, W-O-L-F-E. I live in West  
6 Amwell Township in Hunterdon County.

7 One of the criteria you  
8 rejected, some of the more elaborate,  
9 costly cleanups was on the basis of  
10 air emissions.

11 Do you have current air  
12 emissions from the site?

13 Do you have monitoring data from  
14 what's coming off the site now?

15 MR. SIVAK: We're collecting  
16 data right now as part of the removal  
17 action, and then we have this plan in  
18 place to collect the baseline data.  
19 So, as we move forward --

20 MR. WOLFE: How do you know if  
21 the increment is going to be greater  
22 or lesser?

23 You can have a situation where  
24 your current emissions may be reduced  
25 with your excavation and hauling off

1 site. You don't have a baseline to  
2 compare it to. So, it seems odd to me  
3 that you're dismissing a remedial  
4 alternative on the basis of purported  
5 impacts from trucks and from DL  
6 emissions from the excavation.

7 Am I understand that correctly?

8 MR. MUGDAN: We understand.

9 MR. WOLFE: Okay.

10 Anyway, I came here basically to  
11 listen to the presentation -- it was a  
12 little too lengthy for my taste -- and  
13 to listen to the local concerns from  
14 the people who live here and have had  
15 to deal with this site for the past  
16 hundred years. This a site that's  
17 been poisoning the Raritan River and  
18 the surrounding region for basically a  
19 hundred years.

20 It was identified as one of the  
21 worst sites in the country in terms of  
22 not only the magnitude of the risk and  
23 the contamination coming off the site  
24 but in terms of management of the site  
25 by the State Department of

1 Environmental Protection.

2 EPA's Inspector General issued a  
3 national report looking at what were  
4 called State-lead Superfund Sites and  
5 recommended that EPA take back  
6 control, lead control, of this site  
7 from the State.

8 So, there's been, you know, the  
9 history of the site and chronology, we  
10 see some serious mismanagement, some  
11 serious lack of progress on cleanup.  
12 So, that needs to be a backdrop to  
13 what we're talking about, just to set  
14 the record clear.

15 The other thing is I live in  
16 Hunterdon, just off the Delaware  
17 River. And one of the rationales for  
18 the Crown Vantage Landfill, which is  
19 right along the river, similar but not  
20 as -- frankly, not as flood prone as  
21 this site, was that scouring from  
22 flooding would take the buried drums  
23 and chemicals and materials down the  
24 river. So, the whole rationale for  
25 the cleanup, which was primarily

1 excavation, was the flooding risk.

2 And in this situation, it's  
3 obvious that you have much more  
4 dramatic risk due to flooding and that  
5 the only criteria that they're really  
6 looking at is cost. So, you're  
7 getting a very half-assed remedy and  
8 the cost factors are really driving  
9 that choice.

10 And that, for the community, the  
11 people in the community, and the  
12 community preference, it actually  
13 should be stated clearly you don't  
14 like the way they balance the issues  
15 of remediation versus cost and your  
16 health and the quality of the river  
17 and the regional water supply and a  
18 whole set of other things are directly  
19 relative to that. So, I would urge  
20 people to get on that and submit  
21 written comments and hit on that  
22 point.

23 One other concern I want to  
24 raise, leaving material in the flood  
25 plain is crazy, and there should be a

1 maximal effort to excavate and offsite  
2 dispose versus treat and contain and  
3 cap on site. And I see it's exactly  
4 the opposite. I think they're trying  
5 to -- again, it's a cost issue.

6 There's a bunch of regulatory  
7 issues I'll submit written comments  
8 on, but I was really surprised to hear  
9 that the applicant, or Pfizer, has  
10 submitted a permit application for  
11 NJPDES permit without effluent  
12 standards and it's a general permit  
13 and it's going to be implementing your  
14 remedy. I don't understand that at  
15 all.

16 You've got effluent standards,  
17 you've got Clean Water Act, which is  
18 federally enforceable and should be  
19 not just an ARAR but because New  
20 Jersey's water quality standards are  
21 federally approved, you're bound by  
22 them as well. It's not an ARAR, it's  
23 a federal requirement. So, I would  
24 urge you to look at that.

25 And last thing, the baseline

1 ecological evaluation, no biota, no  
2 toxic effects, no diminution in  
3 healthy aquatic communities in the  
4 brook, in the river? I just find that  
5 not credible and would ask that those  
6 findings and that assessment be  
7 reviewed by U.S. Fish & Wildlife  
8 Service for the science and the  
9 scientific basis for those kind of  
10 conclusions, because I can't imagine  
11 that the concentrations of toxics that  
12 are coming off that site, including  
13 metals, are not effecting the biota in  
14 the brook and downriver.

15 Thank you.

16 (Applause)

17 MR. SODIE: I'm Walt Sodie, the  
18 Executive Director of Crisis.

19 I'm not going to address much  
20 more on the technical points of our  
21 position that Tom Germinario, our  
22 technical advisor, spoke to you about.

23 But I'd like to ask if -- there  
24 are further things that I am going to  
25 address concerning some of the other

1                   comments -- after I speak, if you  
2                   might give Tom another minute or two  
3                   if he wishes to come back up.

4                   MR. MUGDAN: I'd like to keep it  
5                   going and give other people an  
6                   opportunity. I understand your  
7                   question, but I'd like to make sure  
8                   everybody has a chance.

9                   MR. SODIE: I have to say that I  
10                  do appreciate Bob Spiegel's passion  
11                  and the Edison Wetlands' input on this  
12                  project. If nothing else, it's helped  
13                  to keep us on our toes.

14                  But Bob and I have communicated  
15                  on some of this, and some of the  
16                  remedies that Bob and other people  
17                  have spoken on his behalf tonight have  
18                  suggested really don't seem to be  
19                  supported by what we can document in  
20                  terms of the evidence; particularly,  
21                  the low temperature thermal  
22                  desorption.

23                  Crisis signed off in the 1998  
24                  round at a public hearing just like  
25                  this one on a variation of this.

1 Couple years later, we were told it  
2 was impractical to implement at the  
3 site. Now, technology has advanced  
4 beyond that point, admittedly, but we  
5 have -- and I'm going to alter my  
6 statement and we'll submit this after  
7 tonight.

8 MR. MUGDAN: Okay.

9 MR. SODIE: Some of the comments  
10 by Tom Germinario in response to the  
11 low temperature thermal desorption,  
12 because of the heterogeneity, the  
13 difference in the makeup of the waste  
14 characteristics in these impoundments,  
15 that that process is not really geared  
16 to address or remediate that type of  
17 waste, that variety of waste.

18 Bob, if you have engineering  
19 studies -- I know you're still working  
20 on things -- you can come back with  
21 and show us where we're wrong on that,  
22 we'll reconsider our position.

23 The same is true on the comments  
24 that I believe Mr. Boyle made on  
25 bioremediation. That was the other



1 big element in the 1998 Record of  
2 Decision. It took six years for  
3 EPA -- DEP, actually, was in the lead  
4 at that point, to come back and tell  
5 us: Not workable for this site.

6 If there's been some change in  
7 that, we'll take a look at it because  
8 I think, as most people who have been  
9 working on this project for a while  
10 know, this is not the end. What's  
11 happening tonight and what's going to  
12 happen in the public comment period up  
13 to May 15 is not going to be the end  
14 of this. There's going to be ample  
15 opportunity for input later; we get  
16 the Record of Decision, the Remedial  
17 Design plan, implementing the Remedial  
18 Action plan.

19 These things are going to be  
20 difficult enough in themselves. We've  
21 dealt with this project long enough  
22 that we think we know how we're going  
23 to continue interacting on those  
24 projects and to be an effective voice  
25 in terms of a voice of the community.

1                   What worries us more is what I'd  
2                   like to refer to now as the  
3                   intangibles on this project. There  
4                   are two of them I'm going to refer to.  
5                   And EPA and Pfizer may not be real  
6                   happy to hear all of these things, but  
7                   I think they have to be said.

8                   It's been fourteen years since  
9                   we've had a hearing like this. The  
10                  first six were spent trying to  
11                  implement the 1998 Record of Decision.  
12                  It didn't work out. I'm not holding  
13                  any of you from the EPA who are here  
14                  tonight responsible for that.

15                  In fact, the people we've worked  
16                  with most directly, Mark Austin is  
17                  there, Angela Carpenter is there,  
18                  Cecilia Echols, we've had very good  
19                  response and very good results when  
20                  we've had to interact with them.

21                  Where it gets into this  
22                  intangible factor that I'm talking  
23                  about is when things start to go  
24                  deeper into the EPA bureaucracy.  
25                  That's where we end up with

1 interminable delays.

2 At one point, I believe, if I'm  
3 not mistaken, it was on the first  
4 iteration of this sitewide Feasibility  
5 Study that came up after 2005, in  
6 2007, where we had to wait for  
7 comments. DEP was still in the lead.  
8 Everybody else had their comments in  
9 and we had to wait for six months for  
10 comments from the EPA.

11 Again, not the fault of the  
12 people we work with directly.

13 The problem I fear is there are  
14 many instances when EPA has not  
15 developed or has not dedicated the  
16 proper resources to this project. I  
17 hope that's been corrected now. I  
18 have yet to be told it has been.

19 And there are times when one  
20 part of your bureaucracy does not know  
21 what the other is doing. That was  
22 illustrated most vividly recently to  
23 me in what I found very early --  
24 actually, it was late 2011, that the  
25 Raritan River had been declared

1                   impaired for benzene in 2006 at the  
2                   Queensbridge Testing Station in Bound  
3                   Brook, a little more than a mile  
4                   downstream from this site.

5                   I thought my gosh, it's been  
6                   five years since that happened? It  
7                   was December of '06, exactly five  
8                   years. I've got to be the only guy in  
9                   town that doesn't know about this.

10                  Well, surprise. I'm not going  
11                  to name names -- because I was  
12                  personally embarrassed that I didn't  
13                  know -- people from the EPA who were  
14                  on the frontlines at the remediation  
15                  part of this didn't know because the  
16                  DEP did, strangely enough, what was  
17                  required of it.

18                  You want to know what was  
19                  required?

20                  They published the findings in  
21                  the New Jersey Register and they put  
22                  notices, legal notices, in some daily  
23                  newspapers.

24                  Anybody here read the New Jersey  
25                  Register or the legal notices?

1 DEP had to send that -- DEP,  
2 obviously there were people in DEP who  
3 found out about that who knew that we  
4 were involved and other people were  
5 involved in this remediation. They  
6 should have gone beyond what was  
7 required of them and let us know that  
8 that was the case because if that  
9 happened, we would have pressed much  
10 harder for additional testing in the  
11 river and Cuckhold's Brook than we  
12 did. We pressed as it was, but we  
13 would have pressed a lot harder.

14 MR. MUGDAN: Can I ask you --

15 MR. SODIE: I'll try to wrap up.

16 We know the Superfund  
17 regulations, CERCLA, RCRA regulations,  
18 are very burdensome, and you have to  
19 deal with them. But we're asking you,  
20 if you can, as we move this project  
21 forward, to please try to work within  
22 those regulations to get more speed  
23 out of this project than you've been  
24 able to get up to now. I agree with  
25 some of the comments that have been

1 made about this has to be moved along  
2 faster.

3 And our group is going to be  
4 watching and speaking up and a lot  
5 more proactive on this round than we  
6 were after the 1998 hearings.

7 We'll have additional material  
8 that we're going to have in our  
9 written comments that will be  
10 available to everybody here on your  
11 website.

12 Thank you very much.

13 (Applause)

14 MR. MUGDAN: Your question about  
15 resources is a fair one.

16 In our region, we've had some of  
17 the largest Superfund sites in the  
18 country. I only have about four sites  
19 that have more than one Remedial  
20 Project Manager. This site has  
21 three -- they're all here today -- in  
22 addition to technical staff that we  
23 bring to bear.

24 That's some evidence of the  
25 degree of priority we're giving it.

1 MR. HOMMER: Good evening. Mark  
2 Hommer, H-O-M-M-E-R.

3 MR. MUGDAN: Mr. Hommer, excuse  
4 me.

5 I said this earlier, I just want  
6 to say it again. We do have a number  
7 of slides on the flooding issue. My  
8 colleagues have asked me several times  
9 could we get to it because of all the  
10 questions.

11 I actually think it's more  
12 important to hear from you. We will  
13 figure out the best way that we can to  
14 provide some of that information back  
15 to folks, but I think because we have  
16 the limited time I'd rather hear from  
17 you.

18 So, that's why we're not going  
19 to those slides. And I apologize to  
20 my colleagues, because I know they're  
21 itching to try to get you some of this  
22 information.

23 Mr. Hommer, I apologize.

24 MR. HOMMER: That's all right.

25 The critical issue here is the

1 fact that this is a flood plain. It  
2 cannot be denied that this will  
3 continue to flood and probably in more  
4 frequency. The proposal that you have  
5 come up with does not deal with the  
6 fact that the entire site is in a  
7 flood plain.

8 I want to know why that was not  
9 considered as a primary factor in your  
10 decision in the particular plan.

11 MR. MUGDAN: If that's a direct  
12 question, I'll give you a direct  
13 answer.

14 MR. HOMMER: It's a direct  
15 question.

16 MR. MUGDAN: We expect that this  
17 site will be under water relatively  
18 frequently into the future. That's  
19 our expectation.

20 MR. SIVAK: When we use the  
21 terms flood plain soils and main plant  
22 soils, it's a delineation based on the  
23 berm and based on our way to manage  
24 those different types --

25 MR. HOMMER: Okay, but that's a



1 delineation based upon a manmade  
2 structure. I'm not talking about  
3 that. I'm talking about a delineation  
4 based upon the natural course of the  
5 river.

6 MR. MUGDAN: And our expectation  
7 is that the entire site will be under  
8 water on a regular basis. That's our  
9 expectation, as it was last year.

10 MR. HOMMER: Secondarily, I'd  
11 like to remind everyone in the room  
12 that what happens here is that  
13 corporations privatize the profits and  
14 socialize the costs every single time.  
15 We're all expected to pay for this.

16 (Applause)

17 MR. HOMMER: A direct question,  
18 sir.

19 The overall total environmental  
20 impact, including the environmental  
21 impact of all the proposed  
22 remediations, is that something that  
23 has been calculated out?

24 The trucks, the concrete, the  
25 production of the concrete, the total

1 environmental impact of everything  
2 involved in your plans, how -- was  
3 that calculated out?

4 MR. MUGDAN: If I understand  
5 your question, I think the answer is  
6 probably fairly no, we have not  
7 quantified it.

8 MR. HOMMER: Why not?

9 MR. MUGDAN: That's a fair  
10 comment and we expect to --

11 MR. HOMMER: I'd also like to  
12 ask if the downriver impacts, the  
13 cumulative impacts of years of this  
14 impacting all of the ecosystems  
15 downriver as well as the human  
16 ecosystem, who's going to pay for that  
17 degradation of it?

18 MR. MUGDAN: Under the Superfund  
19 law -- another good question -- it's  
20 EPA's task to look prospectively and  
21 deal with the environmental problems  
22 moving forward, as there are separate  
23 authorities, or what are called  
24 Natural Resource Trustees, to seek  
25 damages for those -- the kind of

1 damages that you just alluded to.

2 In this case, the Trustees at  
3 the federal level would be Fish &  
4 Wildlife and NOAA, National Oceanic &  
5 Atmospheric Administration. And at  
6 the state level, the State itself is  
7 the Trustee.

8 So, yes, there are opportunities  
9 for State -- for State and Federal  
10 Trustees to seek damages for both past  
11 and future natural resource damages.

12 MR. HOMMER: Just to reiterate,  
13 one more time, it's a flood plain,  
14 it's going to continue to flood,  
15 chances are with more frequency, and,  
16 once again, everyone here, they  
17 privatize the profits and socialize  
18 the costs.

19 (Applause)

20 MR. MUGDAN: Thank you.

21 Well, one thing that I'm getting  
22 loud and clear -- and Michael alluded  
23 to it -- is that our use of the phrase  
24 "flood plains" and "main plant area"  
25 has been a mistake in the sense that,

1 first of all, it doesn't recognize  
2 that the entire area is a flood plain,  
3 which, of course, we do understand.  
4 In fact, we spent a great deal of time  
5 and effort with Pfizer dealing with  
6 the results of the hurricane last  
7 year.

8 So, that's a change. I'm going  
9 to see whether we can incorporate it.  
10 I mean, whether we change every single  
11 word in every document, that's another  
12 question.

13 I certainly understand the  
14 point, and we want to make it crystal  
15 clear that we understand that going  
16 forward this entire site, the whole  
17 hundreds of acres, is expected to be  
18 under water on a regular basis, and,  
19 therefore, anything we do has to take  
20 account of that.

21 We may have differences of  
22 opinion as to how to properly take  
23 account of it, and there'll be  
24 comments about that. And we'll be  
25 responding to those and we'll be re-

1                   evaluating the matter as we do that.  
2                   But we understand that and it is  
3                   directly an element of the work we've  
4                   done.

5                   Go ahead.

6                   MR. SCHMITT: My name is John  
7                   Schmitt. I'm a resident of  
8                   Bridgewater for about twenty years now  
9                   and a resident of Central New Jersey  
10                  all my life. I don't think I've lived  
11                  more than three miles from the Raritan  
12                  River during that time. So I grew up  
13                  on it and voted on it and I know it  
14                  well, canoe on it.

15                  I am a member of the Resident  
16                  Steering Committee for the Cyanamid  
17                  site, and I'm also Chairman of the  
18                  Economic Development Advisory  
19                  Committee for Bridgewater Township.

20                  As a member of the Resident  
21                  Steering Committee, I've had an  
22                  opportunity over the past year to  
23                  visit the site on several occasions  
24                  and to gain a basic understanding of  
25                  some of the key issues at stake. This

1 is a large, very complex site that  
2 warrants the depth of analysis that's  
3 going into the development of the EPA  
4 proposal for a sitewide remedy.

5 As it stands now, the site has a  
6 health risk exposure for anyone on the  
7 property and the potential for a wider  
8 threat during flooding conditions.

9 The site is one of the largest  
10 properties in Bridgewater Township but  
11 currently has little value for  
12 residents or for anyone else.

13 The EPA proposal appears to me  
14 to offer a balanced approach for  
15 remediation. It uses proven  
16 conventional technologies, it can be  
17 implemented in a reasonable timeframe,  
18 it minimizes risks during  
19 construction, with limited surface  
20 disturbance and soil relocation. It  
21 permits future use for parts of the  
22 site, including ecological restoration  
23 for 370 acres, approximately 30 acres  
24 for potential commercial usage, and 36  
25 acres for alternatives energy

1 generation.

2 Some people, I know, would like  
3 to wait and do more study before  
4 taking action, and recognizing that we  
5 don't know everything, but I think  
6 that the evaluations that will be  
7 conducted during the engineering  
8 design phase will flesh out many of  
9 those details. And I expect that as  
10 that information is acquired, the EPA  
11 will make any modifications to the  
12 sitewide remedy that they feel are  
13 required to assure public safety and  
14 environmental protection.

15 The American Cyanamid site was  
16 placed on the National Protection List  
17 back in September of 1983. That's  
18 almost thirty years ago. Exhaustive  
19 study has been underway for many years  
20 and various options have been  
21 reviewed. The EPA has taken their  
22 alternatives all the way up to their  
23 National Remedy Review Board for  
24 consideration and recommendation. And  
25 it was after all of that that they

1 have settled on Alternative 4A as  
2 their recommendation.

3 I think the time for action has  
4 arrived. I hope the EPA will move  
5 forward and implement Alternative 4A.

6 (Applause)

7 MR. MUGDAN: We're going to have  
8 time for a few more comments, but we  
9 are going to have to leave here in  
10 just a little while. So, I'm going to  
11 ask for a couple more people to still  
12 come on up.

13 MR. STANDER: Thank you. My  
14 name is Ross Stander. I'm Chairman of  
15 the Crisis committee that's been  
16 working on this for many, many years.

17 Just a quick note on Crisis. We  
18 have 54 members currently. We're a  
19 community group, very much a local  
20 group. Most of our members are from  
21 Bridgewater and Somerville and from a  
22 few surrounding towns. We've had the  
23 same Executive Director and Technical  
24 Advisor for eighteen years. You met  
25 them tonight. This gives us an awful



1 lot of site knowledge and site history  
2 and continuity that we can continue to  
3 provide.

4 We have prided ourselves in  
5 providing very much independent  
6 analysis; technical analysis,  
7 primarily. And I have to admit that  
8 we have a certain bias, and that bias  
9 is towards the safety and health of  
10 the local residents.

11 We've made many recommendations  
12 over the years to the EPA and DEP and  
13 the owners of the site. Many of those  
14 have been adopted into plans. And I  
15 have to say that we have not been  
16 reluctant in the past to try to slow  
17 things down when we've disagreed with  
18 positions that have been taken.

19 What I'd like to do for a couple  
20 of minutes is give you my overall  
21 impression of where we are today.  
22 Even though the process has taken way  
23 too long, I think that it's true that  
24 some progress has been made.

25 You've actually heard before

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1                   that some of the impoundments have  
2                   been remediated. Those have been the  
3                   easier ones. An awful lot of  
4                   integrated planning on the site has  
5                   been done, and that's been absolutely  
6                   required over the years, and that's  
7                   taken time, and we recognize that. I  
8                   think it's been very valuable.

9                   But it's also very true what's  
10                  been said tonight; we still have a  
11                  very complex environmentally dangerous  
12                  site to deal with. And unfortunately,  
13                  in the FS that's been discussed  
14                  tonight, the two worst impoundments,  
15                  as you probably know, have not been  
16                  included in that.

17                  From Impoundments 1 and 2 near  
18                  the river, we really have a terrible  
19                  situation today. We have benzene and  
20                  other VOCs that are leaking into the  
21                  river. The river is damaged, as Walt  
22                  said.

23                  Pfizer is directing resources at  
24                  an interim-approved program to gain  
25                  control of the leaks. By the way --

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

(Pause in proceedings)

MR. STANDER: We can use kind of a different term, at least I do, when we talk about interim than the folks did tonight. We say the groundwater treatment, pretreatment, which Crisis has been calling for for many, many years, it is now being implemented by Pfizer as two stages. And the current one we're looking at is the interim, and the long-term plan is what we'll see come out of the focus feasibility study next year.

So, we hope that the so-called interim program to kind of gain control of benzene and other VOCs into the river is going to go far. They're monitoring that, and we think that -- we assume that the pretreatment plant at Pfizer at the interim level is going to come on site pretty soon.

Right?

And we call for everybody to supply more resources to get the permanent plan going. We know that

1                   they'll be looking at 2013 for the  
2                   Focused Feasibility Study. And  
3                   anything that EPA and Pfizer can do,  
4                   and we'd certainly help, to speed that  
5                   up, that would be great.

6                   MR. MUGDAN: I'll ask you to try  
7                   to wrap it up, please.

8                   MR. STANDER: Okay.

9                   We're in favor of implementing  
10                  4A. We're not reluctant to oppose the  
11                  Alternative 3 a few years ago. We  
12                  think that now you've got Pfizer and  
13                  EPA and Crisis all kind of focussed on  
14                  4A, and we think that you should move  
15                  forward as quickly as possible.

16                  Just a couple more seconds.

17                  It seems clear to me that  
18                  process within EPA and within the  
19                  whole program is the way that we may  
20                  be able to make improvements and speed  
21                  up the program over time. We think  
22                  that will be very important to do, so  
23                  we hope that EPA can look at the  
24                  process.

25                  We also -- I don't want to go

1 into details because you've heard a  
2 lot of --

3 MR. MUGDAN: We do need you to  
4 wrap up.

5 MR. STANDER: We also would like  
6 to ask the question: Why is it going  
7 to take ten years to implement that  
8 program?

9 Thank you.

10 (Applause)

11 MS. PATTERSON: Hi. My name is  
12 Dana Patterson. I'm the Toxics  
13 Coordinator for the Edison Wetlands  
14 Association. That's P-A-T-T-E-R-S-  
15 O-N.

16 First thing I wanted to submit  
17 into the record is a letter requesting  
18 a sixty-day extension on the comment  
19 period. And I understand tonight that  
20 EPA has granted that, so we would like  
21 to thank you for that. It was signed  
22 by six organizations.

23 MR. MUGDAN: Just so there's no  
24 ambiguity, it wasn't completely clear  
25 to me from when you wanted that sixty

1 days.

2 What we said is May 15 will be  
3 the deadline. That's a total of  
4 ninety days for the whole time.

5 MS. PATTERSON: We agree with  
6 that. Thank you very much for  
7 extending the comment period.

8 The second thing I would like to  
9 submit into the record is we, Edison  
10 Wetlands Association, started two  
11 petitions on change.org.

12 The first one was back about six  
13 months ago when we found out that  
14 there was benzene leaking into the  
15 Raritan River, and it was urging EPA  
16 to take immediate action. And that  
17 has over two thousand signatures on  
18 that.

19 And the second one is  
20 specifically related to the proposed  
21 plan comment, and that has about  
22 fifteen hundred signatures, where  
23 people are opposed to 4A.

24 So, I just wanted to enter both  
25 of those into the record.

1           The third thing I would like to  
2 talk about is using Alternative 7, the  
3 low temperature thermal desorption  
4 unit, we're in support of using that  
5 for the areas of the site where the  
6 soil can be treated.

7           Specifically, I would like to  
8 mention that EPA used it extremely  
9 successfully at the Cornell-Dubilier  
10 Superfund site in South Plainfield  
11 where they treated soils on site.  
12 That site was about a 25-acre area,  
13 they treated PCB-contaminated soils,  
14 and it was run by the Army Corps of  
15 Engineers. And in about two years,  
16 they treated all the soils.

17           So, I just wanted to make sure  
18 that EPA is reflecting their Cornell-  
19 Dubilier site, looking at the numbers,  
20 and comparing them to what Pfizer has  
21 proposed in their Feasibility Study,  
22 and making sure that these cost  
23 estimates are not inflated because EPA  
24 knows how this works, has seen it  
25 operate, and has realtime costs for

1                   this low temperature thermal  
2                   desorption unit. So, please take that  
3                   into consideration.

4                   The next thing I would like to  
5                   just address is just doing a little  
6                   simple math here, the public had two  
7                   hours to comment. That's a hundred  
8                   and twenty minutes. At three minutes,  
9                   that's forty people commenting.

10                  Clearly, when I walked into this  
11                  room today, there was about a hundred  
12                  and fifty people in here. So, the  
13                  chance for every single person at  
14                  three minutes is not really feasible.

15                  So, I understand there's other  
16                  ways to comment, but if people would  
17                  like to publicly speak who have not  
18                  prepared a statement, there should be  
19                  either a second public meeting or some  
20                  other forum where they're able to come  
21                  with a stenographer and give public  
22                  comment.

23                  (Applause)

24                  MS. PATTERSON: So, I just would  
25                  like to make that very clear. So, if



1                   you can please take that into  
2                   consideration.

3                   We support Option 7 and Option  
4                   11, excavation, treatment of on-site  
5                   soils with low temperature thermal  
6                   desorption, bioremediation, any  
7                   alternative that treats the soil and  
8                   excavates the soil and not contain it  
9                   on site.

10                  A cap is not a cleanup and we  
11                  will not accept that. This is a flood  
12                  plain. You cannot cap toxic waste in  
13                  a flood plain.

14                  Thank you.

15                  (Applause)

16                  MR. MUGDAN: This will probably  
17                  be our last comment.

18                  As a practical matter, I've been  
19                  giving five minutes, but I take your  
20                  point.

21                  And this has to be the last one.

22                  MS. ZIPF: Hi. My name is Cindy  
23                  Zipf, Z-I-P-F. I'm Executive Director  
24                  of Clean Ocean Action, which is a  
25                  coalition of groups throughout the New

1 York/New Jersey area that are  
2 concerned about the downstream effects  
3 to the marine environment from all the  
4 dilution by solution -- solution in  
5 dilution.

6 And the ocean issues that we're  
7 concerned about here are, of course,  
8 the leachate that's been coming from  
9 the plant. And we're here to listen  
10 to the local concerns that have been  
11 raised and to support our local  
12 environmental leaders that have been  
13 championing this issue for so many  
14 years.

15 I know it takes a long time to  
16 address Superfund sites. It is  
17 terribly -- every Superfund site has a  
18 horrible story of legacy and time.  
19 But it's very clear from what we've  
20 heard tonight from the sewerage  
21 treatment plant operator, from the  
22 thoughtful consultants that are  
23 representing Edison Wetlands, that a  
24 lot of major issues still need to be  
25 addressed. It's a major hallmark

1 issue here.

2 The fact that there's a plant  
3 that is going to be built to address  
4 the water quality and discharge and  
5 that the standards are not necessarily  
6 sufficient raises serious concern for  
7 us because those discharges are going  
8 to go downstream and effect,  
9 ultimately, the marine environment.

10 There's also the question about  
11 those two major sites that are left  
12 closest to the waterway that you don't  
13 really have a plan for. You're going  
14 to figure it out as you go along. I  
15 mean, that --

16 MR. MUGDAN: Just a  
17 clarification.

18 Those are Nos. 1 and 2. They're  
19 under a separate study. We're not  
20 figuring it out as we go along.  
21 That's a separate study that will be  
22 done next year.

23 MS. ZIPF: Okay, so, separate  
24 study, but that's a major portion of  
25 what needs to be addressed here. And

1 I'm not sure whether sea level rise  
2 has really been thought about.

3 But I did want to come in and  
4 just say a couple of things about  
5 Pfizer.

6 First of all, true confessions  
7 and transparency, my grandfather  
8 worked at American Cyanamid, Frederick  
9 William Zipf, and was a very -- had a  
10 leadership role in American Cyanamid.  
11 He was also an avid fisherman and a  
12 boater. And I know he wants the best  
13 done at that plant for his legacy,  
14 that mistakes were made, and he would  
15 expect the best to be done.

16 And now that Pfizer owns the  
17 facility, we have hope because Pfizer  
18 is the world's largest research-based  
19 pharmaceutical company. If you go to  
20 their website and you look up their  
21 environmental standards, they're  
22 impressive. They say: We believe  
23 that collectively our individual  
24 experiences allow us to better meet  
25 the needs of our patients and further

1 our work to make the world a healthier  
2 place.

3 They say on their website under  
4 commitment to the environment:  
5 Because of our unmatched resources --  
6 because our unmatched resources allow  
7 us to do more good for more people, we  
8 will use our global presence and scale  
9 to make a difference in local  
10 communities and the world around us.

11 Clearly, Pfizer owns this land,  
12 the legacy, and the liability. They  
13 can do more and they must be expected  
14 to do more.

15 And 4A is not enough.

16 (Applause)

17 MR. MUGDAN: I have to call it a  
18 night now.

19 We'll take into consideration  
20 all the comments that have been made.  
21 We urge those that didn't have an  
22 opportunity to speak to use the  
23 electronic mechanisms, the written  
24 mechanisms. We will be continuing to  
25 communicate with the community.

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

We do have to ask you now to make your way out as quickly as possible.

MS. BINGHAM: Can I just put on record one thing real quick?

I just wanted to put on record that I echo Dana Patterson, what she said with the time restraints. I wanted to read something into the statement tonight, didn't have time. I know that other people wanted to read something.

So, I just wanted that to be put on record.

I'm Victoria Bingham.

MR. MUGDAN: Thank you all very much for your attention and for your patience. We appreciate it.

Drive safely.

(Time noted: 9:57 p.m.)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

C E R T I F I C A T E

STATE OF NEW JERSEY)

) ss.

COUNTY OF HUDSON )

I, LINDA A. MARINO, RPR,  
CCR, a Registered Professional  
Reporter, Certified Court Reporter,  
and Notary Public of the State of  
New Jersey, do hereby certify that  
the foregoing transcription of the  
public meeting, taken at the time  
and place aforesaid, is a true and  
correct transcription of my  
shorthand notes.

I further certify that I am  
neither counsel for nor related to  
any party to said action, nor in any  
way interested in the result or  
outcome thereof.

IN WITNESS WHEREOF, I have  
hereunto set my hand this 12th day  
of March, 2012.



\_\_\_\_\_  
LINDA A. MARINO, RPR, CCR

FINK & CARNEY  
REPORTING AND VIDEO SERVICES  
39 West 37th Street, 6th Floor, New York, N.Y. 10018 (212) 869-1500

ATTACHMENT D: PUBLIC COMMENTS





NEW JERSEY SENATE

**CHRISTOPHER "KIP" BATEMAN**

SENATOR, 16<sup>TH</sup> DISTRICT  
SOMERSET-MORRIS COUNTIES  
38 EAST MAIN STREET  
SOMERVILLE, NJ 08878  
908 526-3600  
FAX 908 707-4578  
email: SenBateman@njleg.org

February 28, 2012

COMMITTEES  
JUDICIARY  
ENVIRONMENT  
LAW AND PUBLIC SAFETY  
DEPUTY CONFERENCE LEADER

Mr. Joseph Battipaglia  
U.S. EPA Records Center, Region 2  
290 Broadway, 18<sup>th</sup> Floor  
New York, New York 10007-1866

Dear Mr. Battipaglia:

This letter is to give conceptual support for the EPA proposal to remediate the 435-acre American Cyanamid superfund site in Bridgewater Township, New Jersey.

For 18 years, up to this January, I represented Bridgewater Township in the New Jersey Legislature -- first as an Assemblyman and for the past 6 years as State Senator. Because of recent legislative redistricting decisions, my Senate district no longer includes Bridgewater Township, but I continue to represent the neighboring communities of Manville and Somerville.

As a member of the Senate Environmental Committee, I have always been deeply concerned about the difficult but slow pace of cleaning up that significant Raritan River-bordering superfund site.

Your EPA proposal seems to me to properly address the most serious hazardous waste containment and flooding problems that plague the site.

As the planned improvements go forward and go into more detail, I reserve the right to comment on specific aspects of the project. It appears to me that present-owner Pfizer is completely cooperative and pro-active in making these improvements.

It is my hope that our New Jersey Department of Environmental Protection will cooperate with EPA in the final planning process.

Very truly yours,

Christopher "Kip" Bateman

CB/n  
CC: Honorable Lisa P. Jackson  
EPA Administrator

R2-0007557



## THE TOWNSHIP OF BRIDGEWATER

100 COMMONS WAY  
BRIDGEWATER, NJ 08807-2447  
908/725-6300 EXT 5001 / FAX 908/725-3192  
email: mayor@bridgewaternj.gov

DAN HAYES  
Mayor

May 11, 2012

Mr. Joseph Battipaglia  
Remedial Project Manager  
USEPA  
290 Broadway, 19<sup>th</sup> Floor  
New York, New York 10007-1866

RE: Public Comments  
American Cyanamid Superfund Site Proposed Plan

Dear Mr. Battipaglia:

Thank you for the opportunity to provide written comments on the Proposed Remedial Plan for the American Cyanamid Superfund Site. The input provided in this correspondence serves to reinforce my commitment as a local official to advocate for an expeditious and environmentally sound clean-up of the former facility.

My foremost concern as the Mayor of Bridgewater is for the health and safety of the community. In this regard it is imperative that these aspects be paramount during any remedial actions as directed by the United States Environmental Protection Agency (USEPA) for the former American Cyanamid Superfund Site. It is further obligatory that Township residents and the surrounding community in close proximity to the former industrial site be recognized as the primary stakeholders in the remediation and viable restoration of the property. All remediation plans from a technical perspective should be designed and reviewed with full recognition and acknowledgement of the needs and protection of the immediate community. I trust that the USEPA will employ all of its technical experts in review of the submitted plan by Pfizer. The EPA experts will determine which is the most suitable remedial plan to restore the site and takes into account the safety, health and welfare of the surrounding community during the cleanup.

That being said I support the approval of Alternative 4A for the remediation of the former American Cyanamid Site. The proposed plan represents the best available alternative for site remediation at this time. It is noted that Pfizer Corporation has taken a site they inherited through acquisition and demonstrated a willingness to invest significant capital resources to initiate and expedite site clean-up. Their communication with Township government and my Administration is to be commended. Their remediation team has expressed a willingness and desire to educate the community about the process and the steps it will undertake to return the property as an asset to the community and surrounding region. Alternative 4A encompasses the public safety, timeliness and reuse goals the site commands and will serve to benefit Bridgewater and the surrounding community.

Sincerely,

Daniel J. Hayes, Jr.  
Mayor

R2-0007558

Howard V. Norgalis

[REDACTED]  
Bridgewater NJ 08807

Mar. 26, 2012

N.J. Department of Environmental Protection  
401 East State Street  
Trenton NJ 08625

U.S. Environmental Protection Agency  
290 Broadway 18<sup>th</sup> Fl  
New York NY 10007-1866

Re: American Cyanamid Superfund Site- Bridgewater NJ

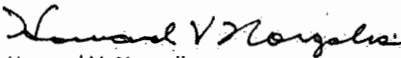
Dear Folks,

While I am a Bridgewater Township Councilman I am writing to both of your organizations as a concerned resident. I have been following the cleanup process at the American Cyanamid Superfund Site in Bridgewater NJ for decades and am very pleased to see the cleanup process effort starting to accelerate.

I attended the Mar. 8, 2012 public meeting held at the Somerset County Vocational and Technical High School in Bridgewater and feel that I have a reasonable understanding of the "4A" recommendation. I was very pleased to see that the plan included the construction of treatment plant on site which will alleviate the 650,000 GPD load on the Somerset Raritan Valley Sewerage Authority. My main concern is the permissible level of discharge from the "new plant" to the Raritan River for several of the more toxic ground water chemicals such as benzene and arsenic. I have even gone so far as to read parts of the New Jersey Surface Quality Standards. It is my understanding that the NJ stream standard is 0.15 micrograms per liter for Benzene and 0.017 micrograms per liter for Arsenic. It is my considered opinion that those are the standards that should be set for the "new plant". Any levels above those standards are a disservice to those who rely on the Raritan River as a water supply or for recreation.

Please feel free to contact me by phone [REDACTED] or e-mail [REDACTED] should you have questions on this correspondence.

Sincerely,

  
Howard V. Norgalis

R2-0007559



**NEW JERSEY GENERAL ASSEMBLY**

**ERIK PETERSON**  
ASSEMBLYMAN, DISTRICT 23  
HUNTERDON, SOMERSET AND  
WARREN COUNTIES

178 CENTER STREET, SUITE 2B  
CLINTON, NEW JERSEY 08809  
TELEPHONE: (908) 238-0251  
FACSIMILE: (908) 238-0256  
ELECTRONIC MAIL: [AsmPeterson@njleg.org](mailto:AsmPeterson@njleg.org)

May 14, 2012

Mr. Joseph Battipaglia  
US EPA Records Center, Region 2  
290 Broadway, 18<sup>th</sup> Floor  
New York, NY 10007-1866

Dear Mr. Battipaglia:

I understand that the US Environmental Protection Agency (EPA) has proposed a cleanup plan to remediate the Superfund site located at the 435-acre American Cyanamid property in Bridgewater Township, New Jersey. I am writing in support of the proposal.

It is my understanding that if the remediation proposal is approved, the current property owner, Pfizer, Inc., is committed to moving forward with the improvements. This proposal will help ensure the health of the people who live near the site and will improve the water quality in the Raritan River.

I appreciate your consideration of my letter. Best wishes.

Sincerely,

A handwritten signature in black ink, appearing to read "Erik Peterson".

Erik Peterson



**THE BOARD OF CHOSEN FREEHOLDERS  
OF THE COUNTY OF SOMERSET  
NEW JERSEY**

COUNTY ADMINISTRATION BUILDING  
20 GROVE STREET, P.O. BOX 3000, SOMERVILLE, NEW JERSEY 08876-1262  
(908) 231-7030 FAX (908) 231-8754  
freeholdersoffice@co.somerset.nj.us

PATRICIA L. WALSH  
Freeholder Director

PETER PALMER  
Freeholder Deputy Director

ROBERT ZABOROWSKI  
Freeholder

PATRICK SCAGLIONE  
Freeholder

MARK CALIGUIRE  
Freeholder

MICHAEL J. AMOROSA  
Administrator/Clerk  
(908) 231-7040

KATHRYN QUICK  
Deputy Clerk

March 22, 2012

Mr. Joseph Battipaglia  
U.S. EPA  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007 1866

Re: Proposed Plan for the American Cyanamid Superfund Site, Township of Bridgewater, Somerset County, New Jersey

Dear Mr. Battipaglia:

Please accept this correspondence in reference to the clean-up effort concerning the American Cyanamid industrial site in Bridgewater, New Jersey. This correspondence represents the Somerset County Freeholder Board's official submission concerning the proposed cleanup plan.

The Somerset County Board of Chosen Freeholders is pleased that the remediation of the project is moving forward. This is an important project with significant implications for Somerset County and the surrounding communities, and the Board whole-heartedly supports the effort.

Somerset County reiterates its long standing interest in the remediation of the property in question and requests that Pfizer and the EPA give serious consideration to the following:

- The American Cyanamid site lies on a critical segment of flood plain and represents an important link along the Raritan River Greenway. It has been the stated policy of the Somerset County Board of Chosen Freeholders and the Somerset County Park Commission to create and maintain an accessible public greenway along the entire course of the Raritan River in our County, and the American Cyanamid site represents a property of interest as we pursue this goal. Understanding the Pfizer may not be able to transfer title to the lands along the Raritan River for the Greenway we are more than willing to accept an easement that allows future public access to the river frontage.
- Also, the County believes that the critical element of any remediation plan is the total remediation of the wetlands contained on the property, particularly those located along East Main Street in Bridgewater (Block 347, Lot 1.02). This particular parcel was part of the original American Cyanamid property and was transferred to Bridgewater Township and the Somerset County when

Mr. Joseph Battipaglia  
Page Two  
March 22, 2012

American Cyanamid disposed of the "Hill Property" for Public, Commercial, and Retail Development in the mid-1990s. These wetlands remain one of the critical environmental elements of the County-owned property, and their remediation by Pfizer would represent an essential milestone in the County's efforts to return this property to environmental acceptability and Public use.

The County remains an interested stakeholder in the future of the American Cyanamid property, provided that the remediation efforts throughout the property, but particularly with relation to the river frontage and above-referenced wetlands, are completed in a thorough and comprehensive fashion.

Very truly yours,



Patricia L. Walsh  
Freeholder Director

cc Board of Chosen Freeholders  
M. Amorosa  
W. Cooper  
R. Brown  
R. Downey



**THE BOARD OF CHOSEN FREEHOLDERS  
OF THE COUNTY OF SOMERSET  
NEW JERSEY**

PATRICIA L. WALSH  
Freeholder Director

PETER PALMER  
Freeholder Deputy Director

ROBERT ZABOROWSKI  
Freeholder

PATRICK SCAGLIONE  
Freeholder

MARK CALIGUIRE  
Freeholder

COUNTY ADMINISTRATION BUILDING  
20 GROVE STREET, P. O. BOX 3000, SOMERVILLE, NEW JERSEY 08876-1262  
(908) 231-7030 FAX (908) 231-8754  
freeholdersoffice@co.somerset.nj.us

MICHAEL J. AMOROSA  
Administrator/Clerk  
(908) 231-7040

KATHRYN QUICK  
Deputy Clerk

May 24, 2012

**CLARIFICATION  
(letter dated March 22, 2012)**

Mr. Joseph Battipaglia  
U.S. EPA  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007 1866

Re: Proposed Plan for the American Cyanamid Superfund Site, Township of Bridgewater, Somerset County, New Jersey

Dear Mr. Battipaglia:

Please accept this correspondence in reference to the clean-up effort concerning the American Cyanamid industrial site in Bridgewater, New Jersey. This correspondence represents the Somerset County Freeholder Board's official submission concerning the proposed cleanup plan.

The Somerset County Board of Chosen Freeholders is pleased that the remediation of the project is moving forward. This is an important project with significant implications for Somerset County and the surrounding communities, and the Board whole-heartedly supports the effort.

Somerset County reiterates its long standing interest in the remediation of the property in question and requests that Pfizer and the EPA give serious consideration to the following;

- The American Cyanamid site lies on a critical segment of flood plain and represents an important link along the Raritan River Greenway. It has been the stated policy of the Somerset County Board of Chosen Freeholders and the Somerset County Park Commission to create and maintain an accessible public greenway along the entire course of the Raritan River in our County, and the American Cyanamid site represents a property of interest as we pursue this goal. Understanding the Pfizer may not be able to transfer title to the lands along the Raritan River for the Greenway we are more than willing to accept an easement that allows future public access to the river frontage.

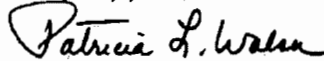
---

Mr. Joseph Battipaglia  
Page Two  
May 24, 2012

- Also, in the mid-1990's American Cyanamid transferred a property along East Main Street in Bridgewater (Block 347, Lot 1.02) to Bridgewater Township and Somerset County when it disposed the "Hill Property" for public, commercial, and retail development. This now County-owned property contains wetlands which remain a critical element in the planned future development of the tract. Assistance by Pfizer in mitigating the wetlands on Lot 1.02 during Pfizer's remediation effort south of the New Jersey Transit line would represent an essential milestone in the County's efforts to return this property to environmental acceptability and public use.

The County remains an interested stakeholder in the future of the American Cyanamid property, provided that the remediation efforts throughout the property, but particularly with relation to the river frontage and above-referenced wetlands, are completed in a thorough and comprehensive fashion.

Very truly yours,



Patricia L. Walsh  
Freeholder Director

cc M. Amorosa  
R. Downey





Pfizer Inc.  
100 Route 206 North, MS 610  
Peapack, NJ 07977  
Tel: 908-901-6079

**VIA ELECTRONIC DELIVERY**

May 15, 2012.

**Mr. Joseph Battipaglia**  
Remedial Project Manager  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

RE: American Cyanamid Superfund Site  
Wyeth Holdings Corporation  
Bridgewater Township, New Jersey  
Comments on Proposed Remedial Action Plan

Dear Mr. Battipaglia:

On behalf of Wyeth Holdings Corporation, Pfizer Inc is submitting the attached comments on the Proposed Remedial Action Plan for the American Cyanamid Superfund Site that was issued by the U.S. Environmental Protection Agency on February 16, 2012.

If you have any questions or require further information, please do not hesitate to contact me at 908.413.0811.

Very truly yours,

Russell Downey  
Director -- Environmental Engineering, Remediation & Transactions  
Pfizer Global Engineering  
Pfizer Inc

cc: USEPA Region II: Mark Austin, Michael Sivak, Angela Carpenter  
NJDEP: Haiyesh Shah, Allen Mottet  
Pfizer Inc: Steve Kemp, Ronald Schott  
Quantum Management: Vince D'Aco  
O'Brien & Gere: Steve Roland, Angelo Caracciolo  
Vita Nuova: Mike Taylor, Elaine Richardson

R2-0007565



Pfizer Inc.  
100 Route 206 North, MS 610  
Peapack, NJ 07977  
Tel: 908-901-6079

**VIA ELECTRONIC DELIVERY**

May 15, 2012

**Mr. Joseph Battipaglia**  
Remedial Project Manager  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

RE: American Cyanamid Superfund Site  
Wyeth Holdings Corporation  
Bridgewater Township, New Jersey  
Comments on Proposed Remedial Action Plan

Dear Mr. Battipaglia:

On behalf of Wyeth Holdings Corporation, Pfizer Inc is submitting the attached comments on the Proposed Remedial Action Plan for the American Cyanamid Superfund Site that was issued by the U.S. Environmental Protection Agency on February 16, 2012.

If you have any questions or require further information, please do not hesitate to contact me at 908.413.0811.

Very truly yours,

Russell Downey  
Director - Environmental Engineering, Remediation & Transactions  
Pfizer Global Engineering  
Pfizer Inc

cc: <u>USEPA Region II:</u>	Mark Austin, Michael Sivak, Angela Carpenter
<u>NJDEP:</u>	Haiyesh Shah, Allen Motter
<u>Pfizer Inc:</u>	Steve Kemp, Ronald Schott
<u>Quantum Management:</u>	Vince D'Aco
<u>O'Brien &amp; Gere:</u>	Steve Roland, Angelo Caracciolo
<u>Vita Nuova:</u>	Mike Taylor, Elaine Richardson

## **Comments to the Proposed Remedial Action Plan American Cyanamid Superfund Site**

Wyeth Holdings Corporation (WHC) appreciates the opportunity to provide these comments on the February 16, 2012 U.S. Environmental Protection Agency (EPA) proposed remedial action plan (PRAP) for addressing the site-wide soils, groundwater, and the impoundment contents that have not yet been remediated (with the exception of Impoundments 1 and 2) at the American Cyanamid Superfund Site in Bridgewater, NJ (Site). Based upon a review of EPA's proposed remedy, and public comments made at the Public Hearing held on March 8, 2012, WHC respectfully submits the following comments into the administrative record.

The PRAP is based upon a comprehensive Site-wide Feasibility Study Report (FSR), the work for which was initiated by WHC in 2004. The FSR underwent multiple revisions following reviews by the EPA, the New Jersey Department of Environmental Protection (NJDEP), Bridgewater Township, and CRISIS, as well as the EPA National Remedy Review Board. In general, WHC supports the PRAP as a balanced approach to addressing site-wide concerns. The following comments provide clarification of several key points in the PRAP.

### The Proposed Remedial Action Plan is Comprehensive and Appropriate

The PRAP is comprehensive in nature and WHC generally agrees that, in combination with the provisions of the work being performed pursuant to the 2011 Administrative Settlement Agreement and Order on Consent for Removal Action (the 2011 Order), and the ongoing remediation of Impoundments 15 and 16 (iron oxide recycling), it will appropriately address all known contamination caused by activities at the Site, other than Impoundments 1 and 2, which are to be the subjects of a separate Focused Feasibility Study.

#### Including:

1. All remaining impoundments requiring remediation (other than Impoundments 1 and 2) will be addressed by the proposed remedy (OU-3).
2. The soils portion of the proposed remedy will address all known Site soil issues (OU-4).
3. The groundwater portion of the proposed remedy, in combination with the removal action for known seeps currently being implemented pursuant to the 2011 Order, will comprehensively address Site-related groundwater issues (OU-5). Once the groundwater removal action in the Impoundments 1 and 2 area is completed for the overburden groundwater along the 2400 linear feet of collection trench and subsurface cutoff barrier, all other overburden and bedrock groundwater remedial design and construction will be performed pursuant to the Site-wide remedy.
4. Based on the results of Site remedial investigations, including the ecological and human health risk assessments, no additional actions are required for wetlands (OU-7) and the surface water and sediment of Cuckhold's (a.k.a. Cuckels) Brook and the Raritan River (although further surface water and sediment monitoring is planned during implementation of the groundwater remedy).

### Containment Is an Appropriate Component of the Remedial Action for this Site

Capping of portions of the Site is a component common to most of the alternatives evaluated in the Site-wide FSR, including Alternatives 3, 4, 4A, 5, 7 and 11. Caps, consisting of soils and geosynthetic materials, are proposed to provide a containment remedy for onsite materials and eliminate potential exposure pathways between Site materials and human and ecological receptors.

Caps designed, constructed, and maintained in accordance with current good engineering practices and regulatory guidance have functioned as required over time, in a manner that eliminates a potential exposure pathway to site materials, and pose no unacceptable risk to human health and the environment.

Protective caps are frequently chosen by EPA as an integral component of remedies at Superfund sites and other types of cleanup sites across the country. Protective caps have been in service on similar sites for many decades, and when subjected to periodic performance reviews and when adequately maintained, have maintained their protective function. The design and construction of each cap system must be tailored to each site's unique circumstances, and with selection of proven construction materials, both natural (e.g., soils and rock) and synthetic (e.g., geomembranes), along with rigorous construction quality control, a cap system as proposed in the PRAP can be expected to perform over time, when subject to routine post-construction inspection and maintenance. As required by the proposed remedy, regular inspections and maintenance consistent with best practices will be conducted to ensure that the caps perform as intended.

EPA's Technical Guidance document on "RCRA/CERCLA Final Covers" notes that the Design Life goal of cap systems can extend well beyond the typical "minimum" post closure care period of 30 years established in RCRA regulations. The Design Life is defined by (1) the service life of the cap system construction materials and (2) the design itself. The service life of natural materials, i.e. soil and rock, can be considered to be "infinitely long". Research performed by the Geosynthetic Institute<sup>1</sup> indicates that geomembranes can be expected to last for many centuries or more, if adequately maintained.

The design of the caps for the Site will incorporate all Site specific aspects that pose a long term threat, for example drainage, slope stability, erosion resistance (water/wind), freeze thaw, potential for flooding, and establishment of surface vegetation. These design concepts have well established engineering solutions and will be designed in the context of a 500-year flood event<sup>2</sup>, which would be a more significant flooding event than observed during Hurricanes Doria (1971), Floyd (1999) and Irene (2011).

### Caps Can be Designed and Maintained to Withstand Frequent Flooding

Engineered caps are commonly used at sites along floodplains, and can be successfully engineered to be protective in flood plain and flood prone areas, specifically with respect to preventing surface erosion and

<sup>1</sup> Geosynthetic Institute (GSI) in Folsom, PA is a consortium of organizations interested in, and involved with, geosynthetics. The organizations include federal and state governmental agencies, facility owners, designers, consultants, QC and QA organizations, testing laboratories, resin and additive suppliers, manufacturers, manufacturer's representatives and installation contractors. GSI currently consists of 71 member organizations of which about 45% are international. Information on GSI can be found on the web at [www.geosynthetic-institute.org](http://www.geosynthetic-institute.org)

<sup>2</sup> Based upon Flood Insurance Rate Map and Flood Insurance Study for Somerset County, New Jersey (All Jurisdictions), Panels 162E and 166E, September 28, 2007

scouring. Site drainage design will further protect the capping systems. At a minimum caps will incorporate two feet of cover soil and appropriate erosion protection will be installed and maintained over these areas. In areas of shallow slope, vegetation will be adequate for preventing erosion. In steeper areas, especially along swales or other water courses that will be designed as part of the final development of the Site, the caps will be protected with armoring or other appropriate erosion control.

Because the portions of the Site requiring remediation are in the flood fringe area and not the floodway (the main flowing part of the river during a flood), the cap systems will not be subjected to extensive erosive forces. The design of the cap systems will account for flooding up to a 500-year design flood, which is higher than any flood that the site has experienced since it was developed in the early 1900s.

Geomembranes are often used for bottom liner systems for containment of waste and liquids and are very effective at preventing infiltration and release of contaminants into the environment. In the case of the Movement Control and Vapor Control caps, which will incorporate a geomembrane, the geomembrane will contain the waste materials and separate them from the floodwaters to prevent the release of any contaminants to the environment. As long as these geomembranes are adequately maintained and protected with cover soil and erosion control measures as described above, they will continue to function as designed for centuries as has been documented by research.

There are many examples of cover and cap systems being installed within a flood plain. A very relevant example is the Sharkey Landfill Superfund Site in Parsippany, New Jersey, which included a landfill in the middle of the Rockaway River. This landfill was successfully capped and the portion within the river and in the flood zone above the river's base flow was protected by armoring and has successfully withstood major flood events, including Hurricane Irene and Tropical Storm Lee in 2011, with no damage or release of contaminants to the environment.

#### The Site Can Be Capped Without Any Significant Loss in Flood Storage Capacity

For convenience, the Site has historically been divided into the following areas: Main Plant (area within the flood berm), Impound 8 Facility (area north and west of Polhemus Lane), and Floodplain (all other areas). However, it has always been understood that both the Main Plant and the Floodplain are located within the Flood Hazard Area.<sup>3</sup> The Impound 8 Facility is located outside the Flood Hazard Area.

In recognition of this, a major goal of the detailed design will be to minimize the loss of flood storage as a result of the remediation of the Site. Although it is acknowledged that capping alone would remove some flood storage capacity, other aspects of the remedy will create flood storage capacity. For example, once remediation is complete, a new natural stormwater management system, including freshwater wetland areas, will be present on the Site. Stormwater will be managed through this natural system which will allow for the return of an estimated 40 to 70 million gallons of flood storage capacity that is currently taken up by the storage of stormwater in Lagoons 6 and 7. As a result of this modification and other measures,

<sup>3</sup> NJDEP defines the Flood Hazard Area as the land and space above land which lies below the flood hazard area design flood elevation, which is the peak water surface elevation that will occur during the design flood (i.e., 100-year flood event) plus an additional amount as shown on NJDEP delineation figures. The flood hazard area is divided into the floodway and flood fringe. The floodway is the channel and area around the channel that has faster and deeper flows during the design flood; while the flood fringe is the area outside the floodway. The regulatory requirements for activities in the floodway tend to be more stringent than those in the flood fringe.

such as potential removal of all or portions of the dike around the Main Plant area,<sup>4</sup> the remedy will result in little to no net loss of flood storage.

While the Site is located within the Flood Hazard Area of the Raritan River, the portions of the Site requiring remediation are not located in the floodway itself where the major flow of the river is concentrated. Rather these areas are located in the flood fringe area. The significance of this is that any modifications to the Site grading will not change or obstruct flow in the main channel of the river (i.e., the floodway) but the Site will provide temporary storage of flood waters flowing from upstream, which will help attenuate flood impacts to downstream areas.

Minor changes to the current storage volume on the Site will have little to no impact to downstream flood elevations. To put this in perspective, it is estimated that the current storage capacity of the Site for a 500-year flood (a flood about a half foot higher than Hurricanes Floyd in 1999 and Irene in 2011) is approximately 1.5 billion gallons. The intent of the detailed design will be to balance any losses from regrading and capping by increasing storage elsewhere to result in as close to zero net loss as possible. However, if this is not possible, the net loss would likely be on the order of 100,000 cubic yards as a result of Site regrading and capping. This volume would represent only about 40 million gallons (a 1.4 percent decrease), and is equivalent to a loss in storage of less than two inches of water over the Site.

Moreover, flood storage capacity on Site will actually increase for the more common flood events, provided that the existing flood control berm surrounding the Main Plant area is totally or partially removed following Site-wide remedy construction. As an example, for a flood stage of 36.7 feet (approximately a 20-year flood), which is higher than all but four of the flood events in the last 40 years, it is estimated that removing the flood control berm would increase flood storage capacity by over 200 million gallons as compared to current conditions, which is almost a 50 percent increase. This will help lower velocities in the Raritan River, provide better control of flood conditions, and help establish viable floodplain habitat on the Site.

The design will follow current New Jersey Flood Hazard Control Act Rules (N.J.A.C. 7:13) regarding filling in a flood hazard area. WHC will work closely with the reviewing regulatory agencies (namely the EPA and NJDEP) to produce a design that is consistent with these regulations and that fulfills the objectives of the remedy.

#### EPA Correctly Rejected Low Temperature Thermal Desorption (LTTD) as an Inappropriate Technology for the Materials in Impoundments 3, 4 and 5

The use of LTTD as a component of the remedy has been considered and appropriately rejected for several reasons.

First, the FSR concluded that although the use of LTTD would reduce the toxicity of contaminants through treatment, there would still be a reliance on long-term protective engineered covers and groundwater treatment for many years. The containment technologies identified in the PRAP are equally as effective as LTTD in meeting the remediation objectives for the Site.

<sup>4</sup> The extent to which the flood control berm may be removed will be determined during final design. Portions of the existing berm or a new berm may be incorporated into the remedy for flood protection in selected areas, e.g. the future groundwater treatment system, northeast area that will be developed commercially, etc.

Second, the extensive material handling would significantly increase worker and community exposure and safety hazards compared to in-situ containment alternatives. In fact, data generated during field studies showed that air emissions from excavation, pre-conditioning, and treatment would be difficult to contain and treat to achieve air permit requirements or permit equivalency requirements. Furthermore, LTTD was tested at the Site, on Impoundment 3, and was found to be inappropriate due to high levels of air emissions, even with extensive controls.

Third, LTTD has not been proven to be effective for the waste materials of these impoundments, which contain high concentrations of tars and other organics, elevated sulfur levels, and large quantities of debris. These materials are difficult to manage and will limit the effectiveness of LTTD. Although LTTD has been used at other sites for treating certain types of contaminated soils and sludge, this technology has not been used on a large scale to treat materials similar to those at this Site. Indeed previous experience with similar Site materials has shown that scale-up from bench studies to full-scale will be problematic. The chemical heterogeneity limits continuous processing and generally requires extensive pre-conditioning before any material handling or treatment activities.

Fourth, design, regulatory review, and treatability testing could extend the program 3 to 5 years before construction could begin. Implementation timeframes would also be increased due to increased pretreatment requirements, additional volume to be treated caused by pretreatment amendment addition, and operating restrictions imposed to meet air emission control requirements. Ultimately, LTTD could require up to 20 years longer to complete than Alternative 4A, posing greater vulnerability to flooding and other atmospheric conditions during construction.

Fifth, with respect to costs, EPA guidance for Feasibility Studies recognizes that the designs of the alternatives are still conceptual, not detailed, and as such the cost estimate is considered to be in the accuracy range of -30 to +50%. The unit costs utilized within the FSR were within the range of costs for direct-fired LTTD systems based on a review of published literature. The costs for indirect-fired systems, which may be required based on the high organic content of the material, are generally reported to be higher than direct-fired. For this reason, it is believed that the costs provided within the FSR are sufficiently accurate for completing the detailed analysis as presented, and may, in fact, be underestimated for actual implementation due to the inherent material complexities.

Finally, from a Green Remediation perspective, the proposed remedy will have a smaller carbon footprint as compared with LTTD, which would result in high carbon emissions from fuel combustion without providing additional benefit in terms of protecting human health and the environment. Thus the proposed alternative supports EPA Region 2's Clean and Green Policy (March 20, 2012) by achieving remedial action goals with reduced greenhouse gas production as compared with LTTD.

#### The Remedy Chosen in the PRAP Will Minimize Impacts from Air Emissions and Waste Transportation

The PRAP provides for the effective onsite treatment of principal threat waste through in-situ stabilization and solidification. This approach ensures that these materials are appropriately remediated while protecting workers and the community from the potential impacts of air emissions and excessive truck traffic associated with Alternatives 7 and 11 as described below.

First, with respect to Alternative 7, which would have the principal threat waste excavated, treated onsite with LTTD, stabilized and solidified, and, ultimately, disposed of in Impound 8, there are several reasons why LTTD is not appropriate, as explained above. Chief among these concerns are the potential excessive air emissions, the exposure of the community and workers to these air emissions, and the longer time that would be required to complete the remedy. Because Alternative 4A avoids these issues raised by LTTD, it is superior to Alternative 7.

Likewise, under Alternative 11 the principal threat waste would be excavated and transported offsite for incineration or recycling, while other materials would be treated using LTTD. This approach also creates disadvantages compared to Alternative 4A. Excavation of contaminated materials, as required by Alternative 11, would introduce significant additional risks to workers and the community from potential air emissions and dust generation. LTTD components of Alternative 11 would have similar disadvantages as LTTD required by Alternative 7, including potential air emissions, community and work exposures, and longer time to complete the remedy. Alternative 11 would also require the transportation of highly contaminated materials through the community creating greater risk of accident or spills. Approximately 24,000 truckloads of contaminated material would be transported through the community under this alternative, as compared with few or no truckloads of contaminated material under the proposed remedy.

#### Beneficial Reuse as a Component of Green Remediation

WHC recommends that the EPA encourage the beneficial reuse of soil from other development projects in the area as a goal during the design and implementation of the proposed remedy. Such materials may include dredge material which has been commonly used at many remediation sites in New Jersey and its use for this application is fully supported by the NJDEP. Other excess soils from residential, commercial or transportation projects may be utilized. All imported soils will be subject to appropriate environmental standards based on their placement within the cap systems at the Site (i.e., whether the material is placed below a geomembrane in the Movement Control and Vapor Control caps or as a cover soil above the geomembrane or in the Direct Contact soil cover areas). Beneficial reuse of these materials will provide needed soil fill for the remedy while removing the need to place or stockpile excess soils elsewhere in the community, and reducing the need to disturb previously undeveloped properties for soil mining. In addition, beneficial reuse of soil that would otherwise need to be transported elsewhere can potentially result in a net reduction of transportation miles between the two projects. Thus, the beneficial reuse of soil would be consistent with EPA's program initiative to reduce the use of natural resources and energy during remedial actions (Superfund Green Remediation Strategy, September 2010).

#### The PRAP Remedy Will Minimize Disruption to Existing Site Wetlands

Under EPA's proposed plan, the targeted remedy for Impoundments 13, 17 and 24 located within the flood fringe and outside the Main Plant area will be based upon the results of an ecological risk assessment to determine the need to relocate the impoundment contents to the Main Plant area. Focused excavation of more significantly impacted impoundment materials and subsequent relocation under an engineered protective cover in the Main Plant area is a balanced approach to addressing these materials. This approach ensures that existing wetlands and habitat are not impacted unnecessarily, while similarly ensuring that materials which pose an unacceptable risk are adequately addressed.

The remedy outlined for Impoundments 13, 17 and 24 in the PRAP is appropriate. The remedies for these Impoundments outlined in Alternatives 7 and 11 were not preferred for the following reasons:



Under Alternative 7, Impoundments 13, 17 and 24 will be excavated and relocated to the Main Plant area under an engineered protective cover, without conducting an ecological risk assessment.

- This approach potentially disturbs existing wetlands and habitats unnecessarily.
- Excavation of all the materials in these three impoundments will take a considerable amount of time, up to 2-3 years, increasing vulnerability to flooding and other atmospheric conditions during remedy construction.

Under Alternative 11, Impoundments 13, 17 and 24 will be excavated and relocated to the Main Plant area for onsite treatment with LTTD and stabilization/solidification.

- This approach potentially disturbs existing wetlands and habitat unnecessarily.
- LTTD would require a much longer time to complete, up to 25 years, increasing vulnerability to flooding and other atmospheric conditions during remedy construction.

#### Transportation Alternatives

The use of both freight trains and trucks will be evaluated for the transportation of materials during the design phase. Potential impacts to the community will be considered in the evaluation process. Rail transportation has been successfully used for some of the past remediation activities at the Site. For example, approximately 94,000 tons of iron oxide material has been transported off-site by rail for recycling.

#### Treatment of Extracted Groundwater

The PRAP calls for groundwater to be appropriately treated or pre-treated, as necessary, for subsequent discharge in accordance with appropriate requirements. As stated in the FSR, there is a preference for on-site treatment followed by direct discharge to either surface water or groundwater. During the design phase, all options for treatment will be evaluated. This evaluation will ensure that future groundwater inputs are fully treated prior to discharge to surface water, or possibly re-injected into the onsite aquifer for groundwater hydraulic control, pursuant to applicable discharge limitations required by EPA and NJDEP.

#### Bedrock Groundwater in the Impoundment 1 and 2 Area

The groundwater component of the proposed remedy includes groundwater collection and treatment. As stated in the PRAP, *"Conceptual improvements to the bedrock collection system include placing of the primary extraction well(s) in a more central location of the impacted bedrock and placing targeted bedrock extraction wells to address localized impacts such as in the vicinity of Lagoons 6 and 7/Impoundment 24."* WHC recommends that the PRAP be revised to clarify that the proposed remedy should address the bedrock groundwater from the Impoundments 1 and 2 area, other groundwater impacts located in the eastern part of the Site, as well as any other groundwater impacts that would be identified during the pre-design investigation preceding the remedial design. This approach is consistent with the installation of *"targeted bedrock extraction wells to address localized impacts."* As for the entire groundwater control system *"additional details of these improvements would be developed during remedial design."*

#### Options for Discharge of Treated Groundwater

Regarding options for the discharge of treated groundwater, the PRAP states “. . . it is anticipated that discharge would be either to SRVSA, directly or following pre-treatment, or directly to surface water following on-site complete treatment.” WHC recommends that “recharge to groundwater following on-site complete treatment” should also be added as a potential discharge option to be evaluated during remedial design. This option presents the advantage of reducing the impact on groundwater storage on the State of New Jersey aquifers through onsite replenishment (i.e. recycling groundwater after treatment). Furthermore, groundwater reinjection can create hydraulic control boundaries at appropriate locations that will slow groundwater movement, and subsequent contaminant transport, across the Site. The groundwater re-injection option was received favorably by the NJDEP as illustrated by their comments to the Site-Wide FSR – Hydrogeological Comments on amended Appendix H, dated August 2011.<sup>5</sup>

#### Methods for Identifying Areas Requiring Vapor Controls

Pages 13 and 14 of the PRAP present the rationale for and a description of the areas of the Site requiring Vapor Control. This culminates in a reference to Figure 8 within the FSR which highlights those areas. However, as noted within Table 2 of the PRAP, “these values are preliminary and a more refined assessment method will be developed and implemented during the Remedial Design phase to appropriately delineate areas requiring vapor control.” As described in the FSR, risk-based soil criteria were developed at which the potential for exceeding a  $10^{-6}$  vapor inhalation risk in the breathing zone existed. These criteria were then compared to the existing Site soil data to provide a preliminary determination of those areas that may require Vapor Control. Further, as highlighted within FSR Section 3.2.1 Identification of Areas or Volumes of Media, an evaluation will be conducted during the Remedial Design to identify the definitive extent of areas which have a  $10^{-6}$  vapor inhalation risk in the breathing zone that are not adequately addressed through institutional controls. It is our understanding that once these areas are defined, they will then be addressed with Vapor Controls which can consist of engineering controls, such as active or passive vapor mitigation systems, institutional controls, or a combination, as appropriate. Therefore, WHC recommends that the remedy description include a clarifying statement that the final definition of the limits of areas requiring Vapor Control will be determined through a more refined assessment implemented during the Remedial Design.

#### Controls Required for Soils in the Flood Plain Outside the Main Flood Control Berm

The description of Flood Plain Soils and Drying Bed Area under Alternative 4A in the PRAP (page 16), states, “These areas identified in the FSR requiring direct contact, movement, and vapor control would be excavated and consolidated at the Main Plant in areas where the same types of controls are warranted.” WHC recommends that this sentence be revised to: “These areas identified in the FSR requiring direct contact, movement, and vapor control (i.e., the area south of Impoundment 13 and the former Drying Bed

<sup>5</sup> NJDEP Comment 26 Appendix H, Section H4.0 – “Optimization of the recovery system is suggested by relocating PW2 & 3 to the southwest (centered on transmissive zone), pumping at lower rates from multiple locations and re-injecting treated groundwater. An additional pumping well is proposed at LA07MP1 and possibly south of CCCC. While detailed proposals for implementation are required, these suggestions are acknowledged and conceptually acceptable.”

Area depicted on Figure 4) would be excavated and consolidated at the Main Plant in areas where the same types of controls are warranted."

#### Controls Required for Impoundments 13, 17 and 24

The description of remedial action required for Impoundments 13, 17 and 24 under Alternative 4A in the PRAP (page 16), states "an ecological risk assessment would be conducted during the remedial design phase to identify if any material requires relocation and consolidation in the Main Plant in areas requiring direct contact control." For clarification, the PRAP should reflect that the materials in these three impoundments are the only materials at the Site requiring additional ecological risk assessment.

Under the same section describing Impoundments 13, 17 and 24 (page 16), it appears that the second paragraph, located in the second column, (beginning with "An evaluation would be...") is misplaced. This paragraph is clearly in reference to determining what materials meet the definition of principal threat wastes and, as such, should follow the second paragraph under Main Plant Soils, Impoundments 3, 4, and 5 in column 1, which describes the proposed actions for those wastes.

#### Specific Comments

The following specific comments are presented in the interests of clarifying the PRAP and correcting some minor errors.

1. On page 4 of 21 under heading "Corrective Action on Groundwater Discharges". The statement that "after sampling was performed and laboratory analysis was completed in December 2010" is incorrect. In fact, the sampling was performed in December 2010, but the laboratory data was not available to WHC until January 6, 2011, the same day that the data was reported to EPA and NJDEP. WHC recommends that this statement be revised to read: "after sampling was performed and preliminary laboratory analytical results were reported on January 6, 2011".
2. On page 5 of 21 under the heading "Previously Remediated Impoundments", there is a reference to 50,000 cubic yards of highly mobile material from Impoundments 1, 2, 4 and 5 being treated onsite through recycling as a fuel source. All of this light oil material was treated offsite for energy recovery, not onsite.
3. On page 7 of 21 under the heading "Investigation Summary," the first sentence of the first paragraph indicates that all remedial activities were suspended in 2004, however this is not completely accurate. We suggest that this sentence be modified to read: "Remedial activities were suspended in 2004 pending the completion of a site-wide feasibility study, with the exception of other ongoing investigation and remediation activities associated with Impoundments 14, 15, 16 and 20 and continued bedrock groundwater extraction and treatment."
4. On page 9 of 21 under the heading "Scope and Role of Action", the fourth bullet should delete reference to Impoundments 1 and 2 since the eighth bullet calls out a new operable unit (i.e. OU8) which is only Impoundments 1 and 2. Also the fourth paragraph of this section also indicates that all ongoing remedial activities were suspended when, in fact, remediation of Impoundments 14, 15, 16 and 20 and groundwater extraction/treatment continued.

5. On page 16 of 21, we recommend that the first sentence be revised as follows: "This alternative would provide a combination of caps over impacted areas in the Main Plant to control the potential for direct contact with impacted soils/impoundment contents, which is one of the primary RAOs for the Site, with the addition of excavation and consolidation in the Main Plant for areas in Impoundments 13, 17 and 24 as determined by an ecological risk assessment."
6. On page 20 of 21 under heading "Implementability", 2nd paragraph: It states that ". . . however, Alternative 4A provides more protection through relocation of the Impoundment material in the floodplain to the Main Plant." WHC recommends that this statement be revised to read: ". . . however, Alternative 4A provides more protection through relocation of the Impoundment material in the floodplain to the Main Plant if required by results of an ecological risk assessment."

Robert E. Albano

May 12, 2012

Joseph Battipaglia  
Remedial Project Manager  
USEPA  
290 Broadway, 19th Floor  
New York, NY 10007-1866

Mr. Joseph Battipaglia  
Re: written response on EPA Public Comment on American Cyanamid Superfund  
Feasibility Study

On behalf of the Bridgewater Cyanamid Oversight Committee, I wish to thank you for efforts you and your associates are making to remediate the site. Thanks for the presentation you gave the Committee in Dec 2011 and for the information you provided at the March public hearing.

This letter is the position and recommendation of the Bridgewater Cyanamid Oversight Committee.

Very Truly Yours,

Robert Albano  
Chair- Bridgewater Cyanamid Oversight Committee

Att: 1

CC: Bridgewater Mayor and Township Council  
Russell Downey – Pfizer Project Manager  
Walt Sodie – CRISIS  
BCOC members

response to epa plan 4a submitted to epa 5-12-12.doc

1

R2-0007577

To: Mr. Joseph Battipaglia

Subject: written response on EPA Public Comment on American Cyanamid Superfund Feasibility Study

From: Robert Albano, Chairman – The Bridgewater Cyanamid Oversight Committee

Date: May 12, 2012

The Bridgewater Cyanamid Oversight Committee, BCOC, was formed with assistance of the Mayor and Township Council of Bridgewater in May 2011. The BCOC consists <sup>(1)</sup> of local residents of diverse backgrounds and interests. Many members are long time residents and community leaders, some of whom were already familiar with the American Cyanamid site and situation. The Committee was assembled to study the proposed alternatives and to evaluate the benefits and liabilities of each. Its responsibility is to provide input to the EPA, DEP, Pfizer and the community on cleanup and future use of the property.

The Committee has met numerous times during the past year and has met with many people including EPA officials, Pfizer personnel and consultants, CRISIS members, Bridgewater Township officials and local interested parties. The Committee has studied background information, the alternative proposals for cleanup and visited the site on several occasions. This letter expresses recommendation of the Bridgewater Cyanamid Oversight Steering Committee as a whole and not of any one member. This letter expressly indicates the Committee's support for the proposed remedy with the additional conditions stated below.

The American Cyanamid Superfund site has been under review for almost 30 years. Exhaustive study has been conducted during that time leading to the present EPA identification of the preferred alternative. Pfizer, the current site owner, acquired the property in a corporate acquisition, never operated this site nor contributed to the existing conditions. In all our contacts with Pfizer to date, they have accepted responsibility for implementing an effective remediation plan and returning the site to a safe and useful property.

The Bridgewater Cyanamid Oversight Committee strongly supports the implementation of Alternative 4A. This alternative provides a balanced approach offering several benefits. It should make this site safe for residents of the surrounding area as well as for those living downstream from the site. Alternative 4A uses proven conventional technologies that can be implemented in a reasonable period of time. Since this alternative requires limited surface disturbance and soil relocation, it should minimize risks for residents during construction. The proposed 4A plan is consistent with EPA's RTU Initiative per the EPA Web site which encourages reuse of the property with a limited section having potential for commercial development and other areas available for active and passive recreation. Alternative 4A may also reduce the impact of future floods. Plan 4A has the additional advantage of being a living document that will accommodate use of new technologies and approaches as these are discovered. The Plan

response to epa plan 4a submitted to epa 5-12-12.doc

2

R2-0007578

also will begin the clean up in a more timely and effective manner than other Plans under discussion,

The BCOC is working closely with and fully supports the effort of CRISIS, a local citizens group, which has monitored the cleanup for nearly 18 years, to continue its work under and extension of its TAG grant. CRISIS has and does serve as an information source and provides technical expertise on the site cleanup for the entire community and region. CRISIS has reviewed Proposal 4A. BCOC is primarily concerned with the future use consistent with safety of the community and surrounding areas. BCOC relies on CRISIS as a technical resource and BCOC supports the recommendations that CRISIS has put forward to improve Plan 4A.

The BCOC suggests the following be added to Plan 4A

1. Remove all PWT from the river banks to impounds behind the existing berm regardless of the risk assessments
2. Maintenance of the existing berm to
  - a. control >100 yr storms by retaining excess flood waters
  - b. provide an added level of safety against accidental leakage or seep from the impounds
3. Provide for stabilization of VOC/SVOC with evidence of effectiveness through Simulation, Bench and Field testing prior to implementations
4. Full treatment of ground and surface water on site with a specifically designed facility and not use SRVSA for water treatment
5. Ensure that all impounds and impacted areas are stable in the 500 yr storm for leaching, scouring, erosion or uplifting.
6. Protection of SRVSA and American Water from contamination from the site
7. Redundant capability to ensure that power to operations is not compromised by adverse weather, flood, or power interruption, such as 2011 Storm Irene.
8. Financial bonds for continuous operation, monitoring and maintenance of the site
9. Separation of impounds 1 and 2 from FS4A for a separated feasibility study
10. Implement Plan 4A consistent with "Return to Use" principles that support the economic value of the site as commercial ratable status. The Committee recognizes that much of the site cannot be returned to commercial use but support identification of areas in the Northern end of the property for commercial development and the central portion of the property for recreation uses.

The BCOC believes that moving forward with Plan 4A represents the best approach to cleanup of the site that has been on hold for 10 years. We disagree with those who suggest that the plan be scrapped for more study. We agree with CRISIS, Bridgewater Township, Somerset County, Pfizer and EPA assessments that Alternative 4A offers the best level of safety and timeliness.

response to epa plan 4a submitted to epa 5-12-12.doc

Questions or comments may be addressed to:

Robert Albano  
1149 Papen Rd  
Bridgewater NJ 08807  
bobaalano@yahoo.com

Footnotes:

1 Bridgewater Cyanamid Oversight Committee members

Member	Community
Alan Kurydla	Bridgewater Township Council President
Chris Poulsen	Bridgewater Health Director and Liaison to Bridgewater Township
Gene Yuliano	MD and Member Bridgewater Health Bd
George Schofield	Business owner- across from site, Rescue Squad member, Long time resident
Jim Anderson	Bridgewater resident
Jim Rokosny	Chairman Bridgewater Environmental Commission
John Schmitt	Chairman Bridgewater Economic Development Committee
Joseph Lefreiri	Commissioner, SRVSA
Michelle Lawrence	Member Bridgewater Recreation Board
Nitin Apte	Environmental Consultant and resident
Robert Albano	Chairman and former Bridgewater Township Council member, current Planning Bd member
Ross Stander	Chairman - CRISIS
Susan Dorward	Bridgewater Sustainability Task Force

response to epa plan 4a submitted to epa 5-12-12.doc

4

R2-0007580





**Somerset County  
Park Commission**

Post Office Box 5327  
North Branch, NJ 08876

Steven Fuerst,  
President

Joanne Jaeger,  
Vice President

Paul Consiglio  
William Crosby  
Dale Florio  
Walter Hansen  
Christopher Paladino  
Dorothy Paluck  
Gary Walsh

Raymond A. Brown,  
Secretary - Director

April 19, 2012

Mr. Russ Downey  
Director – Environmental Engineering, Remediation & Transactions  
Pfizer Global Engineering  
Pfizer, Inc.  
100 Route 206, North, MS 610  
Peapack, NJ 07977

Dear Russ:

The Somerset County Park Commission applauds the efforts of Pfizer, Inc. to address the long standing issues related to the clean up of the former Calco industrial site in Bridgewater Township, NJ.

Pfizer's pursuit of a solution to the numerous environmental issues at the former Calco facility is a positive step that we hope leads to this important regional resource to become the asset it once was.

Somerset County Park Commission's long standing interest in creating an accessible public greenway along the entire course of the Raritan River will ultimately depend upon a clean up of the Calco property. Accordingly Pfizer's efforts to find a solution to the environmental problems on the property are a predicate to achieving this important regional goal.

The Commission is encouraged that clean up options are now finally being considered and we thank Pfizer, Inc for being a pro-active property owner.

Sincerely,

Raymond A. Brown  
Secretary-Director

HEADQUARTERS

355 HILLTOWN ROAD  
BRIDGEWATER, NJ 08807

TEL: 908.722.1200  
FAX: 908.722.6592

[www.somersetcountyparks.org](http://www.somersetcountyparks.org)

R2-0007581



**Fw: Extension request**  
Cecilia Echols to: Joseph Battipaglia

03/06/2012 09:26 AM

----- Forwarded by Cecilia Echols/R2/USEPA/US on 03/06/2012 09:26 AM -----

From: Cecilia Echols/R2/USEPA/US  
To: Wsodie@aol.com  
Cc: [REDACTED]

Date: 03/05/2012 03:51 PM  
Subject: Re: Extension request

---

Hi Mr. Sodie,

Your request has been forwarded to Joseph Battipaglia, Remedial Project Manager. He will respond to your request.

Thanks for your continued interest in the site.

Sincerely,

Cecilia Echols  
Community Involvement Coordinator.

Wsodie

Cecilia Echols

03/05/2012 01:59:23 PM

From: Wsodie@aol.com  
To: Cecilia Echols/R2/USEPA/US@EPA  
Cc: [REDACTED]

Date: 03/05/2012 01:59 PM  
Subject: Extension request

---

Cecilia Echols  
Community Involvement Coordinator  
USEPA, Region 2

Dear Ms. Echols

On behalf of CRISIS, Inc., I am hereby requesting an extension of the public comment period on the Proposed Remedial Action Plan (Proposed Plan) for the American Cyanamid (Pfizer) Superfund site in Bridgewater, NJ.

We ask you to consider the following points in support of this request:

- The time allotted between the public release of the Proposed Plan and the date of public meeting (March 8, 2012) was not sufficient for us to complete our review of the plan; discuss it among our Board and technical advisor; develop a position to submit to our membership and other interested parties; receive comments from the foregoing; and develop testimony and comments for the public meeting. We will need additional time following the public meeting to make up for this

R2-0007582

shortfall.

- CRISIS requested extensions of the public comment period for the three previous Proposed Plans that were developed for the site, in 1993, 1996 and 1998, and they were granted each time (NJDEP was the lead agency during that period).
- The site is considered by EPA to be one of the most complex Superfund sites in the country. This complexity requires us to spend considerable time reviewing the proposed remedy.

Thank you for your consideration of this request.

Walt Sodie  
Executive Director  
CRISIS

# C R I S I S

925 Brown Rd. Bridgewater, NJ 08807

April 30, 2012

(Sent via e-mail this date)

Joseph Battipaglia  
Remedial Project Manager  
USEPA Region 2  
battipaglia.joseph@epa.gov

Dear Mr. Battipaglia:

We are submitting this communication in follow-up to statements we entered into the record at the March 8, 2012 EPA-conducted public hearing on remediation plans for the American Cyanamid (Pfizer) Superfund site. The points that follow supplement oral statements that were given by CRISIS Technical Advisor Thomas Germinario, CRISIS Board Chairman Ross Stander and myself, and Mr. Germinario's letter of March 6, 2012 to you ("*Re: Site-Wide Feasibility Study and Proposed Remedial Action Plan, American Cyanamid Superfund Site*"). Some of the material reiterates sections of our March 8 presentations that require more emphasis.

CRISIS recognizes that EPA is cognizant of some of the points to be made below and that EPA may have already planned to implement some of the suggestions. They are included not only for EPA's consumption but also for review by other interested parties.

While CRISIS does not object to EPA's preferred remedy of solidification/stabilization (S/S), we strongly believe that the plan should be bolstered by implementation of the measures that follow.

## **Conditions for Implementing Solidification/Stabilization (S/S) Remedy**

CRISIS wishes to stress the importance we place on the five bulleted points on page 3 of Mr. Germinario's letter referred to above. These proposed steps, repeated immediately below, not only are conditions for our support of EPA's preferred remedy but are actions we believe are essential for inclusion in the Record of Decision:

- Long-term groundwater treatment should rely on an on-site system designed specifically for the site's contaminants, NOT on the Somerset-Raritan Valley Sewerage Authority's (SRVSA) municipal wastewater treatment system.
- Interim groundwater treatment at the SRVSA should be subject to enforceable effluent limitations for VOCs and SVOCs.
- Materials in the floodplain requiring direct contact, vapor or movement control should be relocated to the Main Plant area and covered by the appropriate engineered multi-layered cap.
- All principal threat wastes should be consolidated in Impoundments 3, 4 and 5 for *in-situ* s/s treatment.

R2-0007584

- Bench-scale testing should be conducted during the remedial design phase to determine the most effective combination of amendments, stabilizing agents and geogrids to be used in the *in-situ* s/s process.

Our conditions for groundwater treatment are crucial. The impoundments to be treated with S/S are located in the Main Plant Area where the groundwater flow is controlled by the bedrock pumping wells. Therefore, any leaching of organics will be drawn down into the groundwater recovery system and sent for treatment. Currently, this treatment is being done at the SRVSA, with which CRISIS is not satisfied. (*We have repeatedly asked for an engineering analysis of SRVSA's capabilities to treat VOC/SVOC wastes and never gotten any response. The typical municipal-type sewage treatment plant is not equipped to remove these wastes without some degree of pre-treatment.*) If CRISIS is successful in getting Pfizer to design and build a state-of-the-art, on-site dedicated groundwater treatment plant, the site will then have a much stronger system that will protect the environment, even if some leaching of organics occurs from the S/S impoundments.

The condition calling for bench-scale testing (*done in a simulated environment*) is also critical; its implementation would assure that the best possible S/S technology will be used. Here is more detail on bench-testing techniques CRISIS is asking EPA to order:

We favor re-remediation testing of various types of S/S treatment to determine the optimal method of immobilizing the unique mix of organic contaminants at this site. There are leaching procedure test methods that have been approved by USEPA for simulating how the S/S treated material will perform in its intended disposal site. These leaching procedures can accurately predict the rate at which organic compounds will leach under the influence of simulated rain and groundwater.

### **Flooding and the Danger of Cap Erosion**

A few speakers at the March 8 EPA public hearing cited frequent flooding as an argument against S/S, contending that floodwaters will wash away caps covering the waste impoundments and release hazardous waste into the water.

While the entire Cyanamid site is in the Raritan River's floodplain, there is a substantial difference between the risks associated with wastes stored inside and outside the Main Plant area. As discussed above, the groundwater in the Main Plant area is controlled by the bedrock pumping system and can be treated if contaminants escape as a result of flooding. Also, the Main Plant is surrounded by a flood dike which slows the rate at which flood waters enter and recede from that area. Therefore, the risk of contaminants being washed away by the uncontrolled force of floodwaters is much less within the Main Plant area than outside it. Nevertheless, the threat demands that EPA impose rigorous conditions to mitigate flood damage.

The Site-wide Feasibility Study indicates that the caps to be used in the Main Plant area will be multi-layered and engineered to withstand the stress of periodic flooding. That will be done during the Remedial Design phase, and CRISIS will monitor the process closely. However, the Record of Decision should require that the highest attainable engineering standards be used in constructing the caps. In this regard, cost should not be a consideration. No matter how high the cost, Pfizer must be required to design, engineer and construct the caps for maximum resistance to floodwaters.

Additionally, we request that the following conditions be included in the Record of Decision:

- The impoundments must be much better protected than in recent extreme flooding. Specifically, the berm around the main plant area must be improved to withstand a “500-year” flood, a magnitude that has been reached or approached several times at the site. The improvement should be both in height and strength of the berm.
- The Remedial Design must specify a means to firmly secure the S/S material under the soil caps to prevent contaminants from being washed out in serious, repeated floods.
- The caps and the berm should be heavily armored at points of highest water flow velocity, as experienced during Hurricane Irene.
- The ground water pumping system must be protected against electricity failure in storms, including maintenance of large backup generators on high ground, and allowing for proper water runoff into the outflow brook.

### **Low Temperature Thermal Desorption Inappropriate for Cyanamid Site**

A small number of environmental groups with no previous involvement at the site called for LTTD to be used for the most severely contaminated sections: impoundments 3, 4 and 5.

LTTD involves in-place thermal treatment that causes contaminants to separate (desorb) from the soil without burning. CRISIS’s extensive review of engineering and environmental reports and studies indicates that the process is not a suitable remedy for impoundments 3, 4 and 5.

CRISIS has been studying and responding to actual and potential remedies for this highly contaminated site for over 20 years and has substantial knowledge of the waste characteristics and past attempts to treat a wide range of deadly substances there. To document our position that LTTD is not the appropriate remedy for these impoundments, CRISIS developed the following points from our review of engineering and environmental reports and studies:

- LTTD is a poor choice for a heterogeneous mix of volatile and semi-volatile organic compounds (VOCs & SVOCs). LTTD uses heat to vaporize the organic contaminants so that they are driven off the waste and captured for treatment. Therefore, LTTD has to operate in the temperature range between the boiling point and the combustion temperature of the organic compound. Since SVOCs have a much higher boiling point than VOCs, completely vaporizing a mix of VOCs and SVOCs would require a higher temperature than would be safe to use, because it would be too close to the flashpoint of the VOCs.
- Just one example: The Sidney Tar Sands site in Nova Scotia, Canada called for remediation of a number of tar ponds having a heterogeneous mix of VOCs and SVOCs, including Benzene, Xylenes, Toluene and Naphthalene, which are also the principal organic contaminants of Cyanamid’s Impoundments 3, 4 and 5. After extensive studies, the selected remedy (2007) was solidification/stabilization (S/S) technology, not LTTD.
- Anyone with any degree of familiarity with Impoundments 3, 4 & 5 would conclude that LTTD is not a good fit. It works well primarily with soils that are contaminated with PHC

(petroleum hydrocarbons). The contaminants have to be relatively homogeneous because there's a specific range of temperatures that needs to be applied to volatilize the contaminants while not oxidizing (burning) them. Also, the sticky tar consistency of this waste (Impoundments 3, 4 & 5) would make a mess in an LTTD system. The tar would have to be processed into a fine granular material. That would be a difficult task in itself, and would almost surely result in large fugitive emissions of VOCs (Volatile Organic Compounds) during the material processing.

## **General**

Because of the complexity of the Cyanamid site, the large-scale distribution of hazardous waste in the impoundments and soils, and the threat of frequent flooding, EPA must impose the most stringent possible standards for the current phase of the remediation and vigilantly monitor every step of the remediation process. Furthermore, EPA should require Pfizer and/or its successors to monitor the site in perpetuity (*under EPA supervision*) and to make repairs that may be required to meet the conditions of all Records of Decision issued for site remediation. This would include the flood berm, impoundments, groundwater pumping system, interceptor trench, slurry wall, treatment facilities, effluent gates, etc. If EPA deems it appropriate to assure compliance, Pfizer could be required to post a bond to protect the community in case of financial changes in the company's future or sale of Pfizer or the Cyanamid site to another firm. As stated above, cost should not be a consideration in these decisions.

Thank you for your consideration of this communication.

Walt Sodie  
Executive Director  
CRISIS

---

\* *Following is a list of references for our position that S/S technology is more appropriate than LTTD for impoundments 3, 4 & 5. While not every one of the sources provided the explicit information contained in the three bullet points regarding LTTD, they indicate the difficulties of applying LTTD to mixed wastes. Some of the sources were not directly researched by CRISIS but were cited by reference material that was examined.*

[http://en.wikipedia.org/wiki/Sydney\\_Tar\\_Ponds](http://en.wikipedia.org/wiki/Sydney_Tar_Ponds).

<http://www.epa.gov/oust/cat/LTTD.HTM>.

*Applying Solidification/Stabilization for Sustainable Redevelopment of Contaminated Property* - (Charles M. Wilk LEHP, QEP, LEED AP, Program Manager, Waste Treatment, Portland Cement Association.

Conner, J.R. *Chemical Fixation and Solidification of Hazardous Wastes*; Van Nostrand, Reinhold: New York.

*Technology Resource Document—Solidification/Stabilization and Its Application to Waste Materials*; EPA 530/R-93/012; U.S. Environmental Protection Agency.

*Innovative Treatment Technologies for Site Cleanup: Annual Status Report, 12th Edition*; EPA 542-R-07-012; U.S. Environmental Protection Agency.

---

*Engineering Bulletin—Solidification/Stabilization of Organics and Inorganics*; EPA 540/S-92/015; U.S. Environmental Protection Agency.

Weitzman, L.; Conner, J.R. Descriptions of Solidification/Stabilization Technologies. In *Immobilization Technology Seminar—Speaker Slide Copies and Supporting Information*; CERL-89-222; U.S. Environmental Protection Agency.

Conner, J.R. *Guide to Improving the Effectiveness of Cement-Based Stabilization/Solidification*; EB211; Portland Cement Association: Skokie, IL.

Pozzolan—a siliceous or siliceous and aluminous material which in itself possess little or no cementitious value, but which will, in finely divided form and in the presence of moisture, chemically react with calcium hydroxide at ordinary temperature to form compounds possessing cementitious properties. *Standard Terminology Relating to Hydraulic Cement*, ASTM C 219-98.

*Stabilization/Solidification of CERCLA and RCRA Wastes—Physical Tests, Chemical Testing Procedures, Technology Screening, and Field Activities*; EPA 625/6-89/022; U.S. Environmental Protection Agency.

Einhaus, R.L.; Erickson, P. *Fate of Polychlorinated Biphenyls (PCBs) in Soil Following Stabilization with Quicklime*; EPA 600/2-91/052; U.S. Environmental Protection Agency.

*Guide Specification for Military Construction—Solidification/Stabilization of Contaminated Material*; CECS-02445; U.S. Army Corps of Engineers.

Delisio, R. *Cement-Based Solidification/Stabilization on Brownfield Sites in New Jersey, USA* Presented at the Cement Association of Canada, Remediation Technology Workshop: Solidification and Stabilization Treatment, Toronto, Ontario, Canada, (unpublished).

Wilk, C.M.; DeLisio, R. *Solidification/Stabilization Treatment of Arsenic- and Creosote-Impacted Soil at a Former Wood-Treating Site*; SR99.

Wilk, C.M.; Germano, M. Remediation of Lead- and Petroleum-Contaminated Soils at a Boston Brownfield Site Using Cement-Based Solidification/Stabilization. In *Proceedings of the International Containment & Remediation Technology Conference, Orlando, FL*.





American Cyanamid Public Comment

bridget

to:

Joseph Battipaglia

03/19/2012 10:49 AM

Hide Details

From: <bridget@edisonwetlands.org>

To: Joseph Battipaglia/R2/USEPA/US@EPA

History: This message has been forwarded.

1 Attachment



Bridget Donnellan American Cyanamid Public Comment.pdf

Dear Joe,

I have attached my comment from the public hearing the other week because I didn't have the opportunity to talk. Thank you so much for your time!

-Bridget Donnellan



**Bridget Donnellan, Conservation Intern  
Edison Wetlands Association  
Statement to EPA at Public Hearing  
March 8, 2012**

Thank you for the opportunity to send comments, my name is Bridget Donnellan and I am a Conservation Intern at the Edison Wetlands Association and I am sending in my comment to show my support for alternative 7 and the benefits that this option would provide for the community because I was not able to speak at the meeting because of time constraints.

After looking over the alternatives, option 7 is the only option that will actually clean up the toxins left behind by the Pfizer Corporation in the community. This plan, as we have heard before this will dramatically increase flooding in the community, something that they simply cannot handle. In the past few weeks, I have personally spoken to countless residents of the Bridgewater/ Bound Brook communities and have heard numerous stories of the floods that have damaged the town previously. Some residents are still reliving the horrors of Hurricane Irene, telling stories such as how they were forced to take boats from their second story windows to escape the rising water. If the plan is to further traumatize the residents, then I think that accepting option 4A would be the perfect plan.

As an Environmental Policy, Institutions and Behavior major at Rutgers University, I am able to fully appreciate the long term effects that this decision will have upon the community. If the EPA understands that the area is going to frequently be underwater, I cannot understand why option 4A is even being considered. A cap is not a clean up and these problems will return to this area the minute the cap breaks, costing the EPA and Pfizer even more money than it would have to choose alternative 7 in the first place. I urge you to choose the health of the community over the price tag that the clean up will have and vote for option 7. Thank you for your time.



change.org

To: The Governor of NJ, State Rep. Upendra Chivukula (NJ-017B), State Sen. Samuel Thompson (NJ-012), Rep. Rush Holt (NJ-12), Sen. Barbara Boxer (CA), USEPA Region 2 Administrator (Judith Enck), USEPA Administrator (Lisa Jackson), Commissioner (Bob Martin), USEPA Region 2 Superfund Chief (Walter Mugdan), Pfizer (Wendy Lazarus), Pfizer (Russell Downey)

Subject: Stop toxic cancer-causing chemicals from seeping into the Raritan River!

Letter: Greetings,

I respectfully request that you strongly compel the United States Environmental Protection Agency (USEPA) to take immediate action to stop the toxic, cancer-causing chemical seep draining into the Raritan River from the 80-year old American Cyanamid Superfund Site in Bridgewater.

The 575-acre site sits directly adjacent to the longest river solely in New Jersey, as well as the Delaware and Raritan Canal, which is used for drinking water for hundreds of thousands of families in the surrounding area. The USEPA recently discovered benzene, a toxic carcinogen known to potentially cause damage to the immune system, oral cancer, and leukemia on the American Cyanamid Superfund Site at 20,000 times the acceptable federal standard.

The site's leaking chemical lagoons, known as lagoons 1 and 2, must be cleaned up immediately. Please tell the USEPA that erecting a temporary Band-Aid of carbon bags and hay bales along the bank to "catch" the seeps is not acceptable. Additionally, I ask that you request the USEPA to require the site's Responsible Party, Pfizer, a billion dollar pharmaceutical company, to fully remediate the on-site historic lagoons from this leaking toxic waste site that is causing this potential health hazard.

This site cleanup has been languishing for over two decades, and it is time for USEPA to take serious action. In order to protect the health and safety of families that utilize this area for recreation, the source of this contamination must be addressed immediately. For the bikers, hikers, fisherman and kayakers, for the osprey, bald eagles, turtles and trout, please urge USEPA to make this site cleanup a top priority and to take immediate action to remove the toxic chemicals draining into our regional resource, the Raritan River. Thank you for your timely assistance on this important environmental issue.

Respectfully,

R2-0007591

# Signatures

Name	Location	Date
	Edison, New Jersey, United States	2011-06-24
	Linden, New Jersey, United States	2011-06-24
	West Orange, New Jersey, United States	2011-06-24
	Monmouth Junction, New Jersey, United States	2011-06-24
	Edison , New Jersey, United States	2011-06-24
	Forest Hills, New York, United States	2011-06-24
	West Orange, New Jersey, United States	2011-06-24
	Bridgeton, New Jersey, United States	2011-06-24
	Fair Lawn, New Jersey, United States	2011-06-24
	Kendall park, New Jersey, United States	2011-06-24
	PERTH AMBOY, New Jersey, United States	2011-06-24
	Roselle, New Jersey, United States	2011-06-24
	W Allenhurst, New Jersey, United States	2011-06-24
	Glen Ridge, New Jersey, United States	2011-06-24
	Montville, New Jersey, United States	2011-06-24
	Arlington, Texas, United States	2011-06-24
	Cherry Hill, New Jersey, United States	2011-06-24
	Maplewood, New Jersey, United States	2011-06-24
	Lawrenceville, New Jersey, United States	2011-06-24
	Kettering, United Kingdom	2011-06-24
	Scranton, Pennsylvania, United States	2011-06-24
	St. Pölten, Austria	2011-06-24
	Gabrovo, Bulgaria	2011-06-24
	Salem, Oregon, United States	2011-06-24
	Liverpool, United Kingdom	2011-06-24
	Fair Oaks, California, United States	2011-06-24
	Chicago, Illinois, United States	2011-06-24
	Pasadena, Maryland, United States	2011-06-24

Name	Location	Date
	Spotsylvania, Virginia, United States	2011-06-24
	Brewster, New York, United States	2011-06-24
	Anadia, Portugal	2011-06-24
	Weymouth, Canada	2011-06-24
	Suva, Hawaii, United States	2011-06-24
	JACKSON HEIGHTS, New York, United States	2011-06-24
	springfield, Ohio, United States	2011-06-24
	Sacaton, Arizona, United States	2011-06-24
	Manchester, New Hampshire, United States	2011-06-24
	stavanger, Nevada, United States	2011-06-24
	Pompton Lakes, New Jersey, United States	2011-06-24
	Randolpj, New Jersey, United States	2011-06-24
	Oakhurst, New Jersey, United States	2011-06-24
	London, United Kingdom	2011-06-24
	Sauk City, Wisconsin, United States	2011-06-24
	London, Canada	2011-06-24
	Chicago, Illinois, United States	2011-06-24
	timisoara, Romania	2011-06-24
	Haddonfield, New Jersey, United States	2011-06-24
	Pipersville, Pennsylvania, United States	2011-06-24
	Concord, California, United States	2011-06-24
	Saratoga, California, United States	2011-06-24
	Berlin, Germany	2011-06-24
	rancho cordova, California, United States	2011-06-24
	Spring Hope, North Carolina, United States	2011-06-24
	Bethlehem, Pennsylvania, United States	2011-06-24
	Johnson city, Tennessee, United States	2011-06-24
	West Orange, New Jersey, United States	2011-06-24

Name	Location	Date
	boca raton, Florida, United States	2011-06-24
	brooklyn, New York, United States	2011-06-24
	Shortsville, New York, United States	2011-06-24
	Hertford, United Kingdom	2011-06-24
	Davis, California, United States	2011-06-24
	West Haven, Connecticut, United States	2011-06-24
	Fargo, North Dakota, United States	2011-06-24
	Manitou Springs, Colorado, United States	2011-06-24
	New York, New York, United States	2011-06-24
	Hagerstown, Maryland, United States	2011-06-24
	Framingham, Massachusetts, United States	2011-06-24
	Webb City, Missouri, United States	2011-06-24
	Chicago, Illinois, United States	2011-06-24
	buenos aires, Argentina	2011-06-24
	Joppa, Maryland, United States	2011-06-24
	Rijeka, Croatia	2011-06-24
	Northfield, United States	2011-06-24
	Adelaide, Australia	2011-06-24
	Honolulu, Hawaii, United States	2011-06-24
	Chicago, Illinois, United States	2011-06-24
	oklahoma city, Oklahoma, United States.	2011-06-24
	Pearl City, Hawaii, United States	2011-06-24
	chihuahua, Maine, United States	2011-06-24
	london, United Kingdom	2011-06-24
	Finleyville, Pennsylvania, United States	2011-06-25
	Amersfoort, Netherlands	2011-06-25
	Ottawa, Canada	2011-06-25
	Basel, Switzerland	2011-06-25
	Peconic, New York, United States	2011-06-25

Name		Location	Date
		Olympia, Washington, United States	2011-06-25
		Hasselt, Belgium	2011-06-25
		Zagreb, Croatia	2011-06-25
		savona, Italy	2011-06-25
		Langley Park, Durham, United Kingdom	2011-06-25
		Como, Australia	2011-06-25
		Indianapolis, Indiana, United States	2011-06-25
		Chicago, Illinois, United States	2011-06-25
		North Olmsted, Ohio, United States	2011-06-25
		St. Louis Park, Minnesota, United States	2011-06-25
		Slate Hill, New York, United States	2011-06-25
		Verona, Italy	2011-06-25
		Perkasie, Pennsylvania, United States	2011-06-25
		Mansfield Center, Connecticut, United States	2011-06-25
		Mansfield Center, Connecticut, United States	2011-06-25
		Chicago, Illinois, United States	2011-06-25
		San Francisco, California, United States	2011-06-25
		Sussex, Wisconsin, United States	2011-06-25
		Bushkill, Pennsylvania, United States	2011-06-25
		Mount Vernon, Kentucky, United States	2011-06-25
		Stratford, Canada	2011-06-25
		barcelona, Spain	2011-06-25
		Pierrelatte, France	2011-06-25
		Revigny-sur-Ornain, France	2011-06-25
		Helena, Arkansas, United States	2011-06-25
		Oakland, California, United States	2011-06-25
		Kansas City, Missouri, United States	2011-06-25
		tampa, Florida, United States	2011-06-25

Name	Location	Date
	NYC, New York, United States	2011-06-25
	Kraków, Poland	2011-06-25
	Los Angeles, California, United States	2011-06-25
	Omaha, Nebraska, United States	2011-06-25
	Toms River, New Jersey, United States	2011-06-25
	laval, Canada	2011-06-25
	Garden City, Michigan, United States	2011-06-25
	Detroit, Michigan, United States	2011-06-25
	west orange, New Jersey, United States	2011-06-25
	SAINT LEU LA FORET, France	2011-06-25
	Des Moines, Iowa, United States	2011-06-25
	Casa Grande, Arizona, United States	2011-06-25
	los Angeles, California, United States	2011-06-25
	SAINT LEU LA FORET, France	2011-06-25
	West New York, New Jersey, United States	2011-06-25
	Tacoma, Washington, United States	2011-06-25
	Langley, Canada	2011-06-25
	Newtown, Connecticut, United States	2011-06-25
	glendale, Arizona, United States	2011-06-25
	jackson, New Jersey, United States	2011-06-25
	sana'a, Yemen	2011-06-25
	Portland, Oregon, United States	2011-06-25
	Jackson, New Jersey, United States	2011-06-25
	N. Ireland, United Kingdom	2011-06-26
	Krefeld, Germany	2011-06-26
	Chicago, Illinois, United States	2011-06-26
	Hesperia, California, United States	2011-06-26
	Palermo, Italy	2011-06-26
	Boe i Telemark, Norway	2011-06-26



Name		Location	Date
		El Segundo, California, United States	2011-06-26
		Guelph, Canada	2011-06-26
		Prairie Village, Kansas, United States	2011-06-26
		Findlay, Ohio, United States	2011-06-26
		Highland Village, Texas, United States	2011-06-26
		Valley Stream, New York, United States	2011-06-26
		Aliquippa, Pennsylvania, United States	2011-06-26
		Nanuet, New York, United States	2011-06-26
		Flushing, New York, United States	2011-06-26
		rockville, Maryland, United States	2011-06-26
		Whiting, New Jersey, United States	2011-06-26
		Cambridge, Massachusetts, United States	2011-06-26
		Springfield, Missouri, United States	2011-06-26
		Murfreesboro, Tennessee, United States	2011-06-26
		Greenbelt, Maryland, United States	2011-06-26
		Lady Lake, Florida, United States	2011-06-26
		New Haven, Connecticut, United States	2011-06-26
		Torre del Mar, Spain	2011-06-26
		South Park, Pennsylvania, United States	2011-06-26
		Philadelphia, Pennsylvania, United States	2011-06-26
		Elmira, New York, United States	2011-06-26
		Irving, Texas, United States	2011-06-26
		Sherwood, Ohio, United States	2011-06-26
		Vacaville, California, United States	2011-06-26
		Jundiaí/SP, Brazil	2011-06-26
		Fair Play, South Carolina, United States	2011-06-26
		Tifton, Georgia, United States	2011-06-26
		Blacksburg, Virginia, United States	2011-06-26
		Jamaica Plain, Massachusetts, United States	2011-06-26

Name	Location	Date
	ALTON, Illinois, United States	2011-06-26
	Knox, Indiana, United States	2011-06-26
	Gainesville, Florida, United States	2011-06-26
	San Diego, California, United States	2011-06-26
	palermo, Italy	2011-06-26
	Staten Island, New York, United States	2011-06-26
	Westerkappeln, Germany	2011-06-26
	Niagara Falls, Canada	2011-06-26
	Argentona, Spain	2011-06-26
	San Anselmo, California, United States	2011-06-26
	Oshkosh, Wisconsin, United States	2011-06-26
	Stillwater, Minnesota, United States	2011-06-26
	Winnipeg, Canada	2011-06-26
	Jersey City, New Jersey, United States	2011-06-26
	Hood River, Oregon, United States	2011-06-26
	Bethesda, Ohio, United States	2011-06-26
	San Francisco, California, United States	2011-06-26
	Long Beach, California, United States	2011-06-26
	Perth Amboy, New Jersey, United States	2011-06-26
	Mokena, Illinois, United States	2011-06-26
	Leiderdorp, District Of Columbia, United States	2011-06-26
	Melvindale, Michigan, United States	2011-06-26
	Forest Hills, New York, United States	2011-06-26
	Pearl City, Hawaii, United States	2011-06-26
	FORT WORTH, Texas, United States	2011-06-26
kingston, Tennessee, United States	2011-06-26	
cincinnati, Ohio, United States	2011-06-26	
Lackawaxen, Pennsylvania, United States	2011-06-26	
Jamaica, New York, United States	2011-06-26	

Name	Location	Date
	Murrieta, California, United States	2011-06-26
	Bloomington, Minnesota, United States	2011-06-26
	Danville, Pennsylvania, United States	2011-06-26
	West Orange, New Jersey, United States	2011-06-26
	San Diego, California, United States	2011-06-26
	red bank, New Jersey, United States	2011-06-26
	santa monica, California, United States	2011-06-26
	Ventura, California, United States	2011-06-26
	Bellingham, Washington, United States	2011-06-26
	Auburn Hills, Michigan, United States	2011-06-26
	St Augustine, Florida, United States	2011-06-26
	New York, New York, United States	2011-06-26
	Santa Fe, New Mexico, United States	2011-06-26
	Plainfield, New Jersey, United States	2011-06-26
	Santa Cruz, California, United States	2011-06-26
	Cockeysville, Maryland, United States	2011-06-26
	De Land, Florida, United States	2011-06-26
	Sidney, Canada	2011-06-26
	daytona beach, Florida, United States	2011-06-26
	Clanton, Alabama, United States	2011-06-26
	la selva beach, California, United States	2011-06-26
	Willemstad, Netherlands Antilles	2011-06-26
	Kathmandu, Nepal	2011-06-26
	Brisbane, Australia	2011-06-26
	Brooklyn, New York, United States	2011-06-26
	Lake City, Florida, United States	2011-06-26
	Phoenix, Arizona, United States	2011-06-26
	Long Branch, New Jersey, United States	2011-06-26
	Brooklyn, New York, United States	2011-06-26
	Chattanooga, Tennessee, United States	2011-06-26

Name	Location	Date
	Albuquerque, New Mexico, United States	2011-06-26
	Madrid/Spain, Alabama, United States	2011-06-26
	Ojai,, California, United States	2011-06-26
	Kenmore, Washington, United States	2011-06-26
	Boulder, Colorado, United States	2011-06-26
	brooklyn, New York, United States	2011-06-26
	Kansas City, Kansas, United States	2011-06-26
	Front Royal, Virginia, United States	2011-06-26
	Centre hall, Puerto Rico, United States	2011-06-26
	Garden Grove, California, United States	2011-06-26
	Henley, Maryland, United States	2011-06-26
	Allison Park, Pennsylvania, United States	2011-06-26
	Poland, Indiana, United States	2011-06-26
	Rochester, New York, United States	2011-06-26
	Sulphur Springs, Texas, United States	2011-06-26
	sf, California, United States	2011-06-26
	Washington, District Of Columbia, United States	2011-06-26
	Philadelphia, Pennsylvania, United States	2011-06-26
	Little Rock, Arkansas, United States	2011-06-26
	bullvalley, Illinois, United States	2011-06-26
	Saratoga, California, United States	2011-06-26
	Honolulu, Hawaii, United States	2011-06-26
	west park, Florida, United States	2011-06-26
	Des Moines, Washington, United States	2011-06-26
	Ellicott City, Maryland, United States	2011-06-26
	Sioux Falls, South Dakota, United States	2011-06-26
	MIDDLETOWN, New York, United States	2011-06-26
	Novokuznetsk, Federated States of Micronesia, United States	2011-06-26
	Pomona, California, United States	2011-06-26

Name		Location	Date
		istanbul turkey, District Of Columbia, United States	2011-06-26
		San Diego, California, United States	2011-06-26
		perth,scotland, United Kingdom	2011-06-26
		milton, Georgia, United States	2011-06-26
		Sonoma, California, United States	2011-06-26
		San Pedro, California, United States	2011-06-26
		Port Orford, Oregon, United States	2011-06-26
		New York, New York, United States	2011-06-26
		Mashpee, Massachusetts, United States	2011-06-26
		San Anselmo, California, United States	2011-06-26
		Adelaide, Australia	2011-06-26
		glen waverley, Australia	2011-06-26
		Rockport, Washington, United States	2011-06-26
		Samara, Ohio, United States	2011-06-26
		los angles, California, United States	2011-06-26
		Pittsburg, California, United States	2011-06-26
		Los Angeles, California, United States	2011-06-26
		Downers Grove, Illinois, United States	2011-06-26
		Monterrey, Mexico	2011-06-26
		Lucknow, India	2011-06-26
		Ragusa, Italy	2011-06-26
		Murrumbateman, Australia	2011-06-26
		Kihei, Hawaii, United States	2011-06-27
		Hewitt, New Jersey, United States	2011-06-27
		Granger, Indiana, United States	2011-06-27
		New York, New York, United States	2011-06-27
		San Francisco, California, United States	2011-06-27
		Pleasant Hill, California, United States	2011-06-27
		Zagreb, California, United States	2011-06-27

Name	Location	Date
	Kirke Saaby, Denmark	2011-06-27
	Bandung, Indonesia	2011-06-27
	N. Saanich, Canada	2011-06-27
	Racine, Wisconsin, United States	2011-06-27
	ROME, Italy	2011-06-27
	rotterdam, Netherlands	2011-06-27
	London,, United Kingdom	2011-06-27
	Costa Mesa, California, United States	2011-06-27
	Parvenets, Bulgaria	2011-06-27
	Florina, Greece	2011-06-27
	Piraeus, Greece	2011-06-27
	Prague 4, Czech Republic	2011-06-27
	baia mare, Romania	2011-06-27
	Beverley Hills, Australia	2011-06-27
	piraeus, Greece	2011-06-27
	osijek, Croatia	2011-06-27
	Leicestershire, United Kingdom	2011-06-27
	Durban, South Africa	2011-06-27
	Bristol, United Kingdom	2011-06-27
	MIKOLOW, Poland	2011-06-27
	Sidmouth, United Kingdom	2011-06-27
	Brisbane, Australia	2011-06-27
	stockholm, Sweden	2011-06-27
	brooklyn, New York, United States	2011-06-27
	Hamilton, New Jersey, United States	2011-06-27
	albano laz., Wyoming, United States	2011-06-27
	Loxahatchee, Florida, United States	2011-06-27
	NY, New York, United States	2011-06-27
Freiburg, Germany	2011-06-27	
Boston, Massachusetts, United States	2011-06-27	

Name	Location	Date
	Aurora, Illinois, United States	2011-06-27
	Vaasa, Finland	2011-06-27
	Benamaurel, Spain	2011-06-27
	Eastton, Kansas, United States	2011-06-27
	bloomington, Indiana, United States	2011-06-27
	Gold Coast, Qld. , Australia	2011-06-27
	Karachi, Pakistan	2011-06-27
	Melbourne, Florida, United States	2011-06-27
	Pennsburg, Pennsylvania, United States	2011-06-27
	lodz, Poland	2011-06-27
	Chicago, Illinois, United States	2011-06-27
	Ringoes, New Jersey, United States	2011-06-27
	Wheaton, Illinois, United States	2011-06-27
	London, United Kingdom	2011-06-27
	Aberdeen, United Kingdom	2011-06-27
	Jerusalem, Israel	2011-06-27
	racine, Wisconsin, United States	2011-06-27
	Fort Wayne, Indiana, United States	2011-06-27
	Bremerton, Washington, United States	2011-06-27
	Paradise, Michigan, United States	2011-06-27
	New Haven, Connecticut, United States	2011-06-27
	Lancaster, United Kingdom	2011-06-27
	Bethel Park, Pennsylvania, United States	2011-06-27
	milan, Italy	2011-06-27
	Villa Gobernador Galvez, Argentina	2011-06-27
	swansea, United Kingdom	2011-06-27
	Brooklyn, New York, United States	2011-06-27
	park Falls, Wisconsin, United States	2011-06-27
	Dawson, Iowa, United States	2011-06-27

Name	Location	Date
	Toronto, Canada	2011-06-27
	Poca, West Virginia, United States	2011-06-27
	Krsko, Slovenia	2011-06-27
	Gastonia, North Carolina, United States	2011-06-27
	Lexington, Kentucky, United States	2011-06-27
	Xalapa, Mexico	2011-06-27
	San Diego, California, United States	2011-06-27
	Myrtle Creek, Oregon, United States	2011-06-27
	Dayton, Ohio, United States	2011-06-27
	San Francisco, California, United States	2011-06-27
	Sacrofano, Italy	2011-06-27
	Greeneville, Tennessee, United States	2011-06-27
	Cambridge, Massachusetts, United States	2011-06-27
	Knutsford, United Kingdom	2011-06-27
	Buffalo, New York, United States	2011-06-27
	Mosheim, Tennessee, United States	2011-06-27
	clifton, New Jersey, United States	2011-06-27
	Montrose, Colorado, United States	2011-06-27
	Eching, Germany	2011-06-27
	Monroe, New Jersey, United States	2011-06-27
	Munhall, Pennsylvania, United States	2011-06-27
	MOUNT LAUREL, New Jersey, United States	2011-06-27
	Chicago, Illinois, United States	2011-06-27
	Toms River, New Jersey, United States	2011-06-27
	Tampa, Florida, United States	2011-06-27
	Beaverton, Oregon, United States	2011-06-27
	Phoenix, Arizona, United States	2011-06-27
	METUCHEN, New Jersey, United States	2011-06-27
	Brooklyn, Connecticut, United States	2011-06-27



Name		Location	Date
		Reseda, California, United States	2011-06-27
		Edison, New Jersey, United States	2011-06-27
		Madison, Wisconsin, United States	2011-06-27
		Knoxville, Tennessee, United States	2011-06-27
		Warszawa, Poland	2011-06-27
		Hillsborough, New Jersey, United States	2011-06-27
		Berlin, Massachusetts, United States	2011-06-27
		Novato, California, United States	2011-06-27
		Dublin, Alabama, United States	2011-06-27
		Upper Lake, California, United States	2011-06-27
		Roma, Italy	2011-06-27
		Hempstead, New York, United States	2011-06-27
		Vista, California, United States	2011-06-27
		Longmont, Colorado, United States	2011-06-27
		Seven Valleys, Pennsylvania, United States	2011-06-27
		Rancho Palos Verdes, California, United States	2011-06-27
		Nashville, Tennessee, United States	2011-06-27
		Rhodes Island, Greece	2011-06-27
		Chatham, New Jersey, United States	2011-06-27
		Ft Pierce, Florida, United States	2011-06-27
		Keyport, New Jersey, United States	2011-06-27
		Dana, North Carolina, United States	2011-06-27
		Keyport, New Jersey, United States	2011-06-27
		Rogers, Arkansas, United States	2011-06-27
		Edison, New Jersey, United States	2011-06-27
		danbury, Connecticut, United States	2011-06-27
		New York, New York, United States	2011-06-27
		shropshire, United Kingdom	2011-06-27

Name	Location	Date
	Pompton Lakes, New Jersey, United States	2011-06-27
	Poplarville, Mississippi, United States	2011-06-27
	Hollywood, Florida, United States	2011-06-27
	Greenville, South Carolina, United States	2011-06-27
	Bennington, Vermont, United States	2011-06-27
	Eugene, Oregon, United States	2011-06-27
	Portland, Oregon, United States	2011-06-27
	Northbrook, Illinois, United States	2011-06-27
	Smyrna, Georgia, United States	2011-06-27
	Veracruz, Mexico	2011-06-27
	Fords, New Jersey, United States	2011-06-27
	Patra, Greece	2011-06-27
	Ft. Myers, Florida, United States	2011-06-27
	Barss Corner, Canada	2011-06-27
	Austell, Georgia, United States	2011-06-27
	Verona, New Jersey, United States	2011-06-27
	Morrisville, Pennsylvania, United States	2011-06-27
	Studio City, California, United States	2011-06-27
	Hohenwart, Germany	2011-06-27
	Dana Point, California, United States	2011-06-27
	San Francisco, California, United States	2011-06-27
	poulsbo, Washington, United States	2011-06-27
	Wilsall, Montana, United States	2011-06-27
	Durban, South Africa	2011-06-27
	Karlsruhe, Germany	2011-06-27
	phoenix, Arizona, United States	2011-06-27
	Millsap, Texas, United States	2011-06-27
	Minneapolis, Minnesota, United States	2011-06-27
	Tokyo, Japan	2011-06-27

Name	Location	Date
	dreux, France	2011-06-27
	Tucson, Arizona, United States	2011-06-27
	Bishop, Texas, United States	2011-06-27
	Iowa City, Iowa, United States	2011-06-27
	Warsaw, Poland	2011-06-27
	NYC, New York, United States	2011-06-27
	Leighton Buzzard, United Kingdom	2011-06-27
	New York, New York, United States	2011-06-27
	roma, Italy	2011-06-27
	Eau Claire, Wisconsin, United States	2011-06-27
	Whitewater, Wisconsin, United States	2011-06-27
	boonton township, New Jersey, United States	2011-06-27
	Decatur, Georgia, United States	2011-06-27
	Plovdiv, Bulgaria	2011-06-27
	Ironton, Missouri	2011-06-27
	union, New Jersey, United States	2011-06-27
	Anchorage, Alaska, United States	2011-06-27
	rock falls, Illinois, United States	2011-06-27
	Fontana, California, United States	2011-06-27
	Chicago, Illinois, United States	2011-06-27
	Norderney, Germany	2011-06-27
	naples, Florida, United States	2011-06-27
	salt lake city, Utah, United States	2011-06-27
	Trieste, Italy	2011-06-27
	vlagtwedde, Netherlands	2011-06-27
	Santiago, Chile	2011-06-27
	Bloomington, New Jersey, United States	2011-06-27
	Las Cruces,, New Mexico, United States	2011-06-27
	Encino, California, United States	2011-06-27

Name	Location	Date
	Chandler, Arizona, United States	2011-06-27
	Coral Gables, Florida, United States	2011-06-27
	Honolulu, Hawaii, United States	2011-06-27
	Paramount, California, United States	2011-06-27
	Boulder, Colorado, United States	2011-06-27
	columbia, Tennessee, United States	2011-06-27
	Belvidere, Illinois, United States	2011-06-27
	Bayside Hills, New York, United States	2011-06-27
	New Brunswick, New Jersey, United States	2011-06-27
	Ellicott City, Maryland, United States	2011-06-27
	New London, North Carolina, United States	2011-06-27
	chicago, Illinois, United States	2011-06-27
	Woodbridge, New Jersey, United States	2011-06-27
	wantagh, New York, United States	2011-06-27
	Arnold, Missouri, United States	2011-06-27
	Setúbal, Portugal	2011-06-27
	san jose, California, United States	2011-06-27
	Butler, New Jersey, United States	2011-06-27
	Charlottesville, Virginia, United States	2011-06-27
	denver, Colorado, United States	2011-06-27
	Lemoore, California, United States	2011-06-27
	Pottsville, Pennsylvania, United States	2011-06-27
	shelbyville, Tennessee, United States	2011-06-27
	Torres Novas, Portugal	2011-06-27
	Chicago, Illinois, United States	2011-06-27
	Oshkosh, Wisconsin, United States	2011-06-27
	San Francisco, California, United States	2011-06-27
	St Louis, Missouri, United States	2011-06-27
Hastings, New Zealand	2011-06-27	

Name	Location	Date
	Boca Raton, Florida, United States	2011-06-27
	Los Angeles, California, United States	2011-06-27
	Washington, Pennsylvania, United States	2011-06-27
	Dayboro, Australia	2011-06-27
	Winchester, Massachusetts, United States	2011-06-27
	Perth, Washington, United States	2011-06-27
	Merthyr Tydfil, Mid Glamorgan, United Kingdom	2011-06-27
	Janesville, Wisconsin, United States	2011-06-27
	Miami, Florida, United States	2011-06-27
	Thunder Bay, Canada	2011-06-27
	Paramus, New Jersey, United States	2011-06-27
	Hallandale Beach, Florida, United States	2011-06-27
	Skillman, New Jersey, United States	2011-06-27
	Portland, Oregon, United States	2011-06-27
	San Pedro, California, United States	2011-06-27
	Lantier, Canada	2011-06-27
	Mexico City, Mexico	2011-06-27
	Escondido, California, United States	2011-06-27
	Bethesda, Maryland, United States	2011-06-27
	Winter Park, Florida, United States	2011-06-27
	Brooklyn, New York, United States	2011-06-27
	Tujunga, California, United States	2011-06-27
	Minneapolis, Minnesota, United States	2011-06-27
	Brookline, Massachusetts, United States	2011-06-27
	Morrice, Michigan, United States	2011-06-27
	Union, Kentucky, United States	2011-06-27
	Ontario, California, United States	2011-06-27
	Winnipeg, MB., Canada	2011-06-27
	Los Angeles, California, United States	2011-06-27

Name	Location	Date
	TORINO, Italy	2011-06-27
	Jersey City, New Jersey, United States	2011-06-28
	Winzer, Germany	2011-06-28
	Fort Collins, Colorado, United States	2011-06-28
	Arkhangelsk, Russian Federation	2011-06-28
	Randwick, Australia	2011-06-28
	New Zealand, New Zealand	2011-06-28
	castel san pietro terme, Italy	2011-06-28
	Bryn Mawr, Pennsylvania, United States	2011-06-28
	Lakeside, California, United States	2011-06-28
	Neuwied, Germany	2011-06-28
	Ridderkerk, Netherlands	2011-06-28
	Quincy, Illinois, United States	2011-06-28
	Amsterdam, Netherlands	2011-06-28
	Vancouver, Canada	2011-06-28
	Purcellville, Virginia, United States	2011-06-28
	rhodos, Greece	2011-06-28
	East Hampton, New York, United States	2011-06-28
	Kuching, Malaysia	2011-06-28
	New Providence, New Jersey, United States	2011-06-28
	Celje, Slovenia	2011-06-28
	Parma, Ohio, United States	2011-06-28
	Cocoa Beach, Florida, United States	2011-06-28
	Diamondhead, Mississippi, United States	2011-06-28
	Diamondhead, Mississippi, United States	2011-06-28
	Genève, New York, United States	2011-06-28
	Jersey City, New Jersey, United States	2011-06-28
	New Oxford, Pennsylvania, United States	2011-06-28
	Syktyvkar, Russian Federation	2011-06-28

Name		Location	Date
		red deer, Canada	2011-06-28
		destin, Florida, United States	2011-06-28
		Manchester, United Kingdom	2011-06-28
		New Brunswick, New Jersey, United States	2011-06-28
		Mercer Island, Washington, United States	2011-06-28
		San Jose, California, United States	2011-06-28
		Gresham, Oregon, United States	2011-06-28
		Sherman Oaks, California, United States	2011-06-28
		Santiago, Chile	2011-06-28
		MEXICO, Mexico	2011-06-28
		New york, New York, United States	2011-06-28
		Reno, Nevada, United States	2011-06-28
		Hazel Green, Alabama, United States	2011-06-28
		Foster City, California, United States	2011-06-28
		Poznan, Poland	2011-06-28
		Loughborough, United Kingdom	2011-06-28
		Taunton, United Kingdom	2011-06-28
		mendoza, Argentina	2011-06-28
		Lismore, Australia	2011-06-28
		Corning, New York, United States	2011-06-28
		Wilmington, Delaware, United States	2011-06-28
		Stony Brook, New York, United States	2011-06-28
		Roswell, Georgia, United States	2011-06-28
		Silver Spring, Maryland, United States	2011-06-28
		Mad Hts., Michigan, United States	2011-06-28
		Aalborg, Denmark	2011-06-29
		Grebenhain, Germany	2011-06-29
		Montgomery, Illinois, United States	2011-06-29
		South Amboy, New Jersey, United States	2011-06-29

Name	Location	Date
	Maplewood, Minnesota, United States	2011-06-29
	chicago, Illinois, United States	2011-06-29
	DALLAS, Texas, United States	2011-06-29
	El Santiscal, Arcos de la Frontera, Spain	2011-06-29
	mtlaurel, New Jersey, United States	2011-06-29
	Centreville, Maryland, United States	2011-06-29
	la mesa, California, United States	2011-06-29
	Faro, Portugal	2011-06-29
	Lords Valley, Pennsylvania, United States	2011-06-29
	Gorham, Maine, United States	2011-06-29
	Seattle, Washington, United States	2011-06-29
	Hillsborough, North Carolina, United States	2011-06-29
	Birmingham, Michigan, United States	2011-06-29
	Marion, Illinois, United States	2011-06-29
	Portland, Oregon, United States	2011-06-29
	Los Angeles, California, United States	2011-06-29
	El PSO, Texas, United States	2011-06-29
	San Diego, California, United States	2011-06-29
	Brighton, Massachusetts, United States	2011-06-30
	Miami, Florida, United States	2011-06-30
	Deerfield Beach, Florida, United States	2011-06-30
	Brighthouse, United Kingdom	2011-06-30
	Thess, Greece	2011-06-30
	Deerfield Beach, Florida, United States	2011-06-30
	Laurence Harbor, New Jersey, United States	2011-06-30
	tel aviv, Israel	2011-06-30
	Dresden, Germany	2011-06-30
	Old Bridge, New Jersey, United States	2011-06-30
torre annunziata(na), Iowa, United States	2011-06-30	



Name	Location	Date
	Pinellas Park, Florida, United States	2011-06-30
	Denver, Colorado, United States	2011-06-30
	juárez, Mexico	2011-06-30
	San Rafael, California, United States	2011-06-30
	San Rafael, California, United States	2011-06-30
	prescott valley, Arizona, United States	2011-06-30
	Rancho Cucamonga, California, United States	2011-06-30
	Denison, Texas, United States	2011-06-30
	Erie, Pennsylvania, United States	2011-06-30
	Distrito Federal, Mexico	2011-06-30
	Porto, Portugal	2011-07-01
	Dhaka, Bangladesh	2011-07-01
	new york, New York, United States	2011-07-01
	Dana Point, California, United States	2011-07-01
	Jackson, New Jersey, United States	2011-07-01
	Bogotá, Colombia	2011-07-01
	Frankston Heights, Australia	2011-07-02
	Lahaska, Pennsylvania, United States	2011-07-02
	Philadelphia, Pennsylvania, United States	2011-07-02
	KL, Malaysia	2011-07-03
	Miami, Florida, United States	2011-07-03
	Tucson, Arizona, United States	2011-07-03
	Clackamas, Oregon, United States	2011-07-03
	Mexico, Mexico	2011-07-03
	Whitehorse, Canada	2011-07-03
	Seixal, Portugal	2011-07-04
	Somerset, New Jersey, United States	2011-07-04
	Sandpoint, Idaho, United States	2011-07-04
	Neptune, New Jersey, United States	2011-07-04

Name	Location	Date
	Bogota, Colombia	2011-07-04
	marano sul panaro, Italy	2011-07-05
	Adelaide, Australia	2011-07-05
	Jeannette, Pennsylvania, United States	2011-07-05
	Alicante, Spain	2011-07-05
	Point Pleasant, New Jersey, United States	2011-07-05
	Wellington, Florida, United States	2011-07-05
	Greenbelt, Maryland, United States	2011-07-05
	San Jose, California, United States	2011-07-06
	telluride, Colorado, United States	2011-07-06
	Iowa City, Iowa, United States	2011-07-06
	Mount Joy, Pennsylvania, United States	2011-07-07
	VALREAS, France	2011-07-08
	Kingston, New York, United States	2011-07-08
	East Hanover, New Jersey, United States	2011-07-08
	Edmonton, Canada	2011-07-08
	New York, New York, United States	2011-07-09
	Jacksonville, Florida, United States	2011-07-09
	Hof, Germany	2011-07-10
	Lexington, Kentucky, United States	2011-07-11
	Rego Park, New York, United States	2011-07-11
	Gdynia, Poland	2011-07-12
	San Diego, California, United States	2011-07-12
	Scituate, Massachusetts, United States	2011-07-12
	Merritt Island, Florida, United States	2011-07-13
	Davenport, Iowa, United States	2011-07-15
	Phoenix, Arizona, United States	2011-07-15
	Inlet, New York, United States	2011-07-15
	Tucson, Arizona, United States	2011-07-16
	Vancouver, Canada	2011-07-16

Name	Location	Date
	Tucson, Arizona, United States	2011-07-17
	Glen Carbon, Illinois, United States	2011-07-23
	Philadelphia, Pennsylvania, United States	2011-07-25
	shelbyville, Tennessee, United States	2011-07-25
	Paris, France	2011-07-27
	Trenton, Canada	2011-07-27
	verona, Italy	2011-07-28
	Whitsett, North Carolina, United States	2011-07-28
	clarkdale, Arizona, United States	2011-07-29
	Vilanova del Camí, Spain	2011-07-31
	Medicina, Bologna, Italy	2011-07-31
	Old bridge, New Jersey, United States	2011-08-01
	Highland Park, New Jersey, United States	2011-08-03
	Highland Park, New Jersey, United States	2011-08-04
	Portland, Oregon, United States	2011-08-04
	browns mills, New Jersey, United States	2011-08-07
	south amboy, New Jersey, United States	2011-08-07
	Columbus, Ohio, United States	2011-08-08
	Hazel Park, Michigan, United States	2011-08-09
	Medford, Massachusetts, United States	2011-08-10
	Metuchen, New Jersey, United States	2011-08-10
	Wadsworth, Ohio, United States	2011-08-11
	Rye, New York, United States	2011-08-11
	Tecumseh, Missouri, United States	2011-08-11
	camden, New Jersey, United States	2011-08-11
	Eugene, Oregon, United States	2011-08-11
	Cincinnati, Ohio, United States	2011-08-11
	Radium Springs, New Mexico, United States	2011-08-11
	Holton, Indiana, United States	2011-08-11

Name	Location	Date
	CHARLESTON, West Virginia, United States	2011-08-11
	Columbus, Indiana, United States	2011-08-12
	Gloucester City, New Jersey, United States	2011-08-12
	Billerica, Massachusetts, United States	2011-08-12
	Lindenhurst, Illinois, United States	2011-08-12
	Feeding Hills, Massachusetts, United States	2011-08-12
	Bedminster, New Jersey, United States	2011-08-13
	Columbia, Maryland, United States	2011-08-13
	Norristown, Pennsylvania, United States	2011-08-13
	Ellicott City, Maryland, United States	2011-08-13
	Lexington, South Carolina, United States	2011-08-13
	Brandon, South Dakota, United States	2011-08-13
	Aveiro, Portugal	2011-08-14
	Oldsmar, Florida, United States	2011-08-14
	Wayne, New Jersey, United States	2011-08-14
	Old Hickory, Tennessee, United States	2011-08-17
	Teaneck, New Jersey, United States	2011-08-18
	Edison, New Jersey, United States	2011-08-18
	Morrice, Michigan, United States	2011-08-19
	Roseburg, Oregon, United States	2011-08-20
	Langhorne, Pennsylvania, United States	2011-08-24
	Ringwood, New Jersey, United States	2011-08-24
	Holiday, Florida, United States	2011-08-25
	East Brunswick, New Jersey, United States	2011-08-26
	Raritan, New Jersey, United States	2011-08-26
	Webster, Kentucky, United States	2011-08-26
	Hobart, Indiana, United States	2011-08-26
	New Brunswick, New Jersey, United States	2011-08-26

Name	Location	Date
	United States	2011-08-26
	Athens, Georgia, United States	2011-08-26
	Saline, Michigan, United States	2011-08-26
	palmdale, California, United States	2011-08-26
	Decatur, Texas, United States	2011-08-26
	Auburn, New York, United States	2011-08-26
	Long Branch, New Jersey, United States	2011-08-26
	Agawam, Massachusetts, United States	2011-08-26
	Morristown, Tennessee, United States	2011-08-26
	Webster, New York, United States	2011-08-26
	Woodland Park, New Jersey, United States	2011-08-26
	Los Angeles, California, United States	2011-08-26
	PEORIA, Arizona, United States	2011-08-26
	port colborne, California, United States	2011-08-26
	Staten Island, New York, United States	2011-08-27
	Branchburg, New Jersey, United States	2011-08-27
	Willoughby, Ohio, United States	2011-08-27
	Singapore, Singapore	2011-08-27
	Edison, New Jersey, United States	2011-08-27
	Thessaloniki, Greece	2011-08-27
	Edison, New Jersey, United States	2011-08-27
	williamsburg, Virginia, United States	2011-08-27
	Linden, New Jersey, United States	2011-08-27
	parish, New York, United States	2011-08-27
	Mahwah, New Jersey, United States	2011-08-27
	Middle River, Maryland, United States	2011-08-27
	Covina, California, United States	2011-08-27
	Flanders, New Jersey, United States	2011-08-27
	Hillsborough, New Jersey, United States	2011-08-27

Name	Location	Date
	Atlantic Beach, Florida, United States	2011-08-27
	Clermont, Florida, United States	2011-08-27
	edison, New Jersey, United States	2011-08-27
	Ridgewood, New York, United States	2011-08-27
	Bound Brook, New Jersey, United States	2011-08-27
	Phx, Arizona, United States	2011-08-27
	Bound Brook, New Jersey, United States	2011-08-27
	Bound Brook, New Jersey, United States	2011-08-27
	Kittery Point, Maine, United States	2011-08-27
	Cranston, Rhode Island, United States	2011-08-27
	Washington, District Of Columbia, United States	2011-08-27
	Fayetteville, North Carolina, United States	2011-08-27
	Dallas, Texas, United States	2011-08-27
	Chicago, Illinois, United States	2011-08-27
	Martinsville, Indiana, United States	2011-08-27
	Biloxi, Mississippi, United States	2011-08-27
	Clearwater, Florida, United States	2011-08-27
	ringwood, New Jersey, United States	2011-08-27
	frenchtown, New Jersey, United States	2011-08-27
	Pittsburgh, Pennsylvania, United States	2011-08-27
	Land O Lakes, Florida, United States	2011-08-27
	Seattle, Washington, United States	2011-08-27
	apple valley, California, United States	2011-08-27
	somerville, New Jersey, United States	2011-08-28
	Mosinee, Wisconsin, United States	2011-08-28
	SACRAMENTO, California, United States	2011-08-28
	Middletown, Maryland, United States	2011-08-28
	lincoln park, New Jersey, United States	2011-08-28
	Seattle, Washington, United States	2011-08-28

Name		Location	Date
		Metuchen, New Jersey, United States	2011-08-28
		Casével, Portugal	2011-08-28
		Strathmore, Canada	2011-08-28
		Glen Gardner, New Jersey, United States	2011-08-28
		Edison, New Jersey, United States	2011-08-28
		Davers, Massachusetts, United States	2011-08-28
		East Orange, New Jersey, United States	2011-08-28
		Leander, Texas, United States	2011-08-28
		Arlington, Texas, United States	2011-08-28
		United States	2011-08-28
		Hope, Idaho, United States	2011-08-28
		Chicopee, Massachusetts, United States	2011-08-28
		morgantown, West Virginia, United States	2011-08-28
		Chicago, Illinois, United States	2011-08-28
		baltimore, Maryland, United States	2011-08-28
		Fort Lee, New Jersey, United States	2011-08-28
		Somerset, New Jersey, United States	2011-08-29
		bridgewater, New Jersey, United States	2011-08-29
		highland park, New Jersey, United States	2011-08-29
		Bridgewater, New Jersey, United States	2011-08-29
		South Bound Brook, New Jersey, United States	2011-08-29
		LAS VEGAS, Nevada, United States	2011-08-29
		somewhere, New Jersey, United States	2011-08-29
		LAS VEGAS, Nevada, United States	2011-08-29
		Atlantic Beach, Florida, United States	2011-08-29
		United States	2011-08-29
		Berkeley, California, United States	2011-08-29
		frankyn, Wisconsin, United States	2011-08-29
		iselin, New Jersey, United States	2011-08-29

Name	Location	Date
	Silver Spring, Maryland, United States	2011-08-29
	port of spain, Trinidad and Tobago	2011-08-29
	LOWELL, Massachusetts, United States	2011-08-29
	Los Angeles, California, United States	2011-08-29
	London, Canada	2011-08-29
	a, Texas, United States	2011-08-29
	galloway, New Jersey, United States	2011-08-29
	Tucson, Arizona, United States	2011-08-29
	Los Angeles, California, United States	2011-08-30
	Rochester, New York, United States	2011-08-30
	Seattle, Washington, United States	2011-08-30
	Gainesville, Florida, United States	2011-08-30
	Columbus, Ohio, United States	2011-08-30
	London, United Kingdom	2011-08-30
	Raleigh, North Carolina, United States	2011-08-30
	Raleigh, North Carolina, United States	2011-08-30
	clarksville, Tennessee, United States	2011-08-30
	West Lafayette, Indiana, United States	2011-08-30
	glen haven, Colorado, United States	2011-08-30
	prescott, Arizona, United States	2011-08-30
	Laramie, Wyoming, United States	2011-08-30
	Cincinnati, Ohio, United States	2011-08-30
	Milwaukee, Wisconsin, United States	2011-08-30
	Santa Fe, New Mexico, United States	2011-08-30
	San Francisco, California, United States	2011-08-30
	valley stream, New York, United States	2011-08-30
	Woodbury, Minnesota, United States	2011-08-30
	Pt. Arena, California, United States	2011-08-30
	hurst, Texas, United States	2011-08-30
	Glendale, Arizona, United States	2011-08-30



Name	Location	Date
	Columbus, Ohio, United States	2011-08-30
	Dilworth, Minnesota, United States	2011-08-30
	Jacksonville, Florida, United States	2011-08-30
	Winter Park, Florida, United States	2011-08-30
	east rochester, New York, United States	2011-08-30
	Brooklyn, New York, United States	2011-08-30
	Winfield, Illinois, United States	2011-08-30
	new york, New York, United States	2011-08-30
	Suffern, New York, United States	2011-08-30
	METUCHEN, New Jersey, United States	2011-08-30
	Eureka, California, United States	2011-08-30
	Blomsterdalen, Norway	2011-08-31
	Compton, California, United States	2011-08-31
	Maysville, Kentucky, United States	2011-08-31
	Delhi, India	2011-08-31
	Trenton, Tennessee, United States	2011-08-31
	Petersburg, Virginia, United States	2011-08-31
	Louisville, Kentucky, United States	2011-08-31
	hoffman estates, Illinois, United States	2011-08-31
	Wichita Falls, Texas, United States	2011-08-31
	Indianapolis, Indiana, United States	2011-08-31
	Monroe, Michigan, United States	2011-08-31
	Southlake, Texas, United States	2011-08-31
	manteca, California, United States	2011-08-31
	Southington, Ohio, United States	2011-08-31
	Etobicoke, Canada	2011-08-31
	Midland, Texas, United States	2011-08-31
	Los Angeles, California, United States	2011-08-31
	Elmwood Park, New Jersey, United States	2011-08-31

Name	Location	Date
	Colorado Springs, Colorado, United States	2011-08-31
	Little Rock, Arkansas, United States	2011-08-31
	Phoenix, Arizona, United States	2011-08-31
	New City, New York, United States	2011-08-31
	Tampa, Florida, United States	2011-08-31
	eaton, Ohio, United States	2011-08-31
	Colorado Springs, Colorado, United States	2011-08-31
	portland, Connecticut, United States	2011-08-31
	Rock Hill, South Carolina, United States	2011-08-31
	toronto, California, United States	2011-08-31
	zanesville, Ohio, United States	2011-08-31
	North Wales, Pennsylvania, United States	2011-09-01
	Hendersonville, North Carolina, United States	2011-09-01
	endicott, New York, United States	2011-09-01
	New Castle, Delaware, United States	2011-09-01
	Katy, Texas, United States	2011-09-01
	North Plainfield, New Jersey, United States	2011-09-01
	Acton, Massachusetts, United States	2011-09-01
	Knox, Indiana, United States	2011-09-01
	Rigewood, New York, United States	2011-09-01
	Lexington, Texas, United States	2011-09-01
	greenville, South Carolina, United States	2011-09-01
	Pacoima, California, United States	2011-09-01
	Goodyear, Arizona, United States	2011-09-01
	Williamsville, New York, United States	2011-09-01
	Los Angeles, California, United States	2011-09-01
	Glendale, California, United States	2011-09-01
	San Bernardino, California, United States	2011-09-01

Name		Location	Date
		Orlando, Florida, United States	2011-09-01
		singapore, Singapore	2011-09-01
		cotati, California, United States	2011-09-01
		Show Low, Arizona, United States	2011-09-01
		Oakland, California, United States	2011-09-01
		Spencerport, New York, United States	2011-09-01
		Henderson, Nevada, United States	2011-09-01
		Long Island City, New York, United States	2011-09-01
		Helsinki, Finland	2011-09-02
		Greenville, Rhode Island, United States	2011-09-02
		barneveld, New York, United States	2011-09-02
		Raleigh, North Carolina, United States	2011-09-02
		Sanford, Florida, United States	2011-09-02
		Colton, Oregon, United States	2011-09-02
		Sea Bright, New Jersey, United States	2011-09-02
		Salida, Colorado, United States	2011-09-02
		Metuchen, New Jersey, United States	2011-09-02
		DeBary, Florida, United States	2011-09-02
		morristown, New Jersey, United States	2011-09-02
		GAVERE, Belgium	2011-09-02
		Ellwood City, Pennsylvania, United States	2011-09-02
		New Orleans, Louisiana, United States	2011-09-02
		Mechanicsburg, Pennsylvania, United States	2011-09-02
		devore, California, United States	2011-09-02
		Sanford, Florida, United States	2011-09-02
		Chula Vista, California, United States	2011-09-02
		Leawood, Kansas, United States	2011-09-02
		Pleasant Hill, California, United States	2011-09-02
		Rangleley, Maine, United States	2011-09-02

Name	Location	Date
	Memphis, Tennessee, United States	2011-09-02
	Bend, Oregon, United States	2011-09-02
	Belle Glade, Florida, United States	2011-09-02
	La Jolla, California, United States	2011-09-02
	Glencoe, Illinois, United States	2011-09-02
	Santa Cruz, California, United States	2011-09-02
	Glen Burnie, Maryland, United States	2011-09-02
	pacific palisades, California, United States	2011-09-02
	Nottingham, United Kingdom	2011-09-03
	Compton, California, United States	2011-09-03
	Tucson, Arizona, United States	2011-09-03
	portland, Oregon, United States	2011-09-03
	Farwell, Michigan, United States	2011-09-03
	Pasig City, Philippines	2011-09-03
	Isabela, Puerto Rico, United States	2011-09-03
	Hospitalet del Llobregat, Northern Mariana Islands, United States	2011-09-03
	Hazel Park, Michigan, United States	2011-09-03
	Delaware, United States Minor Outlying Islands	2011-09-03
	Denver, Colorado, United States	2011-09-03
	Dover, Delaware, United States	2011-09-03
	St. Louis, Missouri, United States	2011-09-03
	Desert Hot Springs, California, United States	2011-09-03
	Toronto, Canada	2011-09-03
	NY, New York, United States	2011-09-03
	philadelphia, Pennsylvania, United States	2011-09-03
jacksonville nc, North Carolina, United States	2011-09-03	
Schiller Park, Illinois, United States	2011-09-03	

Name	Location	Date
	Jackson, Georgia, United States	2011-09-03
	Colorado Springs, Colorado, United States	2011-09-03
	Boone, North Carolina, United States	2011-09-03
	Bellingham, Massachusetts, United States	2011-09-03
	bulverde, Texas, United States	2011-09-03
	Tavares, Florida, United States	2011-09-03
	La Crescenta, California, United States	2011-09-04
	Mumbai, India	2011-09-04
	Miami, Switzerland	2011-09-04
	Hawthorne, California, United States	2011-09-04
	Monticello, Iowa, United States	2011-09-04
	bahar ic caghaq, Malta	2011-09-04
	Albuquerque, New Mexico, United States	2011-09-04
	Eaton, Ohio, United States	2011-09-04
	belfast northern ireland, United Kingdom	2011-09-04
	Santa Cruz, California, United States	2011-09-04
	Mississauga, Canada	2011-09-04
	houston, Texas, United States	2011-09-04
	Alexandria, Virginia, United States	2011-09-04
	St. Louis, Missouri, United States	2011-09-04
	Brookshire, Texas, United States	2011-09-04
	Woodcliff Lake, New Jersey, United States	2011-09-04
	Chicago, Illinois, United States	2011-09-04
	Winthrop, New York, United States	2011-09-04
	29 Palms, California, United States	2011-09-04
	Sittard, Netherlands	2011-09-04
	ewing, New Jersey, United States	2011-09-04
	Phoenix, Arizona, United States	2011-09-04
	ewing, New Jersey, United States	2011-09-04

Name	Location	Date
	palestine, West Virginia, United States	2011-09-04
	Poughkeepsie, New York, United States	2011-09-04
	slidell, Louisiana, United States	2011-09-04
	torrington, Connecticut, United States	2011-09-04
	SEATTLE, Washington, United States	2011-09-04
	Richmond, Virginia, United States	2011-09-05
	Manchester, New Hampshire, United States	2011-09-05
	Manville, New Jersey, United States	2011-09-05
	Brunn am Gebirge, Austria	2011-09-05
	Woodbridge, New Jersey, United States	2011-09-05
	Bloomsbury, New Jersey, United States	2011-09-05
	Bound Brook, New Jersey, United States	2011-09-05
	Ibiza-Spain, Spain	2011-09-05
	BOUND BROOK, New Jersey, United States	2011-09-05
	edison, New Jersey, United States	2011-09-05
	Bridgewater, New Jersey, United States	2011-09-05
	East Brunswick, New Jersey, United States	2011-09-05
	Dunellen, New Jersey, United States	2011-09-05
	Somerset, New Jersey, United States	2011-09-05
	middlesex, New Jersey, United States	2011-09-05
	somerset, New Jersey, United States	2011-09-05
	Hillsborough, New Jersey, United States	2011-09-05
	Minneapolis, Minnesota, United States	2011-09-05
	Bound Brook, New Jersey, United States	2011-09-05
	Bridgewater, New Jersey, United States	2011-09-05
	Somerset, New Jersey, United States	2011-09-05
	Montclair, New Jersey, United States	2011-09-05
	Ossining, New York, United States	2011-09-05
	Santos, Brazil	2011-09-05

Name		Location	Date
		Hillsborough, New Jersey, United States	2011-09-05
		Lemont, Illinois, United States	2011-09-05
		Hawley, Pennsylvania, United States	2011-09-05
		valencia, Spain	2011-09-05
		Monmouth Jct, New Jersey, United States	2011-09-05
		Monmouth Junction, New Jersey, United States	2011-09-05
		Richfield, Minnesota, United States	2011-09-05
		Somewhere, Nebraska, United States	2011-09-05
		Toms River, New Jersey, United States	2011-09-05
		Middlesex, New Jersey, United States	2011-09-05
		Dunellen, New Jersey, United States	2011-09-05
		Frankfurt, Germany	2011-09-05
		Union, New Jersey, United States	2011-09-05
		Purcell, Oklahoma, United States	2011-09-05
		highland park, New Jersey, United States	2011-09-05
		Orange, California, United States	2011-09-05
		Portland, Oregon, United States	2011-09-05
		Allentown, Pennsylvania, United States	2011-09-05
		Hacienda Heights, California, United States	2011-09-05
		Braga, Indiana, United States	2011-09-06
		Cenusco sul naviglio, Italy	2011-09-06
		melksham, New York, United States	2011-09-06
		Lisbon, Portugal	2011-09-06
		North Hollywood, California, United States	2011-09-06
		bound brook, New Jersey, United States	2011-09-06
		Brijdorpe, Netherlands	2011-09-06
		Old Bridge, New Jersey, United States	2011-09-06
		Hoboken, New Jersey, United States	2011-09-06

Name	Location	Date
	cranbury, New Jersey, United States	2011-09-06
	Orange City, Florida, United States	2011-09-06
	manville, New Jersey, United States	2011-09-06
	Hillsborough, New Jersey, United States	2011-09-06
	Bound Brook, New Jersey, United States	2011-09-06
	Warren, New Jersey, United States	2011-09-06
	Cary, North Carolina, United States	2011-09-06
	Bridgewater, New Jersey, United States	2011-09-06
	new york city, New York, United States	2011-09-06
	Hillsborough, New Jersey, United States	2011-09-06
	Avellaneda, Argentina	2011-09-06
	Portland, Oregon, United States	2011-09-06
	Manville, New Jersey, United States	2011-09-06
	Concord, California, United States	2011-09-06
	Yuma, Arizona, United States	2011-09-06
	Somerset, New Jersey, United States	2011-09-06
	Somerset, New Hampshire, United States	2011-09-06
	St. Louis, Missouri, United States	2011-09-06
	Hopkins, Minnesota, United States	2011-09-06
	Warren, New Jersey, United States	2011-09-06
	calgary, Canada	2011-09-06
	Warren, New Jersey, United States	2011-09-06
	Iselin, New Jersey, United States	2011-09-06
	carlsbad, California, United States	2011-09-06
	Ichiharashi, Japan	2011-09-06
	Emmaus, Pennsylvania, United States	2011-09-06
	Aledo, Texas, United States	2011-09-06
	Istanbul, Turkey	2011-09-07
	chiba, Japan	2011-09-07
	igualada, Spain	2011-09-07



Name	Location	Date
	Chiba, Japan	2011-09-07
	camden, New Jersey, United States	2011-09-07
	Hamilton, New Jersey, United States	2011-09-07
	Belo Horizonte, Brazil	2011-09-07
	Cuyahoga Falls, Ohio, United States	2011-09-07
	Decatur, Illinois, United States	2011-09-07
	Sarasota, Florida, United States	2011-09-07
	PEORIA, Illinois, United States	2011-09-07
	Palo Alto, Netherlands	2011-09-07
	Karlsruhe, Germany	2011-09-07
	Bäretswil, Iowa, United States	2011-09-07
	cork, Ireland	2011-09-07
	Granger, Indiana, United States	2011-09-07
	Torino, Italy	2011-09-07
	Nooo, California, United States	2011-09-07
	Summit, New Jersey, United States	2011-09-07
	STAFFORD, Virginia, United States	2011-09-07
	Steuben, Maine, United States	2011-09-07
	BRAMPTON, Canada	2011-09-07
	Sherwood, Arkansas, United States	2011-09-07
	Long Beach, California, United States	2011-09-07
	George West, Texas, United States	2011-09-08
	Adelaide, Australia	2011-09-08
	Pelham, New Hampshire, United States	2011-09-08
	Boone, North Carolina, United States	2011-09-08
	BRONX, New York, United States	2011-09-08
	Maineville, Ohio, United States	2011-09-08
	Capitan, New Mexico, United States	2011-09-08
	Phoenix, Arizona, United States	2011-09-08
	chicago, Illinois, United States	2011-09-08

Name	Location	Date
	Valley Springs, California, United States	2011-09-08
	Parma Heights, Ohio, United States	2011-09-08
	McGregor, Minnesota, United States	2011-09-08
	Georgetown University, District Of Columbia, United States	2011-09-08
	Palatine,, Illinois, United States	2011-09-08
	waterford, Ireland	2011-09-08
	mt horeb, Wisconsin, United States	2011-09-08
	Crestwood, Illinois, United States	2011-09-08
	the woodlands, Texas, United States	2011-09-08
	Bradford, Pennsylvania, United States	2011-09-08
	Farmington Hills, Michigan, United States	2011-09-08
	Suffern, New York, United States	2011-09-08
	San Francisco, California, United States	2011-09-09
	austin, Texas, United States	2011-09-09
	bound brook, New Jersey, United States	2011-09-09
	Weehawken, New Jersey, United States	2011-09-09
	Millers, Maryland, United States	2011-09-09
	Columbus, Ohio, United States	2011-09-09
	Merrillville, Indiana, United States	2011-09-09
	Gillette, New Jersey, United States	2011-09-09
	Basel, Switzerland	2011-09-09
	123, Alabama, United States	2011-09-09
	Kent, Connecticut, United States	2011-09-09
	Pleasant Lake, Michigan, United States	2011-09-09
	Olympia, Washington, United States	2011-09-09
	Denver, Colorado, United States	2011-09-09
	Denver, Colorado, United States	2011-09-09
	Lexington, Kentucky, United States	2011-09-09
	Grand Junction, Michigan, United States	2011-09-09

Name	Location	Date
	Berkeley, California, United States	2011-09-09
	Montpelier, Vermont, United States	2011-09-10
	st louis, Missouri, United States	2011-09-10
	Los Angeles, California, United States	2011-09-10
	Denver, Colorado, United States	2011-09-10
	Edison, New Jersey, United States	2011-09-10
	silver spring, Maryland, United States	2011-09-10
	Abbeville, Georgia, United States	2011-09-10
	union city, California, United States	2011-09-10
	piscataway, New Jersey, United States	2011-09-10
	St. Paul, Minnesotā, United States	2011-09-10
	Redmond, Oregon, United States	2011-09-10
	Hillsborough, New Jersey, United States	2011-09-10
	ft myers, Florida, United States	2011-09-10
	South Pasadena, California, United States	2011-09-10
	Anaheim, California, United States	2011-09-10
	Visalia, California, United States	2011-09-10
	Houston, Texas, United States	2011-09-11
	Manville, New Jersey, United States	2011-09-11
	Columbus, Ohio, United States	2011-09-11
	nashville, Tennessee, United States	2011-09-11
	West Chicago, Illinois, United States	2011-09-11
	Peoria, Arizona, United States	2011-09-11
	Long Branch, New Jersey, United States	2011-09-11
	Beacon Falls, Connecticut, United States	2011-09-11
	Mankato, Minnesota, United States	2011-09-11
	Lawrence, Kansas, United States	2011-09-11
	Santa Cruz, California, United States	2011-09-11
	Louisville, Kentucky, United States	2011-09-11
	Milwaukee, Wisconsin, United States	2011-09-11

Name	Location	Date
	portland, Oregon, United States	2011-09-11
	Charleston, South Carolina, United States	2011-09-11
	Pensacola, Florida, United States	2011-09-11
	Riverside, Rhode Island, United States	2011-09-11
	Bronx, New York, New York, United States	2011-09-11
	NMB, South Carolina, United States	2011-09-11
	Fountain Hill, Pennsylvania, United States	2011-09-11
	Bristol, Virginia, United States	2011-09-11
	Goleta, California, United States	2011-09-11
	Omaha, Nebraska, United States	2011-09-11
	El Paso, Texas, United States	2011-09-11
	Seattle, Washington, United States	2011-09-11
	Hayward, California, United States	2011-09-11
	Nicosia, Cyprus	2011-09-11
	East Lansing, Michigan, United States	2011-09-11
	new york, New York, United States	2011-09-11
	Kissimmee, Florida, United States	2011-09-11
	Glenside, Pennsylvania, United States	2011-09-11
	holliday, Texas, United States	2011-09-11
	San Francisco, California, United States	2011-09-11
	Markham, Canada	2011-09-11
	North Armagh, Ireland	2011-09-11
	Hempstead, New York, United States	2011-09-11
	Brooklyn, New York, United States	2011-09-11
	Martins Ferry, Ohio, United States	2011-09-11
	san marcos, Texas, United States	2011-09-12
	Oklahoma City, Oklahoma, United States	2011-09-12
	Menlo Park, California, United States	2011-09-12
Washington, District Of Columbia, United States	2011-09-12	

Name	Location	Date
	Swansea, Massachusetts, United States	2011-09-12
	Los Angeles, United States Minor Outlying Islands	2011-09-12
	firestone, Colorado, United States	2011-09-12
	Willard, Ohio, United States	2011-09-12
	warminster, Pennsylvania, United States	2011-09-12
	bridgewater, New Jersey, United States	2011-09-12
	Caguas, Puerto Rico, United States	2011-09-12
	Noblesville, Indiana, United States	2011-09-12
	Riverview, Florida, United States	2011-09-12
	Tampere, Finland	2011-09-12
	stratford, New Jersey, United States	2011-09-12
	Perkins, Oklahoma, United States	2011-09-12
	Indianapolis, Indiana, United States	2011-09-12
	Melbourne, Florida, United States	2011-09-12
	Croton on Hudson, New York, United States	2011-09-12
	albuquerque, New Mexico, United States	2011-09-12
	morristown, New Jersey, United States	2011-09-12
	lafayette, Louisiana, United States	2011-09-12
	San Jose, California, United States	2011-09-12
	Los Angeles, California, United States	2011-09-13
	Auburndale, Massachusetts, United States	2011-09-13
	Towson, Maryland, United States	2011-09-13
	Austin, Texas, United States	2011-09-13
	Gilbert, Arizona, United States	2011-09-13
	Tyler, Texas, United States	2011-09-13
	Phoenix, Arizona, United States	2011-09-13
	phila, Pennsylvania, United States	2011-09-13
	Cincinnati, Ohio, United States	2011-09-13

Name	Location	Date
	fort valley, Virginia, United States	2011-09-13
	Louisville, Kentucky, United States	2011-09-13
	Cary, North Carolina, United States	2011-09-13
	Katy, Texas, United States	2011-09-13
	Cottage Grove, Minnesota, United States	2011-09-13
	Purvis, Mississippi, United States	2011-09-13
	southport, North Carolina, United States	2011-09-13
	Lombard, Illinois; United States	2011-09-13
	Apache Junction, Arizona, United States	2011-09-14
	atlanta, Georgia, United States	2011-09-14
	frisco, Texas, United States	2011-09-14
	Milano, Italy	2011-09-14
	New York, New York, United States	2011-09-14
	Winchester, Virginia, United States	2011-09-14
	Alpharetta, Georgia, United States	2011-09-14
	Riverton, New Jersey, United States	2011-09-15
	Austin, Texas, United States	2011-09-15
	north brunswick, New Jersey, United States	2011-09-15
	Palmerton, Pennsylvania, United States	2011-09-15
	UDINE, Alaska, United States	2011-09-15
	Brooklyn, New York, United States	2011-09-15
	Gaithersburg, Maryland, United States	2011-09-15
	Phoenix, Arizona, United States	2011-09-15
	Medford, Oregon, United States	2011-09-15
	Deer Park, Washington, United States	2011-09-15
	Chicago, Illinois, United States	2011-09-16
	Perth, Australia	2011-09-16
	Poughkeepsie, New York, United States	2011-09-16
	st.petersburg, Florida, United States	2011-09-16

Name	Location	Date
	Bowling Green, Ohio, United States	2011-09-16
	Phoenix, Arizona, United States	2011-09-16
	Great Neck, New York, United States	2011-09-16
	mahwah, New Jersey, United States	2011-09-16
	warminster, Pennsylvania, United States	2011-09-17
	Orrefors, Sweden	2011-09-17
	East Brunswick, New Jersey, United States	2011-09-17
	Limassol, Cyprus	2011-09-17
	Postville, Iowa, United States	2011-09-17
	Carolina Beach, North Carolina, United States	2011-09-17
	bordeaux FRANCE, France	2011-09-17
	Buffalo, New York, United States	2011-09-17
	EL CERRITO, California, United States	2011-09-17
	San Diego, California, United States	2011-09-17
	redding, California, United States	2011-09-17
	Wigan, United Kingdom	2011-09-17
	hyderabad, India	2011-09-18
	Memmingen, Delaware, United States	2011-09-18
	Enfield, United Kingdom	2011-09-18
	Alexandria, Virginia, United States	2011-09-18
	Los Angeles, California, United States	2011-09-18
	Foresthill, California, United States	2011-09-18
	Portland, Oregon, United States	2011-09-18
	Portland, Oregon, United States	2011-09-18
	Platteville, Wisconsin, United States	2011-09-18
	Berlin, Germany	2011-09-19
	Virginia Beach, Virginia, United States	2011-09-19
	Clearwater, Florida, United States	2011-09-19
	Marshfield, Wisconsin, United States	2011-09-19

Name	Location	Date
	Madison, Wisconsin, United States	2011-09-19
	Unionville, Connecticut, United States	2011-09-19
	aiken, South Carolina, United States	2011-09-19
	Christchurch, New Zealand	2011-09-20
	Rugby, United Kingdom	2011-09-20
	Grawn, Michigan, United States	2011-09-20
	CHESTER, Vermont, United States	2011-09-20
	Chesterfield, Missouri, United States	2011-09-20
	Holland, Michigan, United States	2011-09-20
	newport, Maine, United States	2011-09-20
	Johannesburg, South Africa	2011-09-20
	Miami, Florida, United States	2011-09-20
	galt, California, United States	2011-09-20
	Oak Creek, Wisconsin, United States	2011-09-20
	tama, Iowa, United States	2011-09-20
	Hatfield, Pennsylvania, United States	2011-09-21
	schirrhein, Florida, United States	2011-09-21
	Cortland, New York, United States	2011-09-21
	Oklahoma City, Oklahoma, United States	2011-09-21
	Worcester, Massachusetts, United States	2011-09-21
	Miami, Florida, United States	2011-09-21
	Swannanoa, North Carolina, United States	2011-09-21
	south Orange, New Jersey, United States	2011-09-22
	Fairmont, West Virginia, United States	2011-09-22
	washington, District Of Columbia, United States	2011-09-22
	North Branford, Connecticut, United States	2011-09-22
	Houghton Lake, Michigan, United States	2011-09-22
	Nashua, New Hampshire, United States	2011-09-22



Name	Location	Date
	denver, Colorado, United States	2011-09-22
	Rowland Heights, California, United States	2011-09-22
	A LAS VEGAS, Nevada, United States	2011-09-22
	Bronx, New York, United States	2011-09-22
	reno, Nevada, United States	2011-09-22
	goleta, California, United States	2011-09-22
	Mesa, Arizona, United States	2011-09-22
	West Covina, California, United States	2011-09-22
	Stayton, Oregon, United States	2011-09-22
	Charlotte, North Carolina, United States	2011-09-23
	Tomball, Texas, United States	2011-09-23
	Richboro, Pennsylvania, United States	2011-09-23
	Colorado Springs, Colorado, United States	2011-09-23
	citrus springs, Florida, United States	2011-09-23
	Lansdowne, Pennsylvania, United States	2011-09-23
	Dover, Delaware, United States	2011-09-23
	Sacramento, California, United States	2011-09-23
	Wheaton, Illinois, United States	2011-09-23
	Spring, Texas, United States	2011-09-23
	Imperial Beach, California, United States	2011-09-23
	Cedar Rapids, Iowa, United States	2011-09-24
	burbank Ca., Alabama, United States	2011-09-24
	Plano, Texas, United States	2011-09-24
	Stevenage, United Kingdom	2011-09-24
	North Miami Beach, Florida, United States	2011-09-24
	seattle, Washington, United States	2011-09-24
	arlington, Texas, United States	2011-09-24
	Keene, New Hampshire, United States	2011-09-24

Name	Location	Date
	New York, New York, United States	2011-09-24
	Lynnwood, Washington, United States	2011-09-24
	Beloit, Wisconsin, United States	2011-09-24
	San Pedro, California, United States	2011-09-24
	Margao, Indiana, United States	2011-09-24
	Edison, New Jersey, United States	2011-10-11
	Seattle, Washington, United States	2011-10-11
	philadelphia, Pennsylvania, United States	2011-10-11
	Fort Myers, Florida, United States	2011-10-12
	antwerp, Belgium	2011-10-12
	Topanga, California, United States	2011-10-12
	chicago, Illinois, United States	2011-10-12
	new york, New York, United States	2011-10-12
	New Haven, Connecticut, United States	2011-10-12
	Miami, Florida, United States	2011-10-12
	telluride, Colorado, United States	2011-10-12
	Chicago, Illinois, United States	2011-10-12
	Phoenix, Arizona, United States	2011-10-12
	reading, Pennsylvania, United States	2011-10-12
	Jamestown, New York, United States	2011-10-12
	Garfield Heights, Ohio, United States	2011-10-12
	singapore, Singapore	2011-10-13
	Seattle, Washington, United States	2011-10-13
	Belle Mead, New Jersey, United States	2011-10-13
	Fayetteville, North Carolina, United States	2011-10-13
	North Park, Italy	2011-10-13
	Monroe, North Carolina, United States	2011-10-13
	Buffalo, New York, United States	2011-10-13
	Aloha, Oregon, United States	2011-10-13

Name	Location	Date
	Yelm, Washington, United States	2011-10-14
	Knoxville, Tennessee, United States	2011-10-14
	Zanesville, Ohio, United States	2011-10-14
	New York, New York, United States	2011-10-15
	Desboro, Ontario, Canada	2011-10-15
	Biloxi, Mississippi, United States	2011-10-15
	mahebourg, Mauritius	2011-10-15
	Riverside, Rhode Island, United States	2011-10-16
	Vidor, Texas, United States	2011-10-16
	Oradell, New Jersey, United States	2011-10-16
	houston, Texas, United States	2011-10-16
	Mesa, Arizona, United States	2011-10-16
	Valencia, California, United States	2011-10-17
	Edison, New Jersey, United States	2011-10-17
	Alexandria, Virginia, United States	2011-10-17
	Chicago, Illinois, United States	2011-10-18
	Ferndale, Michigan, United States	2011-10-19
	Sparta, Tennessee, United States	2011-10-19
	Reno, Nevada, United States	2011-10-19
	south ozone park, New York, United States	2011-10-19
	Stephenville, Texas, United States	2011-10-19
	Boronia, California, United States	2011-10-19
	Spring City, Pennsylvania, United States	2011-10-20
	pittsburgh, Pennsylvania, United States	2011-10-20
	Bronx, New York, United States	2011-10-20
	Orange, California, United States	2011-10-20
	Chevy Chase, Maryland, United States	2011-10-20
	Batavia, Ohio, United States	2011-10-20
	Jamesport, New York, United States	2011-10-20

Name	Location	Date
	Missoula, Montana, United States	2011-10-20
	Taree, Australia	2011-10-20
	Manassas, Virginia, United States	2011-10-20
	Indianapolis, Indiana, United States	2011-10-20
	Dundas, Canada	2011-10-20
	fairfax, Virginia, United States	2011-10-20
	Indianapolis, Virgin Islands, U.S.	2011-10-20
	valencia, Washington, United States	2011-10-21
n	port pirie, Australia	2011-10-21
	Helsinki, Finland	2011-10-21
	North Brunswick, New Jersey, United States	2011-10-21
	San Francisco, California, United States	2011-10-22
	Houston, Texas, United States	2011-10-22
	Boulder, Colorado, United States	2011-10-22
	Iowa City, Iowa, United States	2011-10-23
	Muncie, Indiana, United States	2011-10-23
	Leburn, Kentucky, United States	2011-10-23
	Bourbonnais, Illinois, United States	2011-10-23
a	Tucson, Arizona, United States	2011-10-23
	New York, New York, United States	2011-10-23
	Charlotte, North Carolina, United States	2011-10-23
	Eugene, Oregon, United States	2011-10-23
	Ulen, Minnesota, United States	2011-10-23
	rochester, New York, United States	2011-10-23
	Normal, Illinois, United States	2011-10-23
	Colorado Springs, Colorado, United States	2011-10-23
	NY, New York, United States	2011-10-24
	Edinboro, Pennsylvania, United States	2011-10-24
	Dover, New Jersey, United States	2011-10-24

Name	Location	Date
	Los Angeles, California, United States	2011-10-24
	Riverside, Illinois, United States	2011-10-25
	Ann Arbor, Michigan, United States	2011-10-25
	homestead, Florida, United States	2011-10-25
	Niskayuna, New York, United States	2011-10-25
	Greensburg, Indiana, United States	2011-10-25
	Beaverton, Oregon, United States	2011-10-25
	lewisburg, Pennsylvania, United States	2011-10-25
	Highland Park, New Jersey, United States	2011-10-26
	Ljubljana, Slovenia	2011-10-26
	Seguin, Texas, United States	2011-10-26
	Montebello, California, United States	2011-10-26
	englewood, New Jersey, United States	2011-10-26
	Williamsburg, Virginia, United States	2011-10-26
	Vero Beach, Florida, United States	2011-10-26
	Staten Island, New York, United States	2011-10-26
	Rimini, Italy	2011-10-26
	Branchburg, New Jersey, United States	2011-10-26
	Neshanic Station, New Jersey, United States	2011-10-27
	lynn, Massachusetts, United States	2011-10-27
	Olney, Maryland, United States	2011-10-27
	Womelsdorf, Pennsylvania, United States	2011-10-27
	Branchburg, New Jersey, United States	2011-10-27
	Belgrade, Montana, United States	2011-10-27
	Lakewood, Colorado, United States	2011-10-28
	Miami, Florida, United States	2011-10-28
	Stafford Springs, Connecticut, United States	2011-10-28
	Charleston, South Carolina, United States	2011-10-28
	Arcadia, California, United States	2011-10-28

Name	Location	Date
	East Brunswick, New Jersey, United States	2011-10-29
	Clearwater, Florida, United States	2011-10-29
	Aberdeen, Washington, United States	2011-10-29
	Athens, New York, United States	2011-10-29
	alleur, Belgium	2011-10-29
	Bronx, New York, United States	2011-10-29
	fort bragg, California, United States	2011-10-29
	Long Island City, New York, United States	2011-10-29
	Victoria, Canada	2011-10-29
	Colorado Springs, Colorado, United States	2011-10-29
	La Selva Beach, California, United States	2011-10-29
	Crystal Lake, Illinois, United States	2011-10-30
	hay el hamadia, Algeria	2011-10-30
	Manhattan, New York, United States	2011-10-30
	Toronto, Canada	2011-10-30
	Tucker, Georgia, United States	2011-10-30
	Baltimore, Maryland, United States	2011-10-31
	Kimberly, Alabama, United States	2011-11-01
	g renkum, Netherlands	2011-11-01
	Clawson, Michigan, United States	2011-11-01
	'Munster, Indiana, United States	2011-11-02
	Victoria, Canada	2011-11-02
	antioch, California, United States	2011-11-02
	Ringoos, New Jersey, United States	2011-11-02
	Woodstock, Georgia, United States	2011-11-03
	Focsani, Romania	2011-11-04
	Focsani, Romania	2011-11-04
	focsani, Romania	2011-11-04
	Bronx, Spain	2011-11-04

Name	Location	Date
	Loudonville, New York, United States	2011-11-04
	Brasov, Romania	2011-11-04
	Louisville, Kentucky, United States	2011-11-04
	Fayetteville, North Carolina, United States	2011-11-05
	Santa Ana, California, United States	2011-11-05
	Merrimack, New Hampshire, United States	2011-11-05
	Seattle, Washington, United States	2011-11-05
	Omaha, Nebraska, United States	2011-11-05
	Tucson, Arizona, United States	2011-11-05
	Memphis, Tennessee, United States	2011-11-05
	Buffalo, New York, United States	2011-11-05
	Boston, Massachusetts, United States	2011-11-05
	Kansas City, Missouri, United States	2011-11-05
	Peking, Idaho, United States	2011-11-05
	Memphis, Tennessee, United States	2011-11-05
	Parker, Colorado, United States	2011-11-05
	Montgomery, Alabama, United States	2011-11-05
	Valparaiso, Indiana, United States	2011-11-06
	Boulder, Colorado, United States	2011-11-06
	staten island, New York, United States	2011-11-07
	Cedar Hill, Texas, United States	2011-11-07
	Orlando, Florida, United States	2011-11-07
	Lake Wales, Florida, United States	2011-11-08
	New York, New York, United States	2011-11-08
	Rochester, New York, United States	2011-11-08
	england, United Kingdom	2011-11-08
	Mississauga, Canada	2011-11-08
	Salt Spring Island, Canada	2011-11-09
	Dunedin, New Zealand	2011-11-10

Name	Location	Date
	Stratford, Canada	2011-11-10
	avondale, Arizona, United States	2011-11-10
	carlsbad, California, United States	2011-11-10
	towanda, Illinois, United States	2011-11-10
	germantown, Maryland, United States	2011-11-10
	Sheboygan, Wisconsin, United States	2011-11-10
	Old Bridge, New Jersey, United States	2011-11-11
	Carmichael, California, United States	2011-11-11
	Denver, Germany	2011-11-11
	Kimberly, Wisconsin, United States	2011-11-12
	warren, New Jersey, United States	2011-11-12
	Manchester, United Kingdom	2011-11-13
	colorado springs, Colorado, United States	2011-11-13
	erdmannh., Germany	2011-11-13
	macungie, Afghanistan	2011-11-13
	Firgas, Spain	2011-11-14
	fort lauderdale, Florida, United States	2011-11-14
	kronach, Germany	2011-11-14
	Sherman Oaks, California, United States	2011-11-14
	Brisbane, Australia	2011-11-14
	Key Largo, Florida, United States	2011-11-15
	belleville, Michigan, United States	2011-11-15
	Fort Myers, Florida, United States	2011-11-15
	Portage, Michigan, United States	2011-11-15
	Walnut Creek, California, United States	2011-11-15
	Anchorage, Alaska, United States	2011-11-16
	Evans, Georgia, United States	2011-11-16
	Beverly Hills, California, United States	2011-11-16
	Wisconsin Rapids, Wisconsin, United States	2011-11-16



Name	Location	Date
	Oxford, Mississippi, United States	2011-11-17
	Boston, Massachusetts, United States	2011-11-17
	Alvarado, Texas, United States	2011-11-17
	Mantorville, Minnesota, United States	2011-11-18
	Providence, Rhode Island, United States	2011-11-18
	Huntington, West Virginia, United States	2011-11-19
	West New York, Afghanistan	2011-11-19
	Washington, District Of Columbia, United States	2011-11-19
	El Paso, Texas, United States	2011-11-21
	WESTMINSTER, Colorado, United States	2011-11-21
	Berkley, California, United States	2011-11-21
	Cambridge, Massachusetts, United States	2011-11-21
	Baton Rouge, Louisiana, United States	2011-11-21
	Phoenix, Arizona, United States	2011-11-21
	Emory, Texas, United States	2011-11-21
	Milwaukee, Wisconsin, United States	2011-11-22
	Miami, Florida, United States	2011-11-22
	Colorado Springs, Colorado, United States	2011-11-22
	Valparaiso, Indiana, United States	2011-11-22
	MARION, Indiana, United States	2011-11-22
	Mareeba, Australia	2011-11-22
	San Francisco, California, United States	2011-11-22
	Cleveland, Ohio, United States	2011-11-22
	Allentown, Pennsylvania, United States	2011-11-22
	Clearwater, Florida, United States	2011-11-22
	South Gate, California, United States	2011-11-22
	Philadelphia, Pennsylvania, United States	2011-11-22
	Lexington, South Carolina, United States	2011-11-22
	z Bronx, New York, United States	2011-11-22

Name	Location	Date
	St. Paul, Minnesota, United States	2011-11-22
	Marshville, North Carolina, United States	2011-11-22
	Madison, Alabama, United States	2011-11-22
	Louisville, Kentucky, United States	2011-11-22
	Albuquerque, New Mexico, United States	2011-11-22
	CHADDS FORD, Pennsylvania, United States	2011-11-22
	Omaha, Nebraska, United States	2011-11-22
	Roanoke, Virginia, United States	2011-11-22
	portland, Oregon, United States	2011-11-22
	Miami, Florida, United States	2011-11-22
	Portland, Oregon, United States	2011-11-23
	chino hills, California, United States	2011-11-23
	Rockiin, California, United States	2011-11-23
	Wallingford, United Kingdom	2011-11-23
	edison , New Jersey, United States	2011-11-23
	Washington, District Of Columbia, United States	2011-11-23
	East Brunswick, New Jersey, United States	2011-11-23
	East Brunswick, New Jersey, United States	2011-11-23
	Manville, New Jersey, United States	2011-11-23
	new brunswick, New Jersey, United States	2011-11-23
	east brunswick, New Jersey, United States	2011-11-23
	east brunswick, New Jersey, United States	2011-11-23
	neptune, New Jersey, United States	2011-11-23
	Langley,BC, Canada	2011-11-24
santa Monica, California, United States	2011-11-24	
Oakdale, Minnesota, United States	2011-11-24	
Palm Coast, Florida, United States	2011-11-24	

Name		Location	Date
		Statesboro, Georgia, United States	2011-11-24
		Bern, Switzerland	2011-11-24
		marlborough, Massachusetts, United States	2011-11-24
		palm bay, Florida, United States	2011-11-25
		Irvine, California, United States	2011-11-25
		Norwich, New York, United States	2011-11-26
		Edison, New Jersey, United States	2011-11-26
		Arcata, California, United States	2011-11-26
		Newport News, Virginia, United States	2011-11-26
		Seattle, Washington, United States	2011-11-26
		Ulm, Delaware, United States	2011-11-27
		S.C.S., Michigan, United States	2011-11-27
		phoenix, Arizona, United States	2011-11-27
		Aguadilla, Puerto Rico	2011-11-27
		Gtr Manchester, United Kingdom	2011-11-27
		Santa Barbara, California, United States	2011-11-27
		Newman, California, United States	2011-11-27
		Longmont, Colorado, United States	2011-11-28
		Rehoboth, Massachusetts, United States	2011-11-29
		Mamou, Louisiana, United States	2011-11-30
		FREDERICK, Maryland, United States	2011-11-30
		Fort Hood, Texas, United States	2011-11-30
		Bronxville, New York, United States	2011-12-01
		stonington, Connecticut, United States	2011-12-01
		nashua, New Hampshire, United States	2011-12-01
		San Diego, California, United States	2011-12-02
		Jersey City, New Jersey, United States	2011-12-02
		Orlando, Florida, United States	2011-12-02
		Tinley Park, Illinois, United States	2011-12-02

Name	Location	Date
	Antioch, California, United States	2011-12-03
	Cottonwood, Arizona, United States	2011-12-04
	NY, New York, United States	2011-12-04
	Boston, Massachusetts, United States	2011-12-04
	Los Angeles, California, United States	2011-12-05
	Bellevue, Washington, United States	2011-12-05
	Istanbul, Turkey	2011-12-05
	Hastings, Nebraska, United States	2011-12-05
	Wilmington, North Carolina, United States	2011-12-05
	huntington beach, California, United States	2011-12-06
	Carmel, Indiana, United States	2011-12-06
	Charlotte, North Carolina, United States	2011-12-06
	Valley Center, California, United States	2011-12-06
	Sydney, Australia	2011-12-06
	Indianapolis, Indiana, United States	2011-12-06
	Melbourne, Australia	2011-12-06
	Kissimmee, Florida, United States	2011-12-06
	BRIDGEWATER, New Jersey, United States	2011-12-07
	Bound Brook, New Jersey, United States	2011-12-07
	San Diego, California, United States	2011-12-07
	glen Rock, New Jersey, United States	2011-12-07
	Piscataway, New Jersey, United States	2011-12-07
	Fanwood, New Jersey, United States	2011-12-07
	Kent, Washington, United States	2011-12-07
	Portland, Oregon, United States	2011-12-07
	Raritan, New Jersey, United States	2011-12-07
	westport, Washington, United States	2011-12-07
	Seymour, Tennessee, United States	2011-12-07
	Tulsa, Oklahoma, United States	2011-12-08

Name	Location	Date
	Manchester, Massachusetts, United States	2011-12-08
a	huntington beach, California, United States	2011-12-08
	Little egg harbor, New Jersey, United States	2011-12-08
	dahlonega, Georgia, United States	2011-12-08
	Hannibal, New York, United States	2011-12-08
	Lafayette, Colorado, United States	2011-12-08
	indianapolis, Indiana, United States	2011-12-08
	Emerson, Georgia, United States	2011-12-09
	Evansville, Indiana, United States	2011-12-09
	Seekonk, Massachusetts, United States	2011-12-09
	Greenfield, Massachusetts, United States	2011-12-10
	Hong Kong, Hong Kong	2011-12-10
	maynard, Massachusetts, United States	2011-12-10
	Lakewood, Ohio, United States	2011-12-11
	arcadia, California, United States	2011-12-11
	green river, Wyoming, United States	2011-12-11
	rancho cucamonga, California, United States	2011-12-11
	Ferndale, Michigan, United States	2011-12-12
	Murray, Utah, United States	2011-12-12
	Manhattan, New York City, New York, United States	2011-12-12
	cherry hill, New Jersey, United States	2011-12-13
	Van Nuys, California, United States	2011-12-13
	Honolulu, Hawaii, United States	2011-12-13
	St Catharines, Canada	2011-12-14
	Long Beach, California, United States	2011-12-14
	Ormond Beach, Florida, United States	2011-12-14
	bellevue, Nebraska, United States	2011-12-14

Name	Location	Date
	Doral, Florida, United States	2011-12-14
	Brooklyn, New York, United States	2011-12-14
	East Brunswick, New Jersey, United States	2011-12-14
	point pleasant, New Jersey, United States	2011-12-14
	houston, Texas, United States	2011-12-14
	houston, Texas, United States	2011-12-14
	seven hills, Ohio, United States	2011-12-15
	Chicago, Illinois, United States	2011-12-15
	south amboy, New Jersey, United States	2011-12-15
ds	Lexington, Kentucky, United States	2011-12-15
	Andover, New Jersey, United States	2011-12-15
	louisville, Kentucky, United States	2011-12-15
	Arlington, Texas, United States	2011-12-15
	Virginia Beach, Virginia, United States	2011-12-16
	Pottstown, Pennsylvania, United States	2011-12-16
	DeKalb, Illinois, United States	2011-12-17
	Coimbra, Alabama, United States	2011-12-18
	Honolulu, Hawaii, United States	2011-12-18
	Blaenau Ffestiniog, United Kingdom	2011-12-18
	Glen Gardner, New Jersey, United States	2011-12-18
	Phoenix, Arizona, United States	2011-12-18
	Boston, Massachusetts, United States	2011-12-18
	Clarks Summit, Pennsylvania, United States	2011-12-19
	Rochester, Minnesota, United States	2011-12-19
	Bexley, Ohio, United States	2011-12-19
	Clarkston, Washington, United States	2011-12-20
	Kittredge, Colorado, United States	2011-12-20
	Salzgitter, Germany	2011-12-20
	Lansing, Michigan, United States	2011-12-20

Name	Location	Date
	Firebaugh, California, United States	2011-12-20
	sf, California, United States	2011-12-21
	Highland Park, New Jersey, United States	2011-12-22
	Somerset, United Kingdom	2011-12-22
	glendale, California, United States	2011-12-22
	Eureka, California, United States	2011-12-22
	Manchester, New Hampshire, United States	2011-12-22
	Beloit, Wisconsin, United States	2011-12-22
	Bristol, Virginia, United States	2011-12-22
	The Plains, Ohio, United States	2011-12-22
	Cobb Island, Maryland, United States	2011-12-22
	Kennedyville, Maryland, United States	2011-12-22
	Boston, Massachusetts, United States	2011-12-22
	El Paso, Texas, United States	2011-12-23
	Sunset Beach, California, United States	2011-12-23
	New York, New York, United States	2011-12-23
	Falls Church, Virginia, United States	2011-12-24
	Wylie, Texas, United States	2011-12-24
	Cesky Krumlov, Armed Forces Pacific, United States	2011-12-24
	Arvada, Colorado, United States	2011-12-24
	Edmond, Oklahoma, United States	2011-12-24
	Lakeland, Florida, United States	2011-12-24
	buenos aires, Arkansas, United States	2011-12-25
	Roslyn Heights, New York, United States	2011-12-25
	Los Angeles, California, United States	2011-12-27
	Glasshouse Mountains, Australia	2011-12-27
	Granby, Massachusetts, United States	2011-12-27
	Calgary, California, United States	2011-12-27
	Tempe, Arizona, United States	2011-12-27

Name	Location	Date
	Chesterfield, Indiana, United States	2011-12-27
	Rockford, Illinois, United States	2011-12-28
	atlanta, Georgia, United States	2011-12-28
	Brooklyn, New York, United States	2011-12-29
	Melbourne, Australia	2011-12-29
	Denton, Maryland, United States	2011-12-29
	OFalon, Illinois, United States	2011-12-29
	Philadelphia, Pennsylvania, United States	2011-12-30
	Lahaina, Hawaii, United States	2011-12-31
	--, New York, United States	2011-12-31
	Buffalo Grove, Illinois, United States	2011-12-31
	Charleston, South Carolina, United States	2011-12-31
	Hamburg, Delaware, United States	2011-12-31
	London, United Kingdom	2011-12-31
	us, California, United States	2012-01-01
	Las Vegas, Nevada, United States	2012-01-01
	Las Vegas, Nevada, United States	2012-01-01
	Nottingham, United Kingdom	2012-01-01
	Coquitlam, Canada, Alabama, United States	2012-01-02
	New Paltz, New York, United States	2012-01-03
	Salt Lake City, Utah, United States	2012-01-03
	Austin, Texas, United States	2012-01-04
	SHERWOOD, Oregon, United States	2012-01-05
	Prague, Czech Republic	2012-01-06
	Geneva, Illinois, United States	2012-01-06
	Virginia Beach, Afghanistan	2012-01-06
	Kokomo, Indiana, United States	2012-01-06
	Port St. Lucie, Florida, United States	2012-01-06
	brownstown, Michigan, United States	2012-01-06



Name	Location	Date
	Pasay, Philippines	2012-01-07
	Port Hueneme, California, United States	2012-01-07
	El Paso, Texas, United States	2012-01-07
	Miami, Florida, United States	2012-01-07
	Saginaw, Michigan, United States	2012-01-07
	Erdmannh., Germany	2012-01-07
	Klamath falls, Oregon, United States	2012-01-07
	Medford, Oregon, United States	2012-01-07
	Akureyri, Iceland	2012-01-08
	Calhoun, Georgia, United States	2012-01-08
	white haven, Pennsylvania, United States	2012-01-08
	Newark, New Jersey, United States	2012-01-08
	Harbor Springs, Michigan, United States	2012-01-08
	84106, Utah, United States	2012-01-08
	Clinton, Mississippi, United States	2012-01-09
	Arvin, California, United States	2012-01-09
	Bullhead City, Arizona, United States	2012-01-09
	Buzet, Croatia	2012-01-09
	Las Vegas, New Mexico, United States	2012-01-09
	Massillon, Ohio, United States	2012-01-10
	Raleigh, North Carolina, United States	2012-01-10
	Wausau, Wisconsin, United States	2012-01-11
	Orchard Park, New York, United States	2012-01-11
	Pittsford, New York, United States	2012-01-11
	Tallahassee, Florida, United States	2012-01-12
	Austin, Texas, United States	2012-01-13
	Lake Orion, Michigan, United States	2012-01-13
	Olympia, Washington, United States	2012-01-13
	Gelsenkirchen, Germany	2012-01-13
	Tallahassee, Florida, United States	2012-01-13

Name	Location	Date
	GLASGOW, United Kingdom	2012-01-14
	Burton, Michigan, United States	2012-01-15
	lake forest park, Washington, United States	2012-01-15
	Glide, Oregon, United States	2012-01-15
	Rancho Cucamonga, California, United States	2012-01-16
	Augusta, Georgia, United States	2012-01-16
	Cinnaminson, New Jersey, United States	2012-01-17
	Mestre - VE, Italy	2012-01-17
	Monmouth Junction, New Jersey, United States	2012-01-17
	Winona, Minnesota, United States	2012-01-18
	Everet, Washington, United States	2012-01-18
	Coatesville, Pennsylvania, United States	2012-01-18
	Brick, New Jersey, United States	2012-01-18
	TAMPA, Florida, United States	2012-01-19
	Riverside, New Jersey, United States	2012-01-19
	Aqtau, Kazakhstan	2012-01-20
	Brooklyn, New York, United States	2012-01-20
	cherry hill, New Jersey, United States	2012-01-21
	Fishers, Indiana, United States	2012-01-22
	Fitchburg, Wisconsin, United States	2012-01-22
	Whitewater, Wisconsin, United States	2012-01-22
	Melbourne, Australia	2012-01-23
	Crownsville, Maryland, United States	2012-01-24
	Red Bank, New Jersey, United States	2012-01-25
	Cranbury, New Jersey, United States	2012-01-25
	Fredericksburg, Virginia, United States	2012-01-26
	Lindenhurst, New York, United States	2012-01-27
	CEDAR RAPIDS, Iowa, United States	2012-01-28

Name	Location	Date
[REDACTED]	Oakland, California, United States	2012-01-28
	Pittsburg, Kansas, United States	2012-01-28
	Santa Rosa, California	2012-01-29
	Cottage Grove, Minnesota, United States	2012-01-29
	Wheaton, Illinois, United States	2012-01-30
	Los Angeles, California, United States	2012-01-30
	hamburg, Germany	2012-01-30
	Keller, Texas, United States	2012-01-31
	miami, Florida, United States	2012-01-31
	Indianapolis, Indiana, United States	2012-01-31
	Naperville, Illinois, United States	2012-01-31
	Kokomo, Indiana	2012-01-31
	Cheboygan, Michigan, United States	2012-01-31
	Madeira Beach, Florida, United States	2012-02-01
	Clinton, New Jersey	2012-02-01
	N/A, Virginia, United States	2012-02-01
	South Bound Brook, New Jersey, United States	2012-02-01
	Jacksonville, Florida	2012-02-01
	Lindsborg, Kansas	2012-02-02
	New Brunswick, New Jersey, United States	2012-02-02
	goshen, Indiana, United States	2012-02-03
	Orono, Maine, United States	2012-02-03
	beauparc,navan, Ireland	2012-02-03
	Glenmont, New York, United States	2012-02-03
	Bolingbrook, Illinois	2012-02-04
	Wyoming, Michigan, United States	2012-02-04
	Monroeville, Ohio	2012-02-04
	St.Leon-Rot, Delaware, United States	2012-02-04

Name	Location	Date
	Wuustwezel, Belgium	2012-02-04
	Anderson, Indiana	2012-02-04
	matawan, New Jersey	2012-02-05
	East Setauket, New York	2012-02-05
	Prescott, Arizona, United States	2012-02-05
	Port Richey, Florida, United States	2012-02-05
	West Harrison, New York, United States	2012-02-05
	Houston, Texas, United States	2012-02-06
	Medford, Oregon, United States	2012-02-06
	North Bend, Washington, United States	2012-02-06
	Middletown, Delaware, United States	2012-02-07
	ithaca, New York, United States	2012-02-07
	San Jose, California, United States	2012-02-07
	jackson, Mississippi	2012-02-07
	san diego, California	2012-02-08
	Arvada, Colorado, United States	2012-02-08
	Lanham, Maryland, United States	2012-02-08
	Verona, New Jersey, United States	2012-02-08
	Gainesville, Florida, United States	2012-02-08
	Tucson, Arizona, United States	2012-02-09
	Santa Clarita, California, United States	2012-02-09
	Sarasota, Florida, United States	2012-02-09
	Willits, California, United States	2012-02-09
	Orlando, Florida, United States	2012-02-09
	Beaverton, Oregon, United States	2012-02-09
	St Louis, Missouri, United States	2012-02-10
	Dothan, Alabama, United States	2012-02-10
	Brunswick, New York, United States	2012-02-10
	Marco Island, Florida	2012-02-12
	New York, New York	2012-02-12

Name	Location	Date
	KISSIMMEE, Florida, United States	2012-02-12
	Denver, Colorado	2012-02-12
	Granton, Wisconsin, United States	2012-02-12
	Santa Fe, New Mexico, United States	2012-02-12
	Eagle, Colorado, United States	2012-02-12
	wildomar, California, United States	2012-02-12
	Monson, Massachusetts, United States	2012-02-12
	navan, Ireland	2012-02-12
	HOLLYWOOD, Florida, United States	2012-02-12
	Navan, Ireland	2012-02-12
	Calgary, Canada	2012-02-12
	Sutton, Alaska, United States	2012-02-12
	León, Spain	2012-02-12
	Bariloche, Alabama, United States	2012-02-13
	Denver, Colorado, United States	2012-02-13
	Brookline, Massachusetts, United States	2012-02-13
	Blairsville, Pennsylvania	2012-02-13
	San Diego, California, United States	2012-02-13
	Edison, New Jersey, United States	2012-02-13
	Edison, New Jersey, United States	2012-02-13
	Seattle, Washington	2012-02-13
	Tucson, Arizona, United States	2012-02-14
	Pinole, California	2012-02-14
	Austin, Texas, United States	2012-02-14
	Richmond, California, United States	2012-02-14
	Grand Forks, North Dakota	2012-02-14
	Dry Prong, Louisiana, United States	2012-02-14
	norman, Oklahoma, United States	2012-02-14
	Moscow, Idaho, United States	2012-02-14
	michigan, New York, United States	2012-02-14

Name	Location	Date
	Jacksonville, Florida, United States	2012-02-14
	New York, New York, United States	2012-02-14
	Carnago, Italy	2012-02-14
	Newark, Delaware, United States	2012-02-14
	Hesperia, California, United States	2012-02-14
	Cookeville, Tennessee, United States	2012-02-14
	Orange, California	2012-02-14
	Randburg, South Africa	2012-02-14
	High Point, North Carolina	2012-02-14
	Colonia, New Jersey, United States	2012-02-14
	Bochnia, Poland	2012-02-14
	La Crescenta, California, United States	2012-02-15
	Monmouth Junction, New Jersey	2012-02-15
	Jersey City, New Jersey, United States	2012-02-15
	Emporium, Pennsylvania	2012-02-15
	Phoenix, Arizona, United States	2012-02-15
	Lincoln, Alabama, United States	2012-02-15
	ithaca, New York, United States	2012-02-15
	Eden Prairie, Minnesota, United States	2012-02-15
	South Portland, Maine, United States	2012-02-15
	Nyack, New York	2012-02-16
	savannah, Georgia	2012-02-16
	Zagreb, Croatia	2012-02-16
	Paso Robles, California, United States	2012-02-16
	Dover, Delaware, United States	2012-02-17
	victoria, Illinois, United States	2012-02-17
	Orangeburg, South Carolina, United States	2012-02-17
	Redmond, Washington, United States	2012-02-17
	Milwaukee, Wisconsin, United States	2012-02-17

Name		Location	Date
		Cambridge, Massachusetts	2012-02-18
		Banning, California, United States	2012-02-18
		Monroeton, Pennsylvania, United States	2012-02-18
		Austin, Texas, United States	2012-02-18
		magnolia, Texas	2012-02-18
		haverhill, Massachusetts, United States	2012-02-18
		Brooklyn, New York, United States	2012-02-19
		Sherman Oaks, California, United States	2012-02-19
		Farmington, New Mexico, United States	2012-02-19
		brisbane, Australia	2012-02-20
		Baytown, Texas, United States	2012-02-20
		Naalehu, Hawaii	2012-02-20
		Alderley, Australia	2012-02-20
		Highland Park, Illinois, United States	2012-02-20
		Murfreesboro, Tennessee, United States	2012-02-20
		New York, Australia	2012-02-21
		brunswick, Australia	2012-02-21
		Bridgewater, New Jersey, United States	2012-02-21
		Belfast, United Kingdom	2012-02-21
		marietta, Pennsylvania	2012-02-21
		beverly, Massachusetts	2012-02-21
		Stephentown, New York, United States	2012-02-21
		Middleburg, Virginia, United States	2012-02-21
		Newburyport, Massachusetts	2012-02-21
		Charlottesville, Virginia	2012-02-22
		Cookstown, New Jersey, United States	2012-02-22
		Eureka, Missouri, United States	2012-02-22
		Newport News, Virginia, United States	2012-02-22
		Polk, Florida, United States	2012-02-22
		Jacksonville, Florida	2012-02-22

Name	Location	Date
	Allegany, New York, United States	2012-02-23
	INDIANAPOLIS, Indiana	2012-02-23
	Longview, Washington, United States	2012-02-23
	guerneville, California	2012-02-23
	Laporte, Colorado, United States	2012-02-23
	Heber Springs, Arkansas, United States	2012-02-23
	Redding, Connecticut	2012-02-23
	Brick, New Jersey, United States	2012-02-23
	Mendota Heights, Minnesota	2012-02-23
	Rockaway Park, New York	2012-02-23
	Cornwall Bridge, Connecticut, United States	2012-02-23
	Livonia, Michigan, United States	2012-02-23
	Baltimore, Maryland, United States	2012-02-24
	Brentwood, Maryland, United States	2012-02-24
	Baldwin Park, California, United States	2012-02-24
	Sydney, Australia	2012-02-24
	colo spgs, Colorado, United States	2012-02-24
	Danbury, Connecticut, United States	2012-02-24
	Huntington Beach, California, United States	2012-02-24
	Lancaster, Pennsylvania, United States	2012-02-24
	Barneget, New Jersey, United States	2012-02-24
	chicago, Illinois, United States	2012-02-24
	WANTIRNA, Australia	2012-02-24
	north bergen, New Jersey, United States	2012-02-25
	Kortrijk-Heule West-Vlaanderen Belgie, Nebraska, United States	2012-02-25
	Puunene, Hawaii, United States	2012-02-25
	Jacksonville, Florida, United States	2012-02-25
	Chesapeake, Virginia, United States	2012-02-25



Name		Location	Date
		Cambridge, Massachusetts, United States	2012-02-25
		Norwich, United Kingdom	2012-02-25
		Royal Oak, Michigan, United States	2012-02-25
		Tampa, Florida, United States	2012-02-26
		Royersford, Pennsylvania, United States	2012-02-26
		Shirley, New York, United States	2012-02-26
		gathersburg, Maryland, United States	2012-02-26
		Grand Forks, North Dakota, United States	2012-02-26
		van nuys, California, United States	2012-02-26
		Oak Ridge, Tennessee, United States	2012-02-26
		Skillman, New Jersey, United States	2012-02-26
		Henniker, New Hampshire, United States	2012-02-27
		Bartow, Florida, United States	2012-02-27
		Manalapan, New Jersey, United States	2012-02-27
		Brampton, Canada	2012-02-27
		rockford, Illinois, United States	2012-02-27
		Kingston, Georgia, United States	2012-02-27
		Hackettstown, New Jersey, United States	2012-02-27
		Santa Clarita, California, United States	2012-02-27
		vienna, New Jersey, United States	2012-02-27
		Staten Island, New York, United States	2012-02-27
		Scottsdale, Arizona, United States	2012-02-27
		Austin, Texas, United States	2012-02-27
		Bayside, New York, United States	2012-02-28
		Dublin, Ohio, United States	2012-02-28
		Sacramento, California, United States	2012-02-28
		Goodyear, Arizona, United States	2012-02-28
		Leonardo, New Jersey, United States	2012-02-28
		Cleveland, Tennessee, United States	2012-02-28
		bath, Alaska, United States	2012-02-28

Name	Location	Date
	johanson city, New York, United States	2012-02-28
	Cinnaminson , New Jersey, United States	2012-02-28
	New Westminster, Canada	2012-02-28
	West Vancouver, Canada	2012-02-29
	cinnaminson , New Jersey, United States	2012-02-29
	Atascadero, California, United States	2012-02-29
	Massapequa, New York, United States	2012-02-29
	Dobbs Ferry, New York, United States	2012-02-29
	Ossining, New York, United States	2012-02-29
	Philadelphia, Pennsylvania, United States	2012-03-01
	Severn, Maryland, United States	2012-03-01
	South Bound Brook, New Jersey, United States	2012-03-01
	Antioch, California, United States	2012-03-01
	bound brook, New Jersey, United States	2012-03-02
	huntersville, North Carolina, United States	2012-03-02
	Fanwood, New Jersey, United States	2012-03-02
	Hillsborough, New Jersey, United States	2012-03-02
	battle creek, Michigan, United States	2012-03-02
	san francisco, California, United States	2012-03-02
	Arlington, Texas, United States	2012-03-02
	Dallas, Texas, United States	2012-03-02
	Santa Rosa, California, United States	2012-03-03
	neuss, Germany	2012-03-03
	Phoenix, Arizona, United States	2012-03-03
	Brooklyn, New York, United States	2012-03-03
	perry, Georgia, United States	2012-03-03
	Hamburg, Germany	2012-03-03
	Robbinsville, New Jersey, United States	2012-03-03
	W.W., Rhode Island, United States	2012-03-03

Name	Location	Date
	Des Moines, Iowa, United States	2012-03-03
	Kernersville, North Carolina, United States	2012-03-03
	Brick, New Jersey, United States	2012-03-03
	Austin, Texas, United States	2012-03-04
	south plainfield, New Jersey, United States	2012-03-04
	West Hollywood, California, United States	2012-03-04
	Bay Shore, New York, United States	2012-03-04
	silver spring, Maryland, United States	2012-03-05
	Watsonville, California, United States	2012-03-05
	Red Bay, Alabama, United States	2012-03-05
	Dalton, Georgia, United States	2012-03-05
	BANGOR, Maine, United States	2012-03-05
	Depew, New York, United States	2012-03-05
	Tallahassee, Florida, United States	2012-03-06
	Brampton, Canada	2012-03-06
	El Cajon, California, United States	2012-03-06
	Portsmouth, Virginia, United States	2012-03-06
	bound brook, New Jersey, United States	2012-03-06
	tybee island, Georgia, United States	2012-03-06
	Pittstown, New Jersey, United States	2012-03-06
	P, Italy	2012-03-07
	East Brunswick, New Jersey, United States	2012-03-07
	Union, New Jersey, United States	2012-03-07
	Conway, New Hampshire, United States	2012-03-07
	clyde, North Carolina, United States	2012-03-08
	Philadelphia, Pennsylvania, United States	2012-03-08
	forsyth, Missouri, United States	2012-03-08
	Sault Ste. Marie, Michigan, United States	2012-03-08
	North Guwahati, India	2012-03-08

Name	Location	Date
	Three Rivers, Michigan, United States	2012-03-08
	Dewitt, New York, United States	2012-03-08
	winters, California, United States	2012-03-08
	STOCKTON, California, United States	2012-03-09
	Vancouver, Canada	2012-03-09
	Montgomery, Alabama, United States	2012-03-09
	Honokaa, Hawaii, United States	2012-03-09
	Mountlake Terrace, Washington, United States	2012-03-09
	brooklyn center, Minnesota, United States	2012-03-10
	Mentor, Ohio, United States	2012-03-10
	Schaumburg, Illinois, United States	2012-03-10
	Alhambra, California, United States	2012-03-10
	Hastings, Michigan, United States	2012-03-10
	Bridgewater, New Jersey, United States	2012-03-10
	Jersey City, New Jersey, United States	2012-03-10
	FORT WORTH, Texas, United States	2012-03-10
	Branchburg Twp, New Jersey, United States	2012-03-10
	Palmdale, California, United States	2012-03-10
	North Port, Florida, United States	2012-03-11
	Bloomfield, Ont., California, United States	2012-03-11
	Wilton, Connecticut, United States	2012-03-11
	rockland, Massachusetts, United States	2012-03-11
	High Point, North Carolina, United States	2012-03-11
	Brooklyn, New York, United States	2012-03-11
	Longmont, Colorado, United States	2012-03-11
okatie, South Carolina, United States	2012-03-12	
Ocala, Florida, United States	2012-03-12	
Harbor Springs, Michigan, United States	2012-03-12	

Name	Location	Date
	Melbourne, Australia	2012-03-13
	LAURYS STA, Pennsylvania, United States	2012-03-13
	brooklyn, New York, United States	2012-03-13
	New York City, Canada	2012-03-14
	Holden, Massachusetts, United States	2012-03-14
	San Jose, California, United States	2012-03-15
	Boonton, New Jersey, United States	2012-03-15
	sarasota, Florida, United States	2012-03-15
	Middletown, New Jersey, United States	2012-03-15
	Lake Echo, Canada	2012-03-15
	Monticello, Kentucky, United States	2012-03-15
	north-arlington, New Jersey, United States	2012-03-16
	Pomona, New Jersey, United States	2012-03-16
	Hettlingen, Switzerland	2012-03-16
	Rockford, Illinois, United States	2012-03-17
	Doncaster, United Kingdom	2012-03-17
	Winfield, Missouri, United States	2012-03-18
	fair haven, New Jersey, United States	2012-03-19
	Cape May, New Jersey, United States	2012-03-19
	Pompton Lakes, New Jersey, United States	2012-03-19
	Pompton Lakes, New Jersey, United States	2012-03-19
	San Diego, California, United States	2012-03-19
	Milford, Connecticut, United States	2012-03-19
	Clarksville, Tennessee, United States	2012-03-20
	Wauwatosa, Wisconsin, United States	2012-03-20
	boynton beach, Florida, United States	2012-03-20
	Aurora, Illinois, United States	2012-03-21
	Roselle, New Jersey, United States	2012-03-22

Name	Location	Date
	Westborough, Massachusetts, United States	2012-03-22
	white lake, Michigan, United States	2012-03-22
	Neptune City, New Jersey, United States	2012-03-22
	Boston, Massachusetts, United States	2012-03-22
	aguada, Puerto Rico, United States	2012-03-22
	Brooklyn, New York, United States	2012-03-22
	Kamloops, Canada	2012-03-23
	Everett, Washington, United States	2012-03-23
	Tampa, Florida, United States	2012-03-24
	Pico, Portugal	2012-03-24
	Phoenix, Arizona, United States	2012-03-24
	brooklyn, New York, United States	2012-03-24
	Point Reyes Station, California, United States	2012-03-24
	Ogdensburg, New York, United States	2012-03-25
	sydney, Australia	2012-03-25
	Hickory, North Carolina, United States	2012-03-25
	Las Vegas, Nevada, United States	2012-03-27
	Cincinnati, Ohio, United States	2012-03-27
	Perth Amboy, New Jersey, United States	2012-03-27
	Escondido, California, United States	2012-03-29
	Glen Allen, Virginia, United States	2012-03-29
	Glen Allen, Virginia, United States	2012-03-29
	Madison, Wisconsin, United States	2012-03-29
	Charlotte, North Carolina, United States	2012-03-29
	KANSAS CITY, Kansas, United States	2012-03-29
	Rockford, Michigan, United States	2012-03-29
	Akron, Ohio, United States	2012-03-29
	San Francisco, California, United States	2012-03-30
	Middletown, New Jersey, United States	2012-03-31

Name		Location	Date
		san diego, California, United States	2012-03-31
		sherrill, New York, United States	2012-03-31
		South Beloit, Illinois, United States	2012-03-31
		Milford, Pennsylvania, United States	2012-03-31
		San Francisco, California, United States	2012-03-31
		Tujunga, California, United States	2012-04-01
		ankara, Turkey	2012-04-01
		Edison, New Jersey, United States	2012-04-01
		Sacramento, California, United States	2012-04-02
		Warner Robins, Georgia, United States	2012-04-02
		Highlands ranch, Colorado, United States	2012-04-03
		St. Petersburg, Florida, United States	2012-04-03
		Southport, North Carolina, United States	2012-04-03
		West Columbia, South Carolina, United States	2012-04-03
		hicksville, New York, United States	2012-04-04
		Hamilton, Ohio, United States	2012-04-04
		Culpeper, Virginia, United States	2012-04-04
		Anchorage, Alaska, United States	2012-04-05
		New Brunswick, New Jersey, United States	2012-04-06
		mccaysville, Georgia, United States	2012-04-06
		Portland, Oregon, United States	2012-04-06
		Glen Allen, Virginia, United States	2012-04-06
		Hackettstown, New Jersey, United States	2012-04-06
		Prior Lake, Minnesota, United States	2012-04-07
		Conshohocken, Pennsylvania, United States	2012-04-07
		Moorhead, Minnesota, United States	2012-04-08
		Rancho Palos Verdes, California, United States	2012-04-09



change.org

**To:** The Governor of NJ, State Sen. Michael Doherty (NJ-023), State Sen. Christopher Bateman (NJ-016), State Sen. Barbara Buono (NJ-018), State Sen. Raymond Lesniak (NJ-020), State Sen. Stephen Sweeney (NJ-003), State Sen. Bob Smith (NJ-017), Sen. Frank Lautenberg (NJ), Sen. Robert Menendez (NJ), Rep. Rush Holt (NJ-12), Rep. Frank Pallone (NJ-06), Sen. Barbara Boxer (CA), Rep. Leonard Lance (NJ-07), Rep. Rodney Frelinghuysen (NJ-11), USEPA Remedial Project Manager (Joseph Battipaglia), USEPA Region 2 Administrator (Judith Enck), USEPA Region 2 Superfund Chief (Walter Mugdan), NJDEP Commissioner (Bob Martin), MSNBC (Rachel Maddow), Mayor of Bridgewater (Daniel J. Hayes, Jr), Mayor of Manville (Angelo Corradino), Senator Robert Menendez, Representative Rodney Frelinghuysen, Representative Rush Holt, Senator Barbara Boxer, Representative Leonard Lance, Senator Christopher Bateman, Senator Raymond Lesniak, Pfizer (Wendy Lazarus), Pfizer (Russell Downey), USEPA Administrator (Lisa Jackson), Mayor of Bound Brook (Carey Pilato), CEO of Pfizer (Ian Read), Pfizer Executive Vice President, Policy, External Affairs and Communications (Sally Susman), Pfizer Executive Vice President, Chief Financial Officer and Business Operations (Frank D'Amelio), CRISIS Technical Advisor, CRISIS Technical Advisor, CRISIS Technical Advisor, and CRISIS Technical Advisor

**Subject:** Re: American Cyanamid Proposed Plan Comment

**Letter:**

Dear USEPA Regulators, Elected Officials, and Pfizer Representatives,

I respectfully request that the United States Environmental Protection Agency (USEPA) requires Pfizer to permanently remediate the 80-year old leaking toxic dump, the American Cyanamid Superfund Site in Bridgewater, NJ. Please include my comments as part of the official public record. In order to protect human health and the environment, USEPA must require Pfizer to remediate the site using a modified version of "Alternative 7," and not "Alternative 4A," as described in their 2012 Proposed Plan. Alternative 4A is one of the least costly for alternatives for Pfizer, and is only a quarter of the cost of a comprehensive cleanup. USEPA needs to go back and reevaluate their options and present the public with a more comprehensive plan that is protective of both human health and the environment.

The selected remedy, Alternative 4A, will not be protective of human health and the environment for the following reasons: Filling in a floodplain and capping the site is NOT a full remediation. Pfizer claims there will be no net filling. That is not true as the entire area, not just the fenced site, is in the floodplain. Also, the effect on solidifying parts of the site and capping a floodplain this large is not a permanent long-term solution - it's an engineering control. All caps fail, it's just a matter of time.

I am also highly concerned that Alternative 4A will drastically expand serious toxic flooding for thousands of neighboring families that are already plagued by heavy flood waters. The Proposed Plan Alternative 4A proposes to cover the contamination with a combination of soil and engineering caps,

R2-0007668



which will take 10 years to implement. For the larger portions of the site, Pfizer proposes to raise the gradient two feet. As you are aware, this site lies in the floodplain and, as the most recent flood of Hurricane Irene shows, the American Cyanamid Site can hold about 300,000,000 gallons of water. Placing two feet of fill on the site will reduce its flood storage capacity and could exacerbate the regional flood issue in the area. The USEPA claims that this cap will be built to withstand a 500-year flood. This area floods regularly just with normal amounts of rain, and a cap would fail way before a 500-year flood occurs.

In addition, filling of a flood zone is subject to both New Jersey and Federal regulations. These regulations specify that there can be no net filling of the wetlands or a flood zone, which means you cannot fill one area of the site without removing fill from some other location so the status quo doesn't change. The Proposed Plan is completely silent of the impacts of filling, and this most critical aspect of the American Cyanamid site MUST be clearly presented. The implemented plan must assure it will not exacerbate flooding in the lower Raritan River. The U.S. Army Corps of Engineers is actively working on flood control projects in the Raritan River Watershed to help alleviate flooding in Manville, Bound Brook, Bridgewater and all surrounding towns. The American Cyanamid site is a natural fit for a regional flood control project and can be an environmental benefit for the region if the proper remedy is selected.

CRISIS - an ineffectual "advocacy group" responsible for dissemination of information and cleanup options on the site - spent over \$235,000 of federal taxpayer money to have a technical advisor review documents and evaluate cleanup options. With all this taxpayer money down the drain, the question that has to be raised is why CRISIS and their technical advisors cannot come up with an actual permanent cleanup solution?

The Proposed Plan outlines more applicable cleanup alternatives than Alternative 4A suggests, including low temperature desorption (Alternative 7). This method was successfully used at the Cornell-Dubilier Superfund Site in South Plainfield, NJ to remediate soils with high levels of PCBs and heavy metals without disturbing the surrounding community. In addition, USEPA and Pfizer can make use of an active rail line that runs through the site to properly dispose of this material. The cost estimates for the alternatives seem very high and there must be a detailed analysis for the cost of a low temperature thermal desorption unit.

USEPA must look at low temperature thermal desorption in combination with other techniques, such as off-site disposal at their existing RCRA facility across the street, and other innovative technologies, such as bio remediation with specialized microorganisms. These contaminants lend themselves to thermal destruction offsite. The USEPA must choose the most protective remedy now and implement it in an acceptable time frame.

Capping a site should not take 10 years to complete, which means the time frames for other alternatives are probably exaggerated as well.

Why did USEPA allow the responsible party to stop the cleanup midstream after the record of decision was signed, and then let the site languish for another eight years? This current plan for capping a toxic waste floodplain is unacceptable and threatens the Raritan River Estuary and the millions of New Jersey residents who live near or downstream from the site. USEPA has mishandled this site from the beginning, and it's time to put the residents first. A scathing report by the USEPA Attorney General

documents that USEPA and NJDEP did not ensure this Superfund site cleanup progressed at a timely pace, along with numerous other failures. The report can be found here:  
<http://www.epa.gov/oig/reports/2008/20080602-08-P-0169.pdf>.

This site cleanup has been languishing for over two decades, and it is time for USEPA to take serious action. In order to protect the health and safety of families that utilize this area for recreation, USEPA must require a proper cleanup, such as a modified version of Alternative 7 in the Proposed Plan. Capping this site violates USEPA's preference for permanent, cost effective, and protective cleanups, as caps always fail, especially in a floodplain. Other alternatives offer more permanent solutions for this cleanup.

This year, Pfizer will spend upwards of \$8 billion on research. With some of the finest minds in the world and a CEO with a chemical engineering degree, why is Pfizer using cheap and outdated technology to cleanup this site? We need USEPA to protect public health and the environment, not the profits of Pfizer Executives Ian Read, Sally Susman, and Frank D'Amelio!

With dozens of permanent environmental cleanup options, which are being used throughout the United States, why is the lowest cost and least protective technology being thrown out as the only solution? This raises serious questions of the technical competency of not only CRISIS' "technical advisor", but all the stakeholders involved in this cleanup proposal.

I support the plans put forth by the nationally recognized environmental expert, the nonprofit Edison Wetlands Association, and their scientists and engineers to bring in a low temperature thermal desorption unit as well as utilize other technologies as appropriate for the various toxic and other wastes disposed of on site. I want other treatment technologies used that permanently remediate, not cap or solidify, the waste on site. Capping and/or solidifying the toxic and other wastes on site should not be used under any circumstances in this floodplain. Thank you for your timely assistance on this important environmental issue.

Respectfully,

# Signatures

Name		Location	Date
		Edison, New Jersey, United States	2012-02-24
		Old Bridge, New Jersey, United States	2012-02-24
		Camden, New Jersey, United States	2012-02-24
		Pompton Lakes, New Jersey, United States	2012-02-24
		East Brunswick, New Jersey, United States	2012-02-24
		Morrice, Michigan, United States	2012-02-24
		Pleasant Hill, California, United States	2012-02-24
		Chicago, Illinois, United States	2012-02-24
		Seaside Heights, New Jersey, United States	2012-02-24
		Los Angeles, California, United States	2012-02-24
		Pompton Lakes, New Jersey, United States	2012-02-24
		Bloomfield, New Jersey, United States	2012-02-24
		Hasselt, Belgium	2012-02-24
		St Augustine, Florida, United States	2012-02-24
		Linden, New Jersey, United States	2012-02-24
		Pompton Lakes, New Jersey, United States	2012-02-24
		Ava, Missouri, United States	2012-02-24
		colo spgs, Colorado, United States	2012-02-24
		Edison, New Jersey, United States	2012-02-24
		Mountain View, California, United States	2012-02-24
		Toms River, New Jersey, United States	2012-02-24
			2012-02-24
		Kendall Park, New Jersey, United States	2012-02-24
		edison, New Jersey, United States	2012-02-24
		Chatham, New Jersey, United States	2012-02-24
		South Amboy, New Jersey, United States	2012-02-24
		Edison, New Jersey, United States	2012-02-24

Name	Location	Date
	Pompton Lakes, New Jersey, United States	2012-02-24
	Highlands, New Jersey, United States	2012-02-24
	Denver, Colorado, United States	2012-02-24
	Edison, New Jersey, United States	2012-02-24
	Glenmont, New York, United States	2012-02-24
	Wolf Creek, Oregon, United States	2012-02-24
	HOPEWELL JUNCTION, New York, United States	2012-02-24
	New Brunswick, New Jersey, United States	2012-02-24
	Plano, Texas, United States	2012-02-24
	Yalta, Alabama, United States	2012-02-24
	Florham Park, New Jersey, United States	2012-02-24
	Burlington, Vermont, United States	2012-02-24
	Focsani, Romania	2012-02-24
	New Brunswick, New Jersey, United States	2012-02-24
	edison, New Jersey, United States	2012-02-24
	Red Bank, New Jersey, United States	2012-02-24
	Sleepy Hollow, Illinois, United States	2012-02-24
	Rutherford, New Jersey, United States	2012-02-24
	Woodbridge, New Jersey, United States	2012-02-24
	New Brunswick, New Jersey, United States	2012-02-24
	Holmdel, New Jersey, United States	2012-02-24
	chicago, Illinois, United States	2012-02-24
	New Brunswick, New Jersey, United States	2012-02-24
	Edison, New Jersey, United States	2012-02-24
	Quinton, Virginia, United States	2012-02-24
	High Springs, Florida, United States	2012-02-24
	highland park, New Jersey, United States	2012-02-24

Name		Location	Date
		Cliffwood Beach, New Jersey, United States	2012-02-24
		Sauk City, Wisconsin, United States	2012-02-24
		elmwood park, New Jersey, United States	2012-02-24
		Binghamton, New York, United States	2012-02-24
		Edison, New Jersey, United States	2012-02-25
		Rutland, Vermont, United States	2012-02-25
		North Brunswick Twp, New Jersey, United States	2012-02-25
		Long Branch, New Jersey, United States	2012-02-25
		Plainsboro, New Jersey, United States	2012-02-25
		Chicago, Illinois, United States	2012-02-25
		Hillsborough, New Jersey, United States	2012-02-25
		Monmouth Junction, New Jersey, United States	2012-02-25
		Rutland, Vermont, United States	2012-02-25
		pompton lakes nj, New Jersey, United States	2012-02-25
		Westfield, New Jersey, United States	2012-02-25
		Phoenix, Arizona, United States	2012-02-25
		Leadville, Colorado, United States	2012-02-25
		Macedonia, Germany	2012-02-25
		Bound Brook, New Jersey, United States	2012-02-25
		flagstaff, Arkansas, United States	2012-02-25
		CHESAPEAKE, Virginia, United States	2012-02-25
		Dayton, New Jersey, United States	2012-02-25
		Eliot, Maine, United States	2012-02-25
		St. Pölten, Austria	2012-02-25
		Orrefors, Sweden	2012-02-25
		Pasadena, Maryland, United States	2012-02-25
		fort lauderdale, Florida, United States	2012-02-25
		Webster, Texas, United States	2012-02-26

Name	Location	Date
	Edmond, Oklahoma, United States	2012-02-26
	Dayton, New Jersey, United States	2012-02-26
	Vienna, Arizona, United States	2012-02-26
	Mansfield Center, Connecticut, United States	2012-02-26
	Sussex, Wisconsin, United States	2012-02-26
	Los Angeles, California, United States	2012-02-26
	Sosnowiec, Poland	2012-02-26
	Metz, France	2012-02-26
	McKenzie, Tennessee, United States	2012-02-26
	Scotch Plains, New Jersey, United States	2012-02-26
	North Plainfield, New Jersey, United States	2012-02-26
	Escondido, California, United States	2012-02-26
	ALDERSHOT, United Kingdom	2012-02-26
	Ivanic, Croatia	2012-02-26
	Washington, Georgia, United States	2012-02-26
	Manhattan, New York, United States	2012-02-26
	Dublin., Illinois, United States	2012-02-26
	Madrid/Spain, Alabama, United States	2012-02-26
	Mansfield Center, Connecticut, United States	2012-02-26
	piedmont, California, United States	2012-02-26
	Lincoln, Alabama, United States	2012-02-26
	Caldas da Rainha, Portugal	2012-02-26
	Arnold, Missouri, United States	2012-02-26
	Oregon City, Oregon, United States	2012-02-26
	Klamath Falls, Oregon, United States	2012-02-26
	Sonoma, California, United States	2012-02-26
	Merville, Canada	2012-02-26
	Long Island City, New York, United States	2012-02-26

Name		Location	Date
		Culver City, California, United States	2012-02-26
		Seattle, Washington, United States	2012-02-26
		Reno, Nevada, United States	2012-02-26
		Trabuco Canyon, California, United States	2012-02-26
		Providence, Rhode Island, United States	2012-02-26
		Washington Island, Wisconsin, United States	2012-02-26
		Tampa, Florida, United States	2012-02-26
		south fork, Colorado, United States	2012-02-26
		commack, New York, United States	2012-02-26
		chatel-st-denis, Mississippi, United States	2012-02-26
		Denver, Colorado, United States	2012-02-26
		Bottrop, Indiana, United States	2012-02-26
		Cameron Park, California, United States	2012-02-26
		Blacksburg, Virginia, United States	2012-02-26
		Tappan, New York, United States	2012-02-26
		Montpellier, Vermont, United States	2012-02-26
		Smyrna, Georgia, United States	2012-02-26
		Azusa, California, United States	2012-02-26
		belmont, California, United States	2012-02-26
		New York, New York, United States	2012-02-26
		Bothell, Washington, United States	2012-02-26
		old bethpage, New York, United States	2012-02-26
		benton, Arkansas, United States	2012-02-26
		Roswell, New Mexico, United States	2012-02-26
		High Falls, New York, United States	2012-02-26
		Valley Stream, New York, United States	2012-02-26
		Anderson, California, United States	2012-02-26
		Seattle, Washington, United States	2012-02-26

Name	Location	Date
	Eatonville, Washington, United States	2012-02-26
	West Tremont, Maine, United States	2012-02-26
	Warrenton, Oregon, United States	2012-02-26
	Bethel Park, Pennsylvania, United States	2012-02-26
	Cincinnati, Ohio, United States	2012-02-26
	Phoenix, Arizona, United States	2012-02-26
	Fircrest, Washington, United States	2012-02-26
	Fort Worth, Texas, United States	2012-02-26
	Willow, New York, United States	2012-02-26
	Bridgewater, New Jersey, United States	2012-02-26
	nsw, Idaho, United States	2012-02-26
	Ann Arbor, Michigan, United States	2012-02-26
	Chicago, Illinois, United States	2012-02-26
	Kapaa, Hawaii, United States	2012-02-26
	Fall River,, Massachusetts, United States	2012-02-26
	Tujunga, California, United States	2012-02-26
	nsw, Idaho, United States	2012-02-26
	nsw, Idaho, United States	2012-02-26
	Findlay, Ohio, United States	2012-02-26
	Cardiff, California, United States	2012-02-26
	san francisco, California, United States	2012-02-26
	Westminster, Colorado, United States	2012-02-26
	Old Hickory, Tennessee, United States	2012-02-26
	Carpinteria, California, United States	2012-02-26
	Sedona, Arizona, United States	2012-02-26
	Monte Rio, California, United States	2012-02-26
	Seattle, Washington, United States	2012-02-26
	Orlando, Florida, United States	2012-02-26
	Breitenfurt, Austria	2012-02-26
	Tulsa, Oklahoma, United States	2012-02-26



Name		Location	Date
		Las Cruces, New Mexico, United States	2012-02-26
		Chicago, Illinois, United States	2012-02-26
		Oshawa, Canada	2012-02-26
		lawrence, Pennsylvania, United States	2012-02-26
		St. Helens, Oregon, United States	2012-02-26
		Tucson, Arizona, United States	2012-02-26
		Palm Bay, Florida, United States	2012-02-26
		Lexington, Kentucky, United States	2012-02-26
		Farmington Hills, Michigan, United States	2012-02-26
		Cornville, Arizona, United States	2012-02-26
		new york, New York, United States	2012-02-26
		Phoenix, Arizona, United States	2012-02-26
		Lewiston, Maine, United States	2012-02-26
		Phoenix, Arizona, United States	2012-02-26
		Orange, California, United States	2012-02-26
		Matawan, New Jersey, United States	2012-02-26
		Riverton, Connecticut, United States	2012-02-26
		Los Angeles, United States Minor Outlying Islands	2012-02-26
		Aspen, Colorado, United States	2012-02-26
		traverse city, Michigan, United States	2012-02-26
		Pendleton, New York, United States	2012-02-26
		Austin, Minnesota, United States	2012-02-26
		Dunedin, Florida, United States	2012-02-26
		Sacramento, California, United States	2012-02-26
		Poulsbo, Washington, United States	2012-02-26
		Jamesburg, New Jersey, United States	2012-02-26
		Boston, Massachusetts, United States	2012-02-26
		Los Angeles, California, United States	2012-02-26
		Bellingham, Washington, United States	2012-02-26

Name	Location	Date
	Silver Spring, Maryland, United States	2012-02-26
	Cranford, New Jersey, United States	2012-02-26
	Jackson, New Jersey, United States	2012-02-26
	Rochester, Afghanistan	2012-02-26
	Miami, Florida, United States	2012-02-26
	Brookeville, Maryland, United States	2012-02-26
	Portsmouth, Rhode Island, United States	2012-02-26
	Cottage Grove, Minnesota, United States	2012-02-26
	Portland, Oregon, United States	2012-02-26
	Au/ZH, Alabama, United States	2012-02-26
	Henrico, Virginia, United States	2012-02-26
	Philadelphia, Pennsylvania, United States	2012-02-26
	Winter Park, Florida, United States	2012-02-26
	Simpsonville, South Carolina, United States	2012-02-26
	High Point, North Carolina, United States	2012-02-26
	Port Orchard, Washington, United States	2012-02-26
	New York, New York, United States	2012-02-26
	Kilauea, Hawaii, United States	2012-02-26
	Tucson, Arizona, United States	2012-02-26
	Manchester, Missouri, United States	2012-02-26
	vancouver, Washington, United States	2012-02-26
	St Louis Park, Minnesota, United States	2012-02-26
	Delray Beach, Florida, United States	2012-02-26
	San Diego, Virgin Islands, U.S.	2012-02-26
	Willowick, Ohio, United States	2012-02-26
	San Ramon, California, United States	2012-02-26
	San Jose, California, United States	2012-02-26
	melksham, New York, United States	2012-02-26
	Louisville, Colorado, United States	2012-02-26

Name	Location	Date
	Oklahoma City, Oklahoma, United States	2012-02-26
	Ouray, Colorado, United States	2012-02-26
	Englewood, New Jersey, United States	2012-02-26
	BORDEAUX FRANCE, Alaska, United States	2012-02-26
	Fort Smith, Arkansas, United States	2012-02-26
	muskegon, Michigan, United States	2012-02-26
	LEBANON, Indiana, United States	2012-02-26
	Decatur, Illinois, United States	2012-02-26
	Friendswood, Texas, United States	2012-02-26
	altamonte springs, Florida, United States	2012-02-26
	Dublin, Ireland	2012-02-26
	Cooperstown, New York, United States	2012-02-26
	New Castle, Pennsylvania, United States	2012-02-26
	climax, New York, United States	2012-02-26
	Milton, Massachusetts, United States	2012-02-26
	Belmont, Massachusetts, United States	2012-02-26
	Kraków, Poland	2012-02-26
	Keller, Texas, United States	2012-02-26
	El Cajon, California, United States	2012-02-26
	Glenn Dale, Maryland, United States	2012-02-26
	Highland, United States Minor Outlying Islands	2012-02-26
	Mosheim, Tennessee, United States	2012-02-26
	Rochester, New York, United States	2012-02-26
	Canyon Country, California, United States	2012-02-26
	Scarborough, New York, United States	2012-02-26
	brooklyn, New York, United States	2012-02-26
	Sycamore, Illinois, United States	2012-02-26
	york, Pennsylvania, United States	2012-02-26

Name	Location	Date
	Boynton Beach, Florida, United States	2012-02-26
	Pensacola, Florida, United States	2012-02-26
	Granada Hills, California, United States	2012-02-26
	San Rafael, California, United States	2012-02-26
	Ingleside, Illinois, United States	2012-02-26
	Freeport, Florida, United States	2012-02-26
	Besançon, New York, United States	2012-02-26
	Milton, Pennsylvania, United States	2012-02-26
	rochester, New York, United States	2012-02-26
	Aguadilla, Puerto Rico, United States	2012-02-26
	Cloverdale, California, United States	2012-02-26
	Port Orford, Oregon, United States	2012-02-26
	Canton, Georgia, United States	2012-02-26
	Warsaw, Poland	2012-02-26
	La Follette, Tennessee, United States	2012-02-26
	Neptune, New Jersey, United States	2012-02-26
	Gladstone, Oregon, United States	2012-02-26
	Highland Village, Texas, United States	2012-02-26
	Denfield, California, United States	2012-02-26
	Portland, Oregon, United States	2012-02-26
	Watervliet, New York, United States	2012-02-26
	Wichita, Kansas, United States	2012-02-26
	Nashville, Tennessee, United States	2012-02-26
	Jamaica Plain, Massachusetts, United States	2012-02-26
	St.Paul, Minnesota, United States	2012-02-26
	Kempfeld, Delaware, United States	2012-02-26
	Weston, Connecticut, United States	2012-02-26
	ft. lauderdale, Florida, United States	2012-02-26
	terlingua, Texas, United States	2012-02-26

Name	Location	Date
	Minneapolis, Minnesota, United States	2012-02-26
	Denver, Colorado, United States	2012-02-26
	Ashland, Oregon, United States	2012-02-26
	Houston, Texas, United States	2012-02-26
	Wilmington, Ohio, United States	2012-02-26
	Long Beach, New York, United States	2012-02-26
	Woodacre, California, United States	2012-02-26
	San Francisco, California, United States	2012-02-26
	Quimperlé, France	2012-02-26
	Aguilar, Colorado, United States	2012-02-26
	Augusta, Georgia, United States	2012-02-26
	Mill Valley, California, United States	2012-02-26
	Eureka, California, United States	2012-02-26
	Middlesex, New Jersey, United States	2012-02-26
	Vancouver, Canada	2012-02-26
	Plant City, Florida, United States	2012-02-26
	Concord, California, United States	2012-02-26
	San Diego, California, United States	2012-02-26
	Spicewood, Texas, United States	2012-02-26
	Twisp, Washington, United States	2012-02-26
	El Prado, New Mexico, United States	2012-02-26
	Lewes, Delaware, United States	2012-02-26
	Cypress, California, United States	2012-02-26
	Austin, Texas, United States	2012-02-26
	Bethesda, Ohio, United States	2012-02-26
	Tucson, Arizona, United States	2012-02-26
	Portland, Oregon, United States	2012-02-26
	Albany, Oregon, United States	2012-02-26
	Royal Palm Beach, Florida, United States	2012-02-26
	Boulder, Colorado, United States	2012-02-26

Name	Location	Date
	Eugene, Oregon, United States	2012-02-26
	Bakerfield, California, United States	2012-02-26
	Ellicott City, Maryland, United States	2012-02-26
	boulder creek, California, United States	2012-02-26
	Stillwater, Oklahoma, United States	2012-02-26
	staten island, New York, United States	2012-02-26
	e, Ohio, United States	2012-02-26
	phoenix, Arizona, United States	2012-02-26
	Lantier, Florida, United States	2012-02-26
	zumbrota, Minnesota, United States	2012-02-26
	Sarasota, Florida, United States	2012-02-26
	Philadelphia, Pennsylvania, United States	2012-02-26
	Akron, Ohio, United States	2012-02-26
	Las Vegas, Nevada, United States	2012-02-26
	Moreland Hills, Ohio, United States	2012-02-26
	Kalamazoo, Michigan, United States	2012-02-26
	Campbell, California, United States	2012-02-26
	Woodland Park, Colorado, United States	2012-02-26
	Pompton Lakes, New Jersey, United States	2012-02-26
	Newark, Delaware, United States	2012-02-26
	Chicago, Illinois, United States	2012-02-26
	Montfort, Wisconsin, United States	2012-02-26
	st.james city, Florida, United States	2012-02-26
	Desert Hot Springs, California, United States	2012-02-26
	Decatur, Illinois, United States	2012-02-26
	Windsor, Oregon, United States	2012-02-26
	SF, California, United States	2012-02-26
	Chelsea, Massachusetts, United States	2012-02-26
	bentonville, Arkansas, United States	2012-02-26

Name	Location	Date
	Brooklyn, New York, United States	2012-02-26
	Mechanicsville, Virginia, United States	2012-02-26
	Eden Prairie, Minnesota, United States	2012-02-26
	San Jose, California, United States	2012-02-26
	Murfreesboro, Tennessee, United States	2012-02-26
	Stayner, Puerto Rico, United States	2012-02-26
	penfield, Germany	2012-02-26
	Rowayton, Connecticut, United States	2012-02-26
	Austin, Texas, United States	2012-02-26
	Beaverton, Oregon, United States	2012-02-26
	Vienna, Ohio, United States	2012-02-26
	Springville, Tennessee, United States	2012-02-26
	New York, New York, United States	2012-02-26
	West Townsend, Massachusetts, United States	2012-02-26
	San Jose, California, United States	2012-02-26
	Sullivan, Maine, United States	2012-02-26
	Corrigan, Texas, United States	2012-02-26
	Bronx, New York, United States	2012-02-26
	Orange Park, Florida, United States	2012-02-26
	Salt Lake Cty, Utah, United States	2012-02-26
	Medford, Oregon, United States	2012-02-26
	Baltimore, Maryland, United States	2012-02-26
	Maastricht, Netherlands	2012-02-26
	San Francisco, California, United States	2012-02-26
	Victoria, Canada	2012-02-26
	Austin, Texas, United States	2012-02-26
	W. Hollywood, California, United States	2012-02-26
	San Mateo, California, United States	2012-02-26
	Hillsborough, New Jersey, United States	2012-02-27

Name	Location	Date
	Pittsburgh, Pennsylvania, United States	2012-02-27
	Boulder, Colorado, United States	2012-02-27
	Pearl River, New York, United States	2012-02-27
	Sacramento, California, United States	2012-02-27
	Williamstown, New York, United States	2012-02-27
	dublin, District Of Columbia, United States	2012-02-27
	Dallas, Texas, United States	2012-02-27
	Tecate, California, United States	2012-02-27
	oberlin, Ohio, United States	2012-02-27
	Phoenix, Arizona, United States	2012-02-27
	Indianapolis, Indiana, United States	2012-02-27
	Hancock, New York, United States	2012-02-27
	Lawrence, Kansas, United States	2012-02-27
	Boise, Idaho, United States	2012-02-27
	santa fe, New Mexico, United States	2012-02-27
	Granite Bay, California, United States	2012-02-27
	El Cerrito, California, United States	2012-02-27
	Harrisburg, Pennsylvania, United States	2012-02-27
	Gillette, New Jersey, United States	2012-02-27
	Seattle, Washington, United States	2012-02-27
	san anselmo, California, United States	2012-02-27
	eNGLISHTOWN, New Jersey, United States	2012-02-27
	Portland, Oregon, United States	2012-02-27
	Belmont, Massachusetts, United States	2012-02-27
	Rosalie, Nebraska, United States	2012-02-27
	Henderson, Nevada, United States	2012-02-27
	Asheville, North Carolina, United States	2012-02-27
	North Kansas City, Missouri, United States	2012-02-27
	Minneapolis, Minnesota, United States	2012-02-27



Name	Location	Date
	NY, New York, United States	2012-02-27
	san antonio, Texas, United States	2012-02-27
	Roslyn Heights, New York, United States	2012-02-27
	-, Texas, United States	2012-02-27
	Elizabethton, Tennessee, United States	2012-02-27
	Minneapolis, Minnesota, United States	2012-02-27
	Bradenton, Florida, United States	2012-02-27
	Ludlow, Kentucky, United States	2012-02-27
	Solon, Ohio, United States	2012-02-27
	Tiffin, Ohio, United States	2012-02-27
	stone mountain, Georgia, United States	2012-02-27
	Bellingham, Washington, United States	2012-02-27
	Lansdale, Pennsylvania, United States	2012-02-27
	Bronx, New York, United States	2012-02-27
	Santiago, South Carolina, United States	2012-02-27
	Distrito Federal, Mexico	2012-02-27
	Coaldale, Colorado, United States	2012-02-27
	Brookings, Oregon, United States	2012-02-27
	Schenectady, New York, United States	2012-02-27
	Boca Raton, Florida, United States	2012-02-27
	little rock, Arkansas, United States	2012-02-27
	Spicewood, Texas, United States	2012-02-27
	Knoxville, Tennessee, United States	2012-02-27
	blasdell, New York, United States	2012-02-27
	Bethesda, Maryland, United States	2012-02-27
	covington, Louisiana, United States	2012-02-27
	Salkum, Washington, United States	2012-02-27
	Chicago, Illinois, United States	2012-02-27
	Uvalde, Texas, United States	2012-02-27
	Jacksonville, Florida, United States	2012-02-27

Name	Location	Date
	Novi, Michigan, United States	2012-02-27
	Peruibe, Brazil	2012-02-27
	Vacaville, California, United States	2012-02-27
	London Ont. Canada, N5y4k5, California, United States	2012-02-27
	Maldegem, Armed Forces Pacific, United States	2012-02-27
	West Haverstraw, New York, United States	2012-02-27
	Portland, Oregon, United States	2012-02-27
	orange, California, United States	2012-02-27
	Highland, Illinois, United States	2012-02-27
	Sherwood, Arkansas, United States	2012-02-27
	Cary, North Carolina, United States	2012-02-27
	Newington, Connecticut, United States	2012-02-27
	Newark, Delaware, United States	2012-02-27
	Edinboro, Pennsylvania, United States	2012-02-27
	Washington, District Of Columbia, United States	2012-02-27
	Modesto, California, United States	2012-02-27
	Centreville, Virginia, United States	2012-02-27
	Mokena, Illinois, United States	2012-02-27
	Bretnwood, New Hampshire, United States	2012-02-27
	Saint Louis, Missouri, United States	2012-02-27
	Chapel Hill, North Carolina, United States	2012-02-27
	Toronto, New York, United States	2012-02-27
	Aurora, Colorado, United States	2012-02-27
	Troutdale, Oregon, United States	2012-02-27
	Portland, Oregon, United States	2012-02-27
	Hayward, California, United States	2012-02-27
	New Oxford, Pennsylvania, United States	2012-02-27

Name		Location	Date
		Lexington, Kentucky, United States	2012-02-27
		Woodside, New York, United States	2012-02-27
		Santa Rosa, California, United States	2012-02-27
		L.A., Colombia	2012-02-27
		Wittmann, Arizona, United States	2012-02-27
		springfield, Illinois, United States	2012-02-27
		Houston, Texas, United States	2012-02-27
		Oxford, Florida, United States	2012-02-27
		Oak Lawn, Illinois, United States	2012-02-27
		Florissant, Missouri, United States	2012-02-27
		El Dorado, Arkansas, United States	2012-02-27
		Pleasant Garden, North Carolina, United States	2012-02-27
		Redwood City, Australia	2012-02-27
		Palm Springs, California, United States	2012-02-27
		Phila. , Pennsylvania, United States	2012-02-27
		St. Paul, Minnesota, United States	2012-02-27
		Carlton, Oregon, United States	2012-02-27
		Bradenton, Florida, United States	2012-02-27
		denver, Colorado, United States	2012-02-27
		barling, Arkansas, United States	2012-02-27
		Chico, California, United States	2012-02-27
		Edinburg, Texas, United States	2012-02-27
		Flushing, New York, United States	2012-02-27
		Gretna, Louisiana, United States	2012-02-27
		Ft. Collins, Colorado, United States	2012-02-27
		ALTON, Illinois, United States	2012-02-27
		Hesperia, California, United States	2012-02-27
		Medford, Oregon, United States	2012-02-27
		Wenatchee, Washington, United States	2012-02-27

Name	Location	Date
	West Milford, New Jersey, United States	2012-02-27
	Philadelphia, Pennsylvania, United States	2012-02-27
	Glen Rock, New Jersey, United States	2012-02-27
	Doylestown, Pennsylvania, United States	2012-02-27
	Mashpee, Massachusetts, United States	2012-02-27
	Oshkosh, Wisconsin, United States	2012-02-27
	Lewiston, New York, United States	2012-02-27
	Seattle, Washington, United States	2012-02-27
	Gillett, Wisconsin, United States	2012-02-27
	Billings, Montana, United States	2012-02-27
	Elmira, New York, United States	2012-02-27
	Las Vegas, Nevada, United States	2012-02-27
	Westminster, California, United States	2012-02-27
	NEW YORK, New York, United States	2012-02-27
	Vancouver, California, United States	2012-02-27
	Calgary, California, United States	2012-02-27
	Portland, Oregon, United States	2012-02-27
	Detroit, Michigan, United States	2012-02-27
	San Antonio, Texas, United States	2012-02-27
	Rockport, Washington, United States	2012-02-27
	San Marcos, Texas, United States	2012-02-27
	Winchester, Massachusetts, United States	2012-02-27
	Morro Bay, California, United States	2012-02-27
	Winnipeg, Canada	2012-02-27
	Issaquah, Washington, United States	2012-02-27
	Tucson, Arizona, United States	2012-02-27
	San Rafael, California, United States	2012-02-27
	Sioux Falls, South Dakota, United States	2012-02-27
	St. Cloud, Minnesota, United States	2012-02-27
	San Anselmo, California, United States	2012-02-27

Name	Location	Date
	Pescadero, California, United States	2012-02-27
	Pollock Pines, California, United States	2012-02-27
	Kenmore, Washington, United States	2012-02-27
	Leicester, United Kingdom	2012-02-27
	TACOMA, Washington, United States	2012-02-27
	Chelan, Washington, United States	2012-02-27
	Muskegon, Michigan, United States	2012-02-27
	Tacoma, Washington, United States	2012-02-27
	Sacramento, California, United States	2012-02-27
	Malvern, Pennsylvania, United States	2012-02-27
	Cockeysville, Maryland, United States	2012-02-27
	Chennai, Tennessee, United States	2012-02-27
	Livingston, Texas, United States	2012-02-27
	Wilmington, Delaware, United States	2012-02-27
	Moscow, Rhode Island, United States	2012-02-27
	Sherman Oaks, California, United States	2012-02-27
	Harrison, Arkansas, United States	2012-02-27
	Dri Rey Oaks, California, United States	2012-02-27
	San Mateo, California, United States	2012-02-27
	Pasay, Philippines	2012-02-27
	Granger, Indiana, United States	2012-02-27
	Bertamirans, Ames, A Coruña, Armed Forces Pacific, United States	2012-02-27
	Austin, Texas, United States	2012-02-27
	Nandlstadt, Delaware, United States	2012-02-27
	Fremont, California, United States	2012-02-27
	Pensacola, Florida, United States	2012-02-27
	Santa Fe, New Mexico, United States	2012-02-27
	Downers Grove, Illinois, United States	2012-02-27
	Glendale, California, United States	2012-02-27

Name	Location	Date
	Karachi, Pakistan	2012-02-27
	Sacrofano, Virgin Islands, United States	2012-02-27
	durban, South Africa	2012-02-27
	Thonon les bains, Arizona, United States	2012-02-27
	Solna, Sweden	2012-02-27
	Greenville, South Carolina, United States	2012-02-27
	piraeus, Greece	2012-02-27
	Springfield, Missouri, United States	2012-02-27
	Ventura, California, United States	2012-02-27
	Durban North, Kentucky, United States	2012-02-27
	Wexford, Pennsylvania, United States	2012-02-27
	salerno, Illinois, United States	2012-02-27
	Wrocław, Poland	2012-02-27
	Hilo, Hawaii, United States	2012-02-27
	braga, Indiana, United States	2012-02-27
	Villa Park, Illinois, United States	2012-02-27
	Bremerton, Washington, United States	2012-02-27
	PITTSBURGH, Pennsylvania, United States	2012-02-27
	Grantham, New Hampshire, United States	2012-02-27
	Salem, Oregon, United States	2012-02-27
	houlton, Maine, United States	2012-02-27
	Humacao, Puerto Rico, United States	2012-02-27
	no. ferrisburgh, Vermont, United States	2012-02-27
	Basel, Switzerland	2012-02-27
	Deep River, Connecticut, United States	2012-02-27
	Great Yarmouth, United Kingdom	2012-02-27
	Sintra, Portugal	2012-02-27
	Evergreen, Colorado, United States	2012-02-27
	Brier Hill, New York, United States	2012-02-27
	Naples, Florida, United States	2012-02-27

Name	Location	Date
	Boise, Idaho, United States	2012-02-27
	Chatham, New York, United States	2012-02-27
	Waterford Works, New Jersey, United States	2012-02-27
	new york, New York, United States	2012-02-27
	Burdett, New York, United States	2012-02-27
	Orlando, Florida, United States	2012-02-27
	austin, Texas, United States	2012-02-27
	Clinton, Iowa, United States	2012-02-27
	Stafford, Virginia, United States	2012-02-27
	Longmont, Colorado, United States	2012-02-27
	Jenkintown, Pennsylvania, United States	2012-02-27
	Staten Island, New York, United States	2012-02-27
	Allentown, Pennsylvania, United States	2012-02-27
	Flushing, New York, United States	2012-02-27
	Fredonia, New York, United States	2012-02-27
	Dawson, Iowa, United States	2012-02-27
	vico canavese, New York, United States	2012-02-27
	Springfield, Ohio, United States	2012-02-27
	Columbia, South Carolina, United States	2012-02-27
	Clifton Park, New York, United States	2012-02-27
	bennington, Vermont, United States	2012-02-27
	Winchester, Virginia, United States	2012-02-27
	New Brunswick, New Jersey, United States	2012-02-27
	Granby, Massachusetts, United States	2012-02-27
	New Brunswick, New Jersey, United States	2012-02-27
	Williston, Vermont, United States	2012-02-27
	McKeesport, Pennsylvania, United States	2012-02-27
	Hamilton Square, New Jersey, United States	2012-02-27

Name	Location	Date
	St. Louis, Missouri, United States	2012-02-27
	Hackettstown, New Jersey, United States	2012-02-27
	Hackensack, New Jersey, United States	2012-02-27
	Lake Park, Florida, United States	2012-02-27
	Phoenix, Arizona, United States	2012-02-27
	Houston, Texas, United States	2012-02-27
	Myrtle Creek, Oregon, United States	2012-02-27
	Wheaton, Illinois, United States	2012-02-27
	west haven, Connecticut, United States	2012-02-27
	New York, New York, United States	2012-02-27
	Jacksonville, Alabama, United States	2012-02-27
	Milwaukee, Wisconsin, United States	2012-02-27
	Larsen, Wisconsin, United States	2012-02-27
	Georgetown, Indiana, United States	2012-02-27
	so. Milwaukee, Wisconsin, United States	2012-02-27
	Roma, Italy	2012-02-27
	Rochester Hills, Michigan, United States	2012-02-27
	Summerville, South Carolina, United States	2012-02-27
	High Bridge, New Jersey, United States	2012-02-27
	Lowell, Massachusetts, United States	2012-02-27
	Corpus Christi, Texas, United States	2012-02-27
	Florida, Massachusetts, United States	2012-02-27
	Murrieta, California, United States	2012-02-27
	Louisville, Kentucky, United States	2012-02-27
	Casper, Wyoming, United States	2012-02-27
	New Delhi, India, India	2012-02-27
	New York, New York, United States	2012-02-27
	Keyport, New Jersey, United States	2012-02-27



Name		Location	Date
		Berkeley, United States Minor Outlying Islands	2012-02-27
		Lexington, Kentucky, United States	2012-02-27
		Cambridge, New York, United States	2012-02-27
		East Dundee, Illinois, United States	2012-02-27
		flemington, New Jersey, United States	2012-02-27
		Garden City, Kansas, United States	2012-02-27
		Sarasota, Florida, United States	2012-02-27
		Ojai, California, United States	2012-02-27
		Seattle, Washington, United States	2012-02-27
		Burien, Washington, United States	2012-02-27
		Valencia, Spain	2012-02-27
		Jersey City, New Jersey, United States	2012-02-27
		Arlington, Virginia, United States	2012-02-27
		San Diego, California, United States	2012-02-27
		Chicago, Illinois, United States	2012-02-27
		Videbæk, Delaware, United States	2012-02-27
		Stuart, Florida, United States	2012-02-27
		HILTONHEAD, South Carolina, United States	2012-02-27
		Los Angeles, California, United States	2012-02-27
		Winnipeg, MB., Canada	2012-02-27
		New York, New York, United States	2012-02-27
		El Portal, Florida, United States	2012-02-27
		Astoria, Oregon, United States	2012-02-27
		Alhambra, California, United States	2012-02-27
		hunt. sta., New York, United States	2012-02-27
		Miami, Florida, United States	2012-02-27
		New London, Connecticut, United States	2012-02-27
		Cambridge, Massachusetts, United States	2012-02-27
		Fords, New Jersey, United States	2012-02-27

Name	Location	Date
	Onbekend, Belgium	2012-02-27
	Larwill, Indiana, United States	2012-02-27
	Beach Park, Illinois, United States	2012-02-27
	Brentwood, Tennessee, United States	2012-02-27
	Albany, New York, United States	2012-02-27
	Seattle, Washington, United States	2012-02-27
	Hightstown, New Jersey, United States	2012-02-27
	Santa Rosa, California, United States	2012-02-27
	Evans, Georgia, United States	2012-02-27
	Binghamton, New York, United States	2012-02-27
	Gelsenkirchen, Germany	2012-02-27
	San Diego, California, United States	2012-02-27
	Richboro, Pennsylvania, United States	2012-02-27
	n, Illinois, United States	2012-02-27
	Claremont, California, United States	2012-02-27
	Sierra Vista, Arizona, United States	2012-02-27
	ithaca, New York, United States	2012-02-27
	aix en provence, Alabama, United States	2012-02-27
	Sierra Vista, Arizona, United States	2012-02-27
	Sarasota, Florida, United States	2012-02-27
	Mt Olive, Alabama, United States	2012-02-27
	Scottsdale, Arizona, United States	2012-02-27
	Monroeville, New Jersey, United States	2012-02-27
	Island Pk, New York, United States	2012-02-27
	Kalamazoo, Michigan, United States	2012-02-27
	Brookline, Massachusetts, United States	2012-02-27
	San Diego, California, United States	2012-02-27
	Lincoln, California, United States	2012-02-27
	Berea, Kentucky, United States	2012-02-27
	Cheboygan, Michigan, United States	2012-02-27

Name	Location	Date
	hasselt, Belgium	2012-02-27
	Waynesburg, Pennsylvania, United States	2012-02-27
	Buffalo, New York, United States	2012-02-27
	Beckum, Delaware, United States	2012-02-27
	Winnetka, Illinois, United States	2012-02-27
	Chicago, Illinois, United States	2012-02-28
	Phoenix, Arizona, United States	2012-02-28
	Watervliet, New York, United States	2012-02-28
	LAS VEGAS, Nevada, United States	2012-02-28
	Tobyhanna, Pennsylvania, United States	2012-02-28
	Webster Groves (Saint Louis), Missouri, United States	2012-02-28
	Ceres, California, United States	2012-02-28
	Charlottesville, Virginia, United States	2012-02-28
	stony point, New York, United States	2012-02-28
	Overland Park, Kansas, United States	2012-02-28
	Newark, Delaware, United States	2012-02-28
	Catania, Italy	2012-02-28
	palermò, Italy	2012-02-28
	Florissant, Missouri, United States	2012-02-28
	Bolivar, Missouri, United States	2012-02-28
	Havre, Montana, United States	2012-02-28
	Cleveland, Ohio, United States	2012-02-28
	Portland, Oregon, United States	2012-02-28
	Coquitlam, New York, United States	2012-02-28
	SCOTTSDALE, Arizona, United States	2012-02-28
	Grass Valley, California, United States	2012-02-28
	Nederland, Colorado, United States	2012-02-28
	Chula Vista, California, United States	2012-02-28
	Plainfield, New Jersey, United States	2012-02-28

Name	Location	Date
	Overland Park, Kansas, United States	2012-02-28
	Horton, Alabama, United States	2012-02-28
	portland, Oregon, United States	2012-02-28
	Poland, Indiana, United States	2012-02-28
	escondido, California, United States	2012-02-28
	Normal, Illinois, United States	2012-02-28
	Allison Park, Pennsylvania, United States	2012-02-28
	beaver falls, Pennsylvania, United States	2012-02-28
	Pomona, California, United States	2012-02-28
	Närberth, Pennsylvania, United States	2012-02-28
	Sandpoint, Idaho, United States	2012-02-28
	Portland, Oregon, United States	2012-02-28
	Tucson, Arizona, United States	2012-02-28
	Baldwin Park, California, United States	2012-02-28
	Ericeira, California, United States	2012-02-28
	Chattanooga, Tennessee, United States	2012-02-28
	New Rochelle, New York, United States	2012-02-28
	bradenton, Florida, United States	2012-02-28
	Cape Canaveral, Florida, United States	2012-02-28
	Ponte Vedra Beach, Florida, United States	2012-02-28
	New Brunswick , New Jersey, United States	2012-02-28
	Bergenfield, New Jersey, United States	2012-02-28
	Moorestown, New Jersey, United States	2012-02-28
	Middlesex, New Jersey, United States	2012-02-28
	Berkeley Hts, New Jersey, United States	2012-02-28
	Lodi, New Jersey, United States	2012-02-28
	Pine Brook, New Jersey, United States	2012-02-28
	Madison, New Jersey, United States	2012-02-28
	Paulsboro, New Jersey, United States	2012-02-28

Name		Location	Date
		hewitt, New Jersey, United States	2012-02-28
		Barnegat, New Jersey, United States	2012-02-28
		Roselle, New Jersey, United States	2012-02-28
		Jackson, New Jersey, United States	2012-02-28
		Yardville, New Jersey, United States	2012-02-28
		Mount Laurel, New Jersey, United States	2012-02-28
		Westfield, New Jersey, United States	2012-02-28
		Clifton, New Jersey, United States	2012-02-28
		Madison, New Jersey, United States	2012-02-28
		Plainfield, New Jersey, United States	2012-02-28
		Sterling Heights, Michigan, United States	2012-02-28
		West Milford, New Jersey, United States	2012-02-28
		East Brunswick, New Jersey, United States	2012-02-28
		Kenilworth, New Jersey, United States	2012-02-28
		seattle, Washington, United States	2012-02-28
		Takoma Park, Maryland, United States	2012-02-28
		Tenafly, New Jersey, United States	2012-02-28
		Cranford, New Jersey, United States	2012-02-28
		Blackwood, New Jersey, United States	2012-02-28
		miami, Florida, United States	2012-02-28
		Rutherford, New Jersey, United States	2012-02-28
		Mt. Arlington, New Jersey, United States	2012-02-28
		Higjland Park, New Jersey, United States	2012-02-28
		Woodcliff Lake, New Jersey, United States	2012-02-28
		Roselle Park, New Jersey, United States	2012-02-28
		Chevy Chase, Maryland, United States	2012-02-28
		Ringwood, New Jersey, United States	2012-02-28
		Long Branch, New Jersey, United States	2012-02-28
		Edison, New Jersey, United States	2012-02-28
		Rancho Viejo, Texas, United States	2012-02-28

Name	Location	Date
	Jersey City, New Jersey, United States	2012-02-28
	Westfield, New Jersey, United States	2012-02-28
	Metuchen, New Jersey, United States	2012-02-28
	morgantown, New Jersey, United States	2012-02-28
	Metuchen, New Jersey, United States	2012-02-28
	Hilo, Hawaii, United States	2012-02-28
	new york, New York, United States	2012-02-28
	East Brunswick, New Jersey, United States	2012-02-28
	Louisville, Kentucky, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	RAMSEY, New Jersey, United States	2012-02-28
	Ringwood, New Jersey, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	edison, New Jersey, United States	2012-02-28
	edison, New Jersey, United States	2012-02-28
	Upper Saddle River, New Jersey, United States	2012-02-28
	Metuchen, New Jersey, United States	2012-02-28
	New Brunswick, New Jersey, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	Ringwood, New Jersey, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	New Brunswick, New Jersey, United States	2012-02-28
	New Brunswick, New Jersey, United States	2012-02-28
	Metuchen, New Jersey, United States	2012-02-28
metuchen NJ, New Jersey, United States	2012-02-28	
Newark, New Jersey, United States	2012-02-28	
Highland Park, New Jersey, United States	2012-02-28	

Name		Location	Date
		Asbury Park, New Jersey, United States	2012-02-28
		Newton, New Jersey, United States	2012-02-28
		Somerset, New Jersey, United States	2012-02-28
		edison, New Jersey, United States	2012-02-28
		new brunswick, New Jersey, United States	2012-02-28
		TOWNSHIP OF WASHINGTON, New Jersey, United States	2012-02-28
		Metuchen , New Jersey, United States	2012-02-28
		Medford, New Jersey, United States	2012-02-28
		Colonia, New Jersey, United States	2012-02-28
		Riverside, New Jersey, United States	2012-02-28
		Edison, New Jersey, United States	2012-02-28
		Forked River, New Jersey, United States	2012-02-28
		Ringwood, New Jersey, United States	2012-02-28
		Hamilton, New Jersey, United States	2012-02-28
		New Brunswick, New Jersey, United States	2012-02-28
		Flemington, New Jersey, United States	2012-02-28
		Sarasota, Florida, United States	2012-02-28
		hamilton, New Jersey, United States	2012-02-28
		Metuchen, New Jersey, United States	2012-02-28
		Bradley Beach, New Jersey, United States	2012-02-28
		Fort Collins, Colorado, United States	2012-02-28
		Constanta, Romania	2012-02-28
		Monmouth Junction, New Jersey, United States	2012-02-28
		West New York, New Jersey, United States	2012-02-28
		Hewitt, New Jersey, United States	2012-02-28
		Carteret, New Jersey, United States	2012-02-28
		Upper Montclair, New Jersey, United States	2012-02-28

Name	Location	Date
	Fords, New Jersey, United States	2012-02-28
	South Plainfield, New Jersey, United States	2012-02-28
	Suffern, New York, United States	2012-02-28
	metuchen, New Jersey, United States	2012-02-28
	cincinnati, Ohio, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	thunder bay, Armed Forces Pacific, United States	2012-02-28
	San Francisco, California, United States	2012-02-28
	Somerset, New Jersey, United States	2012-02-28
	Las Vegas, Nevada, United States	2012-02-28
	Dunellen, New Jersey, United States	2012-02-28
	Hewitt, New Jersey, United States	2012-02-28
	Hamilton, New Jersey, United States	2012-02-28
	Trieste, Iowa, United States	2012-02-28
	Ulm, Delaware, United States	2012-02-28
	Union, Kentucky, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	MEXICO, Armed Forces Pacific, United States	2012-02-28
	Charlotte, North Carolina, United States	2012-02-28
	tenafly, New Jersey, United States	2012-02-28
	Riverton, New Jersey, United States	2012-02-28
	Naples, Florida, United States	2012-02-28
	Piscataway, New Jersey, United States	2012-02-28
	New York, New York, United States	2012-02-28
	Stuart, Florida, United States	2012-02-28
	Maplewood, New Jersey, United States	2012-02-28
	New Haven, Connecticut, United States	2012-02-28
	Madison, Wisconsin, United States	2012-02-28



Name		Location	Date
		Allentown, Pennsylvania, United States	2012-02-28
		Boalsburg, Pennsylvania, United States	2012-02-28
		Reseda, California, United States	2012-02-28
		Edison, New Jersey, United States	2012-02-28
		somerset, New Jersey, United States	2012-02-28
		South Park, Pennsylvania, United States	2012-02-28
		Rancho Palos Verdes, California, United States	2012-02-28
		Hillsboro, Oregon, United States	2012-02-28
		Atlanta, Georgia, United States	2012-02-28
		Richboro, Pennsylvania, United States	2012-02-28
		Paradise, Michigan, United States	2012-02-28
		New Brunswick, New Jersey, United States	2012-02-28
		sf, California, United States	2012-02-28
		iselin, New Jersey, United States	2012-02-28
		Iowa City, Iowa, United States	2012-02-28
		Edison, New Jersey, United States	2012-02-28
		Saint Louis, Missouri, United States	2012-02-28
		New York, New York, United States	2012-02-28
		Monmouth Junction, New Jersey, United States	2012-02-28
		Raritan, New Jersey, United States	2012-02-28
		Santa Fe, New Mexico, United States	2012-02-28
		Westfield, New Jersey, United States	2012-02-28
		Edison, New Jersey, United States	2012-02-28
		East Rutherford, New Jersey, United States	2012-02-28
		princeton, New Jersey, United States	2012-02-28
		Guelph, Ontario, Canada, Ohio, United States	2012-02-28
		Oakland, California, United States	2012-02-28

Name	Location	Date
	Talent, Oregon, United States	2012-02-28
	Montclair, New Jersey, United States	2012-02-28
	Ogdensburg, New York, United States	2012-02-28
	Chicago, Illinois, United States	2012-02-28
	Edison, New Jersey, United States	2012-02-28
	Linden, New Jersey, United States	2012-02-28
	Teaneck, New Jersey, United States	2012-02-28
	New Brunswick, New Jersey, United States	2012-02-28
	Old Bridge, New Jersey, United States	2012-02-28
	Ojai , California, United States	2012-02-28
	Dover, New Jersey, United States	2012-02-29
	Butler, New Jersey, United States	2012-02-29
	Knoxville, Tennessee, United States	2012-02-29
	Somerset, New Jersey, United States	2012-02-29
	Roma, Italy	2012-02-29
	Cresskill, New Jersey, United States	2012-02-29
	New York, New York, United States	2012-02-29
	Edison, New Jersey, United States	2012-02-29
	Madison, New Jersey, United States	2012-02-29
	Mahwah, New Jersey, United States	2012-02-29
	Long Valley, New Jersey, United States	2012-02-29
	Saratoga, California, United States	2012-02-29
	new brunswick, New Jersey, United States	2012-02-29
	Hillsborough, New Jersey, United States	2012-02-29
	Fullerton, California, United States	2012-02-29
	Bloomington, Minnesota, United States	2012-02-29
	Oakland, California, United States	2012-02-29
	New Milford, New Jersey, United States	2012-02-29
Jersey City, New Jersey, United States	2012-02-29	

Name	Location	Date
	Point Pleasant, New Jersey, United States	2012-02-29
	San Francisco, California, United States	2012-02-29
	Piscataway, New Jersey, United States	2012-02-29
	Metuchen, New Jersey, United States	2012-02-29
	huntington, New York, United States	2012-02-29
	Princeton, New Jersey, United States	2012-02-29
	Costa Mesa, California, United States	2012-02-29
	Winston, Georgia, United States	2012-02-29
	phoenix, Arizona, United States	2012-02-29
	Brooklyn, United States Minor Outlying Islands	2012-02-29
	Madeira Beach, Florida, United States	2012-02-29
	Ringwood, New Jersey, United States	2012-02-29
	Cliffside Park, New Jersey, United States	2012-02-29
	Pompton Plains, New Jersey, United States	2012-02-29
	East Hampton, New York, United States	2012-02-29
	Milltown, New Jersey, United States	2012-02-29
	Oulu, Finland	2012-02-29
	Kansas City, Missouri, United States	2012-02-29
	Basking Ridge, New Jersey, United States	2012-02-29
	Oxford, Ohio, United States	2012-02-29
	S Plainfield, New Jersey, United States	2012-02-29
	Ithaca, New York, United States	2012-02-29
	Milltown, New Jersey, United States	2012-02-29
	Erie, Pennsylvania, United States	2012-02-29
	Gresham, Oregon, United States	2012-02-29
	Philadelphia, Pennsylvania, United States	2012-02-29
	Union, New Jersey, United States	2012-02-29
	Piscataway, New Jersey, United States	2012-02-29
	Ocean Springs, Mississippi, United States	2012-02-29

Name	Location	Date
	Piscataway, New Jersey, United States	2012-02-29
	Glenwood, New Jersey, United States	2012-02-29
	Colonia, New Jersey, United States	2012-02-29
	Amsterdam, Netherlands	2012-02-29
	Morris Plains, New Jersey, United States	2012-02-29
	Berkeley Helgts, New Jersey, United States	2012-02-29
	sparta, New Jersey, United States	2012-02-29
	Brighon, Massachusetts, United States	2012-02-29
	Westminster, California, United States	2012-02-29
	ringwood, New Jersey, United States	2012-02-29
	milan, Virginia, United States	2012-02-29
	Chesapeake, Virginia, United States	2012-02-29
	Ringwood, New Jersey, United States	2012-02-29
	Metuchen, New Jersey, United States	2012-02-29
	Piscataway, New Jersey, United States	2012-02-29
	Pulaski, Virginia, United States	2012-02-29
	Edison, New Jersey, United States	2012-02-29
	Belvidere, Illinois, United States	2012-02-29
	New York, New York, United States	2012-02-29
	Manville, New Jersey, United States	2012-02-29
	Cygnnet, Ohio, United States	2012-02-29
	santa monica, Virgin Islands, U.S.	2012-02-29
	new brunswick, New Jersey, United States	2012-02-29
	barneveld, New York, United States	2012-02-29
	Kimberly, Alabama, United States	2012-02-29
South River, New Jersey, United States	2012-02-29	
colonia, New Jersey, United States	2012-02-29	
pawtucket, Rhode Island, United States	2012-02-29	
Stuart, Florida, United States	2012-02-29	

Name		Location	Date
		farnborough, United Kingdom	2012-02-29
		Edison, New Jersey, United States	2012-02-29
		Edison, New Jersey, United States	2012-02-29
		Bloomfield, New Jersey, United States	2012-02-29
		baker, Oregon, United States	2012-02-29
		Brooklyn, New York, United States	2012-02-29
		Vienna, Austria	2012-02-29
		Steuben, Maine, United States	2012-02-29
		Monmouth Junction, New Jersey, United States	2012-02-29
		Justice, Illinois, United States	2012-02-29
		dayton, New Jersey, United States	2012-02-29
		Parlin, New Jersey, United States	2012-02-29
		Santa Cruz, California, United States	2012-02-29
		lancaster, California, United States	2012-02-29
		Garfield Hts. Ohio, Alabama, United States	2012-02-29
		Sonoma, California, United States	2012-02-29
		Raamsdonksveer, Netherlands	2012-02-29
		Mahwah, New Jersey, United States	2012-02-29
		Lewisville, Texas, United States	2012-02-29
		Brooklyn, New York, United States	2012-02-29
		ilford, Armed Forces Europe, Canada, Africa, or Middle East, United States	2012-02-29
		jacksonville, Florida, United States	2012-02-29
		Edison, New Jersey, United States	2012-02-29
		Lady Lake, Florida, United States	2012-02-29
		Edison, New Jersey, United States	2012-02-29
		Nelson, New Hampshire, United States	2012-02-29
		Santa Barbara, California, United States	2012-02-29
		Kettering, Ohio, United States	2012-02-29

Name	Location	Date
	Franklin, Tennessee, United States	2012-02-29
	San Jose, California, United States	2012-02-29
	Piscataway, New Jersey, United States	2012-02-29
	Union, New Jersey, United States	2012-02-29
	grosse pointe, Michigan, United States	2012-02-29
	Warren, Ohio, United States	2012-02-29
	Leander, Texas, United States	2012-02-29
	Fort Bragg, California, United States	2012-02-29
	Jamestown, New York, United States	2012-02-29
	San Juan, Puerto Rico, United States	2012-02-29
	Fort Madison, Iowa, United States	2012-02-29
	New York, New York, United States	2012-02-29
	Madison, Wisconsin, United States	2012-02-29
	High Pt., North Carolina, United States	2012-02-29
	Rancho Mirage, California, United States	2012-02-29
	GARDEN CITY, Kansas, United States	2012-02-29
	clidton, New Jersey, United States	2012-02-29
	Roseland, New Jersey, United States	2012-02-29
	Durham, North Carolina, United States	2012-02-29
	Foley, Alabama, United States	2012-02-29
	Crestone, Colorado, United States	2012-02-29
	Mine Hill, New Jersey, United States	2012-02-29
	west haven, Connecticut, United States	2012-02-29
	Los Angeles, California, United States	2012-02-29
	NY, New York, United States	2012-02-29
	Rosemont, Pennsylvania, United States	2012-02-29
	New York, New York, United States	2012-02-29
	Williamsville, New York, United States	2012-02-29
Groton, Connecticut, United States	2012-02-29	
San Antonio, Texas, United States	2012-02-29	

Name	Location	Date
	New Brighton, Minnesota, United States	2012-02-29
	brooklyn, New York, United States	2012-02-29
	Albuquerque, New Mexico, United States	2012-02-29
	Beaverton, Oregon, United States	2012-02-29
	Prescott Valley, Arizona, United States	2012-02-29
	Knoxville, Tennessee, United States	2012-02-29
	rogersville, Tennessee, United States	2012-02-29
	Lakewood ranch, Florida, United States	2012-02-29
	Nashua, New Hampshire, United States	2012-02-29
	paradise, Michigan, United States	2012-02-29
	New Brunswick, New Jersey, United States	2012-02-29
	Louisville, Kentucky, United States	2012-02-29
	Milano, Italy	2012-02-29
	Scottsdale, Arizona, United States	2012-02-29
	Portland, Oregon, United States	2012-02-29
	Edison, New Jersey, United States	2012-02-29
	Middlesex, New Jersey, United States	2012-02-29
	Riverside, Illinois, United States	2012-02-29
	syracuse, New York, United States	2012-02-29
	san jose, California, United States	2012-02-29
	Tucson, Arizona, United States	2012-02-29
	Riverside, California, United States	2012-02-29
	Valley Glen, California, United States	2012-02-29
	Mendon, Massachusetts, United States	2012-02-29
	WELLS, Maine, United States	2012-02-29
	Clifton, New Jersey, United States	2012-02-29
	Hempstead, New York, United States	2012-02-29
	Chandler, Arizona, United States	2012-02-29
	Aurora, Colorado, United States	2012-03-01

Name	Location	Date
	New Providence, New Jersey, United States	2012-03-01
	Milwaukee, Wisconsin, United States	2012-03-01
	Englewood, Tennessee, United States	2012-03-01
	Vimodrone, Italy	2012-03-01
	Brooklyn, Ohio, United States	2012-03-01
	Goshen, Connecticut, United States	2012-03-01
	rockville, Maryland, United States	2012-03-01
	Chippewa Falls, Wisconsin, United States	2012-03-01
	waikoloa, Hawaii, United States	2012-03-01
	Reno, Nevada, United States	2012-03-01
	Elk Grove, California, United States	2012-03-01
	Edison, New Jersey, United States	2012-03-01
	GREEDFIELD, Wisconsin, United States	2012-03-01
	Carson City, Nevada, United States	2012-03-01
	la selva beach, California, United States	2012-03-01
	Thousand Oaks, California, United States	2012-03-01
	Brentwood, California, United States	2012-03-01
	wheat ridge, Colorado, United States	2012-03-01
	TULSA, Oklahoma, United States	2012-03-01
	Philadelphia, Pennsylvania, United States	2012-03-01
	WEST SACRAMENTO, California, United States	2012-03-01
	Louisville, Colorado, United States	2012-03-01
	Ashland, Oregon, United States	2012-03-01
	Frederick, Maryland, United States	2012-03-01
	Slidell, Louisiana, United States	2012-03-01
	Colorado Springs, Colorado, United States	2012-03-01
	Lake Havasu City, Arizona, United States	2012-03-01
	Brooklyn, New York, United States	2012-03-01



Name		Location	Date
		Bethune, South Carolina, United States	2012-03-01
		Bridgewater, New Jersey, United States	2012-03-01
		paramus, New Jersey, United States	2012-03-01
		Seattle, Washington, United States	2012-03-01
		teaneck, New Jersey, United States	2012-03-01
		Buda, Texas, United States	2012-03-01
		Santa Rosa, California, United States	2012-03-01
		Summer Shade, Kentucky, United States	2012-03-01
		Bergenfield, New Jersey, United States	2012-03-01
		Astoria, Oregon, United States	2012-03-01
		pompton lakes, New Jersey, United States	2012-03-01
		Santa BArbara, California, United States	2012-03-01
		Greensburg, Pennsylvania, United States	2012-03-01
		LA, California, United States	2012-03-01
		Roma, Texas, United States	2012-03-01
		High Bridge, New Jersey, United States	2012-03-01
		Southfield, Michigan, United States	2012-03-01
		Auckland, New Zealand	2012-03-01
		Bergenfield, New Jersey, United States	2012-03-01
		Wylie, Texas, United States	2012-03-01
		Toms River, New Jersey, United States	2012-03-01
		Pompton Lakes, New Jersey, United States	2012-03-01
		nanticoke, Pennsylvania, United States	2012-03-01
		Neptune, New Jersey, United States	2012-03-01
		Oaklyn, New Jersey, United States	2012-03-01
		edison, New Jersey, United States	2012-03-01
		LENEXA, Kansas, United States	2012-03-01
		Humble, Texas, United States	2012-03-01
		Comer, Georgia, United States	2012-03-01

Name	Location	Date
	glenview, Illinois, United States	2012-03-01
	South Plainfield, New Jersey, United States	2012-03-01
	Long Pond, Pennsylvania, United States	2012-03-01
	EDISON, New Jersey, United States	2012-03-01
	Elk Grove Village, Illinois, United States	2012-03-01
	LAWRENCE, Pennsylvania, United States	2012-03-01
	Green Brook, New Jersey, United States	2012-03-01
	Sun City, California, United States	2012-03-01
	EHT, New Jersey, United States	2012-03-01
	Asheville, North Carolina, United States	2012-03-01
	Verona, New Jersey, United States	2012-03-01
	Kalamazoo, Michigan, United States	2012-03-01
	Grawn, Michigan, United States	2012-03-01
	Minneapolis, Minnesota, United States	2012-03-01
	Albox, New Mexico, United States	2012-03-01
	Salisbury, North Carolina, United States	2012-03-01
	North Huntingdon, Pennsylvania, United States	2012-03-01
	Millsap, Texas, United States	2012-03-01
	Union, New Jersey, United States	2012-03-01
	baghdad, Iraq	2012-03-01
	Vista, California, United States	2012-03-01
	Asbury, New Jersey, United States	2012-03-01
	west palm beach, Florida, United States	2012-03-01
	West Palm Beach, Florida, United States	2012-03-01
	Venice, Florida, United States	2012-03-01
	Budapest, Hawaii, United States	2012-03-01
	West Milford, New Jersey, United States	2012-03-01
	old bridge, New Jersey, United States	2012-03-01
	Woodstock, New York, United States	2012-03-01

Name	Location	Date
	Beverly, New Jersey, United States	2012-03-01
	mtlaueI, New Jersey, United States	2012-03-01
	Williamstown, New Jersey, United States	2012-03-01
	Cedar Park, Texas, United States	2012-03-01
	Bound Brook, New Jersey, United States	2012-03-01
	tarxien, Idaho, United States	2012-03-01
	Orlando, Florida, United States	2012-03-01
	Chicago, Illinois, United States	2012-03-01
	San Jose, California, United States	2012-03-01
	Bayside Hills, New York, United States	2012-03-01
	Mount Laurel, New Jersey, United States	2012-03-01
	North Haledon, New Jersey, United States	2012-03-01
	Santa Fe, New Mexico, United States	2012-03-01
	Albuquerque, New Mexico, United States	2012-03-01
	Fords, New Jersey, United States	2012-03-01
	Hanford, California, United States	2012-03-02
	edison, New Jersey, United States	2012-03-02
	Eagan, Minnesota, United States	2012-03-02
	Sparta, New Jersey, United States	2012-03-02
	Sparta, New Jersey, United States	2012-03-02
	Harrisburg, Pennsylvania, United States	2012-03-02
	Martinsville, Indiana, United States	2012-03-02
	troy, Pennsylvania, United States	2012-03-02
	Robbinsville, New Jersey, United States	2012-03-02
	Wellington, Florida, United States	2012-03-02
	Westfield, New Jersey, United States	2012-03-02
	Albany, Oregon, United States	2012-03-02
	Blacksburg, Virginia, United States	2012-03-02
	mogliano veneto, Georgia, United States	2012-03-02
	Aurora, Illinois, United States	2012-03-02

Name	Location	Date
	Hillsdale, New Jersey, United States	2012-03-02
	LA CELLE SUR MORIN, Florida, United States	2012-03-02
	Stone Mountain, Georgia, United States	2012-03-02
	Edison, New Jersey, United States	2012-03-02
	Bridgewater, New Jersey, United States	2012-03-02
	bORSBEEK, Alabama, United States	2012-03-02
	Springfield, New Jersey, United States	2012-03-02
	New Brunswick, New Jersey, United States	2012-03-02
	Montclair, New Jersey, United States	2012-03-02
	brick, New Jersey, United States	2012-03-02
	Blackwood, New Jersey, United States	2012-03-02
	Stuart, Virginia, United States	2012-03-02
	Manitou Springs, Colorado, United States	2012-03-02
	Potomac Falls, Virginia, United States	2012-03-02
	Hawthorne, New Jersey, United States	2012-03-02
	Millburn Twp, New Jersey, United States	2012-03-02
	Oakland, New Jersey, United States	2012-03-02
	West Milford, New Jersey, United States	2012-03-02
	Roosevelt, New Jersey, United States	2012-03-02
	Highlands , New Jersey, United States	2012-03-02
	Ridgewood, New Jersey, United States	2012-03-02
	Milford, New Jersey, United States	2012-03-02
	Edison, New Jersey, United States	2012-03-02
	pompton lakes, New Jersey, United States	2012-03-02
	Edison, New Jersey, United States	2012-03-02
	Cranford, New Jersey, United States	2012-03-02
	Rahway, New Jersey, United States	2012-03-02
	Jersey City, New Jersey, United States	2012-03-02

Name		Location	Date
		Millville, New Jersey, United States	2012-03-02
		pointpleasantbeach, New Jersey, United States	2012-03-02
		morganville, New Jersey, United States	2012-03-02
		Hillsborough, New Jersey, United States	2012-03-02
		Edison, New Jersey, United States	2012-03-02
		Wayne, New Jersey, United States	2012-03-02
		Hawthorne, New Jersey, United States	2012-03-02
		Chatham, New Jersey, United States	2012-03-02
		Ringwood, New Jersey, United States	2012-03-02
		Newton, Massachusetts, United States	2012-03-02
		edison, New Jersey, United States	2012-03-02
		South Amboy, New Jersey, United States	2012-03-02
		Toms River, New Jersey, United States	2012-03-02
		Lincoln Park, New Jersey, United States	2012-03-02
		Neshanic Station, New Jersey, United States	2012-03-02
		Jersey City, New Jersey, United States	2012-03-02
		Fort Lee, New Jersey, United States	2012-03-02
		westmont, New Jersey, United States	2012-03-02
		North Plainfield, New Jersey, United States	2012-03-02
		Bergenfield, New Jersey, United States	2012-03-02
		Wayne, New Jersey, United States	2012-03-02
		Woodland Park, New Jersey, United States	2012-03-02
		Jackson, New Jersey, United States	2012-03-02
		Rahway, New Jersey, United States	2012-03-02
		North Brunswick, New Jersey, United States	2012-03-02
		Pompton Lakes, New Jersey, United States	2012-03-02
		Milmay, New Jersey, United States	2012-03-02

Name	Location	Date
	Newark, New Jersey, United States	2012-03-02
	Bloomingdale, New Jersey, United States	2012-03-02
	kinnelon, New Jersey, United States	2012-03-02
	Maplewood, Afghanistan	2012-03-02
	Fair Lawn, New Jersey, United States	2012-03-02
	Lawrenceville, New Jersey, United States	2012-03-02
	Westfield, New Jersey, United States	2012-03-02
	Jackson, New Jersey, United States	2012-03-02
	Bound Brook, New Jersey, United States	2012-03-02
	Perth Amboy, New Jersey, United States	2012-03-02
	West Long Branch, New Jersey, United States	2012-03-02
	Ringwood, New Jersey, United States	2012-03-02
	salt lake city, Utah, United States	2012-03-02
	Saddle Brook, New Jersey, United States	2012-03-02
	Sewaren, New Jersey, United States	2012-03-02
	APODACA, Texas, United States	2012-03-02
	Newark, New Jersey, United States	2012-03-02
	Edison, New Jersey, United States	2012-03-02
	Wayne, New Jersey, United States	2012-03-02
	New Brunswick; New Jersey, United States	2012-03-02
	Vineland , New Jersey, United States	2012-03-02
	Highland Park, New Jersey, United States	2012-03-02
	Metuchen, New Jersey, United States	2012-03-02
	red bank, New Jersey, United States	2012-03-03
	Glen Gardner, New Jersey, United States	2012-03-03
	Washington, New Jersey, United States	2012-03-03
	Chatham, New Jersey, United States	2012-03-03
	Carteret, New Jersey, United States	2012-03-03

Name		Location	Date
		South Plainfield, New Jersey, United States	2012-03-03
		Monroe twp, New Jersey, United States	2012-03-03
		edison, New Jersey, United States	2012-03-03
		Ridgewood, New Jersey, United States	2012-03-03
		North Bergen, New Jersey, United States	2012-03-03
		Wayne, New Jersey, United States	2012-03-03
		North Plainfield, New Jersey, United States	2012-03-03
		Bradley Beach, New Jersey, United States	2012-03-03
		Cedr Run, New Jersey, United States	2012-03-03
		bloomingdale, New Jersey, United States	2012-03-03
		Long Beach Township, New Jersey, United States	2012-03-03
		Morristown, New Jersey, United States	2012-03-03
		Martinsville, New Jersey, United States	2012-03-03
		clementon, New Jersey, United States	2012-03-03
		Tenafly, New Jersey, United States	2012-03-03
		Bound Brook, New Jersey, United States	2012-03-03
		Monmouth Jct, New Jersey, United States	2012-03-03
		Brick, New Jersey, United States	2012-03-03
		Edison, New Jersey, United States	2012-03-03
		Hazlet, New Jersey, United States	2012-03-03
		El Paso, Texas, United States	2012-03-03
		Edison, New Jersey, United States	2012-03-03
		East Brunswick, New Jersey, United States	2012-03-03
		Edison, New Jersey, United States	2012-03-03
		edison, New Jersey, United States	2012-03-03
		Wayne, New Jersey, United States	2012-03-03
		Red Bank, New Jersey, United States	2012-03-03
		Paramus, New Jersey, United States	2012-03-03

Name	Location	Date
	Somerset, New Jersey, United States	2012-03-03
	Manahawkin, New Jersey, United States	2012-03-03
	Berkeley Heights, New Jersey, United States	2012-03-03
	Stockholm, New Jersey, United States	2012-03-03
	closter, New Jersey, United States	2012-03-03
	Wanaque, New Jersey, United States	2012-03-03
	EGG HARBOR TOW, New Jersey, United States	2012-03-03
	New York, New York, United States	2012-03-03
	Gainesville, Florida, United States	2012-03-03
	new brunswick, New Jersey, United States	2012-03-03
	dumont, New Jersey, United States	2012-03-03
	Highland Park, New Jersey, United States	2012-03-03
	Lambertville, New Jersey, United States	2012-03-03
	North Plainfield, New Jersey, United States	2012-03-03
	Chester, New Jersey, United States	2012-03-03
	Long Branch, New Jersey, United States	2012-03-03
	Gloucester, New Jersey, United States	2012-03-03
	East Orange, New Jersey, United States	2012-03-03
	Clifton, New Jersey, United States	2012-03-03
	Rahway, New Jersey, United States	2012-03-03
	edison, New Jersey, United States	2012-03-03
	Kihei, Hawaii, United States	2012-03-03
	Edison, New Jersey, United States	2012-03-03
	Monroe Twp., New Jersey, United States	2012-03-03
	Hoboken, New Jersey, United States	2012-03-03
	Long Branch, New Jersey, United States	2012-03-03
	Manalapan, New Jersey, United States	2012-03-03
	Union, New Jersey, United States	2012-03-03



Name		Location	Date
		Pompton Lakes, New Jersey, United States	2012-03-03
		Oceanport, New Jersey, United States	2012-03-03
		Wyckoff, New Jersey, United States	2012-03-03
		Marlboro, New Jersey, United States	2012-03-03
		Plainfield, New Jersey, United States	2012-03-03
		edison, New Jersey, United States	2012-03-03
		Norwich, Connecticut, United States	2012-03-03
		Manalapan, New Jersey, United States	2012-03-03
		Metuchen, New Jersey, United States	2012-03-03
		Fair Lawn, New Jersey, United States	2012-03-03
		Franklin, New Jersey, United States	2012-03-03
		Edison, New Jersey, United States	2012-03-03
		Jersey City, New Jersey, United States	2012-03-03
		Medford lakes, New Jersey, United States	2012-03-03
		iselin, New Jersey, United States	2012-03-03
		Edison, New Jersey, United States	2012-03-03
		Edison, New Jersey, United States	2012-03-03
		Franklin Park, New Jersey, United States	2012-03-03
		Phoenix, Arizona, United States	2012-03-03
		Metuchen, New Jersey, United States	2012-03-03
		Long Branch, New Jersey, United States	2012-03-03
		Sea Bright, New Jersey, United States	2012-03-03
		waretown, New Jersey, United States	2012-03-03
		Nutley, New Jersey, United States	2012-03-03
		Landrum, South Carolina, United States	2012-03-03
		Brighton, Colorado, United States	2012-03-03
		wyckoff, New Jersey, United States	2012-03-03
		miami, Florida, United States	2012-03-03
		medford lakes, New Jersey, United States	2012-03-03

Name	Location	Date
	Glen Gardner, New Jersey, United States	2012-03-03
	Iselin, New Jersey, United States	2012-03-03
	Ewing, New Jersey, United States	2012-03-03
	Butler, New Jersey, United States	2012-03-03
	Edison, New Jersey, United States	2012-03-03
	Brick, New Jersey, United States	2012-03-03
	chatham, New Jersey, United States	2012-03-03
	Brick, New Jersey, United States	2012-03-03
	South Bound Brook, New Jersey, United States	2012-03-03
	South Bound Brook, New Jersey, United States	2012-03-03
	Ocean Grove, New Jersey, United States	2012-03-03
	Edison, New Jersey, United States	2012-03-03
	Morristown, New Jersey, United States	2012-03-03
	Edison, New Jersey, United States	2012-03-03
	Prospect, Kentucky, United States	2012-03-03
	Auckland, New Zealand	2012-03-03
	Sayreville, New Jersey, United States	2012-03-03
	Ringwood, New Jersey, United States	2012-03-03
	North Brunswick, New Jersey, United States	2012-03-03
	Yardley, Pennsylvania, United States	2012-03-03
	Englewood, New Jersey, United States	2012-03-04
	Beacon Falls, Connecticut, United States	2012-03-04
	Bound Brook, New Jersey, United States	2012-03-04
	Morristown, New Jersey, United States	2012-03-04
	Saugus, California, United States	2012-03-04
	Edison, New Jersey, United States	2012-03-04
	El Segundo, California, United States	2012-03-04
	Galveston, Texas, United States	2012-03-04

Name		Location	Date
		Edison, New Jersey, United States	2012-03-04
		Montgomery, Alabama, United States	2012-03-04
		North Brunswick, New Jersey, United States	2012-03-04
		Clermont, Florida, United States	2012-03-04
		Fulham, Australia	2012-03-04
		Kokomo, Indiana, United States	2012-03-04
		marlton, New Jersey, United States	2012-03-04
		Hillsborough, New Jersey, United States	2012-03-04
		campbell hall, New York, United States	2012-03-04
		Lake Hopatcong, New Jersey, United States	2012-03-04
		Woodbridge, New Jersey, United States	2012-03-04
		Ocean Grove, New Jersey, United States	2012-03-04
		Gorham, Maine, United States	2012-03-04
		Rumson, New York, United States	2012-03-04
		stone ridge, New York, United States	2012-03-04
		Houston, Texas, United States	2012-03-04
		Yuma, Arizona, United States	2012-03-04
		Ringwood, New Jersey, United States	2012-03-04
		Edison, New Jersey, United States	2012-03-04
		Shrewsbury, Massachusetts, United States	2012-03-04
		Asheville, North Carolina, United States	2012-03-04
		Southlake, Texas, United States	2012-03-04
		Shelton, United States Minor Outlying Islands	2012-03-04
		beachwood, New Jersey, United States	2012-03-04
		Washington, District Of Columbia, United States	2012-03-04
		Montreal, Canada	2012-03-04
		East Rutherford, New Jersey, United States	2012-03-05

Name	Location	Date
	Bergenfield, New Jersey, United States	2012-03-05
	Fair Oaks, California, United States	2012-03-05
	Folsom, Louisiana, United States	2012-03-05
	Flanders, New Jersey, United States	2012-03-05
	Chicago, Illinois, United States	2012-03-05
	EDISON, New Jersey, United States	2012-03-05
	San Jose, California, United States	2012-03-05
	Post Falls, Idaho, United States	2012-03-05
	Ocala, Florida, United States	2012-03-05
	edison, New Jersey, United States	2012-03-05
	Edison, New Jersey, United States	2012-03-05
	Tampa, Florida, United States	2012-03-05
	Middle Island, New York, United States	2012-03-05
	Fords, New Jersey, United States	2012-03-05
	Hilo, Hawaii, United States	2012-03-05
	Indianapolis, Indiana, United States	2012-03-05
	Fresno, California, United States	2012-03-05
	Grants Pass, Oregon, United States	2012-03-05
	Bay Shore, New York, United States	2012-03-05
	Los Angeles, California, United States	2012-03-05
	Ward Cove, Alaska, United States	2012-03-05
	hay el hamadia, Algeria	2012-03-05
	Thousand Oaks, California, United States	2012-03-05
	Arcata, California, United States	2012-03-05
	Zanesville, Ohio, United States	2012-03-05
	Frankfort, Kentucky, United States	2012-03-05
	Boonton, New Jersey, United States	2012-03-05
	Las Vegas, New Mexico, United States	2012-03-05
	Ringwood, New Jersey, United States	2012-03-05

Name		Location	Date
		edison, New Jersey, United States	2012-03-05
		Fords, New Jersey, United States	2012-03-05
		New Brunswick, New Jersey, United States	2012-03-05
		Aberdeen, New Jersey, United States	2012-03-05
		Westerville, Ohio, United States	2012-03-05
		Austin, Texas, United States	2012-03-05
		Chicago, Illinois, United States	2012-03-05
		Louisburg, North Carolina, United States	2012-03-05
		Cranbury, New Jersey, United States	2012-03-05
		Perth Amboy, New Jersey, United States	2012-03-05
		Glen Ridge, New Jersey, United States	2012-03-05
		Watsonville, California, United States	2012-03-05
		Terre Haute, Indiana, United States	2012-03-05
		Julian, California, United States	2012-03-05
		Plymouth, Massachusetts, United States	2012-03-05
		Vancouver, Washington, United States	2012-03-05
		Stellenbosch, South Africa	2012-03-05
		Hutto, Texas, United States	2012-03-05
		Antioch, California, United States	2012-03-05
		Newark, New Jersey, United States	2012-03-05
		Tucson, Arizona, United States	2012-03-05
		Birch Run, Michigan, United States	2012-03-05
		montclair, New Jersey, United States	2012-03-05
		New York, New York, United States	2012-03-05
		Edison, New Jersey, United States	2012-03-05
		Jacksonville, Florida, United States	2012-03-05
		Florham Park, New Jersey, United States	2012-03-05
		Santa Monica, California, United States	2012-03-05
		Elkins Park, Pennsylvania, United States	2012-03-05

Name	Location	Date
	Newark, New Jersey, United States	2012-03-05
	Truro, Alabama, United States	2012-03-05
	Dalton, Georgia, United States	2012-03-05
	Lexington, Texas, United States	2012-03-05
	Schenectady, New York, United States	2012-03-05
	Boerne, Texas, United States	2012-03-05
	BANGOR, Maine, United States	2012-03-05
	-----, Florida, United States	2012-03-05
	Sonoma, California, United States	2012-03-05
	Portland, Oregon, United States	2012-03-05
	Easton, Pennsylvania, United States	2012-03-05
	Martinez, California, United States	2012-03-06
	Rockwall, Texas, United States	2012-03-06
	Tallahassee, Florida, United States	2012-03-06
	Kingsville, Texas, United States	2012-03-06
	Brooklyn, New York, United States	2012-03-06
	NY, New York, United States	2012-03-06
	Antioch, Tennessee, United States	2012-03-06
	Thousand Oaks, California, United States	2012-03-06
	Kennett Square, Pennsylvania, United States	2012-03-06
	Scottsdale, Arizona, United States	2012-03-06
	Burlingame, California, United States	2012-03-06
	East Brunswick, New Jersey, United States	2012-03-06
	Denville, New Jersey, United States	2012-03-06
	Weehawken, New Jersey, United States	2012-03-06
	Plano, Texas, United States	2012-03-06
	Orono, Maine, United States	2012-03-06
	Edison, New Jersey, United States	2012-03-06
	Newport News, Virginia, United States	2012-03-06

Name		Location	Date
		Fort Lee, New Jersey, United States	2012-03-06
		metuchen, New Jersey, United States	2012-03-06
		Brighton, Colorado, United States	2012-03-06
		El Paso, Texas, United States	2012-03-06
		Brampton, Canada	2012-03-06
		El Cajon, California, United States	2012-03-06
		Stockbridge, Massachusetts, United States	2012-03-06
		Smyrna, Tennessee, United States	2012-03-06
		little rock, Arkansas, United States	2012-03-06
		Skelmersdale, United Kingdom	2012-03-06
		Rebecca, Georgia, United States	2012-03-06
		buffalo, New York, United States	2012-03-06
		Somerset, New Jersey, United States	2012-03-06
		Keansburg, New Jersey, United States	2012-03-06
		Austin, Texas, United States	2012-03-06
		Arlington, Virginia, United States	2012-03-06
		prairie village, Kansas, United States	2012-03-06
		Edison Twp, New Jersey, United States	2012-03-06
		Edison, New Jersey, United States	2012-03-06
		Burton, Michigan, United States	2012-03-06
		Lexington, North Carolina, United States	2012-03-06
		Roanoke, Virginia, United States	2012-03-06
		New City, New York, United States	2012-03-06
		Portsmouth, Virginia, United States	2012-03-06
		Bridgewater, New Jersey, United States	2012-03-06
		Millville, New Jersey, United States	2012-03-06
		Portsmouth, Virginia, United States	2012-03-06
		New Paltz, New York, United States	2012-03-06
		Munhall, Pennsylvania, United States	2012-03-06

Name	Location	Date
	Severn, Maryland, United States	2012-03-06
	Irving, Texas, United States	2012-03-06
	Howell, New Jersey, United States	2012-03-06
	Long Valley, New Jersey, United States	2012-03-06
	Bound Brook, New Jersey, United States	2012-03-06
	Minneapolis, Minnesota, United States	2012-03-06
	West Bend, Wisconsin, United States	2012-03-06
	new brunswick, New Jersey, United States	2012-03-06
	newmarket, Canada	2012-03-06
	Tampa, Florida, United States	2012-03-06
	hanalei, Hawaii, United States	2012-03-06
	Medford, Oregon, United States	2012-03-06
	Bellingham, Washington, United States	2012-03-06
	LA, California, United States	2012-03-06
	Bay City, Michigan, United States	2012-03-06
	london, United Kingdom	2012-03-06
	Bolton, Massachusetts, United States	2012-03-06
	Madison, Wisconsin, United States	2012-03-06
	fargo, North Dakota, United States	2012-03-06
	Richardson, Texas, United States	2012-03-06
	Ferndale, Michigan, United States	2012-03-06
	xxxx, New York, United States	2012-03-06
	Buffalo, New York, United States	2012-03-06
	New York, New York, United States	2012-03-06
	Metairie, Louisiana, United States	2012-03-06
	Maumee, Ohio, United States	2012-03-06
	carneys point, New Jersey, United States	2012-03-06
	Hampton, New Jersey, United States	2012-03-06
	Minneapolis, Minnesota, United States	2012-03-06



Name		Location	Date
		Perth Amboy, New Jersey, United States	2012-03-06
		Richmond, Virginia, United States	2012-03-06
		Las Vegas, Nevada, United States	2012-03-06
		Mt. Vernon, Texas, United States	2012-03-06
		Ringoes, New Jersey, United States	2012-03-06
		Bentonville, Arkansas, United States	2012-03-06
		Flagler Beach, Florida, United States	2012-03-06
		Shelbyville, Indiana, United States	2012-03-06
		Hempstead, New York, United States	2012-03-06
		Saratoga, Afghanistan	2012-03-07
		Eugene, Oregon, United States	2012-03-07
		SANTA MONICA, California, United States	2012-03-07
		Dover, New Hampshire, United States	2012-03-07
		Irving, Texas, United States	2012-03-07
		Williamsburg, Virginia, United States	2012-03-07
		Hollister, California, United States	2012-03-07
		Yonkers, New York, United States	2012-03-07
		Burbank, California, United States	2012-03-07
		San Diego, California, United States	2012-03-07
		Riverdale, New Jersey, United States	2012-03-07
		Victoria, Seychelles	2012-03-07
		Summerfield, Florida, United States	2012-03-07
		Wanaque, New Jersey, United States	2012-03-07
		Bay City, Michigan, United States	2012-03-07
		Portland, Oregon, United States	2012-03-07
		Winchester, Massachusetts, United States	2012-03-07
		Alta Loma, California, United States	2012-03-07
		Atascadero, California, United States	2012-03-07
		East Northport, New York, United States	2012-03-07

Name	Location	Date
	Waxahachie, Texas, United States	2012-03-07
	Aldershot, Australia	2012-03-07
	Rochester, New York, United States	2012-03-07
	Quincy, Massachusetts, United States	2012-03-07
	Long Beach, California, United States	2012-03-07
	Chatham, New Jersey, United States	2012-03-07
	Lund, Sweden	2012-03-07
	San Francisco, California, United States	2012-03-07
	Duluth, Georgia, United States	2012-03-07
	Portland, Oregon, United States	2012-03-07
	Cocoa, Florida, United States	2012-03-07
	South Gate, California, United States	2012-03-07
	geelong, Australia	2012-03-07
	Österåker, Armed Forces Americas (except Canada), United States	2012-03-07
	Arkhangelsk, Russian Federation	2012-03-07
	P, Italy	2012-03-07
	Ojai, California, United States	2012-03-07
	Loxahatchee, Florida, United States	2012-03-07
	Toronto, Canada	2012-03-07
	Newland, North Carolina, United States	2012-03-07
	Somerdale, New Jersey, United States	2012-03-07
	Montgomery, New York, United States	2012-03-07
	Los Lunas, New Mexico, United States	2012-03-07
	west hills, California, United States	2012-03-07
	West Columbia, South Carolina, United States	2012-03-07
	Bound Brook, New Jersey, United States	2012-03-07
	Athens, Ohio, United States	2012-03-07
	Asheville, North Carolina, United States	2012-03-07
	Beltsville, Maryland, United States	2012-03-07

Name		Location	Date
		Carmichael, California, United States	2012-03-07
		Bloomington, Indiana, United States	2012-03-07
		Kailua, Hawaii, United States	2012-03-07
		Rosemere, New Jersey, United States	2012-03-07
		athens, California, United States	2012-03-07
		Park City, Utah, United States	2012-03-07
		kalamazoo, Michigan, United States	2012-03-07
		Edison, New Jersey, United States	2012-03-07
		haskell, New Jersey, United States	2012-03-07
		New York, New York, United States	2012-03-07
		Wayne, New Jersey, United States	2012-03-07
		Cincinnati, Ohio, United States	2012-03-07
		LAS VEGAS, Nevada, United States	2012-03-07
		LAS VEGAS, Nevada, United States	2012-03-07
		sf, California, United States	2012-03-07
		Phoenix, Arizona, United States	2012-03-07
		Pascoag, South Carolina, United States	2012-03-07
		arcadia, California, United States	2012-03-07
		north brunswick, New Jersey, United States	2012-03-07
		Miami, Florida, United States	2012-03-07
		Chicago, Illinois, United States	2012-03-07
		Richmond, Virginia, United States	2012-03-07
		Fairhaven, Massachusetts, United States	2012-03-07
		Los Angeles, California, United States	2012-03-07
		Tampere, Finland	2012-03-07
		Metuchen, New Jersey, United States	2012-03-07
		Topeka, Kansas, United States	2012-03-08
		Madison, Wisconsin, United States	2012-03-08
		Hailey, Idaho, United States	2012-03-08

Name	Location	Date
	Huntington Beach, California, United States	2012-03-08
	winston salem, North Carolina, United States	2012-03-08
	Fairfax, California, United States	2012-03-08
	clyde, North Carolina, United States	2012-03-08
	Raritan, New Jersey, United States	2012-03-08
	Balgonie, Canada	2012-03-08
	Darby, Pennsylvania, United States	2012-03-08
	San Francisco, California, United States	2012-03-08
	Murrells Inlet, South Carolina, United States	2012-03-08
	Buenos Aires, Arkansas, United States	2012-03-08
	Somewhere, Nebraska, United States	2012-03-08
	Philadelphia, Pennsylvania, United States	2012-03-08
	Lubbock, Texas, United States	2012-03-08
	South San Francisco, California, United States	2012-03-08
	Washington, New Jersey, United States	2012-03-08
	forsyth, Missouri, United States	2012-03-08
	Seattle, Washington, United States	2012-03-08
	Tampa,, Florida, United States	2012-03-08
	Horsham, Pennsylvania, United States	2012-03-08
	Eagleville, Pennsylvania, United States	2012-03-08
	Dallas, Texas, United States	2012-03-08
	Portland, Oregon, United States	2012-03-08
	Monroe, Connecticut, United States	2012-03-08
	Phoenix, Arizona, United States	2012-03-08
	Key LArgo, Florida, United States	2012-03-08
	Jacksonville, Florida, United States	2012-03-08
	Austin, Texas, United States	2012-03-08
	High Point, North Carolina, United States	2012-03-08

Name		Location	Date
		Laguna Hills, California, United States	2012-03-08
		Bridgewater, New Jersey, United States	2012-03-08
		Rochester, New York, United States	2012-03-08
		Lees Summit, Missouri, United States	2012-03-08
		la palma, California, United States	2012-03-08
		Laytonville, California, United States	2012-03-08
		LAS VEGAS, Nevada, United States	2012-03-08
		Milpitas, California, United States	2012-03-08
		Willits, California, United States	2012-03-08
		Sun City West, Arizona, United States	2012-03-08
		bridgewater, New Jersey, United States	2012-03-08
		Three Rivers, Michigan, United States	2012-03-08
		Metairie, Louisiana, United States	2012-03-08
		winters, California, United States	2012-03-08
		Edgewater, Maryland, United States	2012-03-09
		moreno valley, California, United States	2012-03-09
		Brunswick, Georgia, United States	2012-03-09
		Manalapan, New Jersey, United States	2012-03-09
		brooklyn, New York, United States	2012-03-09
		Los Angeles, California, United States	2012-03-09
		Los angeles, California, United States	2012-03-09
		Vancouver, Canada	2012-03-09
		Terrell, Texas, United States	2012-03-09
		Somerset, United Kingdom	2012-03-09
		Montgomery, Alabama, United States	2012-03-09
		Hinsdale, New Hampshire, United States	2012-03-09
		New York, New York, United States	2012-03-09
		Herriman, Utah, United States	2012-03-09
		Delevan, New York, United States	2012-03-09
		towanda, Illinois, United States	2012-03-09

Name	Location	Date
	Honokaa, Hawaii, United States	2012-03-09
	Hillsborough, New Jersey, United States	2012-03-09
	Newberry, South Carolina, United States	2012-03-09
	Markham, Canada	2012-03-09
	Joppa, Maryland, United States	2012-03-09
	Mountlake Terrace, Washington, United States	2012-03-09
	Norfolk, Virginia, United States	2012-03-09
	Lynchburg, Virginia, United States	2012-03-09
	Bothell, Washington, United States	2012-03-10
	us, California, United States	2012-03-10
	Reno, Nevada, United States	2012-03-10
	brooklyn center, Minnesota, United States	2012-03-10
	long beach, California, United States	2012-03-10
	Taylorsville, North Carolina, United States	2012-03-10
	aurora, Ohio, United States	2012-03-10
	Schaumburg, Illinois, United States	2012-03-10
	Hastings, Michigan, United States	2012-03-10
	St Joseph, Missouri, United States	2012-03-10
	Portimão, Portugal	2012-03-10
	hamburg, Germany	2012-03-10
	Bridgewater, New Jersey, United States	2012-03-10
	Mason, Wisconsin, United States	2012-03-10
	Brooklyn, New York, United States	2012-03-10
	FORT WORTH, Texas, United States	2012-03-10
	Montgomery Village, Maryland, United States	2012-03-10
Union City, New Jersey, United States	2012-03-10	
Santa Barbara, California, United States	2012-03-10	
Sahuarita, Arizona, United States	2012-03-10	

Name		Location	Date
		pgh, United States Minor Outlying Islands	2012-03-10
		Great NEck, New York, United States	2012-03-10
		Webster, New York, United States	2012-03-10
		Battle Creek, Michigan, United States	2012-03-10
		colts neck, New Jersey, United States	2012-03-10
		Concrete, Washington, United States	2012-03-10
		New Orleans, Louisiana, United States	2012-03-10
		ann arbor, Michigan, United States	2012-03-10
		Pgh, Pennsylvania, United States	2012-03-10
		Arlington, Texas, United States	2012-03-10
		North Port, Florida, United States	2012-03-11
		Jersey City, New Jersey, United States	2012-03-11
		Bloomfield,Ont., California, United States	2012-03-11
		Durham, North Carolina, United States	2012-03-11
		Everett, Washington, United States	2012-03-11
		Wilton, Connecticut, United States	2012-03-11
		Liverpool, New York, United States	2012-03-11
		Charlotte, Michigan, United States	2012-03-11
		South Bound Brook, New Jersey, United States	2012-03-11
		NY, New York, United States	2012-03-11
		Concord, California, United States	2012-03-11
		leesburg, Virginia, United States	2012-03-11
		Andhra Pradesh, Indiana, United States	2012-03-11
		Chicago, Illinois, United States	2012-03-11
		Glencoe, Illinois, United States	2012-03-11
		rockland, Massachusetts, United States	2012-03-11
		San Rafael, California, United States	2012-03-11
		New York, New York, United States	2012-03-11
		Bergamo, Italy	2012-03-11

Name	Location	Date
	Medford, Oregon, United States	2012-03-11
	Kittery, Maine, United States	2012-03-11
	Santa Cruz, California, United States	2012-03-11
	Athens, Georgia, United States	2012-03-11
	Brooklyn, New York, United States	2012-03-11
	San Diego, California, United States	2012-03-11
	Spokane, Washington, United States	2012-03-11
	Edison, New Jersey, United States	2012-03-11
	Schio (VI), Alabama, United States	2012-03-11
	Banning, California, United States	2012-03-11
	Fairfax, Virginia, United States	2012-03-11
	North Hollywood, California, United States	2012-03-11
	Riga, Latvia	2012-03-12
	Prince Frederick, Maryland, United States	2012-03-12
	Meriden, Connecticut, United States	2012-03-12
	Anaheim, California, United States	2012-03-12
	Phoenix, Arizona, United States	2012-03-12
	Kirkland, Washington, United States	2012-03-12
	Santa Cruz, California, United States	2012-03-12
	new london, Connecticut, United States	2012-03-12
	Yonkers, New York, United States	2012-03-12
	Coon Rapids, Minnesota, United States	2012-03-12
	Vienna, Austria	2012-03-12
	Spotsylvania, Virginia, United States	2012-03-12
	Springfield, Missouri, United States	2012-03-12
	Quispamsis, Canada	2012-03-12
	Carbondale, Colorado, United States	2012-03-12
	Tulsa, Oklahoma, United States	2012-03-12
Lynn Haven, Florida, United States	2012-03-12	



Name		Location	Date
		Worcester, Massachusetts, United States	2012-03-12
		Somerset, New Jersey, United States	2012-03-12
		Milltown, New Jersey, United States	2012-03-13
		Vernon, Texas, United States	2012-03-13
		Johnstown, Pennsylvania, United States	2012-03-13
		Joplin, Missouri, United States	2012-03-13
		Dalton, Georgia, United States	2012-03-13
		Marina Del Rey, California, United States	2012-03-13
		Kamuela, Hawaii, United States	2012-03-13
		St Petersburg, Florida, United States	2012-03-13
		Houston, Texas, United States	2012-03-13
		marengo, Illinois, United States	2012-03-13
		Enumclaw, Washington, United States	2012-03-13
		Rimini, Italy	2012-03-13
		gauteng, South Africa	2012-03-13
		valencia, Pennsylvania, United States	2012-03-13
		Hayward, Wisconsin, United States	2012-03-13
		Sayville, New York, United States	2012-03-13
		Plymouth, Minnesota, United States	2012-03-13
		Bernex, Switzerland	2012-03-13
		Edmond, Oklahoma, United States	2012-03-13
		Richardson, Texas, United States	2012-03-13
		epping, United Kingdom	2012-03-13
		Bolingbrook, Illinois, United States	2012-03-13
		LAURYS STA, Pennsylvania, United States	2012-03-13
		New York, New York, United States	2012-03-14
		Aurora, Colorado, United States	2012-03-14
		York Haven, Pennsylvania, United States	2012-03-14
		shiprock, New Mexico, United States	2012-03-14
		New York City, Canada	2012-03-14

Name	Location	Date
	Aliso Viejo, California, United States	2012-03-14
	St. Charles, Missouri, United States	2012-03-14
	colorado springs, Colorado, United States	2012-03-14
	charlotte, North Carolina, United States	2012-03-14
	New Oxford, Pennsylvania, United States	2012-03-14
	Athens, Georgia, United States	2012-03-14
	Richmond Hill, Georgia, United States	2012-03-14
	Richfield, Minnesota, United States	2012-03-14
	New York City, New York, United States	2012-03-14
	Great Neck, New York, United States	2012-03-14
	New Orleans, Louisiana, United States	2012-03-14
	San Jose, California, United States	2012-03-14
	Manchester, Massachusetts, United States	2012-03-14
	SAN FRAN CISCO, California, United States	2012-03-14
	Pompton Lakes, New Jersey, United States	2012-03-14
	Holden, Massachusetts, United States	2012-03-14
	Worcester, Massachusetts, United States	2012-03-14
	Red Hook, New York, United States	2012-03-14
	Manchester, Massachusetts, United States	2012-03-14
	Mclean, Virginia, United States	2012-03-15
	norfolk, Virginia, United States	2012-03-15
	Essex, Massachusetts, United States	2012-03-15
	Bogotá, Colombia	2012-03-15
	Monticello, Kentucky, United States	2012-03-15
	Ridgewood, New Jersey, United States	2012-03-15
Groesbeck, Texas, United States	2012-03-15	
CARMICHAEL, California, United States	2012-03-15	

Name	Location	Date
	barrington, New Hampshire, United States	2012-03-15
	sarasota, Florida, United States	2012-03-15
	Baltimore, Maryland, United States	2012-03-15
	Manchester, Vermont, United States	2012-03-15
	Jerusalem, Israel	2012-03-15
	New London, Connecticut, United States	2012-03-15
	Berkeley, California, United States	2012-03-15
	Edison, New Jersey, United States	2012-03-15
	Huntsville, Texas, United States	2012-03-15
	Bedford, Virginia, United States	2012-03-15
	Knightdale, North Carolina, United States	2012-03-15
	Manchester, Massachusetts, United States	2012-03-15
	manchvegas, Massachusetts, United States	2012-03-15
	emmaus, Pennsylvania, United States	2012-03-15
	Montevideo, Missouri; United States	2012-03-15
	Manchester, Massachusetts, United States	2012-03-15
	Beverly, Massachusetts, United States	2012-03-15
	manchester, Massachusetts, United States	2012-03-15
	Boise, Idaho, United States	2012-03-15
	Wallingford, United Kingdom	2012-03-15
	Vernon Hills, Illinois, United States	2012-03-15
	Beverly, Massachusetts, United States	2012-03-15
	winter park, Florida, United States	2012-03-16
	Everett, Washington, United States	2012-03-16
	manchester, Massachusetts, United States	2012-03-16
	Williamsport, Pennsylvania, United States	2012-03-16

Name	Location	Date
	Manchester, Massachusetts, United States	2012-03-16
	Rector, Pennsylvania, United States	2012-03-16
	Waco, Texas, United States	2012-03-16
	Zagreb, Croatia	2012-03-16
	ESSEX, United Kingdom	2012-03-16
	Charlotte, North Carolina, United States	2012-03-16
	Huntersville, North Carolina, United States	2012-03-16
	Winston-Salem, North Carolina, United States	2012-03-16
	Shearwater, Canada	2012-03-16
	Toms River, New Jersey, United States	2012-03-16
	Pomona, New Jersey, United States	2012-03-16
	Middleton, Idaho, United States	2012-03-16
	Coral Reef, Florida, United States	2012-03-16
	Hettlingen, Switzerland	2012-03-16
	Redding, California, United States	2012-03-16
	norwich, Connecticut, United States	2012-03-17
	Knoxville, Tennessee, United States	2012-03-17
	Dallas, Texas, United States	2012-03-17
	Foresthill, California, United States	2012-03-17
	Mamou, Louisiana, United States	2012-03-17
	Richmond, California, United States	2012-03-17
	Irvine, California, United States	2012-03-17
	Rockford, Illinois, United States	2012-03-17
	Placitas, New Mexico, United States	2012-03-17
	Montgomery Village, Maryland, United States	2012-03-17
Los Angeles, California, United States	2012-03-17	
Highland Park, New Jersey, United States	2012-03-17	
Doncaster, United Kingdom	2012-03-17	

Name		Location	Date
		LOS ANGELES, California, United States	2012-03-17
		Palo Alto, California, United States	2012-03-17
		ringwood, New Jersey, United States	2012-03-18
		homestead, Florida, United States	2012-03-18
		Dallas, Texas, United States	2012-03-18
		Banks, Alabama, United States	2012-03-18
		Mobile, Alabama, United States	2012-03-18
		Greenbrier, Tennessee, United States	2012-03-18
		Longmont, Colorado, United States	2012-03-18
		Newnan, Georgia, United States	2012-03-18
		Salt Lake City, Utah, United States	2012-03-18
		Clarkston, Washington, United States	2012-03-18
		CAYCE, South Carolina, United States	2012-03-18
		gathersburg, Maryland, United States	2012-03-18
		Huntsville, Texas, United States	2012-03-18
		LaSalle, Illinois, United States	2012-03-18
		private, North Carolina, United States	2012-03-18
		Scotch Plains, New Jersey, United States	2012-03-18
		Medford, New Jersey, United States	2012-03-18
		boone, North Carolina, United States	2012-03-18
		Aveiro, Portugal	2012-03-18
		Egg Harbor City, New Jersey, United States	2012-03-18
		Providence, Rhode Island, United States	2012-03-18
		Piedmont, California, United States	2012-03-18
		Ft. Walton Beach, Florida, United States	2012-03-19
		Manchester, Massachusetts, United States	2012-03-19
		Brooklyn, New York, United States	2012-03-19
		Mahwah, New Jersey, United States	2012-03-19
		Atlantic Beach, Florida, United States	2012-03-19

Name	Location	Date
	Arcata, California, United States	2012-03-19
	Durham, North Carolina, United States	2012-03-19
	Oreana, Illinois, United States	2012-03-19
	Obrien, Oregon, United States	2012-03-19
	port jefferson station, New York, United States	2012-03-19
	Tampere, Finland	2012-03-19
	bogota, Colombia	2012-03-19
	Monroe, Ohio, United States	2012-03-19
	Richmond, Virginia, United States	2012-03-19
	Cape May, New Jersey, United States	2012-03-19
	Brooklyn, New York, United States	2012-03-19
	edison, New Jersey, United States	2012-03-19
	Congleton, United Kingdom	2012-03-19
	SAN DIEGO, California, United States	2012-03-19
	tinley park, Illinois, United States	2012-03-19
	Chandler, Arizona, United States	2012-03-19
	Manassas, Virginia, United States	2012-03-19
	San Diego, California, United States	2012-03-19
	rochester, New York, United States	2012-03-19
	West Richland, Washington, United States	2012-03-19
	Chihuahua, Mexico	2012-03-19
	Orangevale, California, United States	2012-03-19
	Berlin, New York, United States	2012-03-20
	Decatur, Georgia, United States	2012-03-20
	Williamsport, Pennsylvania, United States	2012-03-20
	Naples, Florida, United States	2012-03-20
	Biloxi, Mississippi, United States	2012-03-20
	New York, New York, United States	2012-03-20
	abingdon, Maryland, United States	2012-03-20

Name		Location	Date
		Akron, Ohio, United States	2012-03-20
		Iowa City, Iowa, United States	2012-03-20
		Clarksville, Tennessee, United States	2012-03-20
		miami, Florida, United States	2012-03-20
		San Francisco, California, United States	2012-03-20
		Findlay, Ohio, United States	2012-03-20
		Midlothian, Illinois, United States	2012-03-20
		Mt Prospect, Illinois, United States	2012-03-20
		Weirton, West Virginia, United States	2012-03-20
		Villanova, Pennsylvania, United States	2012-03-20
		Plano, Texas, United States	2012-03-20
		Altamonte Springs, Florida, United States	2012-03-20
		Dover, New Jersey, United States	2012-03-20
		Wauwatosa, Wisconsin, United States	2012-03-20
		bronaugh, Missouri, United States	2012-03-20
		boynton beach, Florida, United States	2012-03-20
		Waldron, Michigan, United States	2012-03-20
		Brooklyn, New York, United States	2012-03-20
		greenbrier, Arkansas, United States	2012-03-20
		Edison, New Jersey, United States	2012-03-20
		Crown Point, Indiana, United States	2012-03-20
		Sebastian, Florida, United States	2012-03-20
		Haverstraw, New York, United States	2012-03-20
		Cheyenne, Wyoming, United States	2012-03-20
		Tacoma, Washington, United States	2012-03-20
		Garfield, New Jersey, United States	2012-03-20
		Woodbridge, Virginia, United States	2012-03-20
		Denver, Colorado, United States	2012-03-20
		Clarkston, Michigan, United States	2012-03-20
		Brooklyn, Ohio, United States	2012-03-20

Name	Location	Date
	Rønne, Denmark	2012-03-20
	West Springfield, Massachusetts, United States	2012-03-20
	Valdosta, Georgia, United States	2012-03-20
	Valdosta, Georgia, United States	2012-03-21
	10004, New York, United States	2012-03-21
	Kent, New York, United States	2012-03-21
	Belleville, Michigan, United States	2012-03-21
	East Brunswick, New Jersey, United States	2012-03-21
	Houston, Texas, United States	2012-03-21
	San Diego, California, United States	2012-03-21
	PASSAIC, New Jersey, United States	2012-03-21
	Mobile, Alabama, United States	2012-03-21
	Pinconning, Michigan, United States	2012-03-21
	Charlotte, North Carolina, United States	2012-03-21
	Chicago, Illinois, United States	2012-03-21
	Munster, Indiana, United States	2012-03-21
	Redway, California, United States	2012-03-21
	Farmington Hills, Michigan, United States	2012-03-21
	Mahwah, New Jersey, United States	2012-03-21
	Wadsworth, Ohio, United States	2012-03-21
	Sedalia, Missouri, United States	2012-03-21
	BRIDGEWATER, New Jersey, United States	2012-03-21
	Tuckerton, New Jersey, United States	2012-03-21
	Silver Spring, Maryland, United States	2012-03-21
	philadelphia, Pennsylvania, United States	2012-03-21
San Antonio, Texas, United States	2012-03-21	
West Lebanon, New Hampshire, United States	2012-03-21	
South plainfield, New Jersey, United States	2012-03-21	



Name		Location	Date
		Fort Lauderdale, Florida, United States	2012-03-21
		moodus, Connecticut, United States	2012-03-22
		Maumelle, Arkansas, United States	2012-03-22
		Austin, Texas, United States	2012-03-22
		Sherbrooke, Canada	2012-03-22
		Westborough, Massachusetts, United States	2012-03-22
		Belton, Texas, United States	2012-03-22
		norwich, Connecticut, United States	2012-03-22
		Salem, Oregon, United States	2012-03-22
		white lake, Michigan, United States	2012-03-22
		pasco, Washington, United States	2012-03-22
		Rensselaer, New York, United States	2012-03-22
		Orlando, Florida, United States	2012-03-22
		Hanover, New Hampshire, United States	2012-03-22
		San Carlos, California, United States	2012-03-22
		Saginaw, Michigan, United States	2012-03-22
		Los Angeles, California, United States	2012-03-22
		huntington beach, California, United States	2012-03-22
		Prairie Village, Kansas, United States	2012-03-22
		Oceanside, California, United States	2012-03-22
		Nashville, Tennessee, United States	2012-03-22
		Bayville, New Jersey, United States	2012-03-22
		austin, Texas, United States	2012-03-22
		Austin, Texas, United States	2012-03-22
		Branchville, New Jersey, United States	2012-03-22
		Temple, Pennsylvania, United States	2012-03-22
		aguada, Puerto Rico, United States	2012-03-22
		Holly Springs, North Carolina, United States	2012-03-22

Name	Location	Date
	Charlotte, North Carolina, United States	2012-03-22
	Brooklyn, New York, United States	2012-03-22
	fort hood, Texas, United States	2012-03-22
	Bridgewater, New Jersey, United States	2012-03-22
	oakland, California, United States	2012-03-22
	Aventura, Florida, United States	2012-03-22
	Somerset, New Jersey, United States	2012-03-22
	Bridgewater, New Jersey, United States	2012-03-22
	Bridgewater, New Jersey, United States	2012-03-22
	Bridgewater, New Jersey, United States	2012-03-22
	Chandler, Arizona, United States	2012-03-22
	Escondido, California, United States	2012-03-22
	Staten Island, New York, United States	2012-03-22
	West Palm Beach, Florida, United States	2012-03-23
	Athens, Georgia, United States	2012-03-23
	Northwood, New Hampshire, United States	2012-03-23
	Perth Amboy, New Jersey, United States	2012-03-23
	Kajaani, Finland	2012-03-23
	Kamloops, Canada	2012-03-23
	Everett, Washington, United States	2012-03-23
	la Verne, California, United States	2012-03-23
	Rodeo, California, United States	2012-03-23
	Chicago, Illinois, United States	2012-03-23
	New York, New York, United States	2012-03-23
	Little Rock, Arkansas, United States	2012-03-23
	alvarado, Texas, United States	2012-03-23
	Somerset, New Jersey, United States	2012-03-23
	Morris Plains, New Jersey, United States	2012-03-23
Fountain, Colorado, United States	2012-03-23	

Name		Location	Date
		Oakland, California, United States	2012-03-23
		Houston, Texas, United States	2012-03-23
		Manhattan, New York City, New York, United States	2012-03-23
		Matawan, United States Minor Outlying Islands	2012-03-23
		Flemington, New Jersey, United States	2012-03-23
		Oceanside, New York, United States	2012-03-24
		Austin, Texas, United States	2012-03-24
		Grovetown, Georgia, United States	2012-03-24
		Houston, Texas, United States	2012-03-24
		Fort Wayne, Indiana, United States	2012-03-24
		Mankato, Minnesota, United States	2012-03-24
		Broomfield, Colorado, United States	2012-03-24
		Stallikon, Switzerland	2012-03-24
		Los Angeles, California, United States	2012-03-24
		Tampa, Florida, United States	2012-03-24
		Pico, Portugal	2012-03-24
		West Allis, Wisconsin, United States	2012-03-24
		Minneapolis, Minnesota, United States	2012-03-24
		Farmington, Maine, United States	2012-03-24
		Phoenix, Arizona, United States	2012-03-24
		Phoenix, Arizona, United States	2012-03-24
		Martins Ferry, Ohio, United States	2012-03-24
		New Orleans, Louisiana, United States	2012-03-24
		Portland, Oregon, United States	2012-03-24
		Dallas, Texas, United States	2012-03-24
		Lakewood, Colorado, United States	2012-03-24
		Alameda, California, United States	2012-03-25
		Miami, Florida, United States	2012-03-25
		wesley chapel, Florida, United States	2012-03-25

Name	Location	Date
	Boulder, CO, United States Minor Outlying Islands	2012-03-25
	Mill Valley, California, United States	2012-03-25
	Kortrijk-Heule West-Vlaanderen Belgie, Nebraska, United States	2012-03-25
	Hawthorne, California, United States	2012-03-25
	Auburn, Pennsylvania, United States	2012-03-25
	sydney, Australia	2012-03-25
	Casper, Wyoming, United States	2012-03-25
	Auburn, Maine, United States	2012-03-25
	Cedar Rapids, Iowa, United States	2012-03-25
	Edison, New Jersey, United States	2012-03-25
	Aberdeen, New Jersey, United States	2012-03-25
	Challenge, California, United States	2012-03-25
	San Marcos, California, United States	2012-03-25
	Derby Line, Vermont, United States	2012-03-25
	Riverview, Florida, United States	2012-03-25
	Glendale, California, United States	2012-03-25
	south daytona, Florida, United States	2012-03-25
	NY, New York, United States	2012-03-25
	Oxford, Mississippi, United States	2012-03-25
	arlington, Texas, United States	2012-03-25
	Tallahassee, Florida, United States	2012-03-25
	Havre, Montana, United States	2012-03-25
	Centerville, Iowa, United States	2012-03-26
	havre de grace, Maryland, United States	2012-03-26
	N. Charleston, South Carolina, United States	2012-03-26
	Tucson, Arizona, United States	2012-03-26
	Denver, Colorado, United States	2012-03-26
	New Buffalo, Michigan, United States	2012-03-26

Name		Location	Date
		Islamabad, Pakistan	2012-03-26
		Clinton, New Jersey, United States	2012-03-26
		Waterbury, Connecticut, United States	2012-03-26
		Ladson, South Carolina, United States	2012-03-26
		Bothell, Washington, United States	2012-03-26
		St. Louis, Missouri, United States	2012-03-26
		Lakewood, New Jersey, United States	2012-03-26
		Brooklyn, New York, United States	2012-03-26
		Sacramento, California, United States	2012-03-27
		Indianapolis, Indiana, United States	2012-03-27
		cocoa, Florida, United States	2012-03-27
		Las Vegas, Nevada, United States	2012-03-27
		New Yoek, New York, United States	2012-03-27
		Murrysville, Pennsylvania, United States	2012-03-27
		Salzgitter, Germany	2012-03-27
		Woodstock, Georgia, United States	2012-03-27
		arlington, Virginia, United States	2012-03-27
		Blackwood, New Jersey, United States	2012-03-27
		Cincinnati, Ohio, United States	2012-03-27
		Columbus, Ohio, United States	2012-03-27
		Grayslake IL, Idaho, United States	2012-03-27
		Los Angeles, California, United States	2012-03-27
		Austin, Texas, United States	2012-03-27
		tonbridge, Arkansas, United States	2012-03-27
		Mississauga, Canada	2012-03-27
		Dekalb, Illinois, United States	2012-03-27
		GLENDAL, Arizona, United States	2012-03-28
		Bowie, Maryland, United States	2012-03-28
		Bass Coast Shire, Australia	2012-03-28
		Burlington, North Carolina, United States	2012-03-28

Name	Location	Date
	Nottingham, United Kingdom	2012-03-28
	Phila, Pennsylvania, United States	2012-03-28
	NRH, Texas, United States	2012-03-28
	Rockford, Illinois, United States	2012-03-28
	Fair Lawn, New Jersey, United States	2012-03-28
	Marco Island, Florida, United States	2012-03-28
	brockport, New York, United States	2012-03-28
	lemoyne@yahoo.com, Pennsylvania, United States	2012-03-28
	toronto, Canada	2012-03-28
	olathe, Kansas, United States	2012-03-28
	Bay city, Michigan, United States	2012-03-28
	Orlando, Florida, United States	2012-03-28
	ticonderoga, New York, United States	2012-03-28
	Toronto, Canada	2012-03-28
	freeland, Washington, United States	2012-03-28
	Ormond Beach, Florida, United States	2012-03-28
	Richmond, Kentucky, United States	2012-03-29
	Madison, Wisconsin, United States	2012-03-29
	takoma park, Maryland, United States	2012-03-29
	Harrison, Arkansas, United States	2012-03-29
	chenango forks, New York, United States	2012-03-29
	Bristol, New York, United States	2012-03-29
	New Hartford, New York, United States	2012-03-29
	platteville, Wisconsin, United States	2012-03-29
	crystal river, Florida, United States	2012-03-29
	houston, Texas, United States	2012-03-29
	Torrington, Connecticut, United States	2012-03-29
	houston, Texas, United States	2012-03-29
	Lantana, Florida, United States	2012-03-29

Name		Location	Date
		KANSAS CITY, Kansas, United States	2012-03-29
		Charlotte, North Carolina, United States	2012-03-29
		Akron, Ohio, United States	2012-03-29
		Brentwood, California, United States	2012-03-29
		cape Coral, Florida, United States	2012-03-29
		CLIFTON, New Jersey, United States	2012-03-30
		Minneapolis, Minnesota, United States	2012-03-30
		Tarbert, United Kingdom	2012-03-30
		Port Charlotte, Florida, United States	2012-03-30
		Verona, New Jersey, United States	2012-03-30
		League City, Texas, United States	2012-03-30
		Edison, New Jersey, United States	2012-03-30
		Edison, New Jersey, United States	2012-03-30
		Edison, New Jersey, United States	2012-03-30
		Weyauwega, Wisconsin, United States	2012-03-30
		Garfield, New Jersey, United States	2012-03-30
		Fraser, Michigan, United States	2012-03-30
		Box Canyon, California, United States	2012-03-30
		Epsom, New Hampshire, United States	2012-03-30
		basking ridge, New Jersey, United States	2012-03-30
		Holland, Michigan, United States	2012-03-30
		Round rock, Texas, United States	2012-03-31
		san diego, California, United States	2012-03-31
		Norwalk, Ohio, United States	2012-03-31
		sherrill, New York, United States	2012-03-31
		South Beloit, Illinois, United States	2012-03-31
		Pittsburg, Kansas, United States	2012-03-31
		Claremont, California, United States	2012-03-31
		Claremont, California, United States	2012-03-31
		Pikeville, Kentucky, United States	2012-03-31

Name	Location	Date
	Fort Collins, Colorado, United States	2012-03-31
	Brooklyn, New York, United States	2012-03-31
	Taunton, United Kingdom	2012-03-31
	bowness on windermere, Wyoming, United States	2012-03-31
	Edinburgh, United Kingdom	2012-03-31
	Wolverhampton, West Virginia, United States	2012-03-31
	Milford, Pennsylvania, United States	2012-03-31
	conway, South Carolina, United States	2012-03-31
	Krum, Texas, United States	2012-03-31
	Winchendon, Massachusetts, United States	2012-03-31
	San Francisco, California, United States	2012-03-31
	Jacksonville, Florida, United States	2012-04-01
	Lanark Highlands, Canada	2012-04-01
	norwich, United Kingdom	2012-04-01
	Merrylands, Australia	2012-04-01
	Northampton, United Kingdom	2012-04-01
	Seattle, Washington, United States	2012-04-01
	Birkdale, Australia	2012-04-01
	LeRoy, Michigan, United States	2012-04-01
	Sanford, Florida, United States	2012-04-01
	Doylestown, Pennsylvania, United States	2012-04-01
	sunnyside, New York, United States	2012-04-01
	Moscow, Idaho, United States	2012-04-01
	Foster City, California, United States	2012-04-01
	Acton, Massachusetts, United States	2012-04-01
	Murrayville, Illinois, United States	2012-04-01
	Bronx, New York, United States	2012-04-01
	Lake Elsinore, California, United States	2012-04-02



Name	Location	Date
	Jackson, Mississippi, United States	2012-04-02
	Sacramento, California, United States	2012-04-02
	Edison, New Jersey, United States	2012-04-02
	Corpus Christi, Texas, United States	2012-04-02
	saskatoon, Canada	2012-04-02
	Tucson, Arizona, United States	2012-04-02
	Tempe, Arizona, United States	2012-04-02
	guilford, Connecticut, United States	2012-04-02
	New York, New York, United States	2012-04-02
	Warrington, Pennsylvania, United States	2012-04-02
	Montclair, New Jersey, United States	2012-04-02
	Colorado Springs, Colorado, United States	2012-04-02
	Deerfield Beach, Florida, United States	2012-04-02
	Danbury, Wisconsin, United States	2012-04-02
	San Francisco, California, United States	2012-04-02
	El Prado, New Mexico, United States	2012-04-02
	Richmond, Virginia, United States	2012-04-02
	Lawrence, Kansas, United States	2012-04-02
	Fort Myers, Florida, United States	2012-04-02
	Huntington Beach, California, United States	2012-04-03
	Arkansas City, Kansas, United States	2012-04-03
	selkirk, New York, United States	2012-04-03
	Highvale, Australia	2012-04-03
	brisbane, Australia	2012-04-03
	Indialantic, Florida, United States	2012-04-03
	Eastbourne, United Kingdom	2012-04-03
	Elk Grove Village, Illinois, United States	2012-04-03
	Ridgewood, New Jersey, United States	2012-04-03
	ALOHA, Oregon, United States	2012-04-03

Name	Location	Date
	W.W., Rhode Island, United States	2012-04-03
	Gainesville, Florida, United States	2012-04-03
	Rockport, Maine, United States	2012-04-03
	Tempe, Arizona, United States	2012-04-03
	Golden, Colorado, United States	2012-04-03
	West Columbia, South Carolina, United States	2012-04-03
	Patchuge, New York, United States	2012-04-03
	South Hadley, Massachusetts, United States	2012-04-03
	Chorley, United Kingdom	2012-04-04
	Camden, Tennessee, United States	2012-04-04
	Fort Myers, Florida, United States	2012-04-04
	Ocala, Florida, United States	2012-04-04
	Murphysboro, Illinois, United States	2012-04-04
	Louisville, Kentucky, United States	2012-04-04
	Albuquerque, New Mexico, United States	2012-04-04
	Fremont, California, United States	2012-04-04
	Wilmington, North Carolina, United States	2012-04-04
	San Diego, California, United States	2012-04-04
	DeLand, Florida, United States	2012-04-04
	Hicksville, New York, United States	2012-04-04
	Norristown, Pennsylvania, United States	2012-04-04
	Warburton Victoria Australia, Australia	2012-04-04
	La Verne, California, United States	2012-04-04
	Halifax, Canada	2012-04-04
	Waynesville, North Carolina, United States	2012-04-04
	Arlington, Virginia, United States	2012-04-04
	Glen Cove, New York, United States	2012-04-04
	Hartford, Connecticut, United States	2012-04-04

Name		Location	Date
		Trabuco Canyon, California, United States	2012-04-04
		Wethersfield, Connecticut, United States	2012-04-04
		Williams, Oregon, United States	2012-04-04
		Longview, Washington, United States	2012-04-04
		england, United Kingdom	2012-04-04
		Troutdale, Oregon, United States	2012-04-04
		Clarendon Hills, Illinois, United States	2012-04-04
		Culpeper, Virginia, United States	2012-04-04
		Wixom, Michigan, United States	2012-04-04
		BROOKLYN, New York, United States	2012-04-04
		Benbrook, Texas, United States	2012-04-05
		Nassau, Bahamas	2012-04-05
		Clark, New Jersey, United States	2012-04-05
		Pelham, New Hampshire, United States	2012-04-05
		Ewa Beach, Hawaii, United States	2012-04-05
		Lafayette, Georgia, United States	2012-04-05
		Merrick, New York, United States	2012-04-05
		Mabank, Texas, United States	2012-04-05
		Tulsa, Oklahoma, United States	2012-04-05
		Warner Robins, Georgia, United States	2012-04-05
		Cadmus, Michigan, United States	2012-04-05
		Newport Coast, California, United States	2012-04-05
		Lennestadt, Germany	2012-04-05
		Austin, Texas, United States	2012-04-05
		Banksia Park, Australia	2012-04-05
		Bronx, New York, United States	2012-04-05
		Vellore, India	2012-04-05
		Anchorage, Alaska, United States	2012-04-05
		youngsville, North Carolina, United States	2012-04-05

Name	Location	Date
	Chicago, Illinois, United States	2012-04-05
	Howell, New Jersey, United States	2012-04-05
	Coal Township, Pennsylvania, United States	2012-04-05
	Boston, Massachusetts, United States	2012-04-05
	West Covina, California, United States	2012-04-06
	New Brunswick, New Jersey, United States	2012-04-06
	Tinley Pk, Illinois, United States	2012-04-06
	Cranston, Rhode Island, United States	2012-04-06
	Lawrence, Massachusetts, United States	2012-04-06
	Midlothian, Virginia, United States	2012-04-06
	mccaysville, Georgia, United States	2012-04-06
	OKC, Oklahoma, United States	2012-04-06
	Woodbridge, New Jersey, United States	2012-04-06
	Portland, Oregon, United States	2012-04-06
	New York, New York, United States	2012-04-06
	Crowley, Louisiana, United States	2012-04-06
	Nicholson, Georgia, United States	2012-04-06
	West Yarmouth, Massachusetts, United States	2012-04-06
	Evanston, Illinois, United States	2012-04-06
	Nahunta, Georgia, United States	2012-04-06
	Philadelphia, Pennsylvania, United States	2012-04-06
	spokane, Washington, United States	2012-04-06
	Hackettstown, New Jersey, United States	2012-04-06
	Durham, North Carolina, United States	2012-04-06
	Prior Lake, Minnesota, United States	2012-04-07
	Santa Rosa, California, United States	2012-04-07
	deceptionbay, Australia	2012-04-07
	Springfield, Missouri, United States	2012-04-07

Name		Location	Date
		Portland, Oregon, United States	2012-04-07
		Prescott, Arizona, United States	2012-04-07
		Dobbs Ferry, New York, United States	2012-04-07
		BLOOMINGDALE, Illinois, United States	2012-04-07
		Antibes, France	2012-04-07
		Canandaigua, New York, United States	2012-04-07
		glendale, New York, United States	2012-04-07
		Edison, New Jersey, United States	2012-04-07
		Menomonee Falls, Wisconsin, United States	2012-04-07
		bedford, Indiana, United States	2012-04-08
		wenig road, Iowa, United States	2012-04-08
		Broomall, Pennsylvania, United States	2012-04-08
		cibolo, Texas, United States	2012-04-08
		Albuquerque, New Mexico, United States	2012-04-08
		North San Juan, California, United States	2012-04-08
		Baroda, Michigan, United States	2012-04-08
		Moorhead, Minnesota, United States	2012-04-08
		Fort Myers, Florida, United States	2012-04-08
		Yorktown, Virginia, United States	2012-04-08
		Garden City, Missouri, United States	2012-04-08
		Lynbrook, New York, United States	2012-04-08
		Minneapolis, Minnesota, United States	2012-04-08
		huntington beach, California, United States	2012-04-08
		San Francisco, California, United States	2012-04-08
		Enumclaw, Washington, United States	2012-04-08
		Brooklyn, New York, United States	2012-04-09
		Martinsburg, West Virginia, United States	2012-04-09
		Rancho Palos Verdes, California, United States	2012-04-09

Name	Location	Date
	Warren, Michigan, United States	2012-04-09
	Upton, New York, United States	2012-04-09
	Whitewater, Wisconsin, United States	2012-04-09
	Wyandotte, Michigan, United States	2012-04-09
	Saint-Petersburg, Russian Federation	2012-04-09
	Stockton, California, United States	2012-04-09
	Hammond, Indiana, United States	2012-04-09
	Marietta, Georgia, United States	2012-04-09
	Frederick, Maryland, United States	2012-04-10
	Huntington Beach, California, United States	2012-04-10
	Summerland, California, United States	2012-04-10
	Media, Pennsylvania, United States	2012-04-10
	MESA, Arizona, United States	2012-04-10
	West Harrison, New York, United States	2012-04-10
	Los Angeles, California, United States	2012-04-10
	Solana Beach, California, United States	2012-04-11
	Stockton, California, United States	2012-04-11
	Loveland, Colorado, United States	2012-04-11
	Salisbury, Maryland, United States	2012-04-11
	Tucson, Arizona, United States	2012-04-11
	Portland, Oregon, United States	2012-04-11
	pitts, Georgia, United States	2012-04-11
	Anchorage, Alaska, United States	2012-04-11
	Midland, Texas, United States	2012-04-11
	Niagara Falls, New York, United States	2012-04-11
Houston, Texas, United States	2012-04-11	
Colonia, New Jersey, United States	2012-04-11	
Houston, Texas, United States	2012-04-11	
spring, Texas, United States	2012-04-11	

Name		Location	Date
		Valley Springs, California, United States	2012-04-11
		New Hope, Minnesota, United States	2012-04-11
		Glen Gardner, New Jersey, United States	2012-04-12
		lost vaily, Oregon, United States	2012-04-12
		Leverett, Massachusetts, United States	2012-04-12
		Hendersonville, North Carolina, United States	2012-04-12
		wellington, Alabama, United States	2012-04-12
		Glendale Hts, Illinois, United States	2012-04-12
		Barrington, Illinois, United States	2012-04-12
		west palm beach, Florida, United States	2012-04-12
		Bridgewater, New Jersey, United States	2012-04-12
		Phila, Pennsylvania, United States	2012-04-13
		Manchester, Massachusetts, United States	2012-04-13
		Winona, Minnesota, United States	2012-04-13
		Long Branch, New Jersey, United States	2012-04-13
		Denver, Colorado, United States	2012-04-13
		Orange Village, Ohio, United States	2012-04-13
		Yakima, Washington, United States	2012-04-13
		Astoria, New York, United States	2012-04-14
		HUNTINGTON, West Virginia, United States	2012-04-14
		Valley Springs, California, United States	2012-04-14
		Karnataka, India	2012-04-14
		mount airy, North Carolina, United States	2012-04-14
		Tampa, Florida, United States	2012-04-14
		coos bay, Oregon, United States	2012-04-15
		Framingham, Massachusetts, United States	2012-04-15
		La Habra, California, United States	2012-04-15
		San Jose, California, United States	2012-04-15

Name	Location	Date
	Mequon, Wisconsin, United States	2012-04-15
	High Point, North Carolina, United States	2012-04-15
	newark, Delaware, United States	2012-04-15
	Middletown, New York, United States	2012-04-15
	Trinidad, Colorado, United States	2012-04-15
	Indianapolis, Indiana, United States	2012-04-15
	Mountain Home, Idaho, United States	2012-04-15
	Columbia, Connecticut, United States	2012-04-16
	mason, Ohio, United States	2012-04-16
	Carmel, Indiana, United States	2012-04-16
	Harrison Township, Michigan, United States	2012-04-16
	Hazel Crest, Illinois, United States	2012-04-16
	Bloomfield Hills, Michigan, United States	2012-04-16
	Marlborough, Massachusetts, United States	2012-04-16
	fairview, New Jersey, United States	2012-04-17
	Reading, Massachusetts, United States	2012-04-17
	middletown, Connecticut, United States	2012-04-17
	Englewood, Colorado, United States	2012-04-17
	Elk Rapids, Michigan, United States	2012-04-17
	Austin, Texas, United States	2012-04-17
	Marion, Iowa, United States	2012-04-17
	Stevensville, Montana, United States	2012-04-17
	Hardy, Arkansas, United States	2012-04-17
	honolulu, Hawaii, United States	2012-04-18
	Eagle, United Kingdom	2012-04-18
	Kissimmee, Florida, United States	2012-04-18
	Coventry, Connecticut, United States	2012-04-18
	N/A, District Of Columbia, United States	2012-04-18
	New York, New York, United States	2012-04-18



Name		Location	Date
		kawkawlin, Michigan, United States	2012-04-18
		La Vergne, Tennessee, United States	2012-04-18
		Hilliard, Ohio, United States	2012-04-18
		Royersford, Pennsylvania, United States	2012-04-18
		North Street, Michigan, United States	2012-04-18
		Scarsdale, New York, United States	2012-04-18
		Gilbert, Arizona, United States	2012-04-18
		Vancouver, Canada	2012-04-18
		Leonardo, New Jersey, United States	2012-04-18
		Wilmette, Illinois, United States	2012-04-18
		salt lake city, Utah, United States	2012-04-18
		New Lenox, Illinois, United States	2012-04-18
		SAINT LEU LA FORET, France	2012-04-19
		Teaneck, New Jersey, United States	2012-04-19
		Houston, Texas, United States	2012-04-19
		Mineola, New York, United States	2012-04-19
		Scottsdale, Arizona, United States	2012-04-19
		ARDMORE, Pennsylvania, United States	2012-04-19
		Oak Ridge, Tennessee, United States	2012-04-19
		Marysville, Washington, United States	2012-04-19
		Northwood, Ohio, United States	2012-04-19
		Midland, Michigan, United States	2012-04-19
		Albany, New York, United States	2012-04-19
		Indiana, Pennsylvania, United States	2012-04-19
		Southend-on-Sea, United Kingdom	2012-04-20
		Livermore, California, United States	2012-04-20
		Wareham, Massachusetts, United States	2012-04-20
		Rye, New Hampshire, United States	2012-04-20
		Abilene, Texas, United States	2012-04-20
		Santa Fe, New Mexico, United States	2012-04-20

Name	Location	Date
	Buffalo, New York, United States	2012-04-20
	Va Beach, Virginia, United States	2012-04-20
	now, United Kingdom	2012-04-20
	Pearl River, New York, United States	2012-04-21
	BURBANK, California, United States	2012-04-21
	edison, New Jersey, United States	2012-04-21
	Elk, California, United States	2012-04-21
	Dallas, Texas, United States	2012-04-21
	Bridgewater, New Jersey, United States	2012-04-21
	Cleveland, Texas, United States	2012-04-21
	Citrus Heights, California, United States	2012-04-21
	Kittery Point, Maine, United States	2012-04-22
	Henryetta, Oklahoma, United States	2012-04-22
	Fort Branch, Indiana, United States	2012-04-22
	WALLINGFORD, Connecticut, United States	2012-04-22
	Potomac, Maryland, United States	2012-04-22
	potomac, Maryland, United States	2012-04-22
	Pepper Pike, Ohio, United States	2012-04-22
	Newark, New Jersey, United States	2012-04-22
	Erie, Pennsylvania, United States	2012-04-22
	Peekskill, New York, United States	2012-04-22
	ny, New York, United States	2012-04-22
	Manchester, New Hampshire, United States	2012-04-23
	Lynchburg, Virginia, United States	2012-04-23
	Derry, New Hampshire, United States	2012-04-23
	Wilmington, North Carolina, United States	2012-04-23
	San Luis Obispo, California, United States	2012-04-23
	Phoeix, Arizona, United States	2012-04-23

Name		Location	Date
		Montrose, New York, United States	2012-04-23
		Riverside, Rhode Island, United States	2012-04-23
		Muncie, Indiana, United States	2012-04-23
		Irvine, California, United States	2012-04-23
		tigard, Oregon, United States	2012-04-23
		grants pass, Oregon, United States	2012-04-23
		Edgewood, Maryland, United States	2012-04-23
		Ellisville, Missouri, United States	2012-04-23
		westfield, New York, United States	2012-04-23
		Port St Lucie, Florida, United States	2012-04-23
		Dallas, Texas, United States	2012-04-23
		Ann Arbor, Michigan, United States	2012-04-23
		Seattle, Washington, United States	2012-04-23
		Campbell, California, United States	2012-04-23
		Findlay, Ohio, United States	2012-04-24
		spokane, Washington, United States	2012-04-24
		warren, Maine, United States	2012-04-24
		New York, New York, United States	2012-04-24
		Freehold, New Jersey, United States	2012-04-24
		Porterville, California, United States	2012-04-24
		Kapaa, Hawaii, United States	2012-04-24
		San Pedro, California, United States	2012-04-24
		Dove Creek, Colorado, United States	2012-04-24
		Cape Coral, Florida, United States	2012-04-24
		New York, New York, United States	2012-04-24
		Jenkintown, Pennsylvania, United States	2012-04-24
		livermore, California, United States	2012-04-24
		Oakland, California, United States	2012-04-24
		East Norriton, Pennsylvania, United States	2012-04-24

Name	Location	Date
	Madison, Wisconsin, United States	2012-04-25
	Placentia, California, United States	2012-04-25
	Ramona, California, United States	2012-04-25
	glén burnie, Maryland, United States	2012-04-25
	Long Branch, New Jersey, United States	2012-04-25
	Port St Lucie, Florida, United States	2012-04-25
	Staunton, Virginia, United States	2012-04-25
	San Juan Capistrano, California, United States	2012-04-25
	WILLOWBROOK, Illinois, United States	2012-04-25
	Cooper City, Florida, United States	2012-04-25
	Boston, Massachusetts, United States	2012-04-25
	Sherman Oaks, California, United States	2012-04-25
	Bremerton, Washington, United States	2012-04-26
	Northfield, Minnesota, United States	2012-04-26
	Sofiq, Bulgaria	2012-04-26
	Pleasanton, California, United States	2012-04-26
	blackpool, United Kingdom	2012-04-26
	Hagerstown, Maryland, United States	2012-04-26
	asd, Massachusetts, United States	2012-04-27
	East Lansing, Michigan, United States	2012-04-27
	Long Branch, New Jersey, United States	2012-04-28
	Belgium, Wisconsin, United States	2012-04-28
	Lakeland, Florida, United States	2012-04-28
	charlottesville, Virginia, United States	2012-04-29
	Lemont, Illinois, United States	2012-04-29
	Emporium, Pennsylvania, United States	2012-04-29
	Edison, New Jersey, United States	2012-04-29
	Gardner, Massachusetts, United States	2012-04-29
	kennewick, Washington, United States	2012-04-29

Name	Location	Date
	New Orleans, Louisiana, United States	2012-04-29
	Manchester, Massachusetts, United States	2012-04-30
	Cambridge, Massachusetts, United States	2012-04-30
	Durham, North Carolina, United States	2012-04-30
	SpringBrook Twp., Pennsylvania, United States	2012-04-30
	New York, New York, United States	2012-04-30
	North Bergen, New Jersey, United States	2012-04-30
	New York, New York, United States	2012-05-01
	New York, New York, United States	2012-05-02
	Norwich, New York, United States	2012-05-02
	Willowick, Ohio, United States	2012-05-02
	White Plains, New York, United States	2012-05-02
	Dallas, Texas, United States	2012-05-02
	Oneonta, New York, United States	2012-05-02
	Harrisburg, Pennsylvania, United States	2012-05-02
	Tulsa, Oklahoma, United States	2012-05-02
	Roslyn Heights, New York, United States	2012-05-03
	Flemington, New Jersey, United States	2012-05-03
	Santa Rosa, California, United States	2012-05-03
	Dallas, Texas, United States	2012-05-03
	Renton, Washington, United States	2012-05-03
	Mesquite, Texas, United States	2012-05-03
	Dompierre sur Mer, France	2012-05-03
	New York, New York, United States	2012-05-04
	FT MYERS, Florida, United States	2012-05-04
	Engelwood, Colorado, United States	2012-05-04
	willow springs, Illinois, United States	2012-05-04
	Rockville, New York, United States	2012-05-04
	Rehoboth, Massachusetts, United States	2012-05-04



change.org

To: The Governor of NJ, State Sen. Michael Doherty (NJ-023), State Sen. Christopher Bateman (NJ-016), State Sen. Barbara Buono (NJ-018), State Sen. Raymond Lesniak (NJ-020), State Sen. Stephen Sweeney (NJ-003), Sen. Frank Lautenberg (NJ), Sen. Robert Menendez (NJ), Rep. Rush Holt (NJ-12), Rep. Frank Pallone (NJ-06), Sen. Barbara Boxer (CA), State Sen. Bob Smith (NJ-017), Rep. Leonard Lance (NJ-07), Rep. Rodney Frelinghuysen (NJ-11), USEPA Remedial Project Manager (Joseph Battipaglia), USEPA Region 2 Administrator (Judith Enck), USEPA Administrator (Lisa Jackson), USEPA Region 2 Superfund Chief (Walter Mugdan), NJDEP Commissioner (Bob Martin), MSNBC (Rachel Maddow), Mayor of Bound Brook (Carey Pilato), Mayor of Bridgewater (Daniel J. Hayes, Jr), Mayor of Manville (Angelo Corradino), Pfizer (Wendy Lazarus), Pfizer (Russell Downey)

Subject: Re: American Cyanamid Proposed Plan Comment

Letter: Greetings,

I respectfully request that the United States Environmental Protection Agency (USEPA) requires Pfizer to properly remediate the 80-year old American Cyanamid Superfund Site in Bridgewater, NJ. In order to protect human health and the environment, USEPA must require Pfizer to remediate the site using "Alternative 7," not "Alternative 4A," as described in their 2012 Proposed Plan. I do not believe the selected remedy, Alternative 4A, will be protective of human health and the environment for the following reasons: Filling in a floodplain and capping the site is NOT a full remediation, and could vastly expand serious toxic flooding for thousands of neighboring families, which poses a serious health threat.

The Proposed Plan Alternative 4A proposes to cover the contamination with a combination of soil and engineering caps. For the larger portions of the site, Pfizer proposes to raise the gradient two feet. As you are aware, this site lies in the floodplain and, as the most recent flood of Hurricane Irene shows, the American Cyanamid Site can hold about 300,000,000 gallons of water. Placing two feet of fill on the site will reduce its flood storage capacity and could exacerbate the regional flood issue in the area. In addition, filling of a flood zone is subject to both New Jersey and Federal regulations. These regulations specify that there can be no net filling of the wetlands or a flood zone, which means you cannot fill one area of the site without removing fill from some other location so the status quo doesn't change. There is no discussion in the Proposed Plan of the impacts on flooding that the proposed capping will have. This MUST be addressed before any plan is entertained and then accepted.

The Proposed Plan outlines more applicable cleanup alternatives than Alternative 4A suggests, including low temperature desorption. This method was successfully used at the Cornell-Dubilier Superfund Site in South Plainfield to remediate soils with high levels of PCBs and heavy metals without disturbing the surrounding community. In addition, the USEPA and Pfizer can make use of an active rail line that runs through the site to properly dispose of this material.

R2-0007762

I am also highly concerned that Alternative 4A could drastically expand serious toxic flooding for thousands of neighboring families that are already plagued by heavy floodwaters. The Proposed Plan is completely silent of the impacts of filling, and this most critical aspect of the American Cyanamid site MUST be clearly presented. The implemented plan must assure it will not exacerbate flooding in the lower Raritan River. The U.S. Army Corps of Engineers is actively working on flood control projects in the Raritan River Watershed to help alleviate flooding in Manville, Bound Brook, Bridgewater and all surrounding towns. The American Cyanamid site is a natural fit for a regional flood control project and can be an environmental benefit for the region if the proper remedy is selected. This site also sits directly adjacent to the Raritan River, as well as the Delaware and Raritan Canal, which is used for drinking water for hundreds of thousands of families in the surrounding area.

This site cleanup has been languishing for over two decades, and it is time for the USEPA to take serious action. In order to protect the health and safety of families that utilize this area for recreation, USEPA must require a proper cleanup as outlined in Alternative 7 in the Proposed Plan. With Pfizer having a facility already constructed and the technology for treatment well established, the cost estimates for Alternative 7 are greatly exaggerated and in reality can provide cost effective and permanent remediation of the American Cyanamid Superfund Site.

I respectfully request for the USEPA to allow a 60 day extension for the public comment period due to the size and scope of this cleanup. I believe the public needs additional time to review relevant data and an extension is more than warranted due to the complexity of the Proposed Plan.

For the bikers, hikers, fisherman and kayakers, for the osprey, bald eagles, turtles and trout please choose Alternative 7 for the cleanup of this site and take immediate action to remove the toxic chemicals draining into our regional resource, the Raritan River. Thank you for your timely assistance on this important environmental issue.

Respectfully,

## SIGNATURES

	Name	City	State	Date
1		Edison	New Jersey	2/24/2012
2		Old Bridge	New Jersey	2/24/2012
3		Camden	New Jersey	2/24/2012
4		Pompton Lakes	New Jersey	2/24/2012
5		East Brunswick	New Jersey	2/24/2012
6		Morrice	Michigan	2/24/2012
7		Pleasant Hill	California	2/24/2012
8		Chicago	Illinois	2/24/2012
9		Seaside Heights	New Jersey	2/24/2012
10		Los Angeles	California	2/24/2012
11		Pompton Lakes	New Jersey	2/24/2012
12		Bloomfield	New Jersey	2/24/2012
13		Hasselt	Texas	2/24/2012
14		St Augustine	Florida	2/24/2012
15		Bundang		2/24/2012
16		Linden	New Jersey	2/24/2012
17		Pompton Lakes	New Jersey	2/24/2012
18		Ava	Missouri	2/24/2012
19		colo spgs	Colorado	2/24/2012
20		Edison	New Jersey	2/24/2012
21		Mountain View	California	2/24/2012
22		Toms River	New Jersey	2/24/2012
23				2/24/2012
24		Kendall Park	New Jersey	2/24/2012
25		edison	New Jersey	2/24/2012
26		Chatham	New Jersey	2/24/2012
27		South Amboy	New Jersey	2/24/2012
28		Edison	New Jersey	2/24/2012
29		Pompton Lakes	New Jersey	2/24/2012
30		Highlands	New Jersey	2/24/2012
31		Denver	Colorado	2/24/2012
32		Edison	New Jersey	2/24/2012
33		Glenmont	New York	2/24/2012
34		Wolf Creek	Oregon	2/24/2012
35		HOPEWELL JUNCTION	New York	2/24/2012
36		New Brunswick	New Jersey	2/24/2012
37		Plano	Texas	2/24/2012
38		Yalta	Alabama	2/24/2012
39		Florham Park	New Jersey	2/24/2012
40		Burlington	Vermont	2/24/2012
41		Focsani		2/24/2012
42		New Brunswick	New Jersey	2/24/2012
43		edison	New Jersey	2/24/2012
44		Red Bank	New Jersey	2/24/2012



	Name	City	State	Date
45		Sleepy Hollow	Illinois	2/24/2012
46		Rutherford	New Jersey	2/24/2012
47		Woodbridge	New Jersey	2/24/2012
48		New Brunswick	New Jersey	2/24/2012
49		Holmdel	New Jersey	2/24/2012
50		chicago	Illinois	2/24/2012
51		New Brunswick	New Jersey	2/24/2012
52		Edison	New Jersey	2/24/2012
53		Quinton	Virginia	2/24/2012
54		High Springs	Florida	2/24/2012
55		highland park	New Jersey	2/24/2012
56		Cliffwood Beach	New Jersey	2/24/2012
57		Sauk City	Wisconsin	2/24/2012
58		elmwood park	New Jersey	2/24/2012
59		Binghamton	New York	2/24/2012
60		Edison	New Jersey	2/25/2012
61		Rutland	Vermont	2/25/2012
62		North Brunswick Twp	New Jersey	2/25/2012
63		Long Branch	New Jersey	2/25/2012
64		Plainsboro	New Jersey	2/25/2012
65		Chicago	Illinois	2/25/2012
66		Hillsborough	New Jersey	2/25/2012
67		Monmouth Junction	New Jersey	2/25/2012
68		Rutland	Vermont	2/25/2012
69		pompton lakes nj	New Jersey	2/25/2012
70		Westfield	New Jersey	2/25/2012
71		Phoenix	Arizona	2/25/2012
72		Leadville	Colorado	2/25/2012
73		Macedonia	Ohio	2/25/2012
74		Bound Brook	New Jersey	2/25/2012
75		flagstaff	Arkansas	2/25/2012
76		CHESAPEAKE	Virginia	2/25/2012
77		Dayton	New Jersey	2/25/2012
78		Elliot	Maine	2/25/2012
79		St. PÄÄliten	Nevada	2/25/2012
80		Orrefors		2/25/2012
81		Pasadena	Maryland	2/25/2012
82		fort lauderdale	Florida	2/25/2012
83		Webster	Texas	2/26/2012
84		Edmond	Oklahoma	2/26/2012
85		Dayton	New Jersey	2/26/2012
86		Vienna	Arizona	2/26/2012
87		Mansfield Center	Connecticut	2/26/2012
88		Sussex	Wisconsin	2/26/2012
89		Los Angeles	California	2/26/2012

	Name	City	State	Date
90		Sosnowiec	Virgin Islands	2/26/2012
91		Metz		2/26/2012
92		McKenzie	Tennessee	2/26/2012
93		Scotch Plains	New Jersey	2/26/2012
94		North Plainfield	New Jersey	2/26/2012
95		Escondido	California	2/26/2012
96		ALDRSHOT		2/26/2012
97		Ivanic		2/26/2012
98		Washington	Georgia	2/26/2012
99		Manhattan	New York	2/26/2012
100		Dublin	Illinois	2/26/2012
101		Madrid/Spain	Alabama	2/26/2012
102		Mansfield Center	Connecticut	2/26/2012
103		pedmont	California	2/26/2012
104		Lincoln	Alabama	2/26/2012
105		Caldas da Rainha		2/26/2012
106		Arnold	Missouri	2/26/2012
107		Oregon City	Oregon	2/26/2012
108		Klamath Falls	Oregon	2/26/2012
109		Sonoma	California	2/26/2012
110		Merville		2/26/2012
111		Long Island City	New York	2/26/2012
112		Culver City	California	2/26/2012
113		Seattle	Washington	2/26/2012
114		Reno	Nevada	2/26/2012
115		Trabuco Canyon	California	2/26/2012
116		Providence	Rhode Island	2/26/2012
117		Washington Island	Wisconsin	2/26/2012
118		Tampa	Florida	2/26/2012
119		south fork	Colorado	2/26/2012
120		commack	New York	2/26/2012
121		chatel-st-denis	Mississippi	2/26/2012
122		Denver	Colorado	2/26/2012
123		Bottrop	Indiana	2/26/2012
124		Cameron Park	California	2/26/2012
125		Blacksburg	Virginia	2/26/2012
126		Tappan	New York	2/26/2012
127		Montpellier	Vermont	2/26/2012
128		Smyrna	Georgia	2/26/2012
129		Azusa	California	2/26/2012
130		belmont	California	2/26/2012
131		New York	New York	2/26/2012
132		Bothell	Washington	2/26/2012
133		old bethpage	New York	2/26/2012
134		benton	Arkansas	2/26/2012

	Name	City	State	Date
135		Roswell	New Mexico	2/26/2012
136		High Falls	New York	2/26/2012
137		Valley Stream	New York	2/26/2012
138		Anderson	California	2/26/2012
139		Seattle	Washington	2/26/2012
140		Eatonville	Washington	2/26/2012
141		West Tremont	Maine	2/26/2012
142		Warrenton	Oregon	2/26/2012
143		Bethel Park	Pennsylvania	2/26/2012
144		Cincinnati	Ohio	2/26/2012
145		Phoenix	Arizona	2/26/2012
146		Fircrest	Washington	2/26/2012
147		Fort Worth	Texas	2/26/2012
148		Willow	New York	2/26/2012
149		Bridgewater	New Jersey	2/26/2012
150		nsw	Idaho	2/26/2012
151		Ann Arbor	Michigan	2/26/2012
152		Chicago	Illinois	2/26/2012
153		Kapaa	Hawaii	2/26/2012
154		Fall River	Massachusetts	2/26/2012
155		Tujunga	California	2/26/2012
156		nsw	Idaho	2/26/2012
157		nsw	Idaho	2/26/2012
158		Findlay	Ohio	2/26/2012
159		Cardiff	California	2/26/2012
160		san francisco	California	2/26/2012
161		Westminster	Colorado	2/26/2012
162		Old Hickory	Tennessee	2/26/2012
163		Carpinteria	California	2/26/2012
164		Sedona	Arizona	2/26/2012
165		Monte Rio	California	2/26/2012
166		Seattle	Washington	2/26/2012
167		Orlando	Florida	2/26/2012
168		Breitenfurt		2/26/2012
169		Tulsa	Oklahoma	2/26/2012
170		Las Cruces	New Mexico	2/26/2012
171		Chicago	Illinois	2/26/2012
172		Oshawa		2/26/2012
173		Lawrence	Pennsylvania	2/26/2012
174		St. Helens	Oregon	2/26/2012
175		Tucson	Arizona	2/26/2012
176		Palm Bay	Florida	2/26/2012
177		Lexington	Kentucky	2/26/2012
178		Farmington Hills	Michigan	2/26/2012
179		Cornville	Arizona	2/26/2012

	Name	City	State	Date
180		new york	New York	2/26/2012
181		Phoenix	Arizona	2/26/2012
182		Lewiston	Maine	2/26/2012
183		Phoenix	Arizona	2/26/2012
184		Orange	California	2/26/2012
185		Matawan	New Jersey	2/26/2012
186		Riverton	Connecticut	2/26/2012
187		Los Angeles	California	2/26/2012
188		Aspen	Colorado	2/26/2012
189		traverse city	Michigan	2/26/2012
190		Pendleton	New York	2/26/2012
191		Austin	Minnesota	2/26/2012
192		Dunedin	Florida	2/26/2012
193		Sacramento	California	2/26/2012
194		Poulsbo	Washington	2/26/2012
195		Jamesburg	New Jersey	2/26/2012
196		Boston	Massachusetts	2/26/2012
197		Los Angeles	California	2/26/2012
198		Bellingham	Washington	2/26/2012
199		Silver Spring	Maryland	2/26/2012
200		Cranford	New Jersey	2/26/2012
201		Jackson	New Jersey	2/26/2012
202		Rochester		2/26/2012
203		Miami	Florida	2/26/2012
204		Brookeville	Maryland	2/26/2012
205		Portsmouth	Rhode Island	2/26/2012
206		Cottage Grove	Minnesota	2/26/2012
207		Portland	Oregon	2/26/2012
208		Au/ZH	Alabama	2/26/2012
209		Henrico	Virginia	2/26/2012
210		Philadelphia	Pennsylvania	2/26/2012
211		Winter Park	Florida	2/26/2012
212		Simpsonville	South Carolina	2/26/2012
213		High Point	North Carolina	2/26/2012
214		Port Orchard	Washington	2/26/2012
215		New York	New York	2/26/2012
216		Kilauea	Hawaii	2/26/2012
217		Tucson	Arizona	2/26/2012
218		Manchester	Missouri	2/26/2012
219		vancouver	Washington	2/26/2012
220		St. Louis Park	Minnesota	2/26/2012
221		Delray Beach	Florida	2/26/2012
222		San Diego	California	2/26/2012
223		Willowick	Ohio	2/26/2012
224		San Ramon	California	2/26/2012

	Name	City	State	Date
222		San Jose	California	2/26/2012
223		melksham	New York	2/26/2012
224		Louisville	Colorado	2/26/2012
225		Oklahoma City	Oklahoma	2/26/2012
226		Ouray	Colorado	2/26/2012
230		Englewood	New Jersey	2/26/2012
231		BORDEAUX FRANCE	Alaska	2/26/2012
232		Fort Smith	Arkansas	2/26/2012
233		muskegon	Michigan	2/26/2012
234		LEBANON	Indiana	2/26/2012
235		Decatur	Illinois	2/26/2012
236		Friendswood	Texas	2/26/2012
237		altamonte springs	Florida	2/26/2012
238		Dublin		2/26/2012
239		Cooperstown	New York	2/26/2012
240		New Castle	Pennsylvania	2/26/2012
241		climax	New York	2/26/2012
242		Milton	Massachusetts	2/26/2012
243		Belmont	Massachusetts	2/26/2012
244		Krakow		2/26/2012
245		Keller	Texas	2/26/2012
246		El Cajon	California	2/26/2012
247		Glenn Dale	Maryland	2/26/2012
248		Highland	Indiana	2/26/2012
249		Mosheim	Tennessee	2/26/2012
250		Rochester	New York	2/26/2012
251		Canyon Country	California	2/26/2012
252		Scarborough	New York	2/26/2012
253		brooklyn	New York	2/26/2012
254		Sycamore	Illinois	2/26/2012
255		york	Pennsylvania	2/26/2012
256		Boynton Beach	Florida	2/26/2012
257		Pensacola	Florida	2/26/2012
258		Granada Hills	California	2/26/2012
259		San Rafael	California	2/26/2012
260		Ingleside	Illinois	2/26/2012
261		Freeport	Florida	2/26/2012
262		Besantown	New York	2/26/2012
263		Milton	Pennsylvania	2/26/2012
264		rochester	New York	2/26/2012
265		Aguadilla	Puerto Rico	2/26/2012
266		Cloverdale	California	2/26/2012
267		Port Orford	Oregon	2/26/2012
268		Canton	Georgia	2/26/2012
269		Warsaw		2/26/2012

	Name	City	State	Date
270		La Follette	Tennessee	2/26/2012
271		Neptune	New Jersey	2/26/2012
272		Gladstone	Oregon	2/26/2012
273		Highland Village	Texas	2/26/2012
274		Denfield	California	2/26/2012
275		Portland	Oregon	2/26/2012
276		Watervliet	New York	2/26/2012
277		Wichita	Kansas	2/26/2012
278		Nashville	Tennessee	2/26/2012
279		Jamaica Plain	Massachusetts	2/26/2012
280		St. Paul	Minnesota	2/26/2012
281		Kempfield	Delaware	2/26/2012
282		Weston	Connecticut	2/26/2012
283		ft. lauderdale	Florida	2/26/2012
284		terlingua	Texas	2/26/2012
285		Minneapolis	Minnesota	2/26/2012
286		Denver	Colorado	2/26/2012
287		Ashland	Oregon	2/26/2012
288		Houston	Texas	2/26/2012
289		Wilmington	Ohio	2/26/2012
290		Long Beach	New York	2/26/2012
291		woodacre	California	2/26/2012
292		San Francisco	California	2/26/2012
293		quimperIA©		2/26/2012
294		Aguilar	Colorado	2/26/2012
295		Augusta	Georgia	2/26/2012
296		Mill Valley	California	2/26/2012
297		Eureka	California	2/26/2012
298		Middlesex	New Jersey	2/26/2012
299		Vancouver	Washington	2/26/2012
300		Plant City	Florida	2/26/2012
301		Concord	California	2/26/2012
302		San Diego	California	2/26/2012
303		Spicewood	Texas	2/26/2012
304		Twisp	Washington	2/26/2012
305		El Prado	New Mexico	2/26/2012
306		Lewes	Delaware	2/26/2012
307		Cypress	California	2/26/2012
308		Austin	Texas	2/26/2012
309		Bethesda	Ohio	2/26/2012
310		Tucson	Arizona	2/26/2012
311		Portland	Oregon	2/26/2012
312		Albany	Oregon	2/26/2012
313		Royal Palm Beach	Florida	2/26/2012
314		Boulder	Colorado	2/26/2012

	Name	City	State	Date
315		Eugene	Oregon	2/26/2012
316		Bakerfield	California	2/26/2012
317		Ellicott City	Maryland	2/26/2012
318		boulder creek	California	2/26/2012
319		Stillwater	Oklahoma	2/26/2012
320		staten Island	New York	2/26/2012
321		e	Ohio	2/26/2012
322		phoenix	Arizona	2/26/2012
323		Lantier	Florida	2/26/2012
324		zumbrota	Minnesota	2/26/2012
325		Sarasota	Florida	2/26/2012
326		Philadelphia	Pennsylvania	2/26/2012
327		Akron	Ohio	2/26/2012
328		Las Vegas	Nevada	2/26/2012
329		Moreland Hills	Ohio	2/26/2012
330		Kalamazoo	Michigan	2/26/2012
331		Campbell	California	2/26/2012
332		Woodland Park	Colorado	2/26/2012
333		Pompton Lakes	New Jersey	2/26/2012
334		Newark	Delaware	2/26/2012
335		Chicago	Illinois	2/26/2012
336		Montfort	Wisconsin	2/26/2012
337		st:james city	Florida	2/26/2012
338		Desert Hot Springs	California	2/26/2012
339		Decatur	Illinois	2/26/2012
340		Windsor	Oregon	2/26/2012
341		SF	California	2/26/2012
342		Chelsea	Massachusetts	2/26/2012
343		bentonville	Arkansas	2/26/2012
344		Brooklyn	New York	2/26/2012
345		Mechanicsville	Virginia	2/26/2012
346		Eden Prairie	Minnesota	2/26/2012
347		San Jose	California	2/26/2012
348		Murfreesboro	Tennessee	2/26/2012
349		Stayner	Puerto Rico	2/26/2012
350		penfield	New York	2/26/2012
351		Rowayton	Connecticut	2/26/2012
352		Austin	Texas	2/26/2012
353		Beaverton	Oregon	2/26/2012
354		Vienna	Ohio	2/26/2012
355		Springville	Tennessee	2/26/2012
356		New York	New York	2/26/2012
357		West Townsend	Massachusetts	2/26/2012
358		San Jose	California	2/26/2012
359		Sullivan	Maine	2/26/2012

	Name	City	State	Date
360		Corrigan	Texas	2/26/2012
361		Bronx	New York	2/26/2012
362		Orange Park	Florida	2/26/2012
363		Salt Lake Cty	Utah	2/26/2012
364		Medford	Oregon	2/26/2012
365		Baltimore	Maryland	2/26/2012
366		Maastricht		2/26/2012
367		San Francisco	California	2/26/2012
368		Victoria		2/26/2012
369		Austin	Texas	2/26/2012
370		W. Hollywood	California	2/26/2012
371		San Mateo	California	2/26/2012
372		Hillsborough	New Jersey	2/27/2012
373		Pittsburgh	Pennsylvania	2/27/2012
374		Boulder	Colorado	2/27/2012
375		Pearl River	New York	2/27/2012
376		Sacramento	California	2/27/2012
377		Williamstown	New York	2/27/2012
378		dublin	District Of Columbia	2/27/2012
379		Dallas	Texas	2/27/2012
380		Tecate	California	2/27/2012
381		oberlin	Ohio	2/27/2012
382		Phoenix	Arizona	2/27/2012
383		Indianapolis	Indiana	2/27/2012
384		Hancock	New York	2/27/2012
385		Lawrence	Kansas	2/27/2012
386		Boise	Idaho	2/27/2012
387		santa fe	New Mexico	2/27/2012
388		Granite Bay	California	2/27/2012
389		El Cerrito	California	2/27/2012
390		Harrisburg	Pennsylvania	2/27/2012
391		Gillette	New Jersey	2/27/2012
392		Seattle	Washington	2/27/2012
393		san anselmo	California	2/27/2012
394		eNGLISHTOWN	New Jersey	2/27/2012
395		Portland	Oregon	2/27/2012
396		Belmont	Massachusetts	2/27/2012
397		Rosalie	Nebraska	2/27/2012
398		Henderson	Nevada	2/27/2012
399		Asheville	North Carolina	2/27/2012
400		North Kansas City	Missouri	2/27/2012
401		Minneapolis	Minnesota	2/27/2012
402		NY	New York	2/27/2012
403		san antonio	Texas	2/27/2012
404		Roslyn Heights	New York	2/27/2012



	Name	City	State	Date
405			Texas	2/27/2012
406		Elizabethton	Tennessee	2/27/2012
407		Minneapolis	Minnesota	2/27/2012
408		Bradenton	Florida	2/27/2012
409		Ludlow	Kentucky	2/27/2012
410		Solon	Ohio	2/27/2012
411		Tiffin	Ohio	2/27/2012
412		stone mountain	Georgia	2/27/2012
413		Bellingham	Washington	2/27/2012
414		Lansdale	Pennsylvania	2/27/2012
415		Bronx	New York	2/27/2012
416		Santiago	South Carolina	2/27/2012
417		Distrito Federal		2/27/2012
418		Coaldale	Colorado	2/27/2012
419		Brookings	Oregon	2/27/2012
420		Schenectady	New York	2/27/2012
421		Boca Raton	Florida	2/27/2012
422		little rock	Arkansas	2/27/2012
423		Spicewood	Texas	2/27/2012
424		Knoxville	Tennessee	2/27/2012
425		blasdell	New York	2/27/2012
426		Bethesda	Maryland	2/27/2012
427		covington	Louisiana	2/27/2012
428		Salkum	Washington	2/27/2012
429		Chicago	Illinois	2/27/2012
430		Uvalde	Texas	2/27/2012
431		Jacksonville	Florida	2/27/2012
432		Novi	Michigan	2/27/2012
433		Peruibe		2/27/2012
434		Vacaville	California	2/27/2012
435		London Ont. Canada	California	2/27/2012
436		Maldegem	Armed Forces Pacific	2/27/2012
437		West Haverstraw	New York	2/27/2012
438		Portland	Oregon	2/27/2012
439		orange	California	2/27/2012
440		Highland	Illinois	2/27/2012
441		Sherwood	Arkansas	2/27/2012
442		Cary	North Carolina	2/27/2012
443		Newington	Connecticut	2/27/2012
444		Newark	Delaware	2/27/2012
445		Edinboro	Pennsylvania	2/27/2012
446		Washington	District Of Columbia	2/27/2012
447		Modesto	California	2/27/2012
448		Centreville	Virginia	2/27/2012
449		Mokena	Illinois	2/27/2012

	Name	City	State	Date
450		Bretnwood	New Hampshire	2/27/2012
451		Saint Louis	Missouri	2/27/2012
452		Chapel Hill	North Carolina	2/27/2012
453		Toronto	New York	2/27/2012
454		Aurora	Colorado	2/27/2012
455		Troutdale	Oregon	2/27/2012
456		Portland	Oregon	2/27/2012
457		Hayward	California	2/27/2012
458		New Oxford	Pennsylvania	2/27/2012
459		Lexington	Kentucky	2/27/2012
460		Woodside	New York	2/27/2012
461		Santa Rosa	California	2/27/2012
462		L.A.	California	2/27/2012
463		Wittmann	Arizona	2/27/2012
464		springfield	Illinois	2/27/2012
465		Houston	Texas	2/27/2012
466		Oxford	Florida	2/27/2012
467		Oak Lawn	Illinois	2/27/2012
468		Florissant	Missouri	2/27/2012
469		El Dorado	Arkansas	2/27/2012
470		Pleasant Garden	North Carolina	2/27/2012
471		Redwood City	California	2/27/2012
472		Palm Springs	California	2/27/2012
473		Phila.	Pennsylvania	2/27/2012
474		St. Paul	Minnesota	2/27/2012
475		Carlton	Oregon	2/27/2012
476		Bradenton	Florida	2/27/2012
477		denver	Colorado	2/27/2012
478		barling	Arkansas	2/27/2012
479		Chico	California	2/27/2012
480		Edinburg	Texas	2/27/2012
481		Flushing	New York	2/27/2012
482		Gretna	Louisiana	2/27/2012
483		Ft. Collins	Colorado	2/27/2012
484		ALTON	Illinois	2/27/2012
485		Hesperia	California	2/27/2012
486		Medford	Oregon	2/27/2012
487		Wenatchee	Washington	2/27/2012
488		West Milford	New Jersey	2/27/2012
489		Philadelphia	Pennsylvania	2/27/2012
490		Glen Rock	New Jersey	2/27/2012
491		Doylestown	Pennsylvania	2/27/2012
492		Mashpee	Massachusetts	2/27/2012
493		Oshkosh	Wisconsin	2/27/2012
494		Lewiston	New York	2/27/2012

	Name	City	State	Date
495		Seattle	Washington	2/27/2012
496		Gillett	Wisconsin	2/27/2012
497		blings	Montana	2/27/2012
498		Elmira	New York	2/27/2012
499		Las Vegas	Nevada	2/27/2012
500		westminster	California	2/27/2012
501		NEW YORK	New York	2/27/2012
502		Vancouver	California	2/27/2012
503		Calgary	California	2/27/2012
504		Portland	Oregon	2/27/2012
505		Detroit	Michigan	2/27/2012
506		San Antonio	Texas	2/27/2012
507		Rockport	Washington	2/27/2012
508		San Marcos	Texas	2/27/2012
509		winchester	Massachusetts	2/27/2012
510		morro bay	California	2/27/2012
511		Winnipeg		2/27/2012
512		Issaquah	Washington	2/27/2012
513		Tucson	Arizona	2/27/2012
514		San Rafael	California	2/27/2012
515		Sioux Falls	South Dakota	2/27/2012
516		St. Cloud	Minnesota	2/27/2012
517		San Anselmo	California	2/27/2012
518		Pescadero	California	2/27/2012
519		Pollock Pines	California	2/27/2012
520		Kenmore	Washington	2/27/2012
521		Leicester		2/27/2012
522		TACOMA	Washington	2/27/2012
523		Chelan	Washington	2/27/2012
524		Muskegon	Michigan	2/27/2012
525		Tacoma	Washington	2/27/2012
526		Sacramento	California	2/27/2012
527		Malvern	Pennsylvania	2/27/2012
528		Cockeysville	Maryland	2/27/2012
529		Chennai	Tennessee	2/27/2012
530		Livingston	Texas	2/27/2012
531		Wilmington	Delaware	2/27/2012
532		Moscow	Rhode Island	2/27/2012
533		Sherman Oaks	California	2/27/2012
534		Harrison	Arkansas	2/27/2012
535		Drl Rey Oaks	California	2/27/2012
536		San Mateo	California	2/27/2012
537		Pasay		2/27/2012
538		Granger	Indiana	2/27/2012
539		Bertamirans, Ames	Armed Forces Pacific	2/27/2012

	Name	City	State	Date
540		Austin	Texas	2/27/2012
541		Nandlstadt	Delaware	2/27/2012
542		Fremont	California	2/27/2012
543		Pensacola	Florida	2/27/2012
544		Santa Fe	New Mexico	2/27/2012
545		Downers Grove	Illinois	2/27/2012
546		Glendale	California	2/27/2012
547		Karachi		2/27/2012
548		Sacrofano	Virgin Islands	2/27/2012
549		durban		2/27/2012
550		Thonon les bains	Arizona	2/27/2012
551		Solna		2/27/2012
552		Greenville	South Carolina	2/27/2012
553		piraeus	Alaska	2/27/2012
554		Springfield	Missouri	2/27/2012
555		Ventura	California	2/27/2012
556		Durban North	Kentucky	2/27/2012
557		Wexford	Pennsylvania	2/27/2012
558		salerno	Illinois	2/27/2012
559		WrocÅ,aw		2/27/2012
560		Hilo	Hawaii	2/27/2012
561		braga	Indiana	2/27/2012
562		Villa Park	Illinois	2/27/2012
563		Bremerton	Washington	2/27/2012
564		PITTSBURGH	Pennsylvania	2/27/2012
565		Grantham	New Hampshire	2/27/2012
566		Salem	Oregon	2/27/2012
567		houlton	Maine	2/27/2012
568		Humacao	Puerto Rico	2/27/2012
569		no. ferrisburgh	Vermont	2/27/2012
570		Basel		2/27/2012
571		Deep River	Connecticut	2/27/2012
572		Great Yarmouth		2/27/2012
573		Sintra		2/27/2012
574		Evergreen	Colorado	2/27/2012
575		Brier Hill	New York	2/27/2012
576		Naples	Florida	2/27/2012
577		Boise	Idaho	2/27/2012
578		Chatham	New York	2/27/2012
579		Waterford Works	New Jersey	2/27/2012
580		new york	New York	2/27/2012
581		Burdett	New York	2/27/2012
582		Orlando	Florida	2/27/2012
583		austin	Texas	2/27/2012
584		Clinton	Iowa	2/27/2012

	Name	City	State	Date
585		Stafford	Virginia	2/27/2012
586		Longmont	Colorado	2/27/2012
587		Jenkintown	Pennsylvania	2/27/2012
588		Staten Island	New York	2/27/2012
589		Allentown	Pennsylvania	2/27/2012
590		Flushing	New York	2/27/2012
591		Fredonia	New York	2/27/2012
592		Dawson	Iowa	2/27/2012
593		vico canavese	New York	2/27/2012
594		Springfield	Ohio	2/27/2012
595		Columbia	South Carolina	2/27/2012
596		Clifton Park	New York	2/27/2012
597		bennington	Vermont	2/27/2012
598		Winchester	Virginia	2/27/2012
599		New Brunswick	New Jersey	2/27/2012
600		Granby	Massachusetts	2/27/2012
601		New Brunswick	New Jersey	2/27/2012
602		Williston	Vermont	2/27/2012
603		McKeesport	Pennsylvania	2/27/2012
604		Hamilton Square	New Jersey	2/27/2012
605		St. Louis	Missouri	2/27/2012
606		Hackettstown	New Jersey	2/27/2012
607		Hackensack	New Jersey	2/27/2012
608		Lake Park	Florida	2/27/2012
609		Phoenix	Arizona	2/27/2012
610		Houston	Texas	2/27/2012
611		Myrtle Creek	Oregon	2/27/2012
612		Wheaton	Illinois	2/27/2012
613		west haven	Connecticut	2/27/2012
614		New York	New York	2/27/2012
615		jacksonville	Alabama	2/27/2012
616		Milwaukee	Wisconsin	2/27/2012
617		Larsen	Wisconsin	2/27/2012
618		Georgetown	Indiana	2/27/2012
619		so. milwaukee	Wisconsin	2/27/2012
620		Roma		2/27/2012
621		Rochester Hills	Michigan	2/27/2012
622		summerville	South Carolina	2/27/2012
623		high bridge	New Jersey	2/27/2012
624		lowell	Massachusetts	2/27/2012
625		Corpus Christi	Texas	2/27/2012
626		Florida	Massachusetts	2/27/2012
627		Murrieta	California	2/27/2012
628		Louisville	Kentucky	2/27/2012
629		casper	Wyoming	2/27/2012

	Name	City	State	Date
630		New Delhi, India	New York	2/27/2012
631		New York	New York	2/27/2012
632		Keyport	New Jersey	2/27/2012
633		Berkeley	California	2/27/2012
634		Lexington	Kentucky	2/27/2012
635		Cambridge	New York	2/27/2012
636		East Dundee	Illinois	2/27/2012
637		flemington	New Jersey	2/27/2012
638		Garden City	Kansas	2/27/2012
639		Sarasota	Florida	2/27/2012
640		Ojai	California	2/27/2012
641		Seattle	Washington	2/27/2012
642		Burien	Washington	2/27/2012
643		Valencia		2/27/2012
644		Jersey City	New Jersey	2/27/2012
645		Arlington	Virginia	2/27/2012
646		San Diego	California	2/27/2012
647		Chicago	Illinois	2/27/2012
648		VidebÄ, k	Delaware	2/27/2012
649		Stuart	Florida	2/27/2012
650		HILTONHEAD	South Carolina	2/27/2012
651		Los Angeles	California	2/27/2012
652		Winnipeg, MB.	Florida	2/27/2012
653		New York	New York	2/27/2012
654		El Portal	Florida	2/27/2012
655		Astoria	Oregon	2/27/2012
656		Alhambra	California	2/27/2012
657		hunt. sta.	New York	2/27/2012
658		Miami	Florida	2/27/2012
659		New London	Connecticut	2/27/2012
660		Cambridge	Massachusetts	2/27/2012
661		Fords	New Jersey	2/27/2012
662		Onbekend	Nebraska	2/27/2012
663		Larwill	Indiana	2/27/2012
664		Beach Park	Illinois	2/27/2012
665		Brentwood	Tennessee	2/27/2012
666		Albany	New York	2/27/2012
667		Seattle	Washington	2/27/2012
668		Hightstown	New Jersey	2/27/2012
669		Santa Rosa	California	2/27/2012
670		Evans	Georgia	2/27/2012
671		Binghamton	New York	2/27/2012
672		Gelsenkirchen	Alabama	2/27/2012
673		San Diego	California	2/27/2012
674		Richboro	Pennsylvania	2/27/2012

	Name	City	State	Date
675		n	Illinois	2/27/2012
676		Claremont	California	2/27/2012
677		Sierra Vista	Arizona	2/27/2012
678		ithaca	New York	2/27/2012
679		aix en provence	Alabama	2/27/2012
680		Sierra Vista	Arizona	2/27/2012
681		Sarasota	Florida	2/27/2012
682		Mt Olive	Alabama	2/27/2012
683		Scottsdale	Arizona	2/27/2012
684		Monroeville	New Jersey	2/27/2012
685		Island Pk	New York	2/27/2012
686		Kalamazoo	Michigan	2/27/2012
687		Brookline	Massachusetts	2/27/2012
688		San Diego	California	2/27/2012
689		Lincoln	California	2/27/2012
690		Berea	Kentucky	2/27/2012
691		Cheboygan	Michigan	2/27/2012
692		hasselt		2/27/2012
693		Waynesburg	Pennsylvania	2/27/2012
694		Buffalo	New York	2/27/2012
695		Beckum	Delaware	2/27/2012
696		Winnetka	Illinois	2/27/2012
697		Chicago	Illinois	2/28/2012
698		Phoenix	Arizona	2/28/2012
699		Watervliet	New York	2/28/2012
700		LAS VEGAS	Nevada	2/28/2012
701		Tobyhanna	Pennsylvania	2/28/2012
702		Webster Groves	Missouri	2/28/2012
703		Ceres	California	2/28/2012
704		Charlottesville	Virginia	2/28/2012
705		stony point	New York	2/28/2012
706		Overland Park	Kansas	2/28/2012
707		Newark	Delaware	2/28/2012
708		Catania	Connecticut	2/28/2012
709		palermo		2/28/2012
710		Florissant	Missouri	2/28/2012
711		Bolivar	Missouri	2/28/2012
712		Havre	Montana	2/28/2012
713		Cleveland	Ohio	2/28/2012
714		Portland	Oregon	2/28/2012
715		Coquitlam	New York	2/28/2012
716		SCOTTSDALE	Arizona	2/28/2012
717		Grass Valley	California	2/28/2012
718		Nederland	Colorado	2/28/2012
719		Chula Vista	California	2/28/2012

	Name	City	State	Date
720		Plainfield	New Jersey	2/28/2012
721		Overland Park	Kansas	2/28/2012
722		Horton	Alabama	2/28/2012
723		portland	Oregon	2/28/2012
724		Poland	Indiana	2/28/2012
725		escondido	California	2/28/2012
726		Normal	Illinois	2/28/2012
727		Allison Park	Pennsylvania	2/28/2012
728		beaver falls	Pennsylvania	2/28/2012
729		Pomona	California	2/28/2012
730		Narberth	Pennsylvania	2/28/2012
731		Sandpoint	Idaho	2/28/2012
732		Portland	Oregon	2/28/2012
733		Tucson	Arizona	2/28/2012
734		Baldwin Park	California	2/28/2012
735		Ericeira	California	2/28/2012
736		Chattanooga	Tennessee	2/28/2012
737		New Rochelle	New York	2/28/2012
738		bradenton	Florida	2/28/2012
739		Cape Canaveral	Florida	2/28/2012
740		Ponte Vedra Beach	Florida	2/28/2012
741		New Brunswick	New Jersey	2/28/2012
742		Bergenfield	New Jersey	2/28/2012
743		Moorestown	New Jersey	2/28/2012
744		Middlesex	New Jersey	2/28/2012
745		Berkeley Hts	New Jersey	2/28/2012
746		Lodi	New Jersey	2/28/2012
747		Pine Brook	New Jersey	2/28/2012
748		Madison	New Jersey	2/28/2012
749		Paulsboro	New Jersey	2/28/2012
750		hewitt	New Jersey	2/28/2012
751		Barnegat	New Jersey	2/28/2012
752		Roselle	New Jersey	2/28/2012
753		Jackson	New Jersey	2/28/2012
754		Yardville	New Jersey	2/28/2012
755		Mount Laurel	New Jersey	2/28/2012
756		Westfield	New Jersey	2/28/2012
757		Clifton	New Jersey	2/28/2012
758		Madison	New Jersey	2/28/2012
759		Plainfield	New Jersey	2/28/2012
760		Sterling Heights	Michigan	2/28/2012
761		West Milford	New Jersey	2/28/2012
762		East Brunswick	New Jersey	2/28/2012
763		Kenilworth	New Jersey	2/28/2012
764		seattle	Washington	2/28/2012



	Name	City	State	Date
765		Takoma Park	Maryland	2/28/2012
766		Tenafly	New Jersey	2/28/2012
767		Cranford	New Jersey	2/28/2012
768		Blackwood	New Jersey	2/28/2012
769		miami	Florida	2/28/2012
770		Rutherford	New Jersey	2/28/2012
771		Mt. Arlington	New Jersey	2/28/2012
772		Higland Park	New Jersey	2/28/2012
773		Woodcliff Lake	New Jersey	2/28/2012
774		Roselle Park	New Jersey	2/28/2012
775		Chevy Chase	Maryland	2/28/2012
776		Ringwood	New Jersey	2/28/2012
777		Long Branch	New Jersey	2/28/2012
778		Edison	New Jersey	2/28/2012
779		Rancho Viejo	Texas	2/28/2012
780		Jersey City	New Jersey	2/28/2012
781		Westfield	New Jersey	2/28/2012
782		Metuchen	New Jersey	2/28/2012
783		morganville	New Jersey	2/28/2012
784		Metuchen	New Jersey	2/28/2012
785		Hilo	Hawaii	2/28/2012
786		new york	New York	2/28/2012
787		East Brunswick	New Jersey	2/28/2012
788		Louisville	Kentucky	2/28/2012
789		Edison	New Jersey	2/28/2012
790		Edison	New Jersey	2/28/2012
791		RAMSEY	New Jersey	2/28/2012
792		Ringwood	New Jersey	2/28/2012
793		Edison	New Jersey	2/28/2012
794		edison	New Jersey	2/28/2012
795		edison	New Jersey	2/28/2012
796		Upper Saddle River	New Jersey	2/28/2012
797		Metuchen	New Jersey	2/28/2012
798		New Brunswick	New Jersey	2/28/2012
799		Edison	New Jersey	2/28/2012
800		Ringwood	New Jersey	2/28/2012
801		Edison	New Jersey	2/28/2012
802		New Brunswick	New Jersey	2/28/2012
803		New Brunswick	New Jersey	2/28/2012
804		Metuchen	New Jersey	2/28/2012
805		metuchen NJ	New Jersey	2/28/2012
806		Newark	New Jersey	2/28/2012
807		Highland Park	New Jersey	2/28/2012
808		Asbury Park	New Jersey	2/28/2012
809		Newton	New Jersey	2/28/2012

	Name	City	State	Date
810		Somerset	New Jersey	2/28/2012
811		edison	New Jersey	2/28/2012
812		new brunswick	New Jersey	2/28/2012
813		Twp. Of Washington	New Jersey	2/28/2012
814		Metuchen	New Jersey	2/28/2012
815		Medford	New Jersey	2/28/2012
816		Colonia	New Jersey	2/28/2012
817		Riverside	New Jersey	2/28/2012
818		Edison	New Jersey	2/28/2012
819		Forked River	New Jersey	2/28/2012
820		Ringwood	New Jersey	2/28/2012
821		Hamilton	New Jersey	2/28/2012
822		New Brunswick	New Jersey	2/28/2012
823		Flemington	New Jersey	2/28/2012
824		Sarasota	Florida	2/28/2012
825		hamilton	New Jersey	2/28/2012
826		Metuchen	New Jersey	2/28/2012
827		Bradley Beach	New Jersey	2/28/2012
828		Fort Collins	Colorado	2/28/2012
829		Constanta		2/28/2012
830		Monmouth Junction	New Jersey	2/28/2012
831		West New York	New Jersey	2/28/2012
832		Hewitt	New Jersey	2/28/2012
833		Carteret	New Jersey	2/28/2012
834		Upper Montclair	New Jersey	2/28/2012
835		Fords	New Jersey	2/28/2012
836		South Plainfield	New Jersey	2/28/2012
837		Suffern	New York	2/28/2012
838		metuchen	New Jersey	2/28/2012
839		cincinnati	Ohio	2/28/2012
840		Edison	New Jersey	2/28/2012
841		thunder bay	Armed Forces Pacific	2/28/2012
842		San Francisco	California	2/28/2012
843		Somerset	New Jersey	2/28/2012
844		Las Vegas	Nevada	2/28/2012
845		Dunellen	New Jersey	2/28/2012
846		Hewitt	New Jersey	2/28/2012
847		Hamilton	New Jersey	2/28/2012
848		Trieste	Iowa	2/28/2012
849		Ulm	Delaware	2/28/2012
850		Union	Kentucky	2/28/2012
851		Edison	New Jersey	2/28/2012
852		MEXICO	Armed Forces Pacific	2/28/2012
853		Charlotte	North Carolina	2/28/2012
854		tenafly	New Jersey	2/28/2012

	Name	City	State	Date
855		Riverton	New Jersey	2/28/2012
856		Naples	Florida	2/28/2012
857		Piscataway	New Jersey	2/28/2012
858		New York	New York	2/28/2012
859		Stuart	Florida	2/28/2012
860		Maplewood	New Jersey	2/28/2012
861		New Haven	Connecticut	2/28/2012
862		Madison	Wisconsin	2/28/2012
863		Allentown	Pennsylvania	2/28/2012
864		Boalsburg	Pennsylvania	2/28/2012
865		Reseda	California	2/28/2012
866		Edison	New Jersey	2/28/2012
867		somerset	New Jersey	2/28/2012
868		South Park	Pennsylvania	2/28/2012
869		Rancho Palos Verdes	California	2/28/2012
870		Hillsboro	Oregon	2/28/2012
871		Atlanta	Georgia	2/28/2012
872		Richboro	Pennsylvania	2/28/2012
873		Paradise	Michigan	2/28/2012
874		New Brunswick	New Jersey	2/28/2012
875		sf	California	2/28/2012
876		iselin	New Jersey	2/28/2012
877		iowa City	iowa	2/28/2012
878		Edison	New Jersey	2/28/2012
879		Saint Louis	Missouri	2/28/2012
880		New York	New York	2/28/2012
881		Monmouth Junction	New Jersey	2/28/2012
882		Raritan	New Jersey	2/28/2012
883		Santa Fe	New Mexico	2/28/2012
884		Westfield	New Jersey	2/28/2012
885		Edison	New Jersey	2/28/2012
886		East Rutherford	New Jersey	2/28/2012
887		princeton	New Jersey	2/28/2012
888		Guelph, Ontario	Canada	2/28/2012
889		Oakland	California	2/28/2012
890		Talent	Oregon	2/28/2012
891		Montclair	New Jersey	2/28/2012
892		Ogdensburg	New York	2/28/2012
893		Chicago	Illinois	2/28/2012
894		Edison	New Jersey	2/28/2012
895		Linden	New Jersey	2/28/2012
896		Teaneck	New Jersey	2/28/2012
897		New Brunswick	New Jersey	2/28/2012
898		Old Bridge	New Jersey	2/28/2012
899		Ojai	California	2/28/2012

	Name	City	State	Date
900		Dover	New Jersey	2/29/2012
901		Butler	New Jersey	2/29/2012
902		Knoxville	Tennessee	2/29/2012
903		Somerset	New Jersey	2/29/2012
904		Roma		2/29/2012
905		Cresskill	New Jersey	2/29/2012
906		New York	New York	2/29/2012
907		Edison	New Jersey	2/29/2012
908		Madison	New Jersey	2/29/2012
909		Mahwah	New Jersey	2/29/2012
910		Long Valley	New Jersey	2/29/2012
911		Saratoga	California	2/29/2012
912		new brunswick	New Jersey	2/29/2012
913		Hillsborough	New Jersey	2/29/2012
914		Fullerton	California	2/29/2012
915		Bloomington	Minnesota	2/29/2012
916		Oakland	California	2/29/2012
917		New Milford	New Jersey	2/29/2012
918		Jersey City	New Jersey	2/29/2012
919		Point Pleasant	New Jersey	2/29/2012
920		San Francisco	California	2/29/2012
921		Piscataway	New Jersey	2/29/2012
922		Metuchen	New Jersey	2/29/2012
923		huntington	New York	2/29/2012
924		Princeton	New Jersey	2/29/2012
925		Costa Mesa	California	2/29/2012
926		Winston	Georgia	2/29/2012
927		phoenix	Arizona	2/29/2012
928		Brooklyn	New York	2/29/2012
929		Madeira Beach	Florida	2/29/2012
930		Ringwood	New Jersey	2/29/2012
931		Cliffside Park	New Jersey	2/29/2012
932		Pompton Plains	New Jersey	2/29/2012
933		East Hampton	New York	2/29/2012
934		Milltown	New Jersey	2/29/2012
935		Oulu		2/29/2012
936		Kansas City	Missouri	2/29/2012
937		Basking Ridge	New Jersey	2/29/2012
938		Oxford	Ohio	2/29/2012
939		S Plainfield	New Jersey	2/29/2012
940		Ithaca	New York	2/29/2012
941		Milltown	New Jersey	2/29/2012
942		Erie	Pennsylvania	2/29/2012
943		Gresham	Oregon	2/29/2012
944		Philadelphia	Pennsylvania	2/29/2012

	Name	City	State	Date
945		Union	New Jersey	2/29/2012
946		Piscataway	New Jersey	2/29/2012
947		Ocean Springs	Mississippi	2/29/2012
948		Piscataway	New Jersey	2/29/2012
949		Glenwood	New Jersey	2/29/2012
950		Colonia	New Jersey	2/29/2012
951		Amsterdam		2/29/2012
952		Morris Plains	New Jersey	2/29/2012
953		Berkeley Heights	New Jersey	2/29/2012
954		sparta	New Jersey	2/29/2012
955		Brighon	Massachusetts	2/29/2012
956		Westminster	California	2/29/2012
957		ringwood	New Jersey	2/29/2012
958		milan	Virginia	2/29/2012
959		Chesapeake	Virginia	2/29/2012
960		Ringwood	New Jersey	2/29/2012
961		Metuchen	New Jersey	2/29/2012
962		Piscataway	New Jersey	2/29/2012
963		Pulaski	Virginia	2/29/2012
964		Edison	New Jersey	2/29/2012
965		Belvidere	Illinois	2/29/2012
966		New York	New York	2/29/2012
967		Manville	New Jersey	2/29/2012
968		Cygnets	Ohio	2/29/2012
969		santa monica	California	2/29/2012
970		new brunswick	New Jersey	2/29/2012
971		barneveld	New York	2/29/2012
972		Kimberly	Alabama	2/29/2012
973		South River	New Jersey	2/29/2012
974		colonia	New Jersey	2/29/2012
975		pawtucket	Rhode Island	2/29/2012
976		Stuart	Florida	2/29/2012
977		farnborough		2/29/2012
978		Edison	New Jersey	2/29/2012
979		Edison	New Jersey	2/29/2012
980		Bloomfield	New Jersey	2/29/2012
981		baker	Oregon	2/29/2012
982		Brooklyn	New York	2/29/2012
983		Vienna		2/29/2012
984		Steuben	Maine	2/29/2012
985		Monmouth Junction	New Jersey	2/29/2012
986		Justice	Illinois	2/29/2012
987		dayton	New Jersey	2/29/2012
988		Parlin	New Jersey	2/29/2012
989		Santa Cruz	California	2/29/2012

	Name	City	State	Date
990		lancaster	California	2/29/12
991		Garfield Hts. Ohio	Alabama	2/29/12
992		Sonoma	California	2/29/12
993		Raamsdonksveer		2/29/12
994		Mahwah	New Jersey	2/29/12
995		Lewisville	Texas	2/29/12
996		Brooklyn	New York	2/29/12
997		ilford	Armed Forces	2/29/12
998		Jacksonville	Florida	2/29/12
999		Edison	New Jersey	2/29/12
1000		Lady Lake	Florida	2/29/12
1001		Edison	New Jersey	2/29/12
1002		Nelson	New Hampshire	2/29/12
1003		Santa Barbara	California	2/29/12
1004		Kettering	Ohio	2/29/12
1005		Franklin	Tennessee	2/29/12
1006		San Jose	California	2/29/12
1007		Piscataway	New Jersey	2/29/12
1008		Union	New Jersey	2/29/12
1009		grosse pointe	Michigan	2/29/12
1010		Warren	Ohio	2/29/12
1011		Leander	Texas	2/29/12
1012		Fort Bragg	California	2/29/12
1013		Jamestown	New York	2/29/12
1014		San Juan	Puerto Rico	2/29/12
1015		Fort Madison	Iowa	2/29/12
1016		New York	New York	2/29/12
1017		Madison	Wisconsin	2/29/12
1018		High Pt.	North Carolina	2/29/12
1019		Rancho Mirage	California	2/29/12
1020		GARDEN CITY	Kansas	2/29/12
1021		clidton	New Jersey	2/29/12
1022		Roseland	New Jersey	2/29/12
1023		Durham	North Carolina	2/29/12
1024		Foley	Alabama	2/29/12
1025		Crestone	Colorado	2/29/12
1026		Mine Hill	New Jersey	2/29/12
1027		west haven	Connecticut	2/29/12
1028		Los Angeles	California	2/29/12
1029		NY	New York	2/29/12
1030		Rosemont	Pennsylvania	2/29/12
1031		New York	New York	2/29/12
1032		Williamsville	New York	2/29/12
1033		Groton	Connecticut	2/29/12
1034		San Antonio	Texas	2/29/12

	Name	City	State	Date
1035		New Brighton	Minnesota	2/29/12
1036		brooklyn	New York	2/29/12
1037		Albuquerque	New Mexico	2/29/12
1038		Beaverton	Oregon	2/29/12
1039		Prescott Valley	Arizona	2/29/12
1040		Knoxville	Tennessee	2/29/12
1041		rogersville	Tennessee	2/29/12
1042		Lakewood ranch	Florida	2/29/12
1043		Nashua	New Hampshire	2/29/12
1044		paradise	Michigan	2/29/12
1045		New Brunswick	New Jersey	2/29/12
1046		Louisville	Kentucky	2/29/12
1047		Milano	Virginia	2/29/12
1048		Scottsdale	Arizona	2/29/12
1049		Portland	Oregon	2/29/12
1050		Edison	New Jersey	2/29/12
1051		Middlesex	New Jersey	2/29/12
1052		Riverside	Illinois	2/29/12
1053		syracuse	New York	2/29/12
1054		san jose	California	2/29/12
1055		Tucson	Arizona	2/29/12
1056		Riverside	California	2/29/12
1057		Valley Glen	California	2/29/12
1058		Mendon	Massachusetts	2/29/12
1059		WELLS	Maine	2/29/12
1060		Clifton	New Jersey	2/29/12
1061		Hempstead	New York	2/29/12
1062		Chandler	Arizona	2/29/12
1063		Aurora	Colorado	3/1/12
1064		New Providence	New Jersey	3/1/12
1065		Milwaukee	Wisconsin	3/1/12
1066		Englewood	Tennessee	3/1/12
1067		Vimodrone		3/1/12
1068		Brooklyn	Ohio	3/1/12
1069		Goshen	Connecticut	3/1/12
1070		rockville	Maryland	3/1/12
1071		Chippewa Falls	Wisconsin	3/1/12
1072		waikoloa	Hawaii	3/1/12
1073		Reno	Nevada	3/1/12
1074		Elk Grove	California	3/1/12
1075		Edison	New Jersey	3/1/12
1076		GREEDFIELD	Wisconsin	3/1/12
1077		Carson City	Nevada	3/1/12
1078		la selva beach	California	3/1/12
1079		Thousand Oaks	California	3/1/12

	Name	City	State	Date
1080		Brentwood	California	3/1/12
1081		wheat ridge	Colorado	3/1/12
1082		TULSA	Oklahoma	3/1/12
1083		Philadelphia	Pennsylvania	3/1/12
1084		WEST SACRAMENTO	California	3/1/12
1085		Louisville	Colorado	3/1/12
1086		Ashland	Oregon	3/1/12
1087		Frederick	Maryland	3/1/12
1088		Slidell	Louisiana	3/1/12
1089		Colorado Springs	Colorado	3/1/12
1090		Lake Havasu City	Arizona	3/1/12
1091		Brooklyn	New York	3/1/12
1092		Bethune	South Carolina	3/1/12
1093		Bridgewater	New Jersey	3/1/12
1094		paramus	New Jersey	3/1/12
1095		Seattle	Washington	3/1/12
1096		teaneck	New Jersey	3/1/12
1097		Buda	Texas	3/1/12
1098		Santa Rosa	California	3/1/12
1099		Summer Shade	Kentucky	3/1/12
1100		Bergenfield	New Jersey	3/1/12
1101		Astoria	Oregon	3/1/12
1102		pompton lakes	New Jersey	3/1/12
1103		Santa Barbara	California	3/1/12
1104		Greensburg	Pennsylvania	3/1/12
1105		LA	California	3/1/12
1106		Roma	Texas	3/1/12
1107		High Bridge	New Jersey	3/1/12
1108		Southfield	Michigan	3/1/12
1109		Auckland	Kansas	3/1/12
1110		Bergenfield	New Jersey	3/1/12
1111		Wylie	Texas	3/1/12
1112		Toms River	New Jersey	3/1/12
1113		Pompton Lakes	New Jersey	3/1/12
1114		nanticoke	Pennsylvania	3/1/12
1115		Neptune	New Jersey	3/1/12
1116		Oaklyn	New Jersey	3/1/12
1117		edison	New Jersey	3/1/12
1118		LENEXA	Kansas	3/1/12
1119		Humble	Texas	3/1/12
1120		Comer	Georgia	3/1/12
1121		glenview	Illinois	3/1/12
1122		South Plainfield	New Jersey	3/1/12
1123		Long Pond	Pennsylvania	3/1/12
1124		EDISON	New Jersey	3/1/12



	Name	City	State	Date
1125		Elk Grove Village	Illinois	3/1/12
1126		LAWRENCE	Pennsylvania	3/1/12
1127		Green Brook	New Jersey	3/1/12
1128		Sun City	California	3/1/12
1129		EHT	New Jersey	3/1/12
1130		Asheville	North Carolina	3/1/12
1131		Verona	New Jersey	3/1/12
1132		Kalamazoo	Michigan	3/1/12
1133		Grawn	Michigan	3/1/12
1134		Minneapolis	Minnesota	3/1/12
1135		Albox	New Mexico	3/1/12
1136		Salisbury	North Carolina	3/1/12
1137		North Huntingdon	Pennsylvania	3/1/12
1138		Millsap	Texas	3/1/12
1139		Union	New Jersey	3/1/12
1140		baghdad		3/1/12
1141		Vista	California	3/1/12
1142		Asbury	New Jersey	3/1/12
1143		west palm beach	Florida	3/1/12
1144		West Palm Beach	Florida	3/1/12
1145		Venice	Florida	3/1/12
1146		Budapest	Hawaii	3/1/12
1147		West Milford	New Jersey	3/1/12
1148		old bridge	New Jersey	3/1/12
1149		Woodstock	New York	3/1/12
1150		Beverly	New Jersey	3/1/12
1151		mtlaueI	New Jersey	3/1/12
1152		Williamstown	New Jersey	3/1/12
1153		Cedar Park	Texas	3/1/12
1154		Bound Brook	New Jersey	3/1/12
1155		tarxien	Idaho	3/1/12
1156		Orlando	Florida	3/1/12
1157		Chicago	Illinois	3/1/12
1158		San Jose	California	3/1/12
1159		Bayside Hills	New York	3/1/12
1160		Mount Laurel	New Jersey	3/1/12
1161		North Haledon	New Jersey	3/1/12
1162		Santa Fe	New Mexico	3/1/12
1163		Albuquerque	New Mexico	3/1/12
1164		Fords	New Jersey	3/1/12
1165		Hanford	California	3/2/12
1166		edison	New Jersey	3/2/12
1167		Eagan	Minnesota	3/2/12
1168		Sparta	New Jersey	3/2/12
1169		Sparta	New Jersey	3/2/12

	Name	City	State	Date
1170		Harrisburg	Pennsylvania	3/2/12
1171		Martinsville	Indiana	3/2/12
1172		troy	Pennsylvania	3/2/12
1173		Robbinsville	New Jersey	3/2/12
1174		Wellington	Florida	3/2/12
1175		Westfield	New Jersey	3/2/12
1176		Albany	Oregon	3/2/12
1177		Blacksburg	Virginia	3/2/12
1178		mogliano veneto	Georgia	3/2/12
1179		Aurora	Illinois	3/2/12
1180		Hillsdale	New Jersey	3/2/12
1181		LA CELLE SUR MORIN	Florida	3/2/12
1182		Stone Mountain	Georgia	3/2/12
1183		Edison	New Jersey	3/2/12
1184		Bridgewater	New Jersey	3/2/12
1185		bORSBEEK	Alabama	3/2/12
1186		Springfield	New Jersey	3/2/12
1187		New Brunswick	New Jersey	3/2/12
1188		Montclair	New Jersey	3/2/12
1189		brick	New Jersey	3/2/12
1190		Blackwood	New Jersey	3/2/12
1191		Stuart	Virginia	3/2/12
1192		Manitou Springs	Colorado	3/2/12
1193		Potomac Falls	Virginia	3/2/12
1194		Hawthorne	New Jersey	3/2/12
1195		Millburn Twp	New Jersey	3/2/12
1196		Oakland	New Jersey	3/2/12
1197		West Milford	New Jersey	3/2/12
1198		Roosevelt	New Jersey	3/2/12
1199		Highlands	New Jersey	3/2/12
1200		Ridgewood	New Jersey	3/2/12
1201		Milford	New Jersey	3/2/12
1202		Edison	New Jersey	3/2/12
1203		pompton lakes	New Jersey	3/2/12
1204		Edison	New Jersey	3/2/12
1205		Cranford	New Jersey	3/2/12
1206		Rahway	New Jersey	3/2/12
1207		Jersey City	New Jersey	3/2/12
1208		Millville	New Jersey	3/2/12
1209		pointpleasantbeach	New Jersey	3/2/12
1210		morganville	New Jersey	3/2/12
1211		Hillsborough	New Jersey	3/2/12
1212		Edison	New Jersey	3/2/12
1213		Wayne	New Jersey	3/2/12
1214		Hawthorne	New Jersey	3/2/12

	Name	City	State	Date
1215		Chatham	New Jersey	3/2/12
1216		Ringwood	New Jersey	3/2/12
1217		Newton	Massachusetts	3/2/12
1218		edison	New Jersey	3/2/12
1219		South Amboy	New Jersey	3/2/12
1220		Toms River	New Jersey	3/2/12
1221		Lincoln Park	New Jersey	3/2/12
1222		Neshanic Station	New Jersey	3/2/12
1223		Jersey City	New Jersey	3/2/12
1224		Fort Lee	New Jersey	3/2/12
1225		westmont	New Jersey	3/2/12
1226		North Plainfield	New Jersey	3/2/12
1227		Bergenfield	New Jersey	3/2/12
1228		Wayne	New Jersey	3/2/12
1229		Woodland Park	New Jersey	3/2/12
1230		Jackson	New Jersey	3/2/12
1231		Rahway	New Jersey	3/2/12
1232		North Brunswick	New Jersey	3/2/12
1233		Pompton Lakes	New Jersey	3/2/12
1234		Milmay	New Jersey	3/2/12
1235		Newark	New Jersey	3/2/12
1236		Bloomington	New Jersey	3/2/12
1237		kinnelon	New Jersey	3/2/12
1238		Maplewood	New Jersey	3/2/12
1239		Fair Lawn	New Jersey	3/2/12
1240		Lawrenceville	New Jersey	3/2/12
1241		Westfield	New Jersey	3/2/12
1242		Jackson	New Jersey	3/2/12
1243		Bound Brook	New Jersey	3/2/12
1244		Perth Amboy	New Jersey	3/2/12
1245		West Long Branch	New Jersey	3/2/12
1246		Ringwood	New Jersey	3/2/12
1247		salt lake city	Utah	3/2/12
1248		Saddle Brook	New Jersey	3/2/12
1249		Sewaren	New Jersey	3/2/12
1250		APODACA	Texas	3/2/12
1251		Newark	New Jersey	3/2/12
1252		Edison	New Jersey	3/2/12
1253		Wayne	New Jersey	3/2/12
1254		New Brunswick	New Jersey	3/2/12
1255		Vineland	New Jersey	3/2/12
1256		Highland Park	New Jersey	3/2/12
1257		Metuchen	New Jersey	3/2/12
1258		red bank	New Jersey	3/3/12
1259		Glen Gardner	New Jersey	3/3/12

	Name	City	State	Date
1260		Washington	New Jersey	3/3/12
1261		Chatham	New Jersey	3/3/12
1262		Carteret	New Jersey	3/3/12
1263		South Plainfield	New Jersey	3/3/12
1264		Monroe twp	New Jersey	3/3/12
1265		edison	New Jersey	3/3/12
1266		Ridgewood	New Jersey	3/3/12
1267		North Bergen	New Jersey	3/3/12
1268		Wayne	New Jersey	3/3/12
1269		North Plainfield	New Jersey	3/3/12
1270		Bradley Beach	New Jersey	3/3/12
1271		Cedr Run	New Jersey	3/3/12
1272		bloomingle	New Jersey	3/3/12
1273		Long Beach Twp.	New Jersey	3/3/12
1274		Morristown	New Jersey	3/3/12
1275		Martinsville	New Jersey	3/3/12
1276		clementon	New Jersey	3/3/12
1277		Tenafly	New Jersey	3/3/12
1278		Bound Brook	New Jersey	3/3/12
1279		Monmouth Jct	New Jersey	3/3/12
1280		Brick	New Jersey	3/3/12
1281		Edison	New Jersey	3/3/12
1282		Hazlet	New Jersey	3/3/12
1283		El Paso	Texas	3/3/12
1284		Edison	New Jersey	3/3/12
1285		East Brunswick	New Jersey	3/3/12
1286		Edison	New Jersey	3/3/12
1287		edison	New Jersey	3/3/12
1288		Wayne	New Jersey	3/3/12
1289		Red Bank	New Jersey	3/3/12
1290		Paramus	New Jersey	3/3/12
1291		Somerset	New Jersey	3/3/12
1292		Manahawkin	New Jersey	3/3/12
1293		Berkeley Heights	New Jersey	3/3/12
1294		Stockholm	New Jersey	3/3/12
1295		closter	New Jersey	3/3/12
1296		Wanaque	New Jersey	3/3/12
1297		Egg Harbor Twp.	New Jersey	3/3/12
1298		New York	New York	3/3/12
1299		Gainesville	Florida	3/3/12
1300		new brunswick	New Jersey	3/3/12
1301		dumont	New Jersey	3/3/12
1302		Highland Park	New Jersey	3/3/12
1303		Lambertville	New Jersey	3/3/12
1304		North Plainfield	New Jersey	3/3/12

	Name	City	State	Date
1305		Chester	New Jersey	3/3/12
1306		Long Branch	New Jersey	3/3/12
1307		Gloucester	New Jersey	3/3/12
1308		East Orange	New Jersey	3/3/12
1309		Clifton	New Jersey	3/3/12
1310		Rahway	New Jersey	3/3/12
1311		edison	New Jersey	3/3/12
1312		Kihei	Hawaii	3/3/12
1313		Edison	New Jersey	3/3/12
1314		Monroe.Twp.	New Jersey	3/3/12
1315		Hoboken	New Jersey	3/3/12
1316		Long Branch	New Jersey	3/3/12
1317		Manalapan	New Jersey	3/3/12
1318		Union	New Jersey	3/3/12
1319		Pompton Lakes	New Jersey	3/3/12
1320		Oceanport	New Jersey	3/3/12
1321		Wyckoff	New Jersey	3/3/12
1322		Marlboro	New Jersey	3/3/12
1323		Plainfield	New Jersey	3/3/12
1324		edison	New Jersey	3/3/12
1325		Norwich	Connecticut	3/3/12
1326		Manalapan	New Jersey	3/3/12
1327		Metuchen	New Jersey	3/3/12
1328		Fair Lawn	New Jersey	3/3/12
1329		Franklin	New Jersey	3/3/12
1330		Edison	New Jersey	3/3/12
1331		Jersey City	New Jersey	3/3/12
1332		Medford Lakes	New Jersey	3/3/12
1333		iselin	New Jersey	3/3/12
1334		Edison	New Jersey	3/3/12
1335		Edison	New Jersey	3/3/12
1336		Franklin Park	New Jersey	3/3/12
1337		Phoenix	Arizona	3/3/12
1338		Metuchen	New Jersey	3/3/12
1339		Long Branch	New Jersey	3/3/12
1340		Sea Bright	New Jersey	3/3/12
1341		waretown	New Jersey	3/3/12
1342		Nutley	New Jersey	3/3/12
1343		Landrum	South Carolina	3/3/12
1344		Brighton	Colorado	3/3/12
1345		wyckoff	New Jersey	3/3/12
1346		miami	Florida	3/3/12
1347		medford lakes	New Jersey	3/3/12
1348		Glen Gardner	New Jersey	3/3/12
1349		Iselin	New Jersey	3/3/12

	Name	City	State	Date
1350		Ewing	New Jersey	3/3/12
1351		Butler	New Jersey	3/3/12
1352		Edison	New Jersey	3/3/12
1353		Brick	New Jersey	3/3/12
1354		chatham	New Jersey	3/3/12
1355		Brick	New Jersey	3/3/12
1356		South Bound Brook	New Jersey	3/3/12
1357		South Bound Brook	New Jersey	3/3/12
1358		Ocean Grove	New Jersey	3/3/12
1359		Edison	New Jersey	3/3/12
1360		Morristown	New Jersey	3/3/12
1361		Edison	New Jersey	3/3/12
1362		Prospect	Kentucky	3/3/12
1363		Auckland		3/3/12
1364		Sayreville	New Jersey	3/3/12
1365		Ringwood	New Jersey	3/3/12
1366		North Brunswick	New Jersey	3/3/12
1367		Yardley	Pennsylvania	3/3/12
1368		Englewood	New Jersey	3/4/12
1369		Beacon Falls	Connecticut	3/4/12
1370		Bound Brook	New Jersey	3/4/12
1371		Morristown	New Jersey	3/4/12
1372		Saugus	California	3/4/12
1373		Edison	New Jersey	3/4/12
1374		El Segundo	California	3/4/12
1375		Galveston	Texas	3/4/12
1376		Edison	New Jersey	3/4/12
1377		Montgomery	Alabama	3/4/12
1378		North Brunswick	New Jersey	3/4/12
1379		Clermont	Florida	3/4/12
1380		Fulham		3/4/12
1381		Kokomo	Indiana	3/4/12
1382		marlton	New Jersey	3/4/12
1383		Hillsborough	New Jersey	3/4/12
1384		campbell hall	New York	3/4/12
1385		Lake Hopatcong	New Jersey	3/4/12
1386		Woodbridge	New Jersey	3/4/12
1387		Ocean Grove	New Jersey	3/4/12
1388		Gorham	Maine	3/4/12
1389		Rumson	New York	3/4/12
1390		stone ridge	New York	3/4/12
1391		Houston	Texas	3/4/12
1392		Yuma	Arizona	3/4/12
1393		Ringwood	New Jersey	3/4/12
1394		Edison	New Jersey	3/4/12

	Name	City	State	Date
1395		Shrewsbury	Massachusetts	3/4/12
1396		Asheville	North Carolina	3/4/12
1397		Southlake	Texas	3/4/12
1398		Shelton		3/4/12
1399		beachwood	New Jersey	3/4/12
1400		Washington	District Of Columbia	3/4/12
1401		Montreal		3/4/12
1402		East Rutherford	New Jersey	3/5/12
1403		Bergenfield	New Jersey	3/5/12
1404		Fair Oaks	California	3/5/12
1405		Folsom	Louisiana	3/5/12
1406		Flanders	New Jersey	3/5/12
1407		Chicago	Illinois	3/5/12
1408		EDISON	New Jersey	3/5/12
1409		San Jose	California	3/5/12
1410		Post Falls	Idaho	3/5/12
1411		Ocala	Florida	3/5/12
1412		edison	New Jersey	3/5/12
1413		Edison	New Jersey	3/5/12
1414		Tampa	Florida	3/5/12
1415		Middle Island	New York	3/5/12
1416		Fords	New Jersey	3/5/12
1417		Hilo	Hawaii	3/5/12
1418		Indianapolis	Indiana	3/5/12
1419		Fresno	California	3/5/12
1420		Grants Pass	Oregon	3/5/12
1421		Bay Shore	New York	3/5/12
1422		Los Angeles	California	3/5/12
1423		Ward Cove	Alaska	3/5/12
1424		hay el hamadia		3/5/12
1425		Thousand Oaks	California	3/5/12
1426		Arcata	California	3/5/12
1427		Zanesville	Ohio	3/5/12
1428		Frankfort	Kentucky	3/5/12
1429		Boonton	New Jersey	3/5/12
1430		Las Vegas	New Mexico	3/5/12
1431		Ringwood	New Jersey	3/5/12
1432		edison	New Jersey	3/5/12
1433		Fords	New Jersey	3/5/12
1434		New Brunswick	New Jersey	3/5/12
1435		Aberdeen	New Jersey	3/5/12
1436		Westerville	Ohio	3/5/12
1437		Austin	Texas	3/5/12
1438		Chicago	Illinois	3/5/12
1439		Louisburg	North Carolina	3/5/12

	Name	City	State	Date
1440		Cranbury	New Jersey	3/5/12
1441		Perth Amboy	New Jersey	3/5/12
1442		Glen Ridge	New Jersey	3/5/12
1443		Watsonville	California	3/5/12
1444		Terre Haute	Indiana	3/5/12
1445		Julian	California	3/5/12
1446		Plymouth	Massachusetts	3/5/12
1447		Vancouver	Washington	3/5/12
1448		Stellenbosch		3/5/12
1449		Hutto	Texas	3/5/12
1450		Antioch	California	3/5/12
1451		Newark	New Jersey	3/5/12
1452		Tucson	Arizona	3/5/12
1453		Birch Run	Michigan	3/5/12
1454		montclair	New Jersey	3/5/12
1455		New York	New York	3/5/12
1456		Edison	New Jersey	3/5/12
1457		Jacksonville	Florida	3/5/12
1458		Florham Park	New Jersey	3/5/12
1459		Santa Monica	California	3/5/12
1460		Elkins Park	Pennsylvania	3/5/12
1461		Newark	New Jersey	3/5/12
1462		Truro	Alabama	3/5/12
1463		Dalton	Georgia	3/5/12
1464		Lexington	Texas	3/5/12
1465		Schenectady	New York	3/5/12
1466		Boerne	Texas	3/5/12
1467		BANGOR	Maine	3/5/12
1468			Florida	3/5/12
1469		Sonoma	California	3/5/12
1470		Portland	Oregon	3/5/12
1471		Easton	Pennsylvania	3/5/12





change.org

To: The Governor of NJ, State Rep. Upendra Chivukula (NJ-017B), State Sen. Samuel Thompson (NJ-012), Rep. Rush Holt (NJ-12), Sen. Barbara Boxer (CA), USEPA Region 2 Administrator (Judith Enck), USEPA Administrator (Lisa Jackson), Commissioner (Bob Martin), USEPA Region 2 Superfund Chief (Walter Mugdan), Pfizer (Wendy Lazarus), Pfizer (Russell Downey)

Subject: Stop toxic cancer-causing chemicals from seeping into the Raritan River!

Letter: Greetings,

I respectfully request that you strongly compel the United States Environmental Protection Agency (USEPA) to take immediate action to stop the toxic, cancer-causing chemical seep draining into the Raritan River from the 80-year old American Cyanamid Superfund Site in Bridgewater.

The 575-acre site sits directly adjacent to the longest river solely in New Jersey, as well as the Delaware and Raritan Canal, which is used for drinking water for hundreds of thousands of families in the surrounding area. The USEPA recently discovered benzene, a toxic carcinogen known to potentially cause damage to the immune system, oral cancer, and leukemia on the American Cyanamid Superfund Site at 20,000 times the acceptable federal standard.

The site's leaking chemical lagoons, known as lagoons 1 and 2, must be cleaned up immediately. Please tell the USEPA that erecting a temporary Band-Aid of carbon bags and hay bales along the bank to "catch" the seeps is not acceptable. Additionally, I ask that you request the USEPA to require the site's Responsible Party, Pfizer, a billion dollar pharmaceutical company, to fully remediate the on-site historic lagoons from this leaking toxic waste site that is causing this potential health hazard.

This site cleanup has been languishing for over two decades, and it is time for USEPA to take serious action. In order to protect the health and safety of families that utilize this area for recreation, the source of this contamination must be addressed immediately. For the bikers, hikers, fisherman and kayakers, for the osprey, bald eagles, turtles and trout, please urge USEPA to make this site cleanup a top priority and to take immediate action to remove the toxic chemicals draining into our regional resource, the Raritan River. Thank you for your timely assistance on this important environmental issue.

Respectfully,

R2-0007797

## SIGNATURES

	Name	City	State	Date
1		Edison	New Jersey	6/24/2011
2		Linden	New Jersey	6/24/2011
3		West Orange	New Jersey	6/24/2011
4		Monmouth Junction	New Jersey	6/24/2011
5		Edison	New Jersey	6/24/2011
6		Forest Hills	New York	6/24/2011
7		West Orange	New Jersey	6/24/2011
8		Bridgeton	New Jersey	6/24/2011
9		Fair Lawn	New Jersey	6/24/2011
10		Kendall park	New Jersey	6/24/2011
11		PERTH AMBOY	New Jersey	6/24/2011
12		Roselle	New Jersey	6/24/2011
13		W Allenhurst	New Jersey	6/24/2011
14		Glen Ridge	New Jersey	6/24/2011
15		Montville	New Jersey	6/24/2011
16		Arlington	Texas	6/24/2011
17		Cherry Hill	New Jersey	6/24/2011
18		Maplewood	New Jersey	6/24/2011
19		Lawrenceville	New Jersey	6/24/2011
20		Kettering		6/24/2011
21		Scranton	Pennsylvania	6/24/2011
22		St. PAULIten		6/24/2011
23		Gabrovo		6/24/2011
24		Salem	Oregon	6/24/2011
25		Liverpool		6/24/2011
26		Fair Oaks	California	6/24/2011
27		Chicago	Illinois	6/24/2011
28		Pasadena	Maryland	6/24/2011
29		Spotsylvania	Virginia	6/24/2011
30		Brewster	New York	6/24/2011
31		Anadia		6/24/2011
32		Weymouth		6/24/2011
33		Suva	Hawaii	6/24/2011
34		Jackson Heights	New York	6/24/2011
35		springfield	Ohio	6/24/2011
36		Sacaton	Arizona	6/24/2011
37		Manchester	New Hampshire	6/24/2011
38		stavanger	Nevada	6/24/2011
39		Prompton Lakes	New Jersey	6/24/2011
40		Randolpj	New Jersey	6/24/2011
41		Oakhurst	New Jersey	6/24/2011
42		London		6/24/2011
43		Sauk City	Wisconsin	6/24/2011
44		London		6/24/2011

	Name	City	State	Date
45		Chicago	Illinois	6/24/2011
46		timisoara		6/24/2011
47		Haddonfield	New Jersey	6/24/2011
48		Pipersville	Pennsylvania	6/24/2011
49		Concord	California	6/24/2011
50		Saratoga	California	6/24/2011
51		Berlin		6/24/2011
52		rancho cordova	California	6/24/2011
53		Spring Hope	North Carolina	6/24/2011
54		Bethlehem	Pennsylvania	6/24/2011
55		johnson city	Tennessee	6/24/2011
56		West Orange	New Jersey	6/24/2011
57		boca raton	Florida	6/24/2011
58		brooklyn	New York	6/24/2011
59		Shortsville	New York	6/24/2011
60		Hertford		6/24/2011
61		Davis	California	6/24/2011
62		West Haven	Connecticut	6/24/2011
63		Fargo	North Dakota	6/24/2011
64		Manitou Springs	Colorado	6/24/2011
65		New York	New York	6/24/2011
66		Hagerstown	Maryland	6/24/2011
67		Framingham	Massachusetts	6/24/2011
68		Webb City	Missouri	6/24/2011
69		Chicago	Illinois	6/24/2011
70		buenos aires		6/24/2011
71		Joppa	Maryland	6/24/2011
72		Rijeka		6/24/2011
73		Northfield		6/24/2011
74		Adelaide		6/24/2011
75		Honolulu	Hawaii	6/24/2011
76		Chicago	Illinois	6/24/2011
77		oklahoma city	Oklahoma	6/24/2011
78		Pearl City	Hawaii	6/24/2011
79		chihuahua	Maine	6/24/2011
80		london		6/24/2011
81		Finleyville	Pennsylvania	6/25/2011
82		Amersfoort		6/25/2011
83		Ottawa		6/25/2011
84		Basel		6/25/2011
85		Peconic	New York	6/25/2011
86		Olympia	Washington	6/25/2011
87		Hasselt		6/25/2011
88		Zagreb		6/25/2011
89		savona		6/25/2011

	Name	City	State	Date
90		Langley Park, Durham.		6/25/2011
91		Como		6/25/2011
92		Indianapolis	Indiana	6/25/2011
93		Chicago	Illinois	6/25/2011
94		North Olmsted	Ohio	6/25/2011
95		St. Louis Park	Minnesota	6/25/2011
96		Slate Hill	New York	6/25/2011
97		Verona		6/25/2011
98		Perkasie	Pennsylvania	6/25/2011
99		Mansfield Center	Connecticut	6/25/2011
100		Mansfield Center	Connecticut	6/25/2011
101		Chicago	Illinois	6/25/2011
102		San Francisco	California	6/25/2011
103		Sussex	Wisconsin	6/25/2011
104		Bushkill	Pennsylvania	6/25/2011
105		Mount Vernon	Kentucky	6/25/2011
106		Stratford		6/25/2011
107		barcelona		6/25/2011
108		Pierrelatte		6/25/2011
109		Revigny-sur-Ornain		6/25/2011
110		Helena	Arkansas	6/25/2011
111		Oakland	California	6/25/2011
112		Kansas City	Missouri	6/25/2011
113		tampa	Florida	6/25/2011
114		NYC	New York	6/25/2011
115		Kraków		6/25/2011
116		Los Angeles	California	6/25/2011
117		Omaha	Nebraska	6/25/2011
118		Toms River	New Jersey	6/25/2011
119		laval		6/25/2011
120		Garden City	Michigan	6/25/2011
121		Detroit	Michigan	6/25/2011
122		west orange	New Jersey	6/25/2011
123		SAINT LEU LA FORET		6/25/2011
124		Des Moines	Iowa	6/25/2011
125		Casa Grande	Arizona	6/25/2011
126		Los Angeles	California	6/25/2011
127		SAINT LEU LA FORET		6/25/2011
128		West New York	New Jersey	6/25/2011
129		Tacoma	Washington	6/25/2011
130		Langley		6/25/2011
131		Newtown	Connecticut	6/25/2011
132		glendale	Arizona	6/25/2011
133		jackson	New Jersey	6/25/2011
134		sana'a		6/25/2011

	Name	City	State	Date
135		Portland	Oregon	6/25/2011
136		Jackson	New Jersey	6/25/2011
137		N. Ireland		6/26/2011
138		Krefeld		6/26/2011
139		Chicago	Illinois	6/26/2011
140		Hesperia	California	6/26/2011
141		Palermo		6/26/2011
142		Boei Telemark		6/26/2011
143		El Segundo	California	6/26/2011
144		Guelph		6/26/2011
145		Prairie Village	Kansas	6/26/2011
146		Findlay	Ohio	6/26/2011
147		Highland Village	Texas	6/26/2011
148		Valley Stream	New York	6/26/2011
149		Aliquippa	Pennsylvania	6/26/2011
150		Nanuet	New York	6/26/2011
151		Flushing	New York	6/26/2011
152		rockville	Maryland	6/26/2011
153		Whiting	New Jersey	6/26/2011
154		Cambridge	Massachusetts	6/26/2011
155		Springfield	Missouri	6/26/2011
156		Murfreesboro	Tennessee	6/26/2011
157		Greenbelt	Maryland	6/26/2011
158		Lady Lake	Florida	6/26/2011
159		New Haven	Connecticut	6/26/2011
160		Torre del Mar		6/26/2011
161		South Park	Pennsylvania	6/26/2011
162		Philadelphia	Pennsylvania	6/26/2011
163		Elmira	New York	6/26/2011
164		Irving	Texas	6/26/2011
165		Sherwood	Ohio	6/26/2011
166		Vacaville	California	6/26/2011
167		Jundia-SP		6/26/2011
168		Fair Play	South Carolina	6/26/2011
169		Tifton	Georgia	6/26/2011
170		Blacksburg	Virginia	6/26/2011
171		Jamaica Plain	Massachusetts	6/26/2011
172		ALTON	Illinois	6/26/2011
173		Knox	Indiana	6/26/2011
174		Gainesville	Florida	6/26/2011
175		San Diego	California	6/26/2011
176		palermo		6/26/2011
177		Staten Island	New York	6/26/2011
178		Westerkappeln		6/26/2011
179		Niagara Falls	California	6/26/2011

	Name	City	State	Date
180		Argentona		6/26/2011
181		San Anselmo	California	6/26/2011
182		Oshkosh	Wisconsin	6/26/2011
183		Stillwater	Minnesota	6/26/2011
184		Winnipeg		6/26/2011
185		Jersey City	New Jersey	6/26/2011
186		Hood River	Oregon	6/26/2011
187		Bethesda	Ohio	6/26/2011
188		San Francisco	California	6/26/2011
189		Long Beach	California	6/26/2011
190		Perth Amboy	New Jersey	6/26/2011
191		Mokena	Illinois	6/26/2011
192		Leiderdorp	District Of Columbia	6/26/2011
193		Melvindale	Michigan	6/26/2011
194		Forest Hills	New York	6/26/2011
195		Pearl City	Hawaii	6/26/2011
196		FORT WORTH	Texas	6/26/2011
197		kingston	Tennessee	6/26/2011
198		cincinnati	Ohio	6/26/2011
199		Lackawaxen	Pennsylvania	6/26/2011
200		Jamaica	New York	6/26/2011
201		Murrieta	California	6/26/2011
202		Bloomington	Minnesota	6/26/2011
203		Danville	Pennsylvania	6/26/2011
204		West Orange	New Jersey	6/26/2011
205		San Diego	California	6/26/2011
206		red bank	New Jersey	6/26/2011
207		santa monica	California	6/26/2011
208		Ventura	California	6/26/2011
209		Bellingham	Washington	6/26/2011
210		Auburn Hills	Michigan	6/26/2011
211		St Augustine	Florida	6/26/2011
212		New York	New York	6/26/2011
213		Santa Fe	New Mexico	6/26/2011
214		Plainfield	New Jersey	6/26/2011
215		Santa Cruz	California	6/26/2011
216		Cockeysville	Maryland	6/26/2011
217		De Land	Florida	6/26/2011
218		Sidney		6/26/2011
219		daytona beach	Florida	6/26/2011
220		Clanton	Alabama	6/26/2011
221		la selva beach	California	6/26/2011
222		Willemstad		6/26/2011
223		Kathmandu		6/26/2011
224		Brisbane		6/26/2011

	Name	City	State	Date
225		Brooklyn	New York	6/26/2011
226		Lake City	Florida	6/26/2011
227		Phoenix	Arizona	6/26/2011
228		Long Branch	New Jersey	6/26/2011
229		Brooklyn	New York	6/26/2011
230		Chattanooga	Tennessee	6/26/2011
231		Albuquerque	New Mexico	6/26/2011
232		Madrid/Spain	Alabama	6/26/2011
233		Ojai,	California	6/26/2011
234		Kenmore	Washington	6/26/2011
235		Boulder	Colorado	6/26/2011
236		brooklyn	New York	6/26/2011
237		Kansas City	Kansas	6/26/2011
238		Front Royal	Virginia	6/26/2011
239		Centre hall	Puerto Rico	6/26/2011
240		Garden Grove	California	6/26/2011
241		Henley	Maryland	6/26/2011
242		Allison Park	Pennsylvania	6/26/2011
243		Poland	Indiana	6/26/2011
244		Rochester	New York	6/26/2011
245		Sulphur Springs	Texas	6/26/2011
246		sf	California	6/26/2011
247		Washington	District Of Columbia	6/26/2011
248		Philadelphia	Pennsylvania	6/26/2011
249		Little Rock	Arkansas	6/26/2011
250		bullvalley	Illinois	6/26/2011
251		Saratoga	California	6/26/2011
252		Honolulu	Hawaii	6/26/2011
253		west park	Florida	6/26/2011
254		Des Moines	Washington	6/26/2011
255		Ellicott City	Maryland	6/26/2011
256		Sioux Falls	South Dakota	6/26/2011
257		MIDDLETOWN	New York	6/26/2011
258		Novokuznetsk	Federated States of M	6/26/2011
259		Pomona	California	6/26/2011
260		istanbul turkey	District Of Columbia	6/26/2011
261		San Diego	California	6/26/2011
262		perth,scotland		6/26/2011
263		milton	Georgia	6/26/2011
264		Sonoma	California	6/26/2011
265		San Pedro	California	6/26/2011
266		Port Orford	Oregon	6/26/2011
267		New York	New York	6/26/2011
268		Mashpee	Massachusetts	6/26/2011
269		San Anselmo	California	6/26/2011

	Name	City	State	Date
270		Adelaide		6/26/2011
271		glen waverley		6/26/2011
272		Rockport	Washington	6/26/2011
273		Samara	Ohio	6/26/2011
274		los angles	California	6/26/2011
275		Pittsburg	California	6/26/2011
276		Los Angeles	California	6/26/2011
277		Downers Grove	Illinois	6/26/2011
278		Monterrey	Texas	6/26/2011
279		Lücknow		6/26/2011
280		Ragusa		6/26/2011
281		Murrumbateman		6/26/2011
282		Kihei	Hawaii	6/27/2011
283		Hewitt	New Jersey	6/27/2011
284		Granger	Indiana	6/27/2011
285		New York	New York	6/27/2011
286		San Francisco	California	6/27/2011
287		Pleasant Hill	California	6/27/2011
288		Zagreb	California	6/27/2011
289		Kirke Saaby		6/27/2011
290		Bandung		6/27/2011
291		N. Saanich		6/27/2011
292		Racine	Wisconsin	6/27/2011
293		ROME		6/27/2011
294		rotterdam		6/27/2011
295		London,		6/27/2011
296		Costa Mesa	California	6/27/2011
297		Parvenets		6/27/2011
298		Florina		6/27/2011
299		Piræus	Alabama	6/27/2011
300		Prague 4		6/27/2011
301		baia mare		6/27/2011
302		Beverly Hills		6/27/2011
303		piraeus		6/27/2011
304		osijek		6/27/2011
305		Leicestershire		6/27/2011
306		Durban		6/27/2011
307		Bristol		6/27/2011
308		MIKOLOW		6/27/2011
309		Sidmouth		6/27/2011
310		Brisbane		6/27/2011
311		stockholm		6/27/2011
312		brooklyn	New York	6/27/2011
313		Hamilton	New Jersey	6/27/2011
314		albano laz.	Wyoming	6/27/2011



	Name	City	State	Date
315		Loxahatchee	Florida	6/27/2011
316		NY	New York	6/27/2011
317		Freiburg		6/27/2011
318		Boston	Massachusetts	6/27/2011
319		Aurora	Illinois	6/27/2011
320		Vaasa		6/27/2011
321		Benamaurel		6/27/2011
322		Eastton	Kansas	6/27/2011
323		bloomington	Indiana	6/27/2011
324		Gold Coast, Qld.		6/27/2011
325		Karachi		6/27/2011
326		Melbourne	Florida	6/27/2011
327		Pennsburg	Pennsylvania	6/27/2011
328		Iodz		6/27/2011
329		Chicago	Illinois	6/27/2011
330		Ringoos	New Jersey	6/27/2011
331		Wheaton	Illinois	6/27/2011
332		London	California	6/27/2011
333		Aberdeen		6/27/2011
334		Jerusalem		6/27/2011
335		racine	Wisconsin	6/27/2011
336		Fort Wayne	Indiana	6/27/2011
337		Bremerton	Washington	6/27/2011
338		Paradise	Michigan	6/27/2011
339		New Haven	Connecticut	6/27/2011
340		Lancaster		6/27/2011
341		Bethel Park	Pennsylvania	6/27/2011
342		milan		6/27/2011
343		Villa Gobernador Galvez		6/27/2011
344		swansea	Utah	6/27/2011
345		Brooklyn	New York	6/27/2011
346		park Falls	Wisconsin	6/27/2011
347		Dawson	Iowa	6/27/2011
348		Toronto		6/27/2011
349		Poca	West Virginia	6/27/2011
350		Krsko	Alabama	6/27/2011
351		Gastonia	North Carolina	6/27/2011
352		Lexington	Kentucky	6/27/2011
353		Xalapa		6/27/2011
354		San Diego	California	6/27/2011
355		Myrtle Creek	Oregon	6/27/2011
356		Dayton	Ohio	6/27/2011
357		San Francisco	California	6/27/2011
358		Sacrofano		6/27/2011
359		Greenville	Tennessee	6/27/2011

	Name	City	State	Date
360		Cambridge	Massachusetts	6/27/2011
361		Knutsford		6/27/2011
362		Buffalo	New York	6/27/2011
363		Mosheim	Tennessee	6/27/2011
364		clifton	New Jersey	6/27/2011
365		Montrose	Colorado	6/27/2011
366		Eching		6/27/2011
367		Monroe	New Jersey	6/27/2011
368		Munhall	Pennsylvania	6/27/2011
369		MOUNT LAUREL	New Jersey	6/27/2011
370		Chicago	Illinois	6/27/2011
371		Toms River	New Jersey	6/27/2011
372		Tampa	Florida	6/27/2011
373		Beaverton	Oregon	6/27/2011
374		Phoenix	Arizona	6/27/2011
375		METUCHEN	New Jersey	6/27/2011
376		Brooklyn	Connecticut	6/27/2011
377		Reseda	California	6/27/2011
378		Edison	New Jersey	6/27/2011
379		Madison	Wisconsin	6/27/2011
380		Knoxville	Tennessee	6/27/2011
381		Warszawa		6/27/2011
382		Hillsborough	New Jersey	6/27/2011
383		Berlin	Massachusetts	6/27/2011
384		Novato	California	6/27/2011
385		Dublin	Alabama	6/27/2011
386		Upper Lake	California	6/27/2011
387		Roma		6/27/2011
388		Hempstead	New York	6/27/2011
389		Vista	California	6/27/2011
390		Longmont	Colorado	6/27/2011
391		Seven Valleys	Pennsylvania	6/27/2011
392		Rancho Palos Verdes	California	6/27/2011
393		Nashville	Tennessee	6/27/2011
394		Rhodes Island		6/27/2011
395		Chatham	New Jersey	6/27/2011
396		Ft. Pierce	Florida	6/27/2011
397		Keyport	New Jersey	6/27/2011
398		Dana	North Carolina	6/27/2011
399		Keyport	New Jersey	6/27/2011
400		Rogers	Arkansas	6/27/2011
401		Edison	New Jersey	6/27/2011
402		danbury	Connecticut	6/27/2011
403		New York	New York	6/27/2011
404		shropshire		6/27/2011

	Name	City	State	Date
405		Pompton Lakes	New Jersey	6/27/2011
406		Poplarville	Mississippi	6/27/2011
407		Hollywood	Florida	6/27/2011
408		Greenville	South Carolina	6/27/2011
409		Bennington	Vermont	6/27/2011
410		Eugene	Oregon	6/27/2011
411		Portland	Oregon	6/27/2011
412		Northbrook	Illinois	6/27/2011
413		Smyrna	Georgia	6/27/2011
414		Veracruz		6/27/2011
415		Fords	New Jersey	6/27/2011
416		Patra		6/27/2011
417		Ft. Myers	Florida	6/27/2011
418		Barss Corner		6/27/2011
419		Austell	Georgia	6/27/2011
420		Verona	New Jersey	6/27/2011
421		Morrisville	Pennsylvania	6/27/2011
422		Studio City	California	6/27/2011
423		Hohenwart	Virgin Islands	6/27/2011
424		Dana Point	California	6/27/2011
425		San Francisco	California	6/27/2011
426		poulsbo	Washington	6/27/2011
427		Wilsall	Montana	6/27/2011
428		Durban		6/27/2011
429		Karlsruhe		6/27/2011
430		phoenix	Arizona	6/27/2011
431		Millsap	Texas	6/27/2011
432		Minneapolis	Minnesota	6/27/2011
433		Tokyo		6/27/2011
434		dreux		6/27/2011
435		Tucson	Arizona	6/27/2011
436		Bishop	Texas	6/27/2011
437		Iowa City	Iowa	6/27/2011
438		Warsaw		6/27/2011
439		NYC	New York	6/27/2011
440		Leighton Buzzard		6/27/2011
441		New York	New York	6/27/2011
442		roma		6/27/2011
443		Eau Claire	Wisconsin	6/27/2011
444		Whitewater	Wisconsin	6/27/2011
445		boonton township	New Jersey	6/27/2011
446		Decatur	Georgia	6/27/2011
447		Plovdiv		6/27/2011
448		Ironton	Missouri	6/27/2011
449		union	New Jersey	6/27/2011

	Name	City	State	Date
450		Anchorage	Alaska	6/27/2011
451		rock falls	Illinois	6/27/2011
452		Fontana	California	6/27/2011
453		Chicago	Illinois	6/27/2011
454		Norderney		6/27/2011
455		naples	Florida	6/27/2011
456		salt lake city	Utah	6/27/2011
457		Trieste	Iowa	6/27/2011
458		vlagtwedde		6/27/2011
459		Santiago		6/27/2011
460		Bloomington	New Jersey	6/27/2011
461		Las Cruces,	New Mexico	6/27/2011
462		Encino	California	6/27/2011
463		Chandler	Arizona	6/27/2011
464		Coral Gables	Florida	6/27/2011
465		Honolulu	Hawaii	6/27/2011
466		Paramount	California	6/27/2011
467		Boulder	Colorado	6/27/2011
468		columbia	Tennessee	6/27/2011
469		Belvidere	Illinois	6/27/2011
470		Bayside Hills	New York	6/27/2011
471		New Brunswick	New Jersey	6/27/2011
472		Ellicott City	Maryland	6/27/2011
473		New London	North Carolina	6/27/2011
474		chicago	Illinois	6/27/2011
475		Woodbridge	New Jersey	6/27/2011
476		wantagh	New York	6/27/2011
477		Arnold	Missouri	6/27/2011
478		SetÄ°bal		6/27/2011
479		san jose	California	6/27/2011
480		Butler	New Jersey	6/27/2011
481		Charlottesville	Virginia	6/27/2011
482		denver	Colorado	6/27/2011
483		Lemoore	California	6/27/2011
484		Pottsville	Pennsylvania	6/27/2011
485		shelbyville	Tennessee	6/27/2011
486		Torres Novas		6/27/2011
487		Chicago	Illinois	6/27/2011
488		Oshkosh	Wisconsin	6/27/2011
489		San Francisco	California	6/27/2011
490		St Louis	Missouri	6/27/2011
491		Hastings		6/27/2011
492		Boca Raton	Florida	6/27/2011
493		Los Angeles	California	6/27/2011
494		Washington	Pennsylvania	6/27/2011

	Name	City	State	Date
495		Dayboro		6/27/2011
496		winchester	Massachusetts	6/27/2011
497		perth	Washington	6/27/2011
498		Merthyr Tydfil, Mid Glamorgan		6/27/2011
499		janesville	Wisconsin	6/27/2011
500		Miami	Florida	6/27/2011
501		thunder bay		6/27/2011
502		Paramus	New Jersey	6/27/2011
503		Hallandale beach	Florida	6/27/2011
504		Skillman	New Jersey	6/27/2011
505		portland	Oregon	6/27/2011
506		San Pedro	California	6/27/2011
507		Lantier		6/27/2011
508		Mexico City		6/27/2011
509		escondido	California	6/27/2011
510		Bethesda	Maryland	6/27/2011
511		Winter Park	Florida	6/27/2011
512		Brooklyn	New York	6/27/2011
513		Tujunga	California	6/27/2011
514		Minneapolis	Minnesota	6/27/2011
515		Brookline	Massachusetts	6/27/2011
516		Morrice	Michigan	6/27/2011
517		Union	Kentucky	6/27/2011
518		Ontario	California	6/27/2011
519		Winnipeg, MB.		6/27/2011
520		Los Angeles	California	6/27/2011
521		TORINO		6/27/2011
522		Jersey City	New Jersey	6/28/2011
523		Winzer	Delaware	6/28/2011
524		Fort Collins	Colorado	6/28/2011
525		Arkhangelsk		6/28/2011
526		Randwick		6/28/2011
527		New Zealand	Federated States of M	6/28/2011
528		castel san pietro terme		6/28/2011
529		Bryn Mawr	Pennsylvania	6/28/2011
530		Lakeside	California	6/28/2011
531		Neuwied	Armed Forces America	6/28/2011
532		Ridderkerk		6/28/2011
533		Quincy	Illinois	6/28/2011
534		Amsterdam		6/28/2011
535		Vancouver		6/28/2011
536		Purcellville	Virginia	6/28/2011
537		rhodos		6/28/2011
538		East Hampton	New York	6/28/2011
539		Küching		6/28/2011

	Name	City	State	Date
540		New Providence	New Jersey	6/28/2011
541		Celje		6/28/2011
542		Parma	Ohio	6/28/2011
543		Cocoa Beach	Florida	6/28/2011
544		Diamondhead	Mississippi	6/28/2011
545		Diamondhead	Mississippi	6/28/2011
546		Genève	New York	6/28/2011
547		Jersey City	New Jersey	6/28/2011
548		New Oxford	Pennsylvania	6/28/2011
549		Syktvkar		6/28/2011
550		red deer		6/28/2011
551		destin	Florida	6/28/2011
552		Manchester		6/28/2011
553		New Brunswick	New Jersey	6/28/2011
554		Mercer Island	Washington	6/28/2011
555		San Jose	California	6/28/2011
556		Gresham	Oregon	6/28/2011
557		Sherman Oaks	California	6/28/2011
558		Santiago	Alaska	6/28/2011
559		MEXICO		6/28/2011
560		New york	New York	6/28/2011
561		Reno	Nevada	6/28/2011
562		Hazel Green	Alabama	6/28/2011
563		Foster City	California	6/28/2011
564		Poznan		6/28/2011
565		Loughborough		6/28/2011
566		Taunton		6/28/2011
567		mendoza		6/28/2011
568		Lismore		6/28/2011
569		Corning	New York	6/28/2011
570		Wilmington	Delaware	6/28/2011
571		Stony Brook	New York	6/28/2011
572		Roswell	Georgia	6/28/2011
573		Silver Spring	Maryland	6/28/2011
574		Mad Hts.	Michigan	6/28/2011
575		Aalborg	Delaware	6/29/2011
576		Grebenhain		6/29/2011
577		Montgomery	Illinois	6/29/2011
578		South Amboy	New Jersey	6/29/2011
579		Maplewood	Minnesota	6/29/2011
580		chicago	Illinois	6/29/2011
581		DALLAS	Texas	6/29/2011
582		El Santiscal, Arcos de la Frontera		6/29/2011
583		mtlaurel	New Jersey	6/29/2011
584		Centreville	Maryland	6/29/2011

	Name	City	State	Date
585		la mesa	California	6/29/2011
586		Faro		6/29/2011
587		Lords Valley	Pennsylvania	6/29/2011
588		Gorham	Maine	6/29/2011
589		Seattle	Washington	6/29/2011
590		Hillsborough	North Carolina	6/29/2011
591		Birmingham	Michigan	6/29/2011
592		Marion	Illinois	6/29/2011
593		Portland	Oregon	6/29/2011
594		Los Angeles	California	6/29/2011
595		El PSO	Texas	6/29/2011
596		San Diego	California	6/29/2011
597		Brighton	Massachusetts	6/30/2011
598		Miami	Florida	6/30/2011
599		Deerfield Beach	Florida	6/30/2011
600		Brighthouse	Alabama	6/30/2011
601		Thess		6/30/2011
602		Deerfield Beach	Florida	6/30/2011
603		Laurence Harbor	New Jersey	6/30/2011
604		tel aviv		6/30/2011
605		Dresden		6/30/2011
606		Old Bridge	New Jersey	6/30/2011
607		torre annunziata(nä)	Iowa	6/30/2011
608		Pinellas Park	Florida	6/30/2011
609		Denver	Colorado	6/30/2011
610		juarez		6/30/2011
611		San Rafael	California	6/30/2011
612		San Rafael	California	6/30/2011
613		prescott valley	Arizona	6/30/2011
614		Rancho Cucamonga	California	6/30/2011
615		Denison	Texas	6/30/2011
616		Erie	Pennsylvania	6/30/2011
617		Distrito Federal		6/30/2011
618		Porto		7/1/2011
619		Dhaka		7/1/2011
620		new york	New York	7/1/2011
621		Dana Point	California	7/1/2011
622		Jackson	New Jersey	7/1/2011
623		Bogotá		7/1/2011
624		Frankston Heights		7/2/2011
625		Lahaska	Pennsylvania	7/2/2011
626		Philadelphia	Pennsylvania	7/2/2011
627		KL		7/3/2011
628		Miami	Florida	7/3/2011

	Name	City	State	Date
629		Tucson	Arizona	7/3/2011
630		Clackamas	Oregon	7/3/2011
631		Mexico		7/3/2011
632		Whitehorse		7/3/2011
633		Seixal		7/4/2011
634		Somerset	New Jersey	7/4/2011
635		Sandpoint	Idaho	7/4/2011
636		Neptune	New Jersey	7/4/2011
637		Bogota		7/4/2011
638		marano sul panaro		7/5/2011
639		Adelaide		7/5/2011
640		Jeannette	Pennsylvania	7/5/2011
641		Alicante		7/5/2011
642		Point Pleasant	New Jersey	7/5/2011
643		Wellington	Florida	7/5/2011
644		Greenbelt	Maryland	7/5/2011
645		San Jose	California	7/6/2011
646		telluride	Colorado	7/6/2011
647		Iowa City	Iowa	7/6/2011
648		Mount Joy	Pennsylvania	7/7/2011
649		VALREAS		7/8/2011
650		Kingston	New York	7/8/2011
651		East Hanover	New Jersey	7/8/2011
652		Edmonton	Alabama	7/8/2011
653		New York	New York	7/9/2011
654		Jacksonville	Florida	7/9/2011
655		Hof		7/10/2011
656		Lexington	Kentucky	7/11/2011
657		rego park	New York	7/11/2011
658		Gdynia		7/12/2011
659		San Diego	California	7/12/2011
660		Scituate	Massachusetts	7/12/2011
661		Merritt Island	Florida	7/13/2011
662		Davenport	Iowa	7/15/2011
663		Phoenix	Arizona	7/15/2011
664		Inlet	New York	7/15/2011
665		Tucson	Arizona	7/16/2011
666		vancouver		7/16/2011
667		Tucson	Arizona	7/17/2011
668		Glen Carbon	Illinois	7/23/2011
669		Philadelphia	Pennsylvania	7/25/2011
670		shelbyville	Tennessee	7/25/2011
671		Paris		7/27/2011
672		Trenton		7/27/2011
673		verona		7/28/2011



	Name	City	State	Date
674		Whitsett	North Carolina	7/28/2011
675		clarkdale	Arizona	7/29/2011
676		Vilanova del CamA-		7/31/2011
677		Medicina, Bologna		7/31/2011
678		Old bridge	New Jersey	8/1/2011
679		Highland Park	New Jersey	8/3/2011
680		Highland Park	New Jersey	8/4/2011
681		Portland	Oregon	8/4/2011
682		browns mills	New Jersey	8/7/2011
683		south amboy	New Jersey	8/7/2011
684		Columbus	Ohio	8/8/2011
685		Hazel Park	Michigan	8/9/2011
686		Medford	Massachusetts	8/10/2011
687		Metuchen	New Jersey	8/10/2011
688		Wadsworth	Ohio	8/11/2011
689		Rye	New York	8/11/2011
690		Tecumseh	Missouri	8/11/2011
691		camden	New Jersey	8/11/2011
692		Eugene	Oregon	8/11/2011
693		Cincinnati	Ohio	8/11/2011
694		Radium Springs	New Mexico	8/11/2011
695		Holton	Indiana	8/11/2011
696		CHARLESTON	West Virginia	8/11/2011
697		Columbus	Indiana	8/12/2011
698		Gloucester City	New Jersey	8/12/2011
699		Billerica	Massachusetts	8/12/2011
700		Lindenhurst	Illinois	8/12/2011
701		Feeding Hills	Massachusetts	8/12/2011
702		Bedminster	New Jersey	8/13/2011
703		Columbia	Maryland	8/13/2011
704		Norristown	Pennsylvania	8/13/2011
705		Ellicott City	Maryland	8/13/2011
706		Lexington	South Carolina	8/13/2011
707		Brandon	South Dakota	8/13/2011
708		Aveiro		8/14/2011
709		Oldsmar	Florida	8/14/2011
710		Wayne	New Jersey	8/14/2011
711		Old Hickory	Tennessee	8/17/2011
712		Teaneck	New Jersey	8/18/2011
713		Edison	New Jersey	8/18/2011
714		Morrice	Michigan	8/19/2011
715		Roseburg	Oregon	8/20/2011
716		langhorne	Pennsylvania	8/24/2011
717		Ringwood	New Jersey	8/24/2011
718		holiday	Florida	8/25/2011

	Name	City	State	Date
719		East Brunswick	New Jersey	8/26/2011
720		Raritan	New Jersey	8/26/2011
721		Webster	Kentucky	8/26/2011
722		hobart	Indiana	8/26/2011
723		New Brunswick	New Jersey	8/26/2011
724				8/26/2011
725		Athens	Georgia	8/26/2011
726		Saline	Michigan	8/26/2011
727		palmdale	California	8/26/2011
728		Decatur	Texas	8/26/2011
729		Auburn	New York	8/26/2011
730		Long Branch	New Jersey	8/26/2011
731		Agawam	Massachusetts	8/26/2011
732		Morristown	Tennessee	8/26/2011
733		Webster	New York	8/26/2011
734		Woodland Park	New Jersey	8/26/2011
735		Los Angeles	California	8/26/2011
736		PEORIA	Arizona	8/26/2011
737		port colborne	California	8/26/2011
738		Staten Island	New York	8/27/2011
739		Branchburg	New Jersey	8/27/2011
740		Willoughby	Ohio	8/27/2011
741		Singapore		8/27/2011
742		Edison	New Jersey	8/27/2011
743		Thessaloniki	California	8/27/2011
744		Edison	New Jersey	8/27/2011
745		williamsburg	Virginia	8/27/2011
746		Linden	New Jersey	8/27/2011
747		parish	New York	8/27/2011
748		Mahwah	New Jersey	8/27/2011
749		Middle River	Maryland	8/27/2011
750		Covina	California	8/27/2011
751		Flanders	New Jersey	8/27/2011
752		Hillsborough	New Jersey	8/27/2011
753		Atlantic Beach	Florida	8/27/2011
754		Clermont	Florida	8/27/2011
755		edison	New Jersey	8/27/2011
756		Ridgewood	New York	8/27/2011
757		Bound Brook	New Jersey	8/27/2011
758		Phx	Arizona	8/27/2011
759		Bound Brook	New Jersey	8/27/2011
760		Bound Brook	New Jersey	8/27/2011
761		Kittery Point	Maine	8/27/2011
762		Cranston	Rhode Island	8/27/2011
763		Washington	District Of Columbia	8/27/2011

	Name	City	State	Date
764		Fayetteville	North Carolina	8/27/2011
765		Dallas	Texas	8/27/2011
766		Chicago	Illinois	8/27/2011
767		Martinsville	Indiana	8/27/2011
768		Biloxi	Mississippi	8/27/2011
769		Clearwater	Florida	8/27/2011
770		ringwood	New Jersey	8/27/2011
771		frenchtown	New Jersey	8/27/2011
772		Pittsburgh	Pennsylvania	8/27/2011
773		Land O Lakes	Florida	8/27/2011
774		Seattle	Washington	8/27/2011
775		apple valley	California	8/27/2011
776		somerville	New Jersey	8/28/2011
777		Mosinee	Wisconsin	8/28/2011
778		SACRAMENTO	California	8/28/2011
779		Middletown	Maryland	8/28/2011
780		lincoln park	New Jersey	8/28/2011
781		Seattle	Washington	8/28/2011
782		Metuchen	New Jersey	8/28/2011
783		CasA@vel		8/28/2011
784		Strathmore	Alabama	8/28/2011
785		Glén Gardner	New Jersey	8/28/2011
786		Edison	New Jersey	8/28/2011
787		Davers	Massachusetts	8/28/2011
788		East Orange	New Jersey	8/28/2011
789		Leander	Texas	8/28/2011
790		Arlington	Texas	8/28/2011
791				8/28/2011
792		Hope	Idaho	8/28/2011
793		Chicopee	Massachusetts	8/28/2011
794		morgantown	West Virginia	8/28/2011
795		Chicago	Illinois	8/28/2011
796		baltimore	Maryland	8/28/2011
797		Fort Lee	New Jersey	8/28/2011
798		Somerset	New Jersey	8/29/2011
799		bridgewater	New Jersey	8/29/2011
800		highland park	New Jersey	8/29/2011
801		Bridgewater	New Jersey	8/29/2011
802		South Bound Brook	New Jersey	8/29/2011
803		LAS VEGAS	Nevada	8/29/2011
804		somewhere	New Jersey	8/29/2011
805		LAS VEGAS	Nevada	8/29/2011
806		Atlantic Beach	Florida	8/29/2011
807				8/29/2011
808		Berkeley	California	8/29/2011

	Name	City	State	Date
809		franklyn	Wisconsin	8/29/2011
810		iselin	New Jersey	8/29/2011
811		Silver Spring	Maryland	8/29/2011
812		port of spain		8/29/2011
813		LOWELL	Massachusetts	8/29/2011
814		Los Angeles	California	8/29/2011
815		London	Michigan	8/29/2011
816		a	Texas	8/29/2011
817		galloway	New Jersey	8/29/2011
818		Tucson	Arizona	8/29/2011
819		Los Angeles	California	8/30/2011
820		Rochester	New York	8/30/2011
821		Seattle	Washington	8/30/2011
822		Gainesville	Florida	8/30/2011
823		Columbus	Ohio	8/30/2011
824		London	Massachusetts	8/30/2011
825		Raleigh	North Carolina	8/30/2011
826		Raleigh	North Carolina	8/30/2011
827		clarksville	Tennessee	8/30/2011
828		West Lafayette	Indiana	8/30/2011
829		glen haven	Colorado	8/30/2011
830		prescott	Arizona	8/30/2011
831		Laramie	Wyoming	8/30/2011
832		Cincinnati	Ohio	8/30/2011
833		Milwaukee	Wisconsin	8/30/2011
834		Santa Fe	New Mexico	8/30/2011
835		San Francisco	California	8/30/2011
836		valley stream	New York	8/30/2011
837		Woodbury	Minnesota	8/30/2011
838		Pt. Arena	California	8/30/2011
839		hurst	Texas	8/30/2011
840		Glendale	Arizona	8/30/2011
841		Columbus	Ohio	8/30/2011
842		Dilworth	Minnesota	8/30/2011
843		Jacksonville	Florida	8/30/2011
844		Winter Park	Florida	8/30/2011
845		east rochester	New York	8/30/2011
846		Brooklyn	New York	8/30/2011
847		Winfield	Illinois	8/30/2011
848		new york	New York	8/30/2011
849		Suffern	New York	8/30/2011
850		METUCHEN	New Jersey	8/30/2011
851		Eureka	California	8/30/2011
852		Blomsterdalen	Alaska	8/31/2011
853		Compton	California	8/31/2011

	Name	City	State	Date
854		Maysville	Kentucky	8/31/2011
855		Delhi		8/31/2011
856		Trenton	Tennessee	8/31/2011
857		Petersburg	Virginia	8/31/2011
858		Louisville	Kentucky	8/31/2011
859		hoffman estates	Illinois	8/31/2011
860		Wichita Falls	Texas	8/31/2011
861		Indianapolis	Indiana	8/31/2011
862		Monroe	Michigan	8/31/2011
863		Southlake	Texas	8/31/2011
864		manteca	California	8/31/2011
865		Southington	Ohio	8/31/2011
866		Etobicoke	Ohio	8/31/2011
867		Midland	Texas	8/31/2011
868		Los Angeles	California	8/31/2011
869		Elmwood Park	New Jersey	8/31/2011
870		Colorado Springs	Colorado	8/31/2011
871		Little Rock	Arkansas	8/31/2011
872		Phoenix	Arizona	8/31/2011
873		New City	New York	8/31/2011
874		Tampa	Florida	8/31/2011
875		eaton	Ohio	8/31/2011
876		Colorado Springs	Colorado	8/31/2011
877		portland	Connecticut	8/31/2011
878		Rock Hill	South Carolina	8/31/2011
879		toronto	California	8/31/2011
880		zanesville	Ohio	8/31/2011
881		North Wales	Pennsylvania	9/1/2011
882		Hendersonville	North Carolina	9/1/2011
883		endicott	New York	9/1/2011
884		New Castle	Delaware	9/1/2011
885		Katy	Texas	9/1/2011
886		North Plainfield	New Jersey	9/1/2011
887		Acton	Massachusetts	9/1/2011
888		Knox	Indiana	9/1/2011
889		Rigewood	New York	9/1/2011
890		Lexington	Texas	9/1/2011
891		greenville	South Carolina	9/1/2011
892		Pacoima	California	9/1/2011
893		Goodyear	Arizona	9/1/2011
894		Williamsville	New York	9/1/2011
895		Los Angeles	California	9/1/2011
896		Glendale	California	9/1/2011
897		San Bernardino	California	9/1/2011
898		Orlando	Florida	9/1/2011

	Name	City	State	Date
899		singapore	Alabama	9/1/2011
900		cotati	California	9/1/2011
901		Show Low	Arizona	9/1/2011
902		Oakland	California	9/1/2011
903		Spencerport	New York	9/1/2011
904		Henderson	Nevada	9/1/2011
905		Long Island City	New York	9/1/2011
906		Helsinki		9/2/2011
907		Greenville	Rhode Island	9/2/2011
908		barneveld	New York	9/2/2011
909		Raleigh	North Carolina	9/2/2011
910		Sanford	Florida	9/2/2011
911		Colton	Oregon	9/2/2011
912		Sea Bright	New Jersey	9/2/2011
913		Salida	Colorado	9/2/2011
914		Metuchen	New Jersey	9/2/2011
915		DeBary	Florida	9/2/2011
916		morristown	New Jersey	9/2/2011
917		GAVERE		9/2/2011
918		Ellwood City	Pennsylvania	9/2/2011
919		New Orleans	Louisiana	9/2/2011
920		Mechanicsburg	Pennsylvania	9/2/2011
921		devore	California	9/2/2011
922		Sanford	Florida	9/2/2011
923		Chula Vista	California	9/2/2011
924		Leawood	Kansas	9/2/2011
925		Pleasant Hill	California	9/2/2011
926		Rangeley	Maine	9/2/2011
927		Memphis	Tennessee	9/2/2011
928		Bend	Oregon	9/2/2011
929		Belle Glade	Florida	9/2/2011
930		La Jolla	California	9/2/2011
931		Glencoe	Illinois	9/2/2011
932		Santa Cruz	California	9/2/2011
933		Glen Burnie	Maryland	9/2/2011
934		pacific palisades	California	9/2/2011
935		Nottingham		9/3/2011
936		Compton	California	9/3/2011
937		Tucson	Arizona	9/3/2011
938		portland	Oregon	9/3/2011
939		Farwell	Michigan	9/3/2011
940		Pasig City		9/3/2011
941		Isabela	Puerto Rico	9/3/2011
942		Hospitalet del Llobregat	Northern Mariana Isla	9/3/2011
943		Hazel Park	Michigan	9/3/2011

	Name	City	State	Date
944		Delaware	Delaware	9/3/2011
945		Denver	Colorado	9/3/2011
946		Dover	Delaware	9/3/2011
947		St. Louis	Missouri	9/3/2011
948		Desert Hot Springs	California	9/3/2011
949		Toronto		9/3/2011
950		NY	New York	9/3/2011
951		philadelphia	Pennsylvania	9/3/2011
952		jacksonville nc	North Carolina	9/3/2011
953		Schiller Park	Illinois	9/3/2011
954		jackson	Georgia	9/3/2011
955		Colorado Springs	Colorado	9/3/2011
956		Boone	North Carolina	9/3/2011
957		Bellingham	Massachusetts	9/3/2011
958		bulverde	Texas	9/3/2011
959		Tavares	Florida	9/3/2011
960		La Crescenta	California	9/4/2011
961		Mumbai		9/4/2011
962		Miami	Florida	9/4/2011
963		Hawthorne	California	9/4/2011
964		Monticello	Iowa	9/4/2011
965		bahar ic caghaq		9/4/2011
966		Albuquerque	New Mexico	9/4/2011
967		Eaton	Ohio	9/4/2011
968		belfast. northen ireland.		9/4/2011
969		Santa Cruz	California	9/4/2011
970		Mississauga		9/4/2011
971		houston	Texas	9/4/2011
972		Alexandria	Virginia	9/4/2011
973		St. Louis	Missouri	9/4/2011
974		Brookshire	Texas	9/4/2011
975		Woodcliff Lake	New Jersey	9/4/2011
976		Chicago	Illinois	9/4/2011
977		Winthrop	New York	9/4/2011
978		29 Palms	California	9/4/2011
979		Sittard	Nebraska	9/4/2011
980		ewing	New Jersey	9/4/2011
981		Phoenix	Arizona	9/4/2011
982		ewing	New Jersey	9/4/2011
983		palestine	West Virginia	9/4/2011
984		Poughkeepsie	New York	9/4/2011
985		slidell	Louisiana	9/4/2011
986		torrington	Connecticut	9/4/2011
987		SEATTLE	Washington	9/4/2011
988		Richmond	Virginia	9/5/2011

	Name	City	State	Date
989		Manchester	New Hampshire	9/5/2011
990		Manville	New Jersey	9/5/2011
991		Brunn am Gebirge		9/5/2011
992		Woodbridge	New Jersey	9/5/2011
993		Bloomsbury	New Jersey	9/5/2011
994		Bound Brook	New Jersey	9/5/2011
995		Ibiza-Spain		9/5/2011
996		BOUND BROOK	New Jersey	9/5/2011
997		edison	New Jersey	9/5/2011
998		Bridgewater	New Jersey	9/5/2011
999		East Brunswick	New Jersey	9/5/2011
1000		Dunellen	New Jersey	9/5/2011
1001		Somerset	New Jersey	9/5/2011
1002		middlesex	New Jersey	9/5/2011
1003		somerset	New Jersey	9/5/2011
1004		Hillsborough	New Jersey	9/5/2011
1005		Minneapolis	Minnesota	9/5/2011
1006		Bound Brook	New Jersey	9/5/2011
1007		Bridgewater	New Jersey	9/5/2011
1008		Somerset	New Jersey	9/5/2011
1009		Montclair	New Jersey	9/5/2011
1010		Ossining	New York	9/5/2011
1011		Santos		9/5/2011
1012		Hillsborough	New Jersey	9/5/2011
1013		Lemont	Illinois	9/5/2011
1014		Hawley	Pennsylvania	9/5/2011
1015		valencia		9/5/2011
1016		Monmouth Jct	New Jersey	9/5/2011
1017		Monmouth Junction	New Jersey	9/5/2011
1018		Richfield	Minnesota	9/5/2011
1019		Somewhere	Nebraska	9/5/2011
1020		Toms River	New Jersey	9/5/2011
1021		Middlesex	New Jersey	9/5/2011
1022		Dunellen	New Jersey	9/5/2011
1023		Frankfurt	Alabama	9/5/2011
1024		Union	New Jersey	9/5/2011
1025		Purcell	Oklahoma	9/5/2011
1026		highland park	New Jersey	9/5/2011
1027		Orange	California	9/5/2011
1028		Portland	Oregon	9/5/2011
1029		Allentown	Pennsylvania	9/5/2011
1030		Hacienda Heights	California	9/5/2011
1031		Braga	Indiana	9/6/2011
1032		Cenusco sul naviglio		9/6/2011
1033		melksham	New York	9/6/2011



	Name	City	State	Date
1034		Lisbon		9/6/2011
1035		North Hollywood	California	9/6/2011
1036		bound brook	New Jersey	9/6/2011
1037		Brijdorpe	Alabama	9/6/2011
1038		Old Bridge	New Jersey	9/6/2011
1039		Hoboken	New Jersey	9/6/2011
1040		cranbury	New Jersey	9/6/2011
1041		Orange City	Florida	9/6/2011
1042		manville	New Jersey	9/6/2011
1043		Hillsborough	New Jersey	9/6/2011
1044		Bound Brook	New Jersey	9/6/2011
1045		Warren	New Jersey	9/6/2011
1046		Cary	North Carolina	9/6/2011
1047		Bridgewater	New Jersey	9/6/2011
1048		new york city	New York	9/6/2011
1049		Hillsborough	New Jersey	9/6/2011
1050		Avellaneda	New Jersey	9/6/2011
1051		Portland	Oregon	9/6/2011
1052		Manville	New Jersey	9/6/2011
1053		Concord	California	9/6/2011
1054		Yuma	Arizona	9/6/2011
1055		Somerset	New Jersey	9/6/2011
1056		Somerset	New Hampshire	9/6/2011
1057		St. Louis	Missouri	9/6/2011
1058		Hopkins	Minnesota	9/6/2011
1059		Warren	New Jersey	9/6/2011
1060		calgary	Connecticut	9/6/2011
1061		Warren	New Jersey	9/6/2011
1062		Iselin	New Jersey	9/6/2011
1063		carlsbad	California	9/6/2011
1064		Ichiharashi		9/6/2011
1065		Emmaus	Pennsylvania	9/6/2011
1066		Aledo	Texas	9/6/2011
1067		Istanbul		9/7/2011
1068		chiba		9/7/2011
1069		igualada	Idaho	9/7/2011
1070		Chiba		9/7/2011
1071		camden	New Jersey	9/7/2011
1072		Hamilton	New Jersey	9/7/2011
1073		Belo Horizonte		9/7/2011
1074		Cuyahoga Falls	Ohio	9/7/2011
1075		Decatur	Illinois	9/7/2011
1076		Sarasota	Florida	9/7/2011
1077		PEORIA	Illinois	9/7/2011
1078		Palo Alto	California	9/7/2011

	Name	City	State	Date
1079		Karlsruhe		9/7/2011
1080		BÄretswil	Iowa	9/7/2011
1081		cork		9/7/2011
1082		Granger	Indiana	9/7/2011
1083		Torino	New York	9/7/2011
1084		Nooo	California	9/7/2011
1085		Summit	New Jersey	9/7/2011
1086		STAFFORD	Virginia	9/7/2011
1087		Steuben	Maine	9/7/2011
1088		BRAMPTON	Arizona	9/7/2011
1089		Sherwood	Arkansas	9/7/2011
1090		Long Beach	California	9/7/2011
1091		George West	Texas	9/8/2011
1092		Adelaide		9/8/2011
1093		Pelham	New Hampshire	9/8/2011
1094		Boone	North Carolina	9/8/2011
1095		BRONX	New York	9/8/2011
1096		Maineville	Ohio	9/8/2011
1097		Capitan	New Mexico	9/8/2011
1098		Phoenix	Arizona	9/8/2011
1099		chicago	Illinois	9/8/2011
1100		Valley Springs	California	9/8/2011
1101		Parma Heights	Ohio	9/8/2011
1102		McGregor	Minnesota	9/8/2011
1103		Georgetown University	District Of Columbia	9/8/2011
1104		Palatine,	Illinois	9/8/2011
1105		waterford		9/8/2011
1106		mt horeb	Wisconsin	9/8/2011
1107		Crestwood	Illinois	9/8/2011
1108		the woodlands	Texas	9/8/2011
1109		Bradford	Pennsylvania	9/8/2011
1110		Farmington Hills	Michigan	9/8/2011
1111		Suffern	New York	9/8/2011
1112		San Francisco	California	9/9/2011
1113		austin	Texas	9/9/2011
1114		bound brook	New Jersey	9/9/2011
1115		Weehawken	New Jersey	9/9/2011
1116		Millers	Maryland	9/9/2011
1117		Columbus	Ohio	9/9/2011
1118		Merrillville	Indiana	9/9/2011
1119		Gillette	New Jersey	9/9/2011
1120		Basel		9/9/2011
1121			123 Alabama	9/9/2011
1122		Kent	Connecticut	9/9/2011
1123		Pleasant Lake	Michigan	9/9/2011

	Name	City	State	Date
1124		Olympia	Washington	9/9/2011
1125		Denver	Colorado	9/9/2011
1126		Denver	Colorado	9/9/2011
1127		Lexington	Kentucky	9/9/2011
1128		Grand Junction	Michigan	9/9/2011
1129		Berkeley	California	9/9/2011
1130		Montpelier	Vermont	9/10/2011
1131		st.louis	Missouri	9/10/2011
1132		Los Angeles	California	9/10/2011
1133		Denver	Colorado	9/10/2011
1134		Edison	New Jersey	9/10/2011
1135		silver spring	Maryland	9/10/2011
1136		Abbeville	Georgia	9/10/2011
1137		union city	California	9/10/2011
1138		piscataway	New Jersey	9/10/2011
1139		St. Paul	Minnesota	9/10/2011
1140		Redmond	Oregon	9/10/2011
1141		Hillsborough	New Jersey	9/10/2011
1142		ft.myers	Florida	9/10/2011
1143		South Pasadena	California	9/10/2011
1144		Anaheim	California	9/10/2011
1145		Visalia	California	9/10/2011
1146		Houston	Texas	9/11/2011
1147		Manville	New Jersey	9/11/2011
1148		Columbus	Ohio	9/11/2011
1149		nashville	Tennessee	9/11/2011
1150		West Chicago	Illinois	9/11/2011
1151		Peoria	Arizona	9/11/2011
1152		Long Branch	New Jersey	9/11/2011
1153		Beacon Falls	Connecticut	9/11/2011
1154		Mankato	Minnesota	9/11/2011
1155		Lawrence	Kansas	9/11/2011
1156		Santa Cruz	California	9/11/2011
1157		Louisville	Kentucky	9/11/2011
1158		Milwaukee	Wisconsin	9/11/2011
1159		portland	Oregon	9/11/2011
1160		Charleston	South Carolina	9/11/2011
1161		Pensacola	Florida	9/11/2011
1162		Riverside	Rhode Island	9/11/2011
1163		Bronx, New York	New York	9/11/2011
1164		NMB	South Carolina	9/11/2011
1165		Fountain Hill	Pennsylvania	9/11/2011
1166		Bristol	Virginia	9/11/2011
1167		Goleta	California	9/11/2011
1168		Omaha	Nebraska	9/11/2011

	Name	City	State	Date
1169		El Paso	Texas	9/11/2011
1170		Seattle	Washington	9/11/2011
1171		hayward	California	9/11/2011
1172		Nicosia		9/11/2011
1173		East Lansing	Michigan	9/11/2011
1174		new york	New York	9/11/2011
1175		Kissimmee	Florida	9/11/2011
1176		Glenside	Pennsylvania	9/11/2011
1177		holliday	Texas	9/11/2011
1178		San Francisco	California	9/11/2011
1179		Markham		9/11/2011
1180		North Armagh		9/11/2011
1181		Hempstead	New York	9/11/2011
1182		Brooklyn	New York	9/11/2011
1183		Martins Ferry	Ohio	9/11/2011
1184		san marcos	Texas	9/12/2011
1185		Oklahoma City	Oklahoma	9/12/2011
1186		Menlo Park	California	9/12/2011
1187		Washington	District Of Columbia	9/12/2011
1188		Swansea	Massachusetts	9/12/2011
1189		los Angeles		9/12/2011
1190		firestone	Colorado	9/12/2011
1191		Willard	Ohio	9/12/2011
1192		warminster	Pennsylvania	9/12/2011
1193		bridgewater	New Jersey	9/12/2011
1194		Caguas	Puerto Rico	9/12/2011
1195		Noblesville	Indiana	9/12/2011
1196		Riverview	Florida	9/12/2011
1197		Tampere	Florida	9/12/2011
1198		stratford	New Jersey	9/12/2011
1199		Perkins	Oklahoma	9/12/2011
1200		Indianapolis	Indiana	9/12/2011
1201		Melbourne	Florida	9/12/2011
1202		Croton on Hudson	New York	9/12/2011
1203		albuquerque	New Mexico	9/12/2011
1204		morristown	New Jersey	9/12/2011
1205		lafayette	Louisiana	9/12/2011
1206		San Jose	California	9/12/2011
1207		los angeles	California	9/13/2011
1208		Auburndale	Massachusetts	9/13/2011
1209		Towson	Maryland	9/13/2011
1210		Austin	Texas	9/13/2011
1211		Gilbert	Arizona	9/13/2011
1212		Tyler	Texas	9/13/2011
1213		Phoenix	Arizona	9/13/2011

	Name	City	State	Date
1214		phila	Pennsylvania	9/13/2011
1215		Cincinnati	Ohio	9/13/2011
1216		fort-valley	Virginia	9/13/2011
1217		Louisville	Kentucky	9/13/2011
1218		Cary	North Carolina	9/13/2011
1219		Katy	Texas	9/13/2011
1220		Cottage Grove	Minnesota	9/13/2011
1221		Purvis	Mississippi	9/13/2011
1222		southport	North Carolina	9/13/2011
1223		Lombard	Illinois	9/13/2011
1224		Apache Junction	Arizona	9/14/2011
1225		atlanta	Georgia	9/14/2011
1226		frisco	Texas	9/14/2011
1227		Milano	Virginia	9/14/2011
1228		Bundang	New York	9/14/2011
1229		New York	New York	9/14/2011
1230		Winchester	Virginia	9/14/2011
1231		Alpharetta	Georgia	9/14/2011
1232		Riverton	New Jersey	9/15/2011
1233		Austin	Texas	9/15/2011
1234		north brunswick	New Jersey	9/15/2011
1235		Palmerton	Pennsylvania	9/15/2011
1236		UDINE	Alaska	9/15/2011
1237		Brooklyn	New York	9/15/2011
1238		Gaithersburg	Maryland	9/15/2011
1239		Phoenix	Arizona	9/15/2011
1240		Medford	Oregon	9/15/2011
1241		Deer Park	Washington	9/15/2011
1242		Chicago	Illinois	9/16/2011
1243		Perth		9/16/2011
1244		Poughkeepsie	New York	9/16/2011
1245		st.petersburg	Florida	9/16/2011
1246		Bowling Green	Ohio	9/16/2011
1247		Phoenix	Arizona	9/16/2011
1248		Great NEck	New York	9/16/2011
1249		mahwah	New Jersey	9/16/2011
1250		warminster	Pennsylvania	9/17/2011
1251		Orrefors		9/17/2011
1252		East Brunswick	New Jersey	9/17/2011
1253		Limassol		9/17/2011
1254		Postville	Iowa	9/17/2011
1255		Carolina Beach	North Carolina	9/17/2011
1256		bordeaux FRANCE		9/17/2011
1257		Buffalo	New York	9/17/2011
1258		EL CERRITO	California	9/17/2011

	Name	City	State	Date
1259		San Diego	California	9/17/2011
1260		redding.	California	9/17/2011
1261		Wigan		9/17/2011
1262		hyderabad		9/18/2011
1263		Memmingen	Delaware	9/18/2011
1264		Enfield		9/18/2011
1265		Alexandria	Virginia	9/18/2011
1266		Los Angeles	California	9/18/2011
1267		Foresthill	California	9/18/2011
1268		Portland	Oregon	9/18/2011
1269		Portland	Oregon	9/18/2011
1270		Platteville	Wisconsin	9/18/2011
1271		Berlin	Arizona	9/19/2011
1272		Virginia Beach	Virginia	9/19/2011
1273		Clearwater	Florida	9/19/2011
1274		Marshfield	Wisconsin	9/19/2011
1275		Madison	Wisconsin	9/19/2011
1276		Unionville	Connecticut	9/19/2011
1277		aiken	South Carolina	9/19/2011
1278		Christchurch		9/20/2011
1279		Rugby		9/20/2011
1280		Grawn	Michigan	9/20/2011
1281		CHESTER	Vermont	9/20/2011
1282		Chesterfield	Missouri	9/20/2011
1283		Holland	Michigan	9/20/2011
1284		newport	Maine	9/20/2011
1285		Johannesburg		9/20/2011
1286		Miami	Florida	9/20/2011
1287		galt	California	9/20/2011
1288		Oak Creek	Wisconsin	9/20/2011
1289		tama	Iowa	9/20/2011
1290		Hatfield	Pennsylvania	9/21/2011
1291		schirrhein	Florida	9/21/2011
1292		Cortland	New York	9/21/2011
1293		Oklahoma City	Oklahoma	9/21/2011
1294		Worcester	Massachusetts	9/21/2011
1295		Miami	Florida	9/21/2011
1296		Swannanoa	North Carolina	9/21/2011
1297		south Orange	New Jersey	9/22/2011
1298		Fairmont	West Virginia	9/22/2011
1299		washington	District Of Columbia	9/22/2011
1300		North Branford	Connecticut	9/22/2011
1301		Houghton Lake	Michigan	9/22/2011
1302		Nashua	New Hampshire	9/22/2011
1303		denver	Colorado	9/22/2011

	Name	City	State	Date
1304		Rowland Heights	California	9/22/2011
1305		LAS VEGAS	Nevada	9/22/2011
1306		Bronx	New York	9/22/2011
1307		reno	Nevada	9/22/2011
1308		göleta	California	9/22/2011
1309		Mesa	Arizona	9/22/2011
1310		West Covina	California	9/22/2011
1311		Stayton	Oregon	9/22/2011
1312		Charlotte	North Carolina	9/23/2011
1313		Tomball	Texas	9/23/2011
1314		Richboro	Pennsylvania	9/23/2011
1315		Colorado Springs	Colorado	9/23/2011
1316		citrus springs	Florida	9/23/2011
1317		Lansdowne	Pennsylvania	9/23/2011
1318		Dover	Delaware	9/23/2011
1319		Sacramento	California	9/23/2011
1320		Wheaton	Illinois	9/23/2011
1321		Spring	Texas	9/23/2011
1322		Imperial Beach	California	9/23/2011
1323		Cedar Rapids	Iowa	9/24/2011
1324		burbank Ca.	Alabama	9/24/2011
1325		Plano	Texas	9/24/2011
1326		Stevenage		9/24/2011
1327		North Miami Beach	Florida	9/24/2011
1328		seattle	Washington	9/24/2011
1329		arlington	Texas	9/24/2011
1330		Keene	New Hampshire	9/24/2011
1331		New York	New York	9/24/2011
1332		Lynnwood	Washington	9/24/2011
1333		Beloit	Wisconsin	9/24/2011
1334		San Pedro	California	9/24/2011
1335		Margao	Indiana	9/24/2011
1336		Edison	New Jersey	10/11/2011
1337		Seattle	Washington	10/11/2011
1338		philadelphia	Pennsylvania	10/11/2011
1339		Fort Myers	Florida	10/12/2011
1340		antwerp		10/12/2011
1341		Topanga	California	10/12/2011
1342		chicago	Illinois	10/12/2011
1343		new york	New York	10/12/2011
1344		New Haven	Connecticut	10/12/2011
1345		Miami	Florida	10/12/2011
1346		telluride	Colorado	10/12/2011
1347		Chicago	Illinois	10/12/2011
1348		Phoenix	Arizona	10/12/2011

	Name	City	State	Date
1349		reading	Pennsylvania	10/12/2011
1350		Jamestown	New York	10/12/2011
1351		Garfield Heights	Ohio	10/12/2011
1352		singapore		10/13/2011
1353		Seattle	Washington	10/13/2011
1354		Belle Mead	New Jersey	10/13/2011
1355		Fayetteville	North Carolina	10/13/2011
1356		North Park	Illinois	10/13/2011
1357		Monroe	North Carolina	10/13/2011
1358		Buffalo	New York	10/13/2011
1359		Aloha	Oregon	10/13/2011
1360		Yelm	Washington	10/14/2011
1361		Knoxville	Tennessee	10/14/2011
1362		Zanesville	Ohio	10/14/2011
1363		New York	New York	10/15/2011
1364		Desboro, Ontario		10/15/2011
1365		Biloxi	Mississippi	10/15/2011
1366		mahebourg		10/15/2011
1367		Riverside	Rhode Island	10/16/2011
1368		Vidor	Texas	10/16/2011
1369		Oradell	New Jersey	10/16/2011
1370		houston	Texas	10/16/2011
1371		Mesa	Arizona	10/16/2011
1372		Valencia	California	10/17/2011
1373		Edison	New Jersey	10/17/2011
1374		Alexandria	Virginia	10/17/2011
1375		Chicago	Illinois	10/18/2011
1376		Ferndale	Michigan	10/19/2011
1377		Sparta	Tennessee	10/19/2011
1378		Reno	Nevada	10/19/2011
1379		south ozone park	New York	10/19/2011
1380		Stephenville	Texas	10/19/2011
1381		Boronia	California	10/19/2011
1382		Spring City	Pennsylvania	10/20/2011
1383		pittsburgh	Pennsylvania	10/20/2011
1384		Bronx	New York	10/20/2011
1385		Orange	California	10/20/2011
1386		Chevy Chase	Maryland	10/20/2011
1387		Batavia	Ohio	10/20/2011
1388		Jamesport	New York	10/20/2011
1389		Missoula	Montana	10/20/2011
1390		Taree		10/20/2011
1391		Manassas	Virginia	10/20/2011
1392		Indianapolis	Indiana	10/20/2011
1393		Dundas		10/20/2011



	Name	City	State	Date
1394		fairfax	Virginia	10/20/2011
1395		Indianapolis		10/20/2011
1396		valencia	Washington	10/21/2011
1397		port pirie		10/21/2011
1398		Helsinki	Nebraska	10/21/2011
1399		North Brunswick	New Jersey	10/21/2011
1400		San Francisco	California	10/22/2011
1401		Houston	Texas	10/22/2011
1402		Boulder	Colorado	10/22/2011
1403		Iowa City	Iowa	10/23/2011
1404		Muncie	Indiana	10/23/2011
1405		Leburn	Kentucky	10/23/2011
1406		Bourbonnais	Illinois	10/23/2011
1407		Tucson	Arizona	10/23/2011
1408		New York	New York	10/23/2011
1409		Charlotte	North Carolina	10/23/2011
1410		Eugene	Oregon	10/23/2011
1411		Ulen	Minnesota	10/23/2011
1412		rochester	New York	10/23/2011
1413		Normal	Illinois	10/23/2011
1414		Colorado Springs	Colorado	10/23/2011
1415		NY	New York	10/24/2011
1416		Edinboro	Pennsylvania	10/24/2011
1417		Dover	New Jersey	10/24/2011
1418		Los Angeles	California	10/24/2011
1419		Riverside	Illinois	10/25/2011
1420		Ann Arbor	Michigan	10/25/2011
1421		homestead	Florida	10/25/2011
1422		Niskayuna	New York	10/25/2011
1423		Greensburg	Indiana	10/25/2011
1424		Beaverton	Oregon	10/25/2011
1425		lewisburg	Pennsylvania	10/25/2011
1426		Highland Park	New Jersey	10/26/2011
1427		Ljubljana		10/26/2011
1428		Seguin	Texas	10/26/2011
1429		Montebello	California	10/26/2011
1430		englewood	New Jersey	10/26/2011
1431		Williamsburg	Virginia	10/26/2011
1432		Vero Beach	Florida	10/26/2011
1433		Staten Island	New York	10/26/2011
1434		Rimini		10/26/2011
1435		Branchburg	New Jersey	10/26/2011
1436		Neshanic Station	New Jersey	10/27/2011
1437		lynn	Massachusetts	10/27/2011
1438		Olney	Maryland	10/27/2011

	Name	City	State	Date
143		Womelsdorf	Pennsylvania	10/27/2011
144		Branchburg	New Jersey	10/27/2011
144		Belgrade	Montana	10/27/2011
144		Lakewood	Colorado	10/28/2011
144		Miami	Florida	10/28/2011
144		Stafford Springs	Connecticut	10/28/2011
144		Charleston	South Carolina	10/28/2011
144		Arcadia	California	10/28/2011
144		East Brunswick	New Jersey	10/29/2011
144		Clearwater	Florida	10/29/2011
144		Aberdeen	Washington	10/29/2011
1450		Athens	New York	10/29/2011
1451		alleur		10/29/2011
1452		Bronx	New York	10/29/2011
1453		fort bragg	California	10/29/2011
1454		Long Island City	New York	10/29/2011
1455		Victoria		10/29/2011
1456		Colorado Springs	Colorado	10/29/2011
1457		La Selva Beach	California	10/29/2011
1458		Crystal Lake	Illinois	10/30/2011
1459		hay el hamadia		10/30/2011
1460		Manhattan	New York	10/30/2011
1461		Toronto		10/30/2011
1462		Tucker	Georgia	10/30/2011
1463		Baltimore	Maryland	10/31/2011
1464		Kimberly	Alabama	11/1/2011
1465		renkum		11/1/2011
1466		Clawson	Michigan	11/1/2011
1467		Munster	Indiana	11/2/2011
1468		Victoria	Illinois	11/2/2011
1469		antioch	California	11/2/2011
1470		Ringoes	New Jersey	11/2/2011
1471		Woodstock	Georgia	11/3/2011
1472		Focsani		11/4/2011
1473		Focsani		11/4/2011
1474		focsani		11/4/2011
1475		Bronx	New York	11/4/2011
1476		Loudonville	New York	11/4/2011
1477		Brasov		11/4/2011
1478		Louisville	Kentucky	11/4/2011
1479		Fayetteville	North Carolina	11/5/2011
1480		Santa Ana	California	11/5/2011
1481		Merrimack	New Hampshire	11/5/2011
1482		Seattle	Washington	11/5/2011
1483		Omaha	Nebraska	11/5/2011

	Name	City	State	Date
1484		Tucson	Arizona	11/5/2011
1485		Memphis	Tennessee	11/5/2011
1486		Buffalo	New York	11/5/2011
1487		Boston	Massachusetts	11/5/2011
1488		Kansas City	Missouri	11/5/2011
1489		Peking	Idaho	11/5/2011
1490		Memphis	Tennessee	11/5/2011
1491		Parker	Colorado	11/5/2011
1492		Montgomery	Alabama	11/5/2011
1493		Valparaiso	Indiana	11/6/2011
1494		Boulder	Colorado	11/6/2011
1495		staten island	New York	11/7/2011
1496		Cedar Hill	Texas	11/7/2011
1497		Orlando	Florida	11/7/2011
1498		Lake Wales	Florida	11/8/2011
1499		New York	New York	11/8/2011
1500		Rochester	New York	11/8/2011
1501		england		11/8/2011
1502		Mississauga		11/8/2011
1503		SaltSpring Island		11/9/2011
1504		Dunedin		11/10/2011
1505		Stratford	California	11/10/2011
1506		avondale	Arizona	11/10/2011
1507		carlsbad	California	11/10/2011
1508		towanda	Illinois	11/10/2011
1509		germantown	Maryland	11/10/2011
1510		Sheboygan	Wisconsin	11/10/2011
1511		Old Bridge	New Jersey	11/11/2011
1512		Carmichael	California	11/11/2011
1513		Denver	Iowa	11/11/2011
1514		Kimberly	Wisconsin	11/12/2011
1515		warren	New Jersey	11/12/2011
1516		Manchester		11/13/2011
1517		colorado springs	Colorado	11/13/2011
1518		erdmannh.		11/13/2011
1519		macungie		11/13/2011
1520		Firgas		11/14/2011
1521		fort lauderdale	Florida	11/14/2011
1522		kronach		11/14/2011
1523		Sherman Oaks	California	11/14/2011
1524		Brisbane		11/14/2011
1525		Key Largo	Florida	11/15/2011
1526		belleville	Michigan	11/15/2011
1527		Fort Myers	Florida	11/15/2011
1528		Portage	Michigan	11/15/2011

	Name	City	State	Date
1529		Walnut Creek	California	11/15/2011
1530		Anchorage	Alaska	11/16/2011
1531		Evans	Georgia	11/16/2011
1532		Beverly Hills	California	11/16/2011
1533		Wisconsin Rapids	Wisconsin	11/16/2011
1534		Oxford	Mississippi	11/17/2011
1535		Boston	Massachusetts	11/17/2011
1536		Alvarado	Texas	11/17/2011
1537		Mantorville	Minnesota	11/18/2011
1538		Providence	Rhode Island	11/18/2011
1539		Huntington	West Virginia	11/19/2011
1540		West New York		11/19/2011
1541		Washington	District Of Columbia	11/19/2011
1542		El Paso	Texas	11/21/2011
1543		WESTMINSTER	Colorado	11/21/2011
1544		Berkley	California	11/21/2011
1545		Cambridge	Massachusetts	11/21/2011
1546		Baton Rouge	Louisiana	11/21/2011
1547		Phoenix	Arizona	11/21/2011
1548		Emory	Texas	11/21/2011
1549		Milwaukee	Wisconsin	11/22/2011
1550		Miami	Florida	11/22/2011
1551		Colorado Springs	Colorado	11/22/2011
1552		Valparaiso	Indiana	11/22/2011
1553		MARION	Indiana	11/22/2011
1554		Mareeba		11/22/2011
1555		San Francisco	California	11/22/2011
1556		Cleveland	Ohio	11/22/2011
1557		Allentown	Pennsylvania	11/22/2011
1558		Clearwater	Florida	11/22/2011
1559		South Gate	California	11/22/2011
1560		Philadelphia	Pennsylvania	11/22/2011
1561		Lexington	South Carolina	11/22/2011
1562		Bronx	New York	11/22/2011
1563		St. Paul	Minnesota	11/22/2011
1564		Marshville	North Carolina	11/22/2011
1565		Madison	Alabama	11/22/2011
1566		Louisville	Kentucky	11/22/2011
1567		Albuquerque	New Mexico	11/22/2011
1568		CHADDS FORD	Pennsylvania	11/22/2011
1569		Omaha	Nebraska	11/22/2011
1570		Roanoke	Virginia	11/22/2011
1571		portland	Oregon	11/22/2011
1572		Miami	Florida	11/22/2011
1573		Portland	Oregon	11/23/2011

	Name	City	State	Date
157		chino hills	California	11/23/2011
157		Rockiin	California	11/23/2011
157		Wallingford		11/23/2011
157		edison	New Jersey	11/23/2011
157		Washington	District Of Columbia	11/23/2011
157		East Brunswick	New Jersey	11/23/2011
158		East Brunswick	New Jersey	11/23/2011
158		Manville	New Jersey	11/23/2011
158		new brunswick	New Jersey	11/23/2011
158		east brunswick	New Jersey	11/23/2011
158		east brunswick	New Jersey	11/23/2011
158		neptune	New Jersey	11/23/2011
158		Langley,BC		11/24/2011
158		santa Monica	California	11/24/2011
158		Oakdale	Minnesota	11/24/2011
158		Palm Coast	Florida	11/24/2011
159		Statesboro	Georgia	11/24/2011
159		Bern		11/24/2011
159		marlborough	Massachusetts	11/24/2011
159		palm bay	Florida	11/25/2011
159		Irvine	California	11/25/2011
159		Norwich	New York	11/26/2011
159		Edison	New Jersey	11/26/2011
159		Arcata	California	11/26/2011
159		Newport News	Virginia	11/26/2011
159		Seattle	Washington	11/26/2011
160		Ulm	Delaware	11/27/2011
160		S.C.S.	Michigan	11/27/2011
160		phoenix	Arizona	11/27/2011
160		Aguadilla		11/27/2011
160		Gtr Manchester		11/27/2011
160		Santa Barbara	California	11/27/2011
160		Newman	California	11/27/2011
160		Longmont	Colorado	11/28/2011
160		Rehoboth	Massachusetts	11/29/2011
160		Mamou	Louisiana	11/30/2011
161		FREDERICK	Maryland	11/30/2011
161		Fort Hood	Texas	11/30/2011
161		Bronxville	New York	12/1/2011
161		stonington	Connecticut	12/1/2011
161		nashua	New Hampshire	12/1/2011
161		San Diego	California	12/2/2011
161		Jersey City	New Jersey	12/2/2011
161		Orlando	Florida	12/2/2011
161		Tinley Park	Illinois	12/2/2011

	Name	City	State	Date
161		Antioch	California	12/3/2011
162		Cottonwood	Arizona	12/4/2011
162		NY	New York	12/4/2011
162		Boston	Massachusetts	12/4/2011
162		Los Angeles	California	12/5/2011
162		Bellevue	Washington	12/5/2011
162		Istanbul		12/5/2011
162		Hastings	Nebraska	12/5/2011
162		Wilmington	North Carolina	12/5/2011
162		huntington beach	California	12/6/2011
162		Carmel	Indiana	12/6/2011
163		Charlotte	North Carolina	12/6/2011
163		Valley Center	California	12/6/2011
163		Sydney		12/6/2011
163		Indianapolis	Indiana	12/6/2011
163		Melbourne		12/6/2011
163		Kissimmee	Florida	12/6/2011
163		BRIDGEWATER	New Jersey	12/7/2011
163		Bound Brook	New Jersey	12/7/2011
163		San Diego	California	12/7/2011
163		glen Rock	New Jersey	12/7/2011
164		Piscataway	New Jersey	12/7/2011
164		Fanwood	New Jersey	12/7/2011
164		Kent	Washington	12/7/2011
164		Portland	Oregon	12/7/2011
164		Raritan	New Jersey	12/7/2011
164		westport	Washington	12/7/2011
164		Seymour	Tennessee	12/7/2011
164		Tulsa	Oklahoma	12/8/2011
164		Manchester	Massachusetts	12/8/2011
164		huntington beach	California	12/8/2011
165		Little egg harbor	New Jersey	12/8/2011
165		dahlonaga	Georgia	12/8/2011
165		Hannibal	New York	12/8/2011
165		Lafayette	Colorado	12/8/2011
165		indianapolis	Indiana	12/8/2011
165		Emerson	Georgia	12/9/2011
165		Evansville	Indiana	12/9/2011
165		Seekonk	Massachusetts	12/9/2011
165		Greenfield	Massachusetts	12/10/2011
165		Hong Kong		12/10/2011
166		maynard	Massachusetts	12/10/2011
166		Lakewood	Ohio	12/11/2011
166		arcadia	California	12/11/2011
166		green river	Wyoming	12/11/2011

	Name	City	State	Date
1664		rancho cucamonga	California	12/11/2011
1665		Ferndale	Michigan	12/12/2011
1666		Murray	Utah	12/12/2011
1667		Manhattan, New York Cit	New York	12/12/2011
1668		cherry hill	New Jersey	12/13/2011
1669		Van Nuys	California	12/13/2011
1670		Honolulu	Hawaii	12/13/2011
1671		St Catharines		12/14/2011
1672		Long Beach	California	12/14/2011
1673		Ormond Beach	Florida	12/14/2011
1674		bellevue	Nebraska	12/14/2011
1675		Doral	Florida	12/14/2011
1676		Brooklyn	New York	12/14/2011
1677		East Brunswick	New Jersey	12/14/2011
1678		point pleasant	New Jersey	12/14/2011
1679		houston	Texas	12/14/2011
1680		houston	Texas	12/14/2011
1681		seven hills	Ohio	12/15/2011
1682		Chicago	Illinois	12/15/2011
1683		south amboy	New Jersey	12/15/2011
1684		Lexington	Kentucky	12/15/2011
1685		Andover	New Jersey	12/15/2011
1686		louisville	Kentucky	12/15/2011
1687		Arlington	Texas	12/15/2011
1688		Virginia Beach	Virginia	12/16/2011
1689		Pottstown	Pennsylvania	12/16/2011
1690		DeKalb	Illinois	12/17/2011
1691		Coimbra	Alabama	12/18/2011
1692		Honolulu	Hawaii	12/18/2011
1693		Blaenau Ffestiniog		12/18/2011
1694		Glen Gardner	New Jersey	12/18/2011
1695		Phoenix	Arizona	12/18/2011
1696		Boston	Massachusetts	12/18/2011
1697		Clarks Summit	Pennsylvania	12/19/2011
1698		Rochester	Minnesota	12/19/2011
1699		Bexley	Ohio	12/19/2011
1700		Clarkston	Washington	12/20/2011
1701		Kittredge	Colorado	12/20/2011
1702		Salzgitter		12/20/2011
1703		Lansing	Michigan	12/20/2011
1704		Firebaugh	California	12/20/2011
1705		sf	California	12/21/2011
1706		Highland Park	New Jersey	12/22/2011
1707		Somerset		12/22/2011
1708		glendale	California	12/22/2011

	Name	City	State	Date
1709		Eureka	California	12/22/2011
1710		Manchester	New Hampshire	12/22/2011
1711		Beloit	Wisconsin	12/22/2011
1712		Bristol	Virginia	12/22/2011
1713		The Plains	Ohio	12/22/2011
1714		Cobb Island	Maryland	12/22/2011
1715		Kennedyville	Maryland	12/22/2011
1716		Boston	Massachusetts	12/22/2011
1717		El Paso	Texas	12/23/2011
1718		Sunset Beach	California	12/23/2011
1719		New York	New York	12/23/2011
1720		Falls Church	Virginia	12/24/2011
1721		Wylie	Texas	12/24/2011
1722		Cesky Krumlov	Armed Forces Pacific	12/24/2011
1723		Arvada	Colorado	12/24/2011
1724		Edmond	Oklahoma	12/24/2011
1725		Lakeland	Florida	12/24/2011
1726		buenos aires	Arkansas	12/25/2011
1727		Roslyn Heights	New York	12/25/2011
1728		Los Angeles	California	12/27/2011
1729		Glasshouse Mountains		12/27/2011
1730		Granby	Massachusetts	12/27/2011
1731		Calgary	California	12/27/2011
1732		Tempe	Arizona	12/27/2011
1733		Chesterfield	Indiana	12/27/2011
1734		Rockford	Illinois	12/28/2011
1735		atlanta	Georgia	12/28/2011
1736		Brooklyn	New York	12/29/2011
1737		Melbourne		12/29/2011
1738		Denton	Maryland	12/29/2011
1739		OFalon	Illinois	12/29/2011
1740		Philadelphia	Pennsylvania	12/30/2011
1741		Lahaina	Hawaii	12/31/2011
1742			New York	12/31/2011
1743		Buffalo Grove	Illinois	12/31/2011
1744		Charleston	South Carolina	12/31/2011
1745		Hamburg	Delaware	12/31/2011
1746		London		12/31/2011
1747		us	California	1/1/2012
1748		Las Vegas	Nevada	1/1/2012
1749		Las Vegas	Nevada	1/1/2012
1750		Nottingham		1/1/2012
1751		Coquitlam, Canada	Alabama	1/2/2012
1752		New Paltz	New York	1/3/2012
1753		Salt Lake City	Utah	1/3/2012



	Name	City	State	Date
1754		Austin	Texas	1/4/2012
1755		SHERWOOD	Oregon	1/5/2012
1756		Prague	Oklahoma	1/6/2012
1757		Geneva	Illinois	1/6/2012
1758		Virginia Beach		1/6/2012
1759		Kokomo	Indiana	1/6/2012
1760		Port St. Lucie	Florida	1/6/2012
1761		brownstown	Michigan	1/6/2012
1762		Pasay		1/7/2012
1763		Port Hueneme	California	1/7/2012
1764		El Paso	Texas	1/7/2012
1765		Miami	Florida	1/7/2012
1766		Saginaw	Michigan	1/7/2012
1767		Erdmannh.		1/7/2012
1768		Klamath falls	Oregon	1/7/2012
1769		Medford	Oregon	1/7/2012
1770		Akureyri		1/8/2012
1771		Calhoun	Georgia	1/8/2012
1772		white haven	Pennsylvania	1/8/2012
1773		Newark	New Jersey	1/8/2012
1774		Harbor Springs	Michigan	1/8/2012
1775		84106	Utah	1/8/2012
1776		Clinton	Mississippi	1/9/2012
1777		Arvin	California	1/9/2012
1778		Bullhead City	Arizona	1/9/2012
1779		Buzet		1/9/2012
1780		Las Vegas	New Mexico	1/9/2012
1781		Massillon	Ohio	1/10/2012
1782		Raleigh	North Carolina	1/10/2012
1783		Wausau	Wisconsin	1/11/2012
1784		Orchard Park	New York	1/11/2012
1785		Pittsford	New York	1/11/2012
1786		Tallahassee	Florida	1/12/2012
1787		Austin	Texas	1/13/2012
1788		Lake Orion	Michigan	1/13/2012
1789		Olympia	Washington	1/13/2012
1790		Gelsenkirchen	Alabama	1/13/2012
1791		Tallahassee	Florida	1/13/2012
1792		GLASGOW	California	1/14/2012
1793		Burton	Michigan	1/15/2012
1794		lake forest park	Washington	1/15/2012
1795		Glide	Oregon	1/15/2012
1796		Rancho Cucamonga	California	1/16/2012
1797		Augusta	Georgia	1/16/2012
1798		Cinnaminson	New Jersey	1/17/2012

	Name	City	State	Date
1799		Mestre - VE		1/17/2012
1800		Monmouth Junction	New Jersey	1/17/2012
1801		Winona	Minnesota	1/18/2012
1802		Everet	Washington	1/18/2012
1803		Coatesville	Pennsylvania	1/18/2012
1804		Brick	New Jersey	1/18/2012
1805		TAMPA	Florida	1/19/2012
1806		Riverside	New Jersey	1/19/2012
1807		Aqtau		1/20/2012
1808		Brooklyn	New York	1/20/2012
1809		cherry hill	New Jersey	1/21/2012
1810		Fishers	Indiana	1/22/2012
1811		Fitchburg	Wisconsin	1/22/2012
1812		Whitewater	Wisconsin	1/22/2012
1813		Mélbourne	Virgin Islands	1/23/2012
1814		Crownsville	Maryland	1/24/2012
1815		Red Bank	New Jersey	1/25/2012
1816		Cranbury	New Jersey	1/25/2012
1817		Fredericksburg	Virginia	1/26/2012
1818		Lindenhurst	New York	1/27/2012
1819		CEDAR RAPIDS	Iowa	1/28/2012
1820		Oakland	California	1/28/2012
1821		Pittsburg	Kansas	1/28/2012
1822		Santa Rosa	California	1/29/2012
1823		Cottage Grove	Minnesota	1/29/2012
1824		Wheaton	Illinois	1/30/2012
1825		Los Angeles	California	1/30/2012
1826		hamburg		1/30/2012
1827		Keller	Texas	1/31/2012
1828		miami	Florida	1/31/2012
1829		Indianapolis	Indiana	1/31/2012
1830		Naperville	Illinois	1/31/2012
1831		Kokomo	Indiana	1/31/2012
1832		Cheboygan	Michigan	1/31/2012
1833		Madeira Beach	Florida	2/1/2012
1834		Clinton	New Jersey	2/1/2012
1835		N/A	Virginia	2/1/2012
1836		South Bound Brook	New Jersey	2/1/2012
1837		Jacksonville	Florida	2/1/2012
1838		Lindsborg	Kansas	2/2/2012
1839		New Brunswick	New Jersey	2/2/2012
1840		goshen	Indiana	2/3/2012
1841		Orono	Maine	2/3/2012
1842		beauparc,navan		2/3/2012
1843		Glenmont	New York	2/3/2012

	Name	City	State	Date
1844		Bolingbrook	Illinois	2/4/2012
1845		Wyoming	Michigan	2/4/2012
1846		Monroeville	Ohio	2/4/2012
1847		St. Leon-Rot	Delaware	2/4/2012
1848		Wuustwezel		2/4/2012
1849		Anderson	Indiana	2/4/2012
1850		matawan	New Jersey	2/5/2012
1851		East Setauket	New York	2/5/2012
1852		Prescott	Arizona	2/5/2012
1853		Port Richey	Florida	2/5/2012
1854		West Harrison	New York	2/5/2012
1855		Houston	Texas	2/6/2012
1856		Medford	Oregon	2/6/2012
1857		North Bend	Washington	2/6/2012
1858		Middletown	Delaware	2/7/2012
1859		ithaca	New York	2/7/2012
1860		San Jose	California	2/7/2012
1861		jackson	Mississippi	2/7/2012
1862		san diego	California	2/8/2012
1863		Arvada	Colorado	2/8/2012
1864		Lanham	Maryland	2/8/2012
1865		Verona	New Jersey	2/8/2012
1866		Gainesville	Florida	2/8/2012
1867		Tucson	Arizona	2/9/2012
1868		Santa Clarita	California	2/9/2012
1869		Sarasota	Florida	2/9/2012
1870		Willits	California	2/9/2012
1871		Orlando	Florida	2/9/2012
1872		Beaverton	Oregon	2/9/2012
1873		St Louis	Missouri	2/10/2012
1874		Dothan	Alabama	2/10/2012
1875		Brunswick	New York	2/10/2012
1876		Marco Island	Florida	2/12/2012
1877		New York	New York	2/12/2012
1878		KISSIMMEE	Florida	2/12/2012
1879		Denver	Colorado	2/12/2012
1880		Granton	Wisconsin	2/12/2012
1881		Santa Fe	New Mexico	2/12/2012
1882		Eagle	Colorado	2/12/2012
1883		wildomar	California	2/12/2012
1884		Monson	Massachusetts	2/12/2012
1885		navan		2/12/2012
1886		HOLLYWOOD	Florida	2/12/2012
1887		Navan		2/12/2012
1888		Calgary		2/12/2012

	Name	City	State	Date
188		Sutton	Alaska	2/12/2012
189		LeAnn		2/12/2012
189		Bariloché	Alabama	2/13/2012
189		Denver	Colorado	2/13/2012
189		Brookline	Massachusetts	2/13/2012
189		Blairsville	Pennsylvania	2/13/2012
189		San Diego	California	2/13/2012
189		Edison	New Jersey	2/13/2012
189		Edison	New Jersey	2/13/2012
189		Seattle	Washington	2/13/2012
189		Tucson	Arizona	2/14/2012
1900		Pinole	California	2/14/2012
1901		Austin	Texas	2/14/2012
1902		Richmond	California	2/14/2012
1903		Grand Forks	North Dakota	2/14/2012
1904		Dry Prong	Louisiana	2/14/2012
1905		norman	Oklahoma	2/14/2012
1906		Moscow	Idaho	2/14/2012
1907		michigan	New York	2/14/2012
1908		Jacksonville	Florida	2/14/2012
1909		New York	New York	2/14/2012
1910		Carnago		2/14/2012
1911		Newark	Delaware	2/14/2012
1912		Hesperia	California	2/14/2012
1913		Cookeville	Tennessee	2/14/2012
1914		Orange	California	2/14/2012
1915		Randburg		2/14/2012
1916		High Point	North Carolina	2/14/2012
1917		Colonia	New Jersey	2/14/2012
1918		Bochnia		2/14/2012
1919		La Crescenta	California	2/15/2012
1920		Monmouth Junction	New Jersey	2/15/2012
1921		Jersey City	New Jersey	2/15/2012
1922		Emporium	Pennsylvania	2/15/2012
1923		Phoenix	Arizona	2/15/2012
1924		Lincoln	Alabama	2/15/2012
1925		ithaca	New York	2/15/2012
1926		Eden Prairie	Minnesota	2/15/2012
1927		South Portland	Maine	2/15/2012
1928		Nyack	New York	2/16/2012
1929		savannah	Georgia	2/16/2012
1930		Zagreb		2/16/2012
1931		Paso Robles	California	2/16/2012
1932		Dover	Delaware	2/17/2012
1933		victoria	Illinois	2/17/2012

	Name	City	State	Date
1934		Orangeburg	South Carolina	2/17/2012
1935		Redmond	Washington	2/17/2012
1936		Milwaukee	Wisconsin	2/17/2012
1937		Cambridge	Massachusetts	2/18/2012
1938		Banning	California	2/18/2012
1939		Monroeton	Pennsylvania	2/18/2012
1940		Austin	Texas	2/18/2012
1941		magnolia	Texas	2/18/2012
1942		haverhill	Massachusetts	2/18/2012
1943		Brooklyn	New York	2/19/2012
1944		Sherman Oaks	California	2/19/2012
1945		Farmington	New Mexico	2/19/2012
1946		brisbane		2/20/2012
1947		Baytown	Texas	2/20/2012
1948		Naalehu	Hawaii	2/20/2012
1949		Alderley		2/20/2012
1950		Highland Park	Illinois	2/20/2012
1951		Murfreesboro	Tennessee	2/20/2012
1952		New York	New York	2/21/2012
1953		brunswick		2/21/2012
1954		Bridgewater	New Jersey	2/21/2012
1955		Belfast		2/21/2012
1956		marietta	Pennsylvania	2/21/2012
1957		beverly	Massachusetts	2/21/2012
1958		Stephentown	New York	2/21/2012
1959		Middleburg	Virginia	2/21/2012
1960		Newburyport	Massachusetts	2/21/2012
1961		Charlottesville	Virginia	2/22/2012
1962		Cookstown	New Jersey	2/22/2012
1963		Eureka	Missouri	2/22/2012
1964		Newport News	Virginia	2/22/2012
1965		Polk	Florida	2/22/2012
1966		Jacksonville	Florida	2/22/2012
1967		Allegany	New York	2/23/2012
1968		INDIANAPOLIS	Indiana	2/23/2012
1969		Longview	Washington	2/23/2012
1970		guerneville	California	2/23/2012
1971		Laporte	Colorado	2/23/2012
1972		Heber Springs	Arkansas	2/23/2012
1973		Redding	Connecticut	2/23/2012
1974		Brick	New Jersey	2/23/2012
1975		Mendota Heights	Minnesota	2/23/2012
1976		Rockaway Park	New York	2/23/2012
1977		Cornwall Bridge	Connecticut	2/23/2012
1978		Livonia	Michigan	2/23/2012

	Name	City	State	Date
1979		Baltimore	Maryland	2/24/2012
1980		Brentwood	Maryland	2/24/2012
1981		Baldwin Park	California	2/24/2012
1982		Sydney		2/24/2012
1983		colo spgs	Colorado	2/24/2012
1984		Danbury	Connecticut	2/24/2012
1985		Huntington Beach	California	2/24/2012
1986		Lancaster	Pennsylvania	2/24/2012
1987		Barnegat	New Jersey	2/24/2012
1988		chicago	Illinois	2/24/2012
1989		WANTIRNA		2/24/2012
1990		north bergen	New Jersey	2/25/2012
1991		Kortrijk-Heule West-Vlaa	Nebraska	2/25/2012
1992		Puunene	Hawaii	2/25/2012
1993		Jacksonville	Florida	2/25/2012
1994		Chesapeake	Virginia	2/25/2012
1995		Cambridge	Massachusetts	2/25/2012
1996		Norwich		2/25/2012
1997		Royal Oak	Michigan	2/25/2012
1998		Tampa	Florida	2/26/2012
1999		Royersford	Pennsylvania	2/26/2012
2000		Shirley	New York	2/26/2012
2001		gathersburg	Maryland	2/26/2012
2002		Grand Forks	North Dakota	2/26/2012
2003		van nuys	California	2/26/2012
2004		Oak Ridge	Tennessee	2/26/2012
2005		Skillman	New Jersey	2/26/2012
2006		Henniker	New Hampshire	2/27/2012
2007		Bartow	Florida	2/27/2012
2008		Manalapan	New Jersey	2/27/2012
2009		Brampton		2/27/2012
2010		rockford	Illinois	2/27/2012
2011		Kingston	Georgia	2/27/2012
2012		Hackettstown	New Jersey	2/27/2012
2013		Santa Clarita	California	2/27/2012
2014		vienna	New Jersey	2/27/2012
2015		Staten Island	New York	2/27/2012
2016		Scottsdale	Arizona	2/27/2012
2017		Austin	Texas	2/27/2012
2018		Bayside	New York	2/28/2012
2019		Dublin	Ohio	2/28/2012
2020		Sacramento	California	2/28/2012
2021		Goodyear	Arizona	2/28/2012
2022		Leonardo	New Jersey	2/28/2012
2023		Cleveland	Tennessee	2/28/2012

	Name	City	State	Date
2024		bath	Alaska	2/28/2012
2025		johnson.city	New York	2/28/2012
2026		Cinnaminson	New Jersey	2/28/2012
2027		New Westminster		2/28/2012
2028		West Vancouver		2/29/2012
2029		cinnaminson	New Jersey	2/29/2012
2030		Atascadero	California	2/29/2012
2031		Massapequa	New York	2/29/2012
2032		Dobbs Ferry	New York	2/29/2012
2033		Ossining	New York	2/29/2012
2034		Philadelphia	Pennsylvania	3/1/2012
2035		Severn	Maryland	3/1/2012
2036		South Bound Brook	New Jersey	3/1/2012
2037		Antioch	California	3/1/2012
2038		bound brook	New Jersey	3/2/2012
2039		huntersville	North Carolina	3/2/2012
2040		Fanwood	New Jersey	3/2/2012
2041		Hillsborough	New Jersey	3/2/2012
2042		battle creek	Michigan	3/2/2012
2043		san francisco	California	3/2/2012
2044		Arlington	Texas	3/2/2012
2045		Dallas	Texas	3/2/2012
2046		Santa Rosa	California	3/3/2012
2047		neuss		3/3/2012
2048		Phoenix	Arizona	3/3/2012
2049		Brooklyn	New York	3/3/2012
2050		perry	Georgia	3/3/2012
2051		Hamburg		3/3/2012
2052		Robbinsville	New Jersey	3/3/2012
2053		W.W.	Rhode Island	3/3/2012
2054		Des Moines	Iowa	3/3/2012
2055		Kernersville	North Carolina	3/3/2012
2056		Brick	New Jersey	3/3/2012
2057		Austin	Texas	3/4/2012
2058		south plainfield	New Jersey	3/4/2012
2059		West Hollywood	California	3/4/2012
2060		Bay Shore	New York	3/4/2012
2061		silver spring	Maryland	3/5/2012
2062		Watsonville	California	3/5/2012
2063		Red Bay	Alabama	3/5/2012
2064		Dalton	Georgia	3/5/2012
2065		BANGOR	Maine	3/5/2012
2066		Depew	New York	3/5/2012
2067		Tallahassee	Florida	3/6/2012
2068		Brampton		3/6/2012

	Name	City	State	Date
2069		El Cajon	California	3/6/2012
2070		Portsmouth	Virginia	3/6/2012
2071		bound brook	New Jersey	3/6/2012
2072		tybee island	Georgia	3/6/2012
2073		Pittstown	New Jersey	3/6/2012
2074		P		3/7/2012
2075		East Brunswick	New Jersey	3/7/2012
2076		Union	New Jersey	3/7/2012
2077		Conway	New Hampshire	3/7/2012
2078		clyde	North Carolina	3/8/2012
2079		Philadelphia	Pennsylvania	3/8/2012
2080		forsyth	Missouri	3/8/2012
2081		Sault Ste. Marie	Michigan	3/8/2012
2082		North Guwahati		3/8/2012





change.org

To: The Governor of NJ, State Sen. Michael Doherty (NJ-023), State Sen. Christopher Bateman (NJ-016), State Sen. Barbara Buono (NJ-018), State Sen. Raymond Lesniak (NJ-020), State Sen. Stephen Sweeney (NJ-003), Sen. Frank Lautenberg (NJ), Sen. Robert Menendez (NJ), Rep. Rush Holt (NJ-12), Rep. Frank Pallone (NJ-06), Sen. Barbara Boxer (CA), State Sen. Bob Smith (NJ-017), Rep. Leonard Lance (NJ-07), Rep. Rodney Frelinghuysen (NJ-11), USEPA Remedial Project Manager (Joseph Battipaglia), USEPA Region 2 Administrator (Judith Enck), USEPA Administrator (Lisa Jackson), USEPA Region 2 Superfund Chief (Walter Mugdan), NJDEP Commissioner (Bob Martin), MSNBC (Rachel Maddow), Mayor of Bound Brook (Carey Pilato), Mayor of Bridgewater (Daniel J. Hayes, Jr), Mayor of Manville (Angelo Corradino), Pfizer (Wendy Lazarus), Pfizer (Russell Downey)

Subject: Re: American Cyanamid Proposed Plan Comment

Letter: Dear USEPA Regulators, Elected Officials, and Pfizer Representatives,

I respectfully request a 60-day extension for the American Cyanamid Superfund Site Proposed Plan public comment period due to the size and scope of this cleanup. The public must have additional time to review the relevant data for the Proposed Plan and Feasibility Study. The United States Environmental Protection Agency (USEPA) has released this Proposed Plan with very little time for review, and the Feasibility Study is full of inconsistencies.

In addition, I request that USEPA requires Pfizer to properly remediate the 80-year old leaking toxic dump, the American Cyanamid Superfund Site in Bridgewater, NJ. Please include my comments as part of the official public record. In order to protect human health and the environment, USEPA must require Pfizer to remediate the site using "Alternative 7," and not "Alternative 4A," as described in their 2012 Proposed Plan. Alternative 4A, while the least costly for Pfizer, is not protective of the public's health or the environment.

Why did USEPA allow the responsible party to stop the cleanup midstream after the record of decision was signed, and then let the site languish for another eight years? This current plan for capping a toxic waste floodplain is unacceptable and threatens the Raritan River Estuary and the millions of New Jersey residents who live near or downstream from the site. USEPA has mishandled this site from the beginning, and it's time to put the residents first. A scathing report by the USEPA Attorney General documents that USEPA and NJDEP did not ensure this Superfund site cleanup progressed at a timely pace, along with numerous other failures. The report can be found here: <http://www.epa.gov/oig/reports/2008/20080602-08-P-0169.pdf>.

The selected remedy, Alternative 4A, will not be protective of human health and the environment for the following reasons: Filling in a floodplain and capping the site is NOT a full remediation, and could vastly expand serious toxic flooding for thousands of neighboring families, which poses a serious health threat. Pfizer claims there will be no net filling. That is not true as the entire area, not just the fenced site, is in the floodplain. Also, the effect on solidifying parts of the site and capping a floodplain this large is not a permanent long-term solution. All caps fail, it's just a matter of time. This is not protective and it's not permanent. It is the cheapest for the multinational corporation who would rather pour their money into public relations and pretty brochures than be good corporate neighbors and clean up their toxic mess.

R2-0007845

I am also highly concerned that Alternative 4A could drastically expand serious toxic flooding for thousands of neighboring families that are already plagued by heavy flood waters. The Proposed Plan Alternative 4A proposes to cover the contamination with a combination of soil and engineering caps. For the larger portions of the site, Pfizer proposes to raise the gradient two feet. As you are aware, this site lies in the floodplain and, as the most recent flood of Hurricane Irene shows, the American Cyanamid Site can hold about 300,000,000 gallons of water. Placing two feet of fill on the site will reduce its flood storage capacity and could exacerbate the regional flood issue in the area.

In addition, filling of a flood zone is subject to both New Jersey and Federal regulations. These regulations specify that there can be no net filling of the wetlands or a flood zone, which means you cannot fill one area of the site without removing fill from some other location so the status quo doesn't change. The Proposed Plan is completely silent of the impacts of filling, and this most critical aspect of the American Cyanamid site MUST be clearly presented. The implemented plan must assure it will not exacerbate flooding in the lower Raritan River. The U.S. Army Corps of Engineers is actively working on flood control projects in the Raritan River Watershed to help alleviate flooding in Manville, Bound Brook, Bridgewater and all surrounding towns. The American Cyanamid site is a natural fit for a regional flood control project and can be an environmental benefit for the region if the proper remedy is selected.

The Proposed Plan outlines more applicable cleanup alternatives than Alternative 4A suggests, including low temperature desorption (Alternative 7). This method was successfully used at the Cornell-Dubilier Superfund Site in South Plainfield, NJ to remediate soils with high levels of PCBs and heavy metals without disturbing the surrounding community. In addition, USEPA and Pfizer can make use of an active rail line that runs through the site to properly dispose of this material. The cost estimates for the alternatives seem very high and there must be a detailed analysis for the cost of a low temperature thermal desorption unit. USEPA needs to go back and reevaluate the options they are presenting here.

USEPA must look at low temperature thermal desorption in combination with other techniques, such as off-site disposal at their existing RCRA facility across the street, and other innovative technologies, such as bio remediation. The USEPA must choose the most protective remedy now and implement it.

This site cleanup has been languishing for over two decades, and it is time for USEPA to take serious action. In order to protect the health and safety of families that utilize this area for recreation, USEPA must require a proper cleanup as outlined in Alternative 7 in the Proposed Plan. Capping this site violates USEPA's preference for permanent, cost effective, and protective cleanups, as caps always fail. Other Alternatives offer more permanent solutions for this cleanup.

I support the plans put forth by the nationally recognized environmental expert, the nonprofit Edison Wetlands Association, and their scientists and engineers to bring in a low temperature thermal desorption unit. I want this and other treatment technologies used to clean up the American Cyanamid Site, including the existing off-site RCRA disposal facility specifically constructed to handle the waste from this site. Capping and/or solidifying the toxic waste on site should not be used under any circumstances in this floodplain.

Thank you for your timely assistance on this important environmental issue.

Respectfully,

## SIGNATURES

Name	City	State	Date
	Martinez	California	3/6/2012
	Rockwall	Texas	3/6/2012
	Tallahassee	Florida	3/6/2012
	Kingsville	Texas	3/6/2012
	Brooklyn	New York	3/6/2012
	NY	New York	3/6/2012
	Antioch	Tennessee	3/6/2012
	Thousand Oaks	California	3/6/2012
	Kennett Square	Pennsylvania	3/6/2012
	Scottsdale	Arizona	3/6/2012
	Burlingame	California	3/6/2012
	East Brunswick	New Jersey	3/6/2012
	Denville	New Jersey	3/6/2012
	Weehawken	New Jersey	3/6/2012
	Plano	Texas	3/6/2012
	Orono	Maine	3/6/2012
	Edison	New Jersey	3/6/2012
	Newport News	Virginia	3/6/2012
	Fort Lee	New Jersey	3/6/2012
	metuchen	New Jersey	3/6/2012
	Brighton	Colorado	3/6/2012
	El Paso	Texas	3/6/2012
	Brampton		3/6/2012
	El Cajon	California	3/6/2012
	Stockbridge	Massachusetts	3/6/2012
	Smyrna	Tennessee	3/6/2012
	little rock	Arkansas	3/6/2012
	Skelmersdale		3/6/2012
	Rebecca	Georgia	3/6/2012
	buffalo	New York	3/6/2012
	Somerset	New Jersey	3/6/2012
	Keansburg	New Jersey	3/6/2012
	Austin	Texas	3/6/2012
	Arlington	Virginia	3/6/2012
	prairie village	Kansas	3/6/2012
	Edison Twp	New Jersey	3/6/2012
	Edison	New Jersey	3/6/2012
	Burton	Michigan	3/6/2012
	Lexington	North Carolina	3/6/2012
	Roanoke	Virginia	3/6/2012
	New City	New York	3/6/2012
	Portsmouth	Virginia	3/6/2012
	Bridgewater	New Jersey	3/6/2012
	Millville	New Jersey	3/6/2012

	Name	City	State	Date
45		Portsmouth	Virginia	3/6/2012
46		New Paltz	New York	3/6/2012
47		Munhall	Pennsylvania	3/6/2012
48		Severn	Maryland	3/6/2012
49		Irving	Texas	3/6/2012
50		Howell	New Jersey	3/6/2012
51		Long Valley	New Jersey	3/6/2012
52		Bound Brook	New Jersey	3/6/2012
53		Minneapolis	Minnesota	3/6/2012
54		West Bend	Wisconsin	3/6/2012
55		new brunswick	New Jersey	3/6/2012
56		newmarket		3/6/2012
57		Tampa	Florida	3/6/2012
58		hanalei	Hawaii	3/6/2012
59		Medford	Oregon	3/6/2012
60		Bellingham	Washington	3/6/2012
61		LA	California	3/6/2012
62		Bay City	Michigan	3/6/2012
63		london	New York	3/6/2012
64		Bolton	Massachusetts	3/6/2012
65		Madison	Wisconsin	3/6/2012
66		fargo	North Dakota	3/6/2012
67		Richardson	Texas	3/6/2012
68		Ferndale	Michigan	3/6/2012
69		xxxx	New York	3/6/2012
70		Buffalo	New York	3/6/2012
71		New York	New York	3/6/2012
72		Metairie	Louisiana	3/6/2012
73		Maumee	Ohio	3/6/2012
74		carneys point	New Jersey	3/6/2012
75		Hampton	New Jersey	3/6/2012
76		Minneapolis	Minnesota	3/6/2012
77		Perth Amboy	New Jersey	3/6/2012
78		Richmond	Virginia	3/6/2012
79		las vegas	Nevada	3/6/2012
80		Mt. Vernon	Texas	3/6/2012
81		Ringoes	New Jersey	3/6/2012
82		Bentonville	Arkansas	3/6/2012
83		Flagler Beach	Florida	3/6/2012
84		Shelbyville	Indiana	3/6/2012
85		Hempstead	New York	3/6/2012
86		Saratoga		3/7/2012
87		Eugene	Oregon	3/7/2012
88		SANTA MONICA	California	3/7/2012
89		dover	New Hampshire	3/7/2012

	Name	City	State	Date
90		Irving	Texas	3/7/2012
91		Williamsburg	Virginia	3/7/2012
92		Hollister	California	3/7/2012
93		Yonkers	New York	3/7/2012
94		Burbank	California	3/7/2012
95		San Diego	California	3/7/2012
96		Riverdale	New Jersey	3/7/2012
97		Victoria		3/7/2012
98		Summerfield	Florida	3/7/2012
99		Wanaque	New Jersey	3/7/2012
100		Bay City	Michigan	3/7/2012
101		Portland	Oregon	3/7/2012
102		Winchester	Massachusetts	3/7/2012
103		Alta Loma	California	3/7/2012
104		Atascadero	California	3/7/2012
105		East Northport	New York	3/7/2012
106		Waxahachie	Texas	3/7/2012
107		Aldershot		3/7/2012
108		Rochester	New York	3/7/2012
109		Quincy	Massachusetts	3/7/2012
110		Long Beach	California	3/7/2012
111		Chatham	New Jersey	3/7/2012
112		Lund		3/7/2012
113		San Francisco	California	3/7/2012
114		Duluth	Georgia	3/7/2012
115		Portland	Oregon	3/7/2012
116		Cocoa	Florida	3/7/2012
117		South Gate	California	3/7/2012
118		Geelong		3/7/2012
119		Asterker	Armed Forces Americas	3/7/2012
120		Arkhangelsk		3/7/2012
121		P		3/7/2012
122		Ojai	California	3/7/2012
123		Loxahatchee	Florida	3/7/2012
124		Toronto		3/7/2012
125		Newland	North Carolina	3/7/2012
126		Somerdale	New Jersey	3/7/2012
127		Montgomery	New York	3/7/2012
128		Los Lunas	New Mexico	3/7/2012
129		West Hills	California	3/7/2012
130		West Columbia	South Carolina	3/7/2012
131		Bound Brook	New Jersey	3/7/2012
132		Athens	Ohio	3/7/2012
133		Asheville	North Carolina	3/7/2012
134		Beltsville	Maryland	3/7/2012

	Name	City	State	Date
135		Carmichael	California	3/7/2012
136		Bloomington	Indiana	3/7/2012
137		Kailua	Hawaii	3/7/2012
138		Rosemere	New Jersey	3/7/2012
139		athens	California	3/7/2012
140		Park City	Utah	3/7/2012
141		kalamazoo	Michigan	3/7/2012
142		Edison	New Jersey	3/7/2012
143		haskell	New Jersey	3/7/2012
144		New York	New York	3/7/2012
145		Wayne	New Jersey	3/7/2012
146		Cincinnati	Ohio	3/7/2012
147		LAS VEGAS	Nevada	3/7/2012
148		sf	California	3/7/2012
149		Phoenix	Arizona	3/7/2012
150		Pascoag	South Carolina	3/7/2012
151		arcadia	California	3/7/2012
152		north brunswick	New Jersey	3/7/2012
153		Miami	Florida	3/7/2012
154		Chicago	Illinois	3/7/2012
155		Richmond	Virginia	3/7/2012
156		Fairhaven	Massachusetts	3/7/2012
157		Los Angeles	California	3/7/2012
158		Tampere	Florida	3/7/2012
159		Metuchen	New Jersey	3/7/2012
160		Topeka	Kansas	3/8/2012
161		Madison	Wisconsin	3/8/2012
162		Hailey	Idaho	3/8/2012
163		Huntington Beach	California	3/8/2012
164		winston salem	North Carolina	3/8/2012
165		Fairfax	California	3/8/2012
166		clyde	North Carolina	3/8/2012
167		Raritan	New Jersey	3/8/2012
168		Balgonie		3/8/2012
169		Darby	Pennsylvania	3/8/2012
170		San Francisco	California	3/8/2012
171		Murrells Inlet	South Carolina	3/8/2012
172		Buenos Aires	Arkansas	3/8/2012
173		Somewhere	Nebraska	3/8/2012
174		Philadelphia	Pennsylvania	3/8/2012
175		Lubbock	Texas	3/8/2012
176		San Francisco	California	3/8/2012
177		Washington	New Jersey	3/8/2012
178		forsyth	Missouri	3/8/2012
179		Seattle	Washington	3/8/2012

	Name	City	State	Date
180		Tampa,	Florida	3/8/2012
181		Horsham	Pennsylvania	3/8/2012
182		Eagleville	Pennsylvania	3/8/2012
183		Dallas	Texas	3/8/2012
184		Portland	Oregon	3/8/2012
185		Monroe	Connecticut	3/8/2012
186		Phoenix	Arizona	3/8/2012
187		Key Largo	Florida	3/8/2012
188		Jacksonville	Florida	3/8/2012
189		Austin	Texas	3/8/2012
190		High Point	North Carolina	3/8/2012
191		Laguna Hills	California	3/8/2012
192		Bridgewater	New Jersey	3/8/2012



U.S. EPA  
Attn: Joseph Battipaglia  
290 Broadway, 19<sup>th</sup> Floor  
New York, New York 10007-1866

May 10, 2012

Re: American Cyanamid Proposed Plan Comment

Dear Mr. Battipaglia,

On behalf of Edison Wetlands Association and over 4,800 people who signed these petitions on [Change.org](http://Change.org), I would like the attached comment letters to be included as part of the official public record for the American Cyanamid Proposed Plan.

These letters request that the United States Environmental Protection Agency (USEPA) requires Pfizer to permanently remediate the 80-year old leaking toxic dump, the American Cyanamid Superfund Site in Bridgewater, NJ. In order to protect human health and the environment, USEPA must require Pfizer to remediate the site using a modified version of "Alternative 7," and not "Alternative 4A," as described in their 2012 Proposed Plan.

If you have any questions, you can contact me at 732-321-1300 or via email at [rspiegel@edisonwetlands.org](mailto:rspiegel@edisonwetlands.org). Thank you for your timely assistance on this important environmental issue.

Sincerely,

Robert Spiegel  
Executive Director  
Edison Wetlands Association

CC: U.S. Senator Frank Lautenberg (with separate cover)  
U.S. Senator Robert Menendez (with separate cover)  
U.S. Congressman Frank Pallone (with separate cover)  
State Senator Barbara Buono (with separate cover)

---

Edison Wetlands Association, Inc. ♦ 206 Tyler Road ♦ Edison, New Jersey 08820  
Telephone 732-321-1300 ♦ Fax 732-372-7866 ♦ [www.EdisonWetlands.org](http://www.EdisonWetlands.org)

R2-0007852

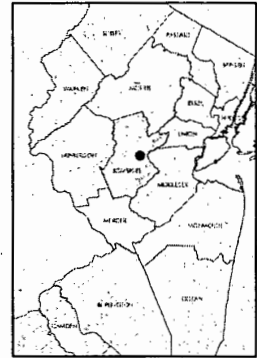




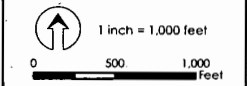
**FEMA Floodplain**

- AE: 1% Annual-Chance Flood Hazard
- A: 1% Annual-Chance Flood Hazard (No Base Flood Elevations)
- 0.2% Annual-Chance Flood Hazard
- X: Areas outside the 0.2% Annual-Chance Flood Hazard

**NEW JERSEY COUNTY MAP**



**PH** PRINCETON HYDRO, LLC.  
 1108 OLD YORK ROAD  
 P.O. BOX 720  
 RINGOES, NJ 08551  
\*with offices in NJ, PA and CT



**NOTES:**

1. FEMA 2007 DFIRM obtained from FEMA Map Resources Center.

Map Projection:  
 NAD 1983 StatePlane New Jersey FIPS 2900 Feet

**FEMA FLOODPLAIN**

AMERICAN CYANAMID SITE  
 BRIDGEWATER TOWNSHIP  
 SOMERSET COUNTY, NEW JERSEY  
 EDISON WETLANDS ASSOCIATION

**Legend**

- Stream
- FEMA Floodway
- Municipal Boundary



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

(See Issuing Division below)

PERMIT\*



The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to the further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit.		
Permit No. 1806-02-0005.2 FHA 050001 1806-02-0005.2 FWW 050001 GP No. 4		Application No.
Issuance Date	Effective Date	Expiration Date
Name and Address of Applicant Wyeth Holdings Corporation 5 Giralda Farms, 2A Madison, New Jersey 07940	Name and Address of Operator	
Location of Activity/Facility (Street Address)  Lot: 2 Block: 342 Twp: Bridgewater County: Somerset	Issuing Division  Land Use Regulation Program	Statute(s) NJSA 13:9B-1 NJSA 13:1D-1 NJSA 58:10A-1 NJSA 58:16A-50, et. seq.
Type of Permit Stream Encroachment FHA 050001 Freshwater Wetlands FWW 050001 GP 4	Maximum Approved Capacity, if applicable	
<p>This permit grants permission to:</p> <p>excavate approximately 27,000 cubic yards of hazardous material from Impoundment 15 and backfill with approximately 5,400 cubic yards of clean fill and to excavate approximately 31,000 cubic yards of hazardous material from Impoundment 16 and backfill with approximately 6,200 cubic yards of clean fill and to remove contaminated material from the drying area, all in the floodway of the Raritan River, within Lot No. 2 of Block No. 342, located immediately southerly of the Cuckold's Brook crossing under the Lehigh Valley Railroad/Port Reading Railroad, in the Township of Bridgewater, Somerset County, New Jersey. This permit also authorizes the disturbance of Freshwater wetland transition area for removal of hazardous materials associated with the remediation areas of Impoundment 15 and 16 and the drying area under a General permit No. 4.</p> <p>Prepared By: _____ George Davis</p> <p>(See page 4 for Section Chief's signature.)</p>		
Revised Date	Approved by the Department of Environmental Protection	
	Name (Print or Type) _____	Title _____
	Signature _____	Title _____

**Terms And Conditions**

**This permit is subject to the following terms and conditions:**

1. This permit is revocable, or subject to modification or change at any time, pursuant to the applicable regulations, when in the judgement of the Department of Environmental Protection of the State of New Jersey such revocation, modification or change shall be necessary.
2. The issuance of the permit shall not be deemed to affect in any way action by the Department of Environmental Protection of the State of New Jersey on any future application.
3. The works, facilities, and/or activities shown by plans and/or other engineering data, which are this day approved, subject to the conditions herewith established, shall be constructed and/or executed in conformity with such plans and/or engineering data and the said conditions.
4. No change in plans or specifications shall be made except with the prior written permission of the Department of Environmental Protection of the State of New Jersey.
5. The granting of this permit shall not be construed to in any way affect the title or ownership of property, and shall not make the Department of Environmental Protection or the State a party in any suit or question of ownership.
6. This permit does not waive the obtaining of Federal or other State or local government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained.
7. A copy of this permit shall be kept at the work site, and shall be exhibited upon request of any person.
8. In cases of conflict, the conditions of this permit shall supersede the plans and/or engineering data.
9. Limit and Extent of Approval
  - a. This approval grants permission to the applicant and/or its agents to undertake an activity regulated by the State of New Jersey as described by the text of this permit and as detailed by the herein approved plans. Any construction, grading, removal of vegetation, or other activity at this site within or affecting a regulated flood plain, other than specifically approved by this permit or as detailed by the approved drawings, shall require additional approvals from the Department. The commencement of such regulated activities without the appropriate approvals shall be in violation of State law.
  - b. All activities authorized by this permit shall be completed within five years of the issuance date as listed on the first page of this document. At that time, this approval, if not previously revoked, shall automatically become null and void, and none of the activities referenced herein may commence or continue until a new approval has been granted by the Department.

Terms And Conditions

10. Method of Construction

- a. All activities approved by this permit shall be performed under the supervision and direction of a Professional Engineer licensed in the State of New Jersey, and shall be undertaken using the best management practices available. Furthermore, the site shall be subject to inspection at any time by representatives of the Department to ensure the continuous application of the provisions of this permit.
- b. During the course of construction, neither the applicant nor its agents shall cause or permit any unreasonable interference with the free flow of the stream by placing or dumping any materials, equipment, debris or structures within or adjacent to the stream corridor. Upon completion or abandonment of the work, the applicant and/or its agents shall remove and dispose of in a lawful manner all excess materials, equipment and debris from the stream corridor and adjacent lands.
- c. All activities authorized by this permit shall be stabilized in accordance with the *Standards for Soil Erosion and Sediment Control in New Jersey* (obtainable from local Soil Conservation District offices), or equal engineering specifications, to prevent eroded soil and sediment from entering adjacent waterways and wetlands at any time during and subsequent to construction. The Department reserves the right to order the suspension of any activity if unacceptable levels of erosion or turbidity result from the same. Furthermore, the applicant shall maintain the stream corridor as shown on the approved drawing/s for either such time as is required for the channel and/or banks to become reasonably stabilized, or for one year after completion of the project (as evidenced by a Certificate of Completion), whichever period of time is longer.

11. Responsibilities of Applicant

- a. The granting of this permit does not in any way relieve the applicant and/or its agents from the responsibility for damages caused by any construction or activities hereby approved, nor does the Department accept responsibility for any structural designs.
- b. No construction authorized by this permit may begin until the enclosed **permit acceptance form** has been signed by the applicant and is returned to the Department. By signing and submitting this form, the applicant accepts this permit in its entirety and agrees to adhere to all of its terms and conditions. Please be advised that this permit may be declared null and void should it be determined that adequate measures had not been taken by the applicant and/or its agents to ensure the continuous implementation of these terms and conditions.
- c. Within ten (10) days of the receipt of this permit by the applicant, this permit shall be recorded in its entirety in the office of the County Clerk or the Registrar of Deeds and Mortgages for each county where this permit is located. Verified notice of this action shall be forwarded to the Department immediately thereafter.
- d. The enclosed **construction notice** shall be completed by the applicant or its agent and submitted to the Department at least fourteen (14) days prior to the commencement of the herein approved activities.
- e. The enclosed **completion report** shall be completed by a Professional Engineer licensed in the State of New Jersey and submitted to the Department within thirty (30) days after completion of the herein approved activities.

**Terms And Conditions**

12. All excavated material must be disposed of in a lawful manner outside of any regulated flood plain, open water, freshwater wetlands or adjacent transition areas, and in such a way as not to interfere with the positive drainage of the receiving area.

13. Provisions of the Freshwater Wetlands General Permit:

Limit of Authorized Disturbance - The authorized activity involves the disturbance of freshwater wetland transition area for the removal of hazardous materials associated with the remediation of Impoundment areas 15 and 16 as well as the former "drying area" under a General Permit No. 4. Any additional disturbance of freshwater wetlands, State open waters and/or transition areas shall be considered a violation of the Freshwater Wetlands Protection Act unless a permit is obtained prior to the start of the disturbances from the Land Use Regulation Program.

The transition area shall not be reduced to less than 10 feet in width as shown on the referenced plan.

14. The Land Use Regulation program has not reviewed this application for consistency with the Areawide Water Quality Management Plan and the issuance of this permit shall not be construed as an approval of any wastewater management plan for this project or site. There shall be no construction of any sewage generating structures unless and until the proposed development has been found to be consistent with the appropriate areawide water quality management plan.
15. Upon completion of the project, all temporarily disturbed upland areas within or affecting the regulated flood plain/floodway must be restored to their original condition using native soils and indigenous vegetation. Said restoration is to be accomplished under the recommendation and discretion of the local soil conservation district having jurisdiction over the project.
16. The drawing hereby approved is one (1) sheet prepared by the O'Brien & Gere Engineers, Inc., dated February 23, 2005, last revised February 23, 2005, entitled:

"BOUND BROOK REMEDIAL PROGRAM IMPS. 15 & 16 CLOSURE PROGRAM"

"EXCAVATION PLAN" sheet Attach. 9

---

Madhu Guru, PE  
Section Chief  
Northwest/central Engineering

---

DATE

**Stream Encroachment Permit No. 1806-02-0005.2 FHA 050001**  
**1806-02-0005.2 FWW 050001 GP No. 4**

**Terms And Conditions**

**PAGE 5**



**STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF LAND USE REGULATION**

501 East State Street, Station Plaza 5, 2<sup>nd</sup> Floor  
P.O. Box 439, Trenton, New Jersey 08625-0439  
Fax: (609) 777-3656 or (609) 292-8115  
www.state.nj.us/dep/landuse



**PERMIT**

<p>In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc."</p>		Approval Date
		Expiration Date
Permit Number/s 1806-02-0005.1    FHA 070001	Type of Approval/s Stream Encroachment	Enabling Statute/s NJSA 13:1D-1 NJSA 58:10A-1 NJSA 58:16A-50, et. seq.
Applicant Wyeth Holdings Corporation 5 Giralda Farms, 2A, Attn. John Egan Madison, New Jersey 07940	Owner (if different from applicant)	
Description of Authorized Activities and Limit of Disturbance  <p>This permit grants permission to remove contaminated material from Impoundments 14 and 20, in the floodplain of the Raritan River, and transport to temporary treatment area for solidification and then deposit to Impoundment No. 8, outside the floodplain of the Raritan River, within Lot No. 2 of Block No. 340, located approximately 3500' westerly of the U.S. Route 287 crossing of the Lehigh Valley Rail Road, in Bridgewater Township, Somerset County, New Jersey.</p>		
Project Location Lot No. 2 Block No. 8 Bridgewater Township Somerset county, New Jersey	Received by County Clerk	
Project Manager's Signature  George Davis Telephone: (609) 984-0232		
<b>This permit is not valid unless authorizing signature appears on the last page.</b>		

**STANDARD CONDITIONS:**

1. **Extent of approval:** This document grants permission to perform certain activities that are regulated by the State of New Jersey. The approved work is described by the text of this permit and is further detailed by the approved drawings listed below. All work must conform to the requirements, conditions and limitations of this permit and all approved drawings. You must keep a copy of this permit and all approved drawings readily available for inspection at the work site. Approved work may be altered only with the prior written approval of the Department. If you alter the project without prior approval, or expand work beyond the description of this permit, you may be in violation of State law and may be subject to fines and penalties.
2. **Acceptance of permit:** If you begin any activity approved by this permit, you thereby accept this document in its entirety and agree to adhere to all terms and conditions. If you do not accept or agree with this document in its entirety, **do not** begin construction. You are entitled to request an appeal within a limited time as detailed on the attached *Administrative Hearing Request Checklist and Tracking Form*. You may also contact the project manager shown on the first page if you have any questions or concerns about this document.
3. **Recording with County Clerk:** You must record this permit in the Office of the County Clerk for each county involved in this project. You must also mail or fax a copy of the front page of this permit to the Department showing the received stamp from each County Clerk within 30 days of the issuance date (or 90 days if multiple counties are involved). The Department's address and fax number are shown on the first page of this permit.
4. **Notice of Construction:** You must notify the Department in writing at least 7 days before you begin any work approved by this permit. The Department's address and fax number are shown on the first page of this permit. Please direct your letter to the project manager shown on the first page.
5. **Expiration date:** All activities authorized by this permit must be completed by the expiration date shown on the first page. At that time, this permit will automatically become invalid and none of the approved work may begin or continue until a replacement permit is granted. (Some coastal permits may qualify for an extension of the expiration date. Please contact the Department for further information.)
6. **Rights of the State:** This permit is revocable and subject to modification by the State with due cause. The State may inspect the work site and may suspend construction if work does not comply with this permit. This permit does not grant property rights. The issuance of this permit shall not affect any action by the State on future applications, nor affect the title or ownership of property, nor make the State a party in any suit or question of ownership.
7. **Other responsibilities:** You must obtain all necessary local, Federal and other State approvals before you begin work. All work must be stabilized in accordance with the *Standards for Soil Erosion and Sediment Control in New Jersey*, and all fill material must be free of toxic pollutants in toxic amounts as defined in section 307 of the Federal Act.

**SPECIAL CONDITIONS IN ADDITION TO THE STANDARD CONDITIONS:**

8. The drawings hereby approved are the total of three (3) sheets prepared by O'Brien & Gere, dated December 15, 2006, revised December 15, 2006, unless otherwise noted, entitled:

"BOUND BROOK, NEW JERSEY SITE IMPOUNDMENTS 14 AND 20 CLOSURE"

"WORK AREA PLAN" sheet no. G-1, last revised April 12, 2007

"EXISTING MANAGED STOCKPILES/SOIL EROSION AND SEDIMENT CONTROL PLAN" sheet no. G-2



"IMPOUNDMENT 8 CONTRACT AREA AND PLACEMENT PLAN" sheet no. G-6

---

Madhu M. Guru, PE  
Section Chief  
Bureau of Inland Regulation

---

Date



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF LAND USE REGULATION

501 East State Street, Station Plaza 5, 2<sup>nd</sup> Floor  
P.O. Box 439, Trenton, New Jersey 08625-0439  
Fax: (609) 777-3656 or (609) 292-8115  
www.state.nj.us/dep/landuse



PERMIT

<p>In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc."</p>		Approval Date <b>JAN 30 2008</b>
		Expiration Date <b>JAN 30 2013</b>
Permit Number/s 1806-06-0014.3 FHA 070001 SEP	Type of Approval/s Stream Encroachment	Enabling Statute/s NJSA 13:1D-1 NJSA 58:10A-1 NJSA 58:16A-50, et. seq.
Applicant Wyeth Holdings Corporation 5 Giralda Farms, 2A Attn, John Egan Madison, New Jersey 07940	Owner (if different from applicant)	
<p>Description of Authorized Activities and Limit of Disturbance</p> <p>This permit grants permission to place temporary stockpiles of fill in the floodplain of the Raritan River and Chuckholds Brook in connection with a future CERCLA Remedial Program for capping, within Lot No. 2 of Block No. 340, in the Township of Bridgewater, Somerset County, New Jersey.</p>		
Project Location Lot No. 2 Block No. 340 Township of Bridgewater Somerset County, New Jersey	Received by County Clerk	
Project Manager's Signature <i>George Davis</i> George Davis Telephone: (609) 984-0232		
<p>This permit is not valid unless authorizing signature appears on the last page.</p>		

**STANDARD CONDITIONS:**

1. **Extent of approval:** This document grants permission to perform certain activities that are regulated by the State of New Jersey. The approved work is described by the text of this permit and is further detailed by the approved drawings listed below. All work must conform to the requirements, conditions and limitations of this permit and all approved drawings. You must keep a copy of this permit and all approved drawings readily available for inspection at the work site. Approved work may be altered only with the prior written approval of the Department. If you alter the project without prior approval, or expand work beyond the description of this permit, you may be in violation of State law and may be subject to fines and penalties.
2. **Acceptance of permit:** If you begin any activity approved by this permit, you thereby accept this document in its entirety and agree to adhere to all terms and conditions. If you do not accept or agree with this document in its entirety, **do not** begin construction. You are entitled to request an appeal within a limited time as detailed on the attached *Administrative Hearing Request Checklist and Tracking Form*. You may also contact the project manager shown on the first page if you have any questions or concerns about this document.
3. **Recording with County Clerk:** You must record this permit in the Office of the County Clerk for each county involved in this project. You must also mail or fax a copy of the front page of this permit to the Department showing the received stamp from each County Clerk within 30 days of the issuance date (or 90 days if multiple counties are involved). The Department's address and fax number are shown on the first page of this permit.
4. **Notice of Construction:** You must notify the Department in writing at least 7 days before you begin any work approved by this permit. The Department's address and fax number are shown on the first page of this permit. Please direct your letter to the project manager shown on the first page.
5. **Expiration date:** All activities authorized by this permit must be completed by the expiration date shown on the first page. At that time, this permit will automatically become invalid and none of the approved work may begin or continue until a replacement permit is granted. (Some coastal permits may qualify for an extension of the expiration date. Please contact the Department for further information.)
6. **Rights of the State:** This permit is revocable and subject to modification by the State with due cause. The State may inspect the work site and may suspend construction if work does not comply with this permit. This permit does not grant property rights. The issuance of this permit shall not affect any action by the State on future applications, nor affect the title or ownership of property, nor make the State a party in any suit or question of ownership.
7. **Other responsibilities:** You must obtain all necessary local, Federal and other State approvals before you begin work. All work must be stabilized in accordance with the *Standards for Soil Erosion and Sediment Control in New Jersey*, and all fill material must be free of toxic pollutants in toxic amounts as defined in section 307 of the Federal Act.

**SPECIAL CONDITIONS IN ADDITION TO THE STANDARD CONDITIONS:**

8. In order to protect the general fishery resource within the Raritan River and Cuckholds Brook any proposed grading or construction activities within the banks of this or any other stream on site are prohibited between May 1 to June 30 of each year. In addition, any activity within the 100-year flood plain or flood hazard area of these watercourses, which could introduce sediment into said stream or which could cause an increase in the natural level of turbidity is also prohibited during this period. The Department reserves the right to suspend all regulated activities on site should it be determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.
9. The applicant must stabilize the soil stockpiles by seeding them immediately after placement.

10. The soil stockpiles must be either removed or used for the capping of contamination on the site within 1 year of the date of placement. The actual re-grading of the site, or the re-distribution of fill will require a separate Flood Hazard Area Permit from this office.
11. The drawings hereby approved are five (5) sheets prepared by O'Brien & Gere, dated October 3, 2007, last revised January 26, 2008, unless otherwise noted, entitled:

"WYETH HOLDINGS CORPORATION BOUND BROOK REMEDIAL PROGRAM BOUND BROOK,  
NEW JERSEY"

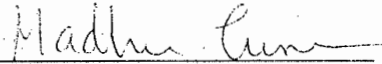
"REMEDICATION CAPPING PROGRAM WORK AREA PLAN" sheet no. G-1,

"REMDIATION CAPPING PROGRAM SOIL EROSION AND SEDIMENT CONTROL  
PLAN AND DETAILS" sheet no. G-2, revised October 3, 2007,

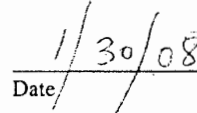
"REMEDICATION CAPPING PROGRAM STOCKPILE CROSS-SECTIONS" sheet no. G-  
3, dated January 26, 2008,

"REMEDICATION CAPPING PROGRAM EXISTING SITE PLAN AND FLOOD  
ELEVATION" sheet no. G-4, dated January 26, 2008, and

"REMEDICATION CAPPING PROGRAM FLOOD ELEVATION SECTIONS" sheet no.  
G-5, dated January 26, 2008.



Madhu M. Guru, PE  
Supervisor  
Bureau of Inland Regulation

  
Date

FLOOD FRINGE



POTENTIAL SOIL STOCKPILE AREA



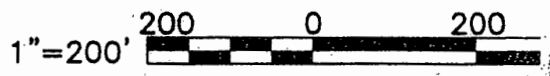
FLOOD HAZARD AREA DESIGN FLOOD

**APPROVED**

1806-06-0014.3

JAN 30 2008

NO.	DATE	REVISION
2	1/26/08	REVISED PER NJDEP LAND USE C
1	12/5/07	REVISED PER NJDEP LAND USE C
0	10/3/07	ISSUED FOR PERMIT APPROVAL



THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.



**O'BRIEN & GERE**

2007 © O'Brien & Gere Engineers, Inc.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

WYETH HOLDINGS CORP  
 BOUND BROOK REMEDIAL  
 BOUND BROOK, NEW JERSEY

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.

STEVEN J. ROLAND

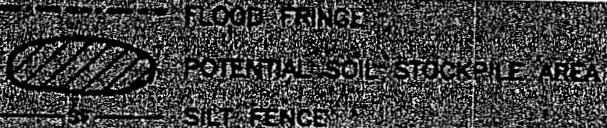
*Steven J. Roland*

N.J. PROFESSIONAL ENGINEER  
 NO. 33629

REMEDIATION CAPPING I  
 WORK AREA P

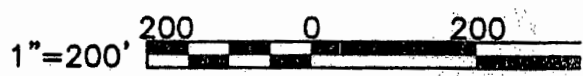
IN CHARGE OF <u>MAUREEN T. HOKE</u>	FILE NO. 5772.421
DESIGNED BY <u>AMM</u> CHECKED BY <u>MTH</u>	DATE 10/3
DRAWN BY <u>AG</u>	

CH  
 WITHIN  
 BE  
 CE WITH  
 UID  
 DING  
 10%  
 MALIS, 5%  
 NSERVATION  
 -5  
 AT  
 2  
 S' OF  
 AS  
 PLAN  
 UNTIL  
 HAT ALL  
 T  
 ES  
 EDED  
 AREAS  
 S AT  
 ASURES;



**APPROVED**  
 1806-06-0014.3  
 JAN 30 2007  
 Department of Environmental Protection  
 Land Use Regulation Program

NO.	DATE	REVISION
0	10/3/07	ISSUED FOR PERMIT APPROVAL



THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.



WYETH HOLDINGS CORPO  
 BOUND BROOK REMEDIAL F  
 BOUND BROOK, NEW JE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

REMDIATION CAPPING PR  
 SOIL EROSION AND S  
 CONTROL PLAN AND

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.  
 STEVEN J. ROLAND  
  
 N.J. PROFESSIONAL ENGINEER  
 NO. 33629

IN CHARGE OF <u>MAUREEN T. HOKE</u>	FILE NO. 5772.4019
DESIGNED BY <u>AMM</u> CHECKED BY <u>MTH</u>	DATE 10/3/07
DRAWN BY <u>AG</u>	

ELEVATIONS SHOWN ARE REFERENCED TO FACILITY DATUM. (FACILITY DATUM BASED ON U.S.G.S. NGVD 29



NO.	DATE	REVISION
0	1/26/08	ISSUED FOR PERMIT APPROVAL

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.



2007 © O'Brien & Gere Engineers, Inc.

WYETH HOLDINGS CORP  
 BOUND BROOK REMEDIAL  
 BOUND BROOK, NEW J

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

REMEDIATION CAPPING P  
 STOCKPILE  
 CROSS-SECTION

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.

STEVEN J. ROLAND

*Steven J. Roland*

N.J. PROFESSIONAL ENGINEER  
 NO. 33629

IN CHARGE OF <u>MAUREEN T. HOKE</u>	FILE NO. 5772.420
DESIGNED BY <u>AMM</u> CHECKED BY <u>MTH</u>	DATE 1/26
DRAWN BY <u>AG</u>	

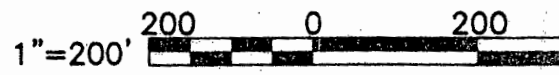
- — — FLOODWAY LIMIT
- — — FLOOD FRINGE
- — — FLOOD ELEVATION CONTOUR
- FLOOD HAZARD AREA DESIGN FLOOD STA

**APPROVED**

1806-06-0014.3  
JAN 30 2008

*Department of Environmental Protection  
Land Use Regulation Program*

NO.	DATE	REVISION
0	1/26/08	ISSUED FOR PERMIT APPROVAL



2007 © O'Brien & Gere Engineers, Inc.

**WYETH HOLDINGS CORP  
BOUND BROOK REMEDIAL  
BOUND BROOK, NEW**

**REMEDICATION CAPPING  
EXISTING SITE PL  
FLOOD ELEVAT**

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.

STEVEN J. ROLAND

*Steven J. Roland*

N.J. PROFESSIONAL ENGINEER  
NO. 33629

IN CHARGE OF <u>MAUREEN T. HOKE</u>	FILE NO <b>5772.4</b>
DESIGNED BY <u>AMM</u> CHECKED BY <u>MTH</u>	DATE
DRAWN BY <u>AG</u>	<b>1/</b>

UM  
3512  
-SITE  
EP  
THE  
AND  
D  
IN THE  
EN  
D  
AGE  
HE

ABLE  
SE



**APPROVED**  
 1806-06-0014-3  
 JAN 30 2008  
 Department of Environmental Protection  
 Land Use Regulation Program

0	1/26/08	ISSUED FOR PERMIT APPROVAL
NO.	DATE	REVISION

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.



2007 © O'Brien & Gere Engineers, Inc.

WYETH HOLDINGS CORP  
 BOUND BROOK REMEDIAL F  
 BOUND BROOK, NEW JE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

REMEDICATION CAPPING PF  
 FLOOD ELEVATION SE

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.

STEVEN J. ROLAND

*Steven J. Roland*  
 N.J. PROFESSIONAL ENGINEER  
 NO. 33629

IN CHARGE OF <u>MAUREEN T. HOKE</u>	FILE NO. <b>5772.4203</b>
DESIGNED BY <u>AMM</u> CHECKED BY <u>MTH</u>	DATE
DRAWN BY <u>AG</u>	<b>1/26/</b>



American Cyanamid Superfund Site Proposed Plan Comments

rspiegel

to:

Joseph Battipaglia

05/14/2012 05:21 PM

Cc:

Judith Enck, Walter Mugdan, "Carolyn Fefferman", "Zoe Baldwin", "Wright Tuley", "Bill Schultz", "Bill Wolfe", "jeff tittel", "Cindy \Clean", "Lisa Plevin", Bonnie Bellow

Hide Details

From: <rspiegel@edisonwetlands.org> Sort List...

To: Joseph Battipaglia/R2/USEPA/US@EPA

Cc: Judith Enck/R2/USEPA/US@EPA, Walter Mugdan/R2/USEPA/US@EPA, "Carolyn Fefferman" <carolyn\_fefferman@menendez.senate.gov>, "Zoe Baldwin" <Zoe\_Baldwin@lautenberg.senate.gov>, "Wright Tuley" <Tuley.Wright@mail.house.gov>, "Bill Schultz" <raritan.riverkeeper@verizon.net>, "Bill Wolfe" [REDACTED], "jeff tittel" <jeff.tittel@sierraclub.org>, "Cindy \Clean" <Zipf@CleanOceanAction.org>, "Lisa Plevin" <Plevin.Lisa@epamail.gov>, Bonnie Bellow/R2/USEPA/US@EPA

History: This message has been forwarded.

6 Attachments



Am Cyan 1% propability Floodplain.pdf Proposed Plan Comment letter Cover letter FINAL 5-14-12.pdf



2012-05-14 AmCyan Proposed Plan Comments X-2 FINAL.pdf NJDEP Land Use Permit 2005.doc



NJDEP Land Use Permit 2007.doc attz0loj.pdf

Dear Mr. Battipaglia,

On behalf of the environmental nonprofit organizations Edison Wetlands Association, New Jersey Sierra Club, Clean Ocean Action, New Jersey Public Employees for Environmental Responsibility, and the Raritan Riverkeeper, please find the attached cover letter, technical memo, floodplain map, and 3 NJDEP permits for submission in the American Cyanamid Superfund Site Proposed Plan public comment period.

Please confirm that you have received this email and you are able to open the attachments. If you have any questions, I can be reached directly at 732-321-1300. Thank you.

Respectfully,

Bob Spiegel  
Executive Director  
Edison Wetlands Association  
PO Box #1208  
South Plainfield, NJ 07080  
Phone: (732) 321-1300  
Fax: (732) 372-7866  
[www.edisonwetlands.org](http://www.edisonwetlands.org)

The information in this e-mail is intended only for the use of the designated recipient(s) and may contain confidential and privileged information. If the reader of this message is not the intended recipient(s), you are hereby notified that you have received this email in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify the sender by reply e-mail and destroy all copies of the original message.



American Cyanamid Superfund Site Proposed Plan Comments

rspiegel

to:

Joseph Battipaglia

05/15/2012 01:20 AM

Cc:

Judith Enck, Walter Mugdan, "Carolyn Fefferman", "Zoe Baldwin", "Wright Tuley", "Bill Schultz", "Bill Wolfe", "jeff tittel", "Cindy \Clean", "Lisa Plevin", Bonnie Bellow, Lisa Plevin, "Alan Godber", "Aaron Kleinbaum", dana, "Rich CHAPIN", Joe Rotola, dwheeler  
Hide Details

From: <rspiegel@edisonwetlands.org> Sort List...

To: Joseph Battipaglia/R2/USEPA/US@EPA

Cc: Judith Enck/R2/USEPA/US@EPA, Walter Mugdan/R2/USEPA/US@EPA, "Carolyn Fefferman" <carolyn\_fefferman@menendez.senate.gov>, "Zoe Baldwin" <Zoe\_Baldwin@lautenberg.senate.gov>, "Wright Tuley" <Tuley.Wright@mail.house.gov>, "Bill Schultz" <raritan.riverkeeper@verizon.net>, "Bill Wolfe" [REDACTED], "jeff tittel" <jeff.tittel@sierraclub.org>, "Cindy \Clean" <Zipf@CleanOceanAction.org>, "Lisa Plevin" <Plevin.Lisa@epamail.gov>, Bonnie Bellow/R2/USEPA/US@EPA, Lisa Plevin/R2/USEPA/US@EPA, [REDACTED], "Aaron Kleinbaum" <akleinbaum@easternenvironmental.org>, dana@edisonwetlands.org, "Rich CHAPIN" <rwc27q@verizon.net>, Joe Rotola/R2/USEPA/US@EPA, dwheeler@edisonwetlands.org

History: This message has been replied to.

6 Attachments



Am Cyan 1% propability Floodplain.pdf



Proposed Plan Comment letter Cover letter FINAL 5-14-12.pdf



2012-05-14 AmCyan Proposed Plan Comments X-2 FINAL.pdf NJDEP Land Use Permit 2005.doc



NJDEP Land Use Permit 2007.doc att9nmny.pdf

Dear Mr. Battipaglia,

On behalf of the environmental nonprofit organizations Edison Wetlands Association, New Jersey Sierra Club, Clean Ocean Action, New Jersey Public Employees for Environmental Responsibility, and the Raritan Riverkeeper, please find the attached cover letter, technical memo, floodplain map, and 3 NJDEP permits for submission in the American Cyanamid Superfund Site Proposed Plan public comment period.

I am resubmitting these and will send them to you via certified US mail as I noticed in my first attempt that at least one of the USEPA cced sent the e-mail had it bounce back.

**I would also like to request that the Edison Wetlands Association and our project partners including Jeff Tittel, William Schultz , Bill Wolfe and Cindy Ziff as well as our technical team be allowed to meet with US EPA and your technical team and discuss our comments in detail.**

The US EPA had allowed the public discourse as well the community involvement at this site to be hijacked and minimized by a select few individuals and this approach has to change.

**The site failures continue to endanger public health and the environment and the US EPA must change how you are approaching community relations and involvement with regards to cleanup of American Cyanamid Superfund Site.**

This proposed cleanup has far reaching local, regional, statewide and nationwide impacts. The undersigned group are requesting the US EPA, your technical and management review our comments let us know what dates are available for you to meet so we can coordinate a meeting in Region 2 Edison NJ. with in the next 2 weeks.

We want to meet before EPA finalize its decision and relegate our important technical, policy and administrative concerns to the administrative record and obscurity.

**In short, this site is too important to the state, region and country to simply bury our concerns along with the site back into obscurity for another decade. More can and should be considered and done before the USEPA and Pfizer can move forward with the cleanup.**

Please confirm that you have received this email and you are able to open the attachments. If you have any questions, I can be reached directly at 732-321-1300.

Thank you.

Respectfully,  
Bob Spiegel  
Executive Director  
Edison Wetlands Association  
PO Box #1208  
South Plainfield, NJ 07080  
Phone: (732) 321-1300  
Fax: (732) 372-7866  
[www.edisonwetlands.org](http://www.edisonwetlands.org)

The information in this e-mail is intended only for the use of the designated recipient(s) and may contain confidential and privileged information. If the reader of this message is not the intended recipient(s), you are hereby notified that you have received this email in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify the sender by reply e-mail and destroy all copies of the original message.

Mr. Joseph Battipaglia  
United States Environmental Protection Agency  
Region 2  
290 Broadway, 19th Floor  
New York, NY 10007-1866

RE: American Cyanamid Superfund Site (EPA ID#: NJD002173276)  
Proposed Plan Public Comments  
Bridgewater, Somerset County, New Jersey

Dear Mr. Battipaglia,

On behalf of the environmental nonprofit organizations Edison Wetlands Association, Clean Ocean Action, New Jersey Sierra Club, Raritan Riverkeeper and New Jersey Public Employees for Environmental Responsibility, we respectfully request the United States Environmental Protection Agency (USEPA) require Pfizer to permanently remediate the 80-year old leaking toxic dump, also known as the American Cyanamid Superfund Site located in Bridgewater, New Jersey. Please include our technical comments (attached) as well our comments below into the public record. Our serious concerns must be completely addressed before USEPA makes a permanent decision on the site remedy.

This Proposed Plan falls far too short of the what needs to be done to address human health and environmental threats from this over 500-acre, leaking toxic waste site. This site was the target of a scathing USEPA Inspector General Report which named it one of the most problematic sites in New Jersey history, and documents that USEPA and NJDEP did not ensure this Superfund site cleanup progressed at a timely pace, along with numerous other failures. The USEPA cleanup does not address deficiencies found in this audit. The report can be found here: <http://www.epa.gov/oig/reports/2008/20080602-08-P-0169.pdf>.

Multiple regulatory oversight remediation failures have resulted in the carcinogen benzene being discharged at 20,000 times the allowable standard into the Raritan River. In addition, when the site cleanup was halted after the initial failed Record of Decision, the public was misled into agreeing to the delay so USEPA and the responsible party could essentially come up with an effective remedy.

Now, after almost a decade of mismanagement, USEPA approved the billion dollar, international pharmaceutical giant Pfizer's prophylactic cleanup plan, which is incomplete and not in the best interest of the public's health and safety. Choosing the least effective cleanup plan that will leave leaking toxic chemical poisons behind by covering it, will only pass it down to become problems for our children. We are also concerned that discussions with the public did not reflect the past failed remediation decisions and actions that have resulted in human health and environmental exposures that continue even today. USEPA has mishandled this site from the beginning, and it's time to put the residents first.

In order to protect human health and the environment, USEPA must require Pfizer to remediate the site using a modified version of "Alternative 7," and not "Alternative 4A," as described in their 2012 Proposed Plan. Alternative 4A is one of the least costly for alternatives for Pfizer, and is only a quarter of the cost of a comprehensive cleanup. USEPA must go back and reevaluate their options and present the public with a more comprehensive, holistic, permanent solution that is protective of both human health and the environment.

*The selected remedy, Alternative 4A, will not be protective of human health and the environment for the following reasons:*

R2-0007875

Filling in a floodplain and capping the site is NOT a full or permanent remediation. The Proposed Plan Alternative 4A proposes to cover the contamination with a combination of soil and engineering caps, which will take 10 years to implement. In addition, filling of a flood zone is subject to both New Jersey and Federal regulations. These regulations specify that there can be no net fill in a flood zone. Pfizer claims there will be no net filling in their capping plan, yet that is not true as the entire area, not just the fenced site, falls within a high-risk floodplain.

The most recent flood Hurricane Irene showed the site can hold at least 300,000,000 gallons of water. Placing two feet of fill on the site will reduce its flood storage capacity and will likely exacerbate the regional flooding issues in the area. The USEPA claims that this cap will be built to withstand a 500-year flood. This area floods regularly just with normal amounts of rain, and this cap would likely fail after every major rain event. Also, the effect of solidifying parts of the site and capping in a floodplain this enormous is not a permanent long-term solution - it's simply an engineering control. **All caps fail, it's just a matter of time.**  
**This proposed cap would take 10 years to build and 10 minutes to fail.**

In addition, capping this site violates USEPA's preference for permanent, cost effective, and protective cleanups. The proposed alternative fails to mandate compliance with Clean Water Act (CWA) Applicable or Relevant and Appropriate Requirements (ARARs) in the form of NJ Surface Water Quality Standards (SWQS) and New Jersey Pollutant Discharge Elimination System (NJPDES) permit requirements, in this case, what are known as Water Quality Based Effluent Limits (WQBEL's). The consultants for the water authority have also raised this issue, as well as the failure of the NJDEP NJPDES General Permit (GP) to include effluent limitations for all parameters discharged, as required by NJ SWQS. Therefore, any discharge to the river must comply with NJ SWQS and NJPDES WQBEL effluent limits (at point of discharge, not mixing zone).

We join the thousands who signed and submitted comments in voicing our serious concerns that Alternative 4A will drastically expand serious toxic flooding for thousands of neighboring families that are already plagued by heavy flood waters. The plan that USEPA must approve should permanently cleanup this site as well as assuring it will not exacerbate flooding in the Raritan River.

The United States Army Corps of Engineers is actively working on flood control projects in the Raritan River Watershed to help alleviate flooding in Manville, Bound Brook, Bridgewater and all surrounding towns. The site is a natural fit for a regional flood control project and can be an environmental benefit for the region if the proper remedy is selected.

The Proposed Plan outlines more applicable cleanup alternatives than Alternative 4A suggests, including Low Temperature Thermal Desorption (LTTD) (Alternative 7). This method was successfully used at the Cornell-Dubilier Superfund Site in South Plainfield, New Jersey to remediate soils with high levels of PCBs and heavy metals without disturbing the surrounding community. The cost estimates for the alternatives appear to be inflated and falsely position the capping alternative to be the most cost effective, and there must be a detailed analysis for the cost of a low temperature thermal desorption unit. In addition to USEPA evaluating LTTD, they should also consider this method in combination with other techniques, such as off-site disposal at their existing RCRA facility across the street, and other innovative technologies, such as bio remediation with specialized microorganisms. In addition, USEPA and Pfizer should take into consideration using the active rail line that runs through the site to properly dispose of this material. USEPA must choose the most protective remedy now and implement it in an acceptable time frame. Capping a site should not take 10 years to complete, which means the time frames for other alternatives are probably exaggerated as well.



**USEPA and Pfizer must do comprehensive treatability studies on the various waste streams before, not after, they decide on which technologies are best suited to clean up this site.** A comprehensive study and bench scale testing using best available cleanup technologies to determine which technologies must be used for the various wastes present on site must be completed prior to selecting a remedy.

With dozens of permanent environmental cleanup options, which are being used throughout the United States, why is the lowest cost and least protective technology being offered as the only practical and cost effective solution? We support the plans put forth by the nationally recognized environmental expert, Chapin Engineering, who recommends using LTTD and other advanced technologies as appropriate remedies for the various toxic and other wastes disposed of on site.

This year, Pfizer will spend upwards of \$8 billion on research. With some of the finest minds in the world and a CEO with a chemical engineering degree, why is Pfizer using cheap and outdated technology to cleanup this site? We need USEPA to protect public health and the environment, not the profits of Pfizer Executives Ian Read, Sally Susman, and Frank D'Amelio!

This site cleanup has been languishing for over two decades, and it is time for USEPA to take serious action. In order to protect the health and safety of families that utilize this area for recreation, USEPA must require a proper cleanup, such as a modified version of Alternative 7 in the Proposed Plan. This current plan for filling a toxic waste floodplain is unacceptable and threatens the Raritan River Estuary and the millions of New Jersey residents who live near or downstream from the site. The public and the environment must be considered first and foremost and this cleanup proposal will do nothing more than leave problems for our future generations, while putting the community and Raritan River in perpetual risk from this site.

Thank you for your consideration and timely assistance on this important environmental issue. If you have any questions, Robert Spiegel will serve as the point of contact, and can be reached directly at 732-321-1300 or via email at [rspiegel@edisonwetlands.org](mailto:rspiegel@edisonwetlands.org).

Respectfully,

**Robert Spiegel**  
Executive Director  
Edison Wetlands Association

**Jeff Tittel**  
Director  
NJ Sierra Club

**Cindy Zipf**  
Executive Director  
Clean Ocean Action

**Bill Schultz**  
Raritan Riverkeeper

**Bill Wolfe**  
Director  
NJ Public Employees for Environmental Responsibility

## CHAPIN ENGINEERING

A PROFESSIONAL CORPORATION

"Experience Matters"

R.W. Chapin, M.S., P.E., President

Board Certified Environmental Engineer

### Memorandum

TO: Robert Spiegel, Executive Director, Edison Wetlands Association  
FROM: R.W. Chapin, P.E.  
DATE: May 8, 2012  
RE: Review & Comments on the USEPA's Proposed Plan for the  
Wyeth Holdings Corporation American Cyanamid Superfund Site,  
Township of Bridgewater, New Jersey

In accordance with Edison Wetland Association's (EWA) request, Chapin Engineering has reviewed the referenced Proposed Plan (PP) for the Wyeth Holdings Corporation (which is wholly owned by Pfizer) American Cyanamid Superfund site (the "Site"). Comments are provided below after a synopsis of the United States Environmental Protection Agency's (USEPA's) selected remedy for the Site.

Comments are provided by specific topics and each should be satisfactorily addressed prior to issuing a Record of Decision for the Site.

### Proposed Plan Synopsis

The PP is defined in the Site's Feasibility Study (FS) as Alternative 4A, and this "preferred alternative" is described by the USEPA as having the following key elements: Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Ground Water. As summarized by the USEPA, the remedial methods to address soil and groundwater contamination at the site include these remedial actions:

- Excavation of contaminated materials from outside the Site's embankment and placing these materials inside the embankment.
- After movement of materials inside the embankment, a two (2) feet thick soil cap/cover will be placed over the entire area within the embankment. This cover will include a vapor barrier over specific areas where vapor control is needed.
- Specific areas of within the embankment that meet the definition of Principal Threat Wastes (PTW) would be treated via "...in-situ solidification/stabilization or a similar physical process as determined to be appropriate during the conceptual design phase..." Impoundments 3, 4 & 5, as well as areas outside the embankment and soils proximate to those impoundments, are indicated as areas where Principal Threat Wastes [PWT] "...may to present..."
- Contaminated bedrock groundwater has been recovered and treated for a considerable period. The PP will upgrade this system to enhance control and recovery of this groundwater. In addition, an overburden groundwater collection and treatment system will be implemented.
- The PP indicates the following costs (rounded to nearest \$10,000) for the preferred alternative 4A. Implementation for the soils work is given as 10 years, while the groundwater remediation is stated as requiring 30 years.
  - Capital Cost: \$154,000,000.
  - Annual O&M: \$50,000,000.
  - Total Present Worth: \$204,000,000.

Memorandum

DATE: May 8, 2012

RE: Review & Comments on the USEPA's Proposed Plan for the  
Wyeth Holdings Corporation American Cyanamid Superfund Site,  
Township of Bridgewater, New Jersey

General Comments

- The PP will not remediate the Site to an unrestricted use and will rely on **engineering controls** (i.e., a capping and cover system) to control exposure to the wastes left on the Site. These controls will require **maintenance in perpetuity** or until that point in the future when the wastes are removed or no longer pose a threat to groundwater or the environment. **This fact is not explicitly stated in the PP and must be in order that all stakeholders understand that the Site, which is currently a waste disposal site, will remain as a waste disposal site.** Any future use will be controlled by the fact that it must set, as its first priority, maintenance of the site as a secure waste disposal area. It also must be explicitly stated that any alteration or modification to these engineering control requires prior approval by the USEPA.
- **The PP will require recording of a notice in the deed(s)** for the property the presence of the wastes left behind and restrictions of future use that will assure the engineering controls are maintained in perpetuity. **This fact is not explicitly stated in the PP and must be so all present and future stakeholders know there are specific restrictions on the Site that will run with the land in perpetuity.**
- There is a permitted, hazardous waste disposal facility on the Site, known as Impoundment 8. This was designed and constructed to receive wastes from the other areas of the Site. It accepted wastes from the Site during prior remedial actions. The PP makes **little or no use of this facility**, which is currently well below its permitted capacity. This creates a critical question: Why isn't it being used? Use of this facility could reduce the amounts of wastes left on the Main Plant, thus reducing restricted area of the Site and likely facilitating its re-use. **USEPA must explain why Impoundment 8 is not being used by the PP for cleanup of the Site, when that is its purpose.**
- Typically Principal Threat (PTW) waste (i.e. impacted soils) are removed or treated at the site. The volume of PT materials to be consolidated is around 145,000CY. This would represent about \$50 million to remove and treat/dispose of the materials offsite. This represents represent a 25% increase in the capital cost (minus the cost of on-site stabilization which is not treatment but rather containment). Removal of the most hazardous materials, that are mobile, should be considered in the final remedy selection.
- **The PP has a ten year time line for completion of its proposed soil remediation, but the basis for this extended period is provided. A detailed schedule for this project and justification for the stated time must be provided before selection.**
- **Burrowing animals may pierce Site capping and bring wastes to the surface. The PP must assure exposure via this mechanism will not happen.**

Impacts of the PP on Flooding

- **The Site is located directly adjacent to the Raritan River.** Historically, an earthen embankment was constructed to control of flooding of the plant site. The FS, hence the PP, dissect the site into two basic areas: the "Main Plant", which is the area inside the historic embankment; and "Flood Plain", which is the area between the embankment and the Raritan River.

Memorandum

DATE: May 8, 2012

RE: Review & Comments on Proposed Plan & Feasibility Study for the  
American Cyanamid Superfund Site, Bridgewater, New Jersey

- The dissection of the site into these pieces and its basis is not provided by either the PP or the FS. This artificial dissection is believed as being simply carried forward from past reports concerning the site and its contamination, without being questioned. The earthen embankment is believed to have been historically constructed to shield the Site's from flooding by the Raritan River.
- As shown on the attached FEMA flood map, **the entire site resides within the flood plain of the 1% probability flooding event.** The problem of Site flooding is clearly evidenced by the actions of Hurricane Irene in August 2011, when the entire site was completely submerged and USEPA estimated it held 300,000,000 gallons of flood water. What is the design of the surface cap that may be located in floodway scour conditions? No details are provided. Does the flooding of the site eliminate groundwater containment and for how long? Does the presence of standing water over the capped areas provide a hydraulic head to the movement of impacted waters?
- Consequently, the dissection of the site by the FS and, consequently, the PP is not appropriate. The remedy that is implemented for this site **MUST** view the entire site as residing in the floodplain and must be designed and implemented with, at a minimum, zero impacts upon flooding of the Raritan River.
- Table 16 of the FS presents "ARAR's, Criteria and Guidance" for evaluating and selecting a remedy. Floodplain Management is identified as a "Standard Requirement" to be considered; specifically Executive Order #11988 "Requires evaluations of alternatives that impact floodplains, and a floodplain value assessment." No discussion has been provided on how this the floodplain ARAR will be met or if not met what will be the potential impact. This requirement was only partially fulfilled.
- Review of the FS found the excavations activities that would occur outside the earthen embankment, and in the floodway, had been evaluated relative to floodplain impacts and permits for those activities had been granted by the New Jersey Department of Environmental Protection (NJDEP). **Why was filling of the flood plain in to Main Plant area ignored?**
- Based on the volumes utilized in the cost estimate for the PP (Alternative 4A), approximately 600,000 cubic yards of fill will placed inside the earthen embankment by waste relocations and for the cap/cover. This represents a significant filling of the floodplain.
- Placement of fill in a floodplain requires a permit under New Jersey's Flood Hazard regulations. The FS states [see page 94] "A permit for placement of the fill for capping within a flood plain has already been obtained from NJDEP". The NJDEP was contacted and they supplied copies of the two permits (noted above) they apparently had issued [copies attached]. Both of these permits are for excavation of materials outside the embankment and their placement inside the embankment. To date **NJDEP has provided no permit for the importation of 600,000 cubic yards of fill.** Consequently, the inclusion of the statement in the FS implying all required permits were in hand requires an explanation and correction.

Memorandum

DATE: May 8, 2012

RE: Review & Comments on Proposed Plan & Feasibility Study for the  
American Cyanamid Superfund Site, Bridgewater, New Jersey

- The appropriate means to evaluate the impact of the PP's floodplain filling is use of the HEC-RES model, which is a standard tool used by the U.S. Army Corps of Engineers to evaluate the impacts of changes on a river basin's flooding. Given the history of flooding in the Raritan and the major flood control project that is on-going the Bound Brook, we suspect the Raritan Basin has an existing model that could be utilized. This question must be answered prior to implementation of the remedy for the site: **What is the impact, both upstream and downstream, of eliminating 600,000 cubic yards of storage by filling of the American Cyanamid site?**
- If flooding is increased as the result of the PP, the impacted residents can be expected to seek compensation. Consequently, a comprehensive assessment of the floodplain impacts must be modelled to assure the selected remedy does not exacerbate flooding in the Raritan River basin.
- **Complete reliance of capping and solidification of the on-site wastes is not appropriate methods of cleanup due to this site location within the high risk flood plain. Wastes must be removed to the maximum extent practical.**

Principal Threat Wastes

- Principal Threat Wastes (PTW) are sources materials considered to be highly toxic or highly mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur.
- The materials in impoundments 3, 4 & 5 are represented by the PP as "...may be..." Principal Threat Wastes in the text. By this juncture in this project (25+years), the characteristics of the Site's wastes should be known and which wastes are PTW should be known. **How can a remedy be selected when the waste types are not ascertained?**
- The PP relies solely on containment (i.e. solidification/stabilization) to manage the PTW, yet no testing of the process to be used on the specific PTW contained in Impoundments 3, 4 & 5 were reported in the FS. The best description of the Site's wastes is "highly heterogeneous", so past uses of solidification/stabilization (S/S) at the Site must be viewed with a jaundiced eye. The PP pushes the testing of these specific materials off until the design phase, but nothing is provided to address the question: What happens if S/S doesn't work? A treatability study of these wastes is required now, before remedy selection. A Feasibility Study means to evaluate whether or not an alternative will work. And the current FS does not adequately address application of S/S to Impoundments 3, 4 & 5.
- Is the PTW to be stabilized or solidified? There is a big difference given the mobility of the PTW material. The PP should indicate which is being done and technical details such as percent cement and strength of solidified mass to be achieved. Merely stabilizing the PTW does not limit the mobility.
- **The ability of the PP's "Preferred Alternative" to work must be ascertained before it is selected. In 1998, the USEPA issued a ROD for these same impoundments. That selected remedy was found to be wrong after subsequent work during the design phase. We recommend a very hard re-evaluation of the PP by USEPA so it can assure the public that history will not repeat itself.**

Memorandum

DATE: May 8, 2012

RE: Review & Comments on Proposed Plan & Feasibility Study for the  
American Cyanamid Superfund Site, Bridgewater, New Jersey

- Justification for only containing PTW on-site and not providing treatment or offsite removal is, apparently, concerns vapor emissions during excavation. The proposed S/S will have vapor emissions that must be controlled. No quantitative evaluation of the emissions from these options was provided to the FS or discussed in the PP. What is the amount of VOC release with the proposed onsite actions versus an off-site removal action? Control of vapors during remedial actions via excavation within a temporary structure and control and treatment of emissions from that structure is a commonly employed remedial technology.
- The PP takes credit for toxicity reduction by S/S in its alternative evaluation. How does this alternative reduce toxins?
- S/S activities drive volatile organics from the wastes that are subjected to this process due to physical mixing and heat generation. Consequently, S/S must be conducted under the same controls as excavation. The selection of treatment only requires explanation as the benefits of leaving these wastes at the Site are questionable. PTW should be removed for off-site disposal.
- For other Superfund sites in Region 2, the PTW has been removed from a site to the extent practicable, and then remaining site wastes are capped/contained etc. The following sites used this approach Cornell-Dubilier, Chemical Insecticide, Horseshoe Road, Vestron/Velsicol, White Chemical, Bayonne Barrel and Drum. USEPA must take this same approach for this Site.

Technologies that must be considered

- The PP essentially transforms the entire Site into a long term waste storage facility. Efforts to reduce the mass of wastes that will be entombed at the Site are not incorporated into the PP.
- The 1998 Record of Decision (EPA/ROD/R02-98/500 1998) for OU3 includes discussion of a "...stringy, tacky tar..." from Impoundments 4 & 5 that was successfully treated and removed from the Site under a "Fuel Blending/Recycling" program. The characteristics of those tars appear similar to the tars and organic wastes that the PP intends to address by stabilization/solidification. The PP is selecting a containment technology rather than an option that could destroy the wastes.
- The use of the previously successful fuel blending/recycling approach to management of the Site's complex organic wastes was not considered by FS. An explanation as to why a treatment methodology known to be successful with this Site's wastes was apparently not considered is required provided.
- **Off-site incineration of the organic wastes was not given serious consideration in the FS. This approach can assure those wastes will be addressed only one time. S/S is burdened with the requirement for perpetual care and significant long term O&M costs.**
- The Site has ready access to a major freight rail line and rail car transport to an off-site, permitted hazardous waste incinerator (e.g., Waste Management in Emille, AL) is an alternative that requires detailed consideration. Yes, it could have initially more capital costs, but it would also have no long term O&M for those wastes.
- Technologies that destroy the wastes today rather than leave them for a future generation must be incorporated into the PP for the Site.

Memorandum

DATE: May 8, 2012

RE: Review & Comments on Proposed Plan & Feasibility Study for the American Cyanamid Superfund Site, Bridgewater, New Jersey

- The current PP essentially relies on a single technology that leaves the Site as a waste disposal area in perpetuity. Utilizing technologies that would destroy, rather than entomb wastes, can have the long term benefit of reducing the area of the site left as disposal and enhancing future reuse options. The PP should incorporate a combination of technologies.
- Low Temperature Thermal Desorption (LTTD) was part of alternative 7 as treatment for PTW requiring vapor control. LTTD is known to be effective for removing volatile organics; yet, was rejected under Long-Term Effectiveness because it "...has not demonstrated effectiveness for the full range of contaminants..." The LTTD did not target the "full range of contaminants", so an explanation is required. In addition, LTTD should be considered as it could reduce the mass of wastes entombed and area dedicated to waste disposal.

Community Impacts not Addressed

- The PP represents importation of approximately 960,000 tons of fill materials [computed using the FS unit weight of 1.6 tons per cubic yard]. This represents 48,000 truckloads [at 20 tons per load] into the Site, or 96,000 truck movements. There is no discussion at all concerning this activity and its impacts on Bridgewater and the neighboring communities. We note there is limited access and the closeness of residential neighborhoods. This is a significant short terms effects factor that has not been addressed by the PP or the FS. Materials transport into the Site must be fully evaluated and to date it has not.
- The Site has ready access to active freight trackage, yet there is no consideration given in the FS for any use of rail for transport of materials into the site (or removal of wastes from the Site). Rail transport could reduce the short term impacts and must be considered. In addition, use of rail for off-site rail transport will also minimize the short term impacts of the cleanup.

Incomplete Cost Assessment

- The cost analysis provides a total annual operation and maintenance (O&M) cost for the groundwater treatment systems and the soil and multilayer caps for a 30 year period, but does not incorporate any costs for O&M of the capping systems beyond that point in time. The PP would create a waste entombment that requires perpetual O&M by Pfizer, the Responsible Party. The costs should be recast to reflect the Responsible Party's true obligation for the waste tomb that will be created by the PP.
- From a cost prospective, any projects capital costs (which can be defined with a good degree of certainty) and the long term O&M costs (which are projected and have a lesser degree of certainty) should be balanced. The classical choice is between spending today (capital costs) vs. spending tomorrow (O&M). For the 30 year period assumed by the PP, the total O&M is less than the projected capital costs; however, this evaluation does not incorporate O&M for the entombed wastes beyond 30 years, and those costs should be considered in the evaluation of the PP.
- Pfizer's financial liability for the Site extends well beyond the 30 year cost estimate provided with the PP. What mechanism will USEPA use to assure that Pfizer continues to fund the project given the possibility they may no longer exist in the future as a company with assets?

**THOMAS J. GERMINARIO**

Attorney-at-Law  
154 Route 206  
Chester, New Jersey 07930

TELEPHONE  
(908) 879-0091

FACSIMILE  
(908) 879-0079

March 6, 2012

VIA E-MAIL & REGULAR MAIL

Joseph Battipaglia  
Remedial Project Manager  
U.S. EPA  
209 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

**Re: Site-Wide Feasibility Study and Proposed Remedial Action Plan  
American Cyanamid Superfund Site**

Dear Mr. Battipaglia:

On behalf of CRISIS, I have reviewed the Site-Wide Feasibility Study (the "SWFS") and the Proposed Remedial Action Plan for the American Cyanamid Superfund Site in Bridgewater, New Jersey, both dated February 2012, and this letter contains my analysis of these documents.

The SWFS addresses the remediation of Impoundments 3, 4, 5, 13, 17 and 24, as well as site-wide soils and groundwater. A separate Focused Feasibility Study is being prepared to address Impoundments 1 and 2. Impoundments 3, 4 and 5 are located in the Main Plant area within the flood control dike, while Impoundments 13, 17 and 24 are located in the floodplain between Cuckhold's Brook and the Raritan River. Impoundments 3, 4 and 5 were used for storage of organic tars and sludges from production processes, while Impoundments 13, 17 and 24 primarily comprise wastewater treatment sludges.

Consequently, Impoundments 3, 4 and 5 contain relatively high levels of volatile and semi-volatile organic contaminants (VOCs and SVOCs), with mean concentrations in the range of  $10^3$  to  $10^4$  ppb (mg/kg). Contaminants of concern in these impoundments include benzene, toluene, xylene, and naphthalene. Impoundments 13, 17 and 24, on the other hand, have mean concentrations of VOCs and SVOC mostly below  $10^2$  ppb. The Impoundment 3, 4 and 5 wastes comprise two layers: an upper tar-like layer, which becomes viscous at higher temperatures, and low permeability sludge layer. Due to their high toxicity and mobility, the upper 4-foot layers of Impoundments 3, 4 and 5 are classified as principal threat wastes. The potential of the lower sludge layers of these impoundments

R2-0007884



to be considered principal threat wastes will be investigated during the remedial design phase (SWFS, Vol. 1, pp. 30-31).

In addition to being highly toxic and mobile, the Impoundment 3, 4 and 5 wastes are quite heterogeneous – meaning that the wastes exhibit a wide range of variability as to the types and concentrations of contaminants. As noted in the SWFS (p. 16), this heterogeneity makes these wastes very difficult to handle and treat. Based on previous experience with similarly heterogeneous wastes (Impoundments 14 and 20), *ex-situ* treatment of this type of waste is apt to involve considerable uncertainties, extended timeframe and greater potential for fugitive air emissions. Therefore, it is my opinion that *in-situ* solidification/stabilization (s/s) to reduce contaminant mobility is potentially the best remedy for Impoundments 3, 4 and 5. In order to optimize the efficiency of the s/s process, I recommend that bench-scale testing be conducted during the remedial design phase to determine the most effective combination of amendments, stabilizing agents and geogrids.

Regarding Impoundments 13, 17 and 24, the material should be classified during the remedial design phase in accordance with the three classifications for site-wide soils, namely, those requiring: (i) direct contact control, (ii) vapor control, or (iii) movement control. The material thus classified would be relocated to the areas of the Main Plant designed for the appropriate level of control. Principal threat wastes, if any, located in these impoundments should be removed and consolidated in Impoundments 3, 4 and 5 for *in-situ* s/s treatment. The same should apply to any principal threat wastes, including tar blooms, located outside the impoundments.

With respect to site-wide groundwater, the SWFS (p. 67) outlines a series of recovery systems (trenches, wells and/or containment walls) to intercept overburden groundwater before it gets to the Raritan River and/or Cuckhold's Brook. It also addresses improvements in the bedrock groundwater collection system (Appendix H) and extension of bedrock pumping to the Lagoon 7 Area.

While the SWFS (p. 87) defers the determination of final disposition of the collected and treated groundwater to the remedial design phase, it identifies three potential options:

- Construction of an on-site water treatment facility with direct discharge to either surface water or groundwater under the requirements of an NJPDES permit
- Construction of an on-site pre-treatment system with discharge to SRVSA
- Straight discharge to SRVSA

Since the SRVSA currently does not monitor for VOCs and SVOCs in its effluent and has no discharge limits for these contaminants, the options involving SRVSA should be taken off the table until such monitoring and limits are in place, and the capability of achieving these limits has been demonstrated. If interim reliance on the SRVSA is necessary while on-site treatment alternatives are being developed, as indicated in the SWFS (p. 49), appropriate VOC/SVOC monitoring and discharge requirements should be imposed as soon as possible. These stipulations should be included in the Record of Decision (ROD) for this phase of the site remediation.

Joseph Battipaglia  
March 6, 2012  
Page 3

Based on the foregoing considerations, Alternatives 4A and 5 are worthy of further consideration. Alternatives 7 and 11 rely on untested treatment techniques and have extended implementation periods upwards of 20 years. Alternative 5 differs from 4A principally by extending *in situ* s/s treatment beyond Impoundments 3, 4 and 5, and materials consolidated therein, to encompass all areas of the Main Plant subject to vapor and/or movement control. Alternative 4A addresses those areas with multi-layered caps. But the extension of s/s treatment in Alternative 5 to a much larger area and variety of contaminants raises issues of effectiveness and doubles the implementation timeframe to 20 years, as compared to 10 years for Alternative 4A.

Since the incremental environmental benefits of Alternative 5 as compared to 4A appear speculative, at best, they do not justify the very long implementation period required. Consequently, the bottom-line assessment of 4A as the preferred alternative appears reasonable and justified, subject to the recommendations made herein and clarification of the groundwater treatment issues as discussed above. In particular, CRISIS should request that the following issues be addressed in the ROD:

- Long-term groundwater treatment should rely on an on-site system designed specifically for the site's contaminants, NOT on the SRVSA's municipal wastewater treatment system.
- Interim groundwater treatment at the SRVSA should be subject to enforceable effluent limitations for VOCs And SVOCs.
- Materials in the floodplain requiring direct contact, vapor or movement control should be relocated to the Main Plant area and covered by the appropriate engineered multi-layered cap.
- All principal threat wastes should be consolidated in Impoundments 3,4 and 5 for *in-situ* s/s treatment.
- Bench-scale testing should be conducted during the remedial design phase to determine the most effective combination of amendments, stabilizing agents and geogrids to be used in the *in-situ* s/s process.

CRISIS thanks the U.S. EPA for its consideration of our recommendations regarding the Proposed Remedial Action Plan and the Site-Wide Feasibility Study.

Very truly yours,

*Thomas J. Germinario*

THOMAS J. GERMINARIO

cc: Walt Sodie, CRISIS

R2-0007886



public comments  
Kelly A. Kemmerle to: Joseph Battipaglia

03/19/2012 10:32 AM

---

History: This message has been forwarded.

1 attachment



american cyanamid testimony.pdf

Hi Joseph,

My name is Kelly Kemmerle and I have attached my public testimony for the American Cyanamid Superfund Site. I attended the public meeting in Bridgewater but did not get a chance to speak. I really appreciate you taking the time to read my comments on the Proposed Plan. Please feel free to contact me at any time if you have any questions.

Thank you so much,  
Kelly Kemmerle

R2-0007887



**Kelly Kemmerle, Conservation Intern  
Edison Wetlands Association  
Statement to EPA at Public Hearing  
March 8, 2012**

My name is Kelly Kemmerle and I am a senior at Rutgers University studying in Environmental Policy and I am also a Conservation Intern for the Edison Wetlands Association and I am writing today to voice my opinion about the Proposed Plan to address the American Cyanamid Superfund Site. I attended the public meeting but I did not get a chance to speak. I have faith that both written and spoken testimonies will be considered during the decision making process.

After reviewing the Proposed Plan by the EPA & Pfizer I have some concerns. Option 4A of the plan does not fully address the problems at the site. Any additional impervious surface on the site will increase flooding in surrounding towns. I have spoken with many residents in Bound Brook and Bridgewater who are completely fed up with the flooding. If you talk to mostly anyone from these towns they all have flood stories. I spoke with one woman in Bound Brook who is actually moving out of the community because the flooding is so bad. She has been trying to leave the neighborhood since the Hurricane Irene floods but was unable to get out of her lease and is finally leaving next month. She was extremely frustrated with the community. These people do not need anything that could possibly make the flooding situation worse.

Pfizer should have to implement the most feasible option that is best for the community, which is Option 7 because it actually cleans up the site. Public health & what is best for the community should be the number one priority of this plan. Engineered designs can not last forever and this cap will eventually wear down and fail. When this happens, what will happen to future generations? It would be extremely wasteful to have to go back and re visit the site in the future when we could just clean it up right now. Option 7 is the best choice for the people of these towns and their best interest should be the number one priority.

Thank you for listening to my concerns and I appreciate that the period for public comment has been extended since I did not get to speak at the meeting. Thanks again for your time.



# SOMERSET COUNTY BUSINESS PARTNERSHIP

LEADERSHIP • OPPORTUNITY • RESULTS



## EPA Hearing on American Cyanamid Superfund Site

Good evening. My name is Michael Kerwin and I am the President/CEO of the Somerset County Business Partnership. The Business Partnership serves as Somerset County's regional Chamber of Commerce and we also partner with the Somerset County Freeholders to provide economic development services to our community.

The mission of the Business Partnership is to lead the business community to a prosperous and sustainable future. We take the sustainability part of our mission very seriously. The Business Partnership supports sustainable economic growth that creates a foundation for job creation and economic prosperity. Business decisions need to be based on a careful balance of the triple bottom line: environment, economy and community. Decisions must be based on reason, not emotion.

We have a Sustainable Somerset committee, under the leadership of Chairman Ed Seliga, that meets on a regular basis and delivers a program of work that benefits our members. Examples of these programs include the creation of a green design toolkit for the design and construction of buildings in the public sector. This toolkit was the first of its kind in New Jersey and has been followed in the design of many new facilities. The Business Partnership works closely with the Somerset County Energy Council to support energy efficient programs in Somerset County. We also work closely with the US Green Building Council, New Jersey chapter, to provide training in LEED accreditation.

The Business Partnership's Sustainable Somerset reviewed the proposed plan to clean up the American Cyanamid site on ~~February 14~~ <sup>Jan 10</sup>, 2012. The committee offers the following comments:

- We appreciate and support Pfizer's efforts to, at long last, clean up this site. The Business Partnership, and our predecessor organization, has been supporting the cleanup of the Cyanamid for over 20 years. We have seen more action towards achieving the goal of cleaning up the site since Pfizer assumed control than there was in the prior decades. We want to see this momentum continue. We see a significant risk to the community if the project is further delayed. The site has been investigated since 1981. It is time for implementation.
- The Somerset County Business Partnership supports the implementation of remedial alternative 4A as summarized in the EDA report. While we do not present ourselves as experts in the area of environmental cleanup, the proposed plan appears to us as a reasonable approach to cleaning up the site. We note that no matter what option is considered, the site will require ongoing remediation for the foreseeable future.

Therefore, we are fortunate that we have a company with the resources of Pfizer to post a guaranty that this ongoing remediation will occur. We do not see the environmental benefit of the more expensive options, but do see the considerable risk to the cleanup workers and the neighboring community if the contaminated soil had to be exposed to the environment and transported off site.

- We recognize that the proposed plan is still conceptual and that, if approved, many details will need to be resolved and addressed to make sure that the community is protected. The Business Partnership supports the continued involvement of CRISIS as the community watchdog to make sure that their concerns about the implementation of the alternative 4A plan are addressed.
- While our primary concern is to see that the American Cyanamid site proceeds to cleanup within a reasonable time in order to protect the community, we also support the plans to give the community greater access to the Raritan River. In addition, there is a portion of the site adjacent to the Bridgewater train station that would provide an attractive site for redevelopment. We support the plan to open this area for smart development at some time in the future.



Comments to EPA proposal for American Cyanamid site

to:

Joseph Battipaglia

04/06/2012 12:11 PM

Hide Details

From:

To: Joseph Battipaglia/R2/USEPA/US@EPA

Hello,

Below are my comments to the proposal

I'm not a scientist or an expert on toxic chemicals and how to treat their misuse, but as a member of the Bridgewater Economic Committee I did attend a presentation by the Pfizer team where they explained the EPA proposal and how Pfizer would implement it as well as manage the site in the future. I also toured the American Cyanamid site.

All I can say is that Pfizer appears to be anxious to spend a lot of money to make this site so it is a "non-issue" environmentally, and a non-issue for their company. At the same time they propose to make much of the site suitable for "open space" parklands as well as a small portion which could be developed for commercial use.

I thought it was particularly important that Pfizer did not envision turning the property over to some other entity by "giving it" to the town or to the county. Rather they want to continue to own it and keep it within their control in order to personally make certain the standards agreed upon will continue to be met for the foreseeable future.

This problem has polluted our river and our land, especially the wetlands feeding into the river and has been negatively impacting the environment for way too long. There is a plan that will get the job done, sooner than later.

For these reasons I and my wife support the plan.

[REDACTED]





**Sustainable Somerset Committee  
Comments Regarding American Cyanamid Superfund Site**

As presented by Edward M. Seliga, Committee Chairman and SCBP Board Member

May 14, 2012

ES  
U.S. EPA – Region 2  
ATTN: Joseph Battipaglia  
290 Broadway, 19th Floor  
New York, NY 10007-1866  
([battipaglia.joseph@epa.gov](mailto:battipaglia.joseph@epa.gov))

The Sustainable Somerset Committee of the Somerset County Business Partnership and its predecessor, the EHS Committee, have been involved with the assessment and proposed remediation of this property for approximately 20 years. Our committee's participation included public meetings and site tours of the property in the 1992 timeframe, literally 20 years ago.

Our committee strongly supports **Remedial Alternative 4A** as the appropriate action plan for clean-up and reuse of this site. We would summarize our position as "Clean it up, put it to use."

We are confident that Alternative 4A is protective of human health and protective of the environment as well. While the expenditure of funds is certainly substantial, we appreciate that this approach is cost-effective. Containing the remaining contaminated materials on-site and isolating them from contact with the public and with the environment is the most appropriate strategy. We would prefer that the remedial process not create risks of additional exposures through large-scale off-site transport of contaminated materials.

We emphasize that elimination of contamination of the Raritan River must remain a top priority throughout the management of the property. We support the role of the community group CRISIS as the best representative of local community interests.

Additionally, we would prefer that some portions of the property be designated for return to beneficial use as soon as possible. While this is obviously not possible in the near term for the site as a whole, we remain optimistic that a phased approach would allow partial reuse (for recreational or business purposes) within the not too distant future.



American Cyanamid Superfund Site - SCBP Sustainable Somerset Comments

Ed Seliga

to:

Joseph Battipaglia

05/14/2012 06:32 PM

Cc:

"Mike Kerwin (mkerwin@scbp.org)", "Michael Taylor (taylor@vitanuova.net)"

Hide Details

From: Ed Seliga <ed@advancedsolarproducts.com>

To: Joseph Battipaglia/R2/USEPA/US@EPA

Cc: "Mike Kerwin (mkerwin@scbp.org)" <mkerwin@scbp.org>, "Michael Taylor (taylor@vitanuova.net)" <taylor@vitanuova.net>

History: This message has been forwarded.

1 Attachment



SCBP Sustainable Somerset Comments - USEPA - American Cyanamid site.PDF

Dear Mr. Battipaglia:

I am attaching the comments of the Sustainable Somerset Committee of the Somerset County Business Partnership regarding the American Cyanamid Superfund Site in Bridgewater, NJ.

These comments reflect the statement I made at the March 8, 2012 public meeting in Bridgewater.

Please add my name to any public notification list for future meetings.

Thank you for your assistance with moving this project toward resolution.

Sincerely,

Edward M. Seliga  
Chairman, Sustainable Somerset Committee - SCBP  
Vice President / Chief Operating Officer  
***Advanced Solar Products, Inc.***  
270 South Main Street, Suite 203  
Flemington, NJ 08822  
(908) 751-5818  
(732) 672-7490 cell  
[www.advancedsolarproducts.com](http://www.advancedsolarproducts.com)

May 15, 2012

Joseph Battipaglia, Remedial Project Manager  
U.S. Environmental Protection Agency, Region 2  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

Dear Mr. Battipaglia,

The following are my comments on the Feasibility Study for the American Cyanamid Site in Somerset County, New Jersey. While this letter does not represent the Raritan River Collaborative, I write as the convenor of the effort, and through that role, with knowledge of the region, the need for remediation and long-term ecological reconstruction throughout the Raritan River region, and remediation on this site in particular.

The Raritan River Collaborative is an umbrella organization created through Rutgers University to bring concerned parties together for the health and welfare of the Raritan River, its tributaries and Raritan Bay. You will hear from various members of the group in response to the call for public comment. We collectively encourage EPA to continue to pay close attention to this site, to ensure there are no missteps in the remediation process and no additional damage to the resource during the remediation phase. Ideally, one would like to see all contaminants removed, but I recognize the need for progress and advocate an active continued dialogue with all interested parties to ensure that this site sees a continual reduction in contaminants and enjoys a restored ecosystem, which, in its current state so dramatically affects the quality of the Raritan River and impacts the viability of investment in the region. This remediation will go far in completing a larger social contract whereby the residents of this region will receive a clean site and safety from exposure into the future.

In my review of the Feasibility Study, I sought to see five concerns addressed:

- (1) Restoration of the natural areas to acceptable habitat condition
- (2) Curtailment of potential seepages or other flood-related distribution of contaminants from the site into the Raritan River
- (3) Curtailment of any aerosolized (vapor) impacts to the region
- (4) Long term remediation and aggressive protection of the river system from impounded or capped areas
- (5) Community compensation for losses of the resource over the years the site has not been remediated

Given the alternatives, there are clear benefits to several options, but clearly the most reasonable is Alternative 4A. And yet, there are other issues this Alternative did not clarify so I raise those concerns in hopes that USEPA will review with the remediating parties and arrive at an approach that maximizes the protection of the resource and the surrounding community and looks ahead to how this can remediation can maximize the protection and restoration goals outlined.

Shaw – 2 –

Point one (1) is acknowledged in the executive summary which states the “remedial program will also be designed to allow for concurrent planning and implementation of prospective Natural Resource Damage (NRD) restoration measures.”

Point two (2), regarding potential seepages is of particular concern as affects the use of slurry walls. It is key that there be a means of testing the efficacy of the slurry walls and reporting on that to the community along with other data on a quarterly basis. In addition, this can also affect the river directly and thus should require a report of quarterly tests of the water quality with satisfactory explanation for any levels that exceed the New Jersey Surface Water Quality Standards – and description of responses to arrest any discharges.

Point three (3) focuses on aerosolized/vapor exposure and it is essential that the vapors from all areas be measured *and reported to anyone interested* on a regular basis. It is recommended that the remediating party secure the contact information (email or other) for all interested parties, and that EPA describe a reasonable (quarterly) basis by which reports are provided.

Point four (4) addresses Long term remediation and aggressive protection of the river system from impounded or capped areas. I understand that the remediating party wishes to consider areas of the Site not yet remediated as a single operable unit (OU) – with the removal of Impoundments 1 and 2 from the Site-wide FS – to be addressed in a separate Focused feasibility study some time in the future.

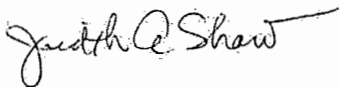
This (which largely includes “Group 3”) is of major concern and while the complexity of those impoundments are of such significance to require separate consideration, an articulated strategy to address those impoundments are critical to the comfort of the community – to the protection of the environment and needs to be outlined now.

Point five (5) is also addressed in the executive summary which states the “remedial program will also be designed to allow for concurrent planning and implementation of prospective Natural Resource Damage (NRD) restoration measures.” EPA needs to require that the remediating parties also provide quarterly reports on the progress of efforts to address this and how success is being measured.

In sum it is critical that the remediating parties proactively provide ongoing and timely reports to the community that demonstrate both the protective nature of the remediation process and actual sampling results as described above. This needs to be provided in “plain language” without undue ambiguity and with opportunities for further information clearly available.

I thank you for the opportunity to respond and look forward to clear and measurable progress on the restoration of this site and the value such restoration will add to the River.

Sincerely yours,



Judith A. Shaw, Ph.D., PP/AICP

Project Director  
The Sustainable Raritan River Initiative.



EPA Proposed Plan - American Cyanamid

bill\_wolfe

to:

Joseph Battipaglia

05/14/2012 01:11 PM

Hide Details

From: [REDACTED]

To: Joseph Battipaglia/R2/USEPA/US@EPA

U.S. EPA – Region 2  
ATTN: Joseph Battipaglia  
290 Broadway, 19th Floor  
New York, NY 10007-1866

Re: Comments on American Cyanamid - EPA Proposed Plan

Mr. Battipaglia:

Please accept the below comments on EPA's proposed cleanup plan for the American Cyanamid Superfund site.

Comments are submitted on behalf of NJ Public Employees for Environmental Responsibility (NJ PEER).

NJ PEER testified at the public hearing and joined other comments submitted by Edison Wetlands Association. However, we would like to make additional comments noted below.

### 1. Role of the National Remedy Review Board

We are concerned by the role of the Board, given their effective development of the preferred remedial alternative, as EPA states:

"On March 16, 2010, EPA presented the proposed alternatives of the Comprehensive Site-wide FS to EPA's National Remedy Review Board (NRRB) to evaluate the appropriate remedy for the remainder of the Site. As a result of this review, an additional alternative was developed in response to the NRRB's advisory recommendations. **The preferred remedy presented in this Proposed Plan reflects this new alternative and NRRB input.**" (@ page 7)

We ask that the Board's role be clarified in response to comments so that the public may better understand the scientific and regulatory bases for EPA's proposed plan.

Specifically, we'd like EPA to outline the membership, transparency, accountability, policies, and decision-making procedures of the Board.

How are Board reviews triggered? How are Board members selected? What are the qualifications and affiliations of Board members? What ethical standards govern the Board? How are Board recommendations developed? How does the Board deliberate? Does the Board conduct peer review? Is the Board subject to the Federal Advisory Committee Act?

How could the Board first engage on March 16, 2010 and develop the selected alternative proposed on February 2012, after EPA and NJ DEP have been involved at the site for almost 30 years? Do Board experts know something EPA Region 2 staff do not? Are Board recommendations subject to the same scientific and regulatory standards that EPA Region 2 are? What explains the Board's deviation from EPA R2?

## **2. Clean Water Act compliance and ARAR issues**

Superfund mandates the consideration of ARAR's and compliance with the Clean Water Act.

The proposed alternative fails to mandate compliance with all applicable requirements for all discharges from the site (and resulting from the proposed plan) to the Raritan River.

Specifically, EPA has failed to demonstrate how all discharges will comply with the federal Clean Water Act in the form of EPA delegated NJ Surface water quality standards and NJPDES permit requirements, in this case, "water quality based effluent limits" (WQBEL's) and industrial storm water requirements.

This is a key Clean Water Act compliance issue, as no CWA permit may be issued that would violate a state ambient water quality standard.

At the public hearing, consultants for the local sewer authority raised this issue, as well as the failure of the NJ DEP NJPDES GP to include effluent limitations for all parameters discharged, as required by NJ SWQS and NJPDES regulations, and the Clean Water Act.

So, we should note that, and say that any discharge to the river comply with NJ SWQS and NJPDES WQBEL effluent limits (at point of discharge, with no mixing zone).

## **3. Site wide ecological assessment**

The scope of the ecological screening and assessment was far too narrow (spatially, ecologically, and in terms of all discharges). According to the EPA plan:

"Ecological Risk Assessments

Ecological risks at the Site were addressed in two documents: the BEA approved by NJDEP and EPA in 1992, and the BERA in 2005. In the Qualitative Ecological Assessment section of the BEA, the results of a site-wide habitat survey, as well as evidence from direct field observations, were compared to the Natural Heritage Data Base (NJDEP, 1991). The assessment indicated that, with the exception of the great blue heron, the on-site habitat does not support threatened or endangered species. Impoundments 13, 17, and 24 were not included in either the 1992 BEA or the 2005 BERA because the contents of these impoundments were scheduled to be remediated under the OU1 and



## OU2 RODs.

The most significant potential exposure pathway identified in the BEA involves aquatic biota exposure to Raritan River water. Site groundwater discharge mass loading calculations suggest that exposure to concentrations of Site chemicals of interest resulting from groundwater discharge is unlikely to affect the health and diversity of aquatic biota in the Raritan River." (@ page 11).

It appears that the 1992 BEA and 2005 BERA were limited to on-site habitat and did not consider all ecological values and functions.

The scope of the assessment was not site-wide and did not consider offsite impacts to sediments and biota, including downriver and estuarine impacts.

The ecological receptors include species other than "threatened and endangered".

In addition to groundwater discharges, the Raritan River is impacted by surface discharges from the site (i.e. storm water runoff, point source discharges, and failure of impoundment/seepage/breakout. These surface water off site releases were not assessed, including impacts associated with flood events.

These are just preliminary structural flaws in the ecological assessment, based only on review of the proposed plan. We're confident that detailed review of the 1992 BEA and 2005 BERA would disclose additional specific methodological, data, and findings concerns that warrant current competent scientific review and regulatory oversight.

#### **4. Formal consultation with US Fish and Wildlife Service**

We request that EPA formally consult with USFWS on the ecological bases of the proposed cleanup plan.

Formal consultation should include de novo site-wide ecological impact assessment (including off-site and downriver impacts) in order to assess natural resource injuries and require mitigation, restoration, and compensation for all natural resource injuries, as required by law.

#### **5. EPA Inspector General Audit Findings Must be addressed**

EPA oversight at the American Cyanamid site was influenced by the following EPA Inspector General Evaluation Report:

##### **Improved Controls Would Reduce Superfund Backlogs**

**Report No. 08-P-0169 June 2, 2008**

**<http://www.epa.gov/oig/reports/2008/20080602-08-P-0169.pdf>**

That Report implicitly and explicitly criticizes both NJ DEP and EPA oversight at the site. The EPA IG

found that DEP and EPA caused unnecessary delays in cleanup and concluded that timely and protective actions were not taken on the cleanup.

Delays obviously increased on site and offsite migration of contaminants and exacerbated risks and impacts from the site.

The EPA IG Report found:

"We recommend that the Region 2 Administrator direct staff to coordinate with NJDEP officials the clean-up of specified sites more than 20 years old. **Region 2 should assume lead status from New Jersey** for those sites where both agencies agree it would be beneficial and develop Letters of Agreement for those sites. We also recommend that the Assistant Administrator for Solid Waste and Emergency Response, where appropriate, improve site profiles in EPA's public Superfund Website to accurately depict EPA and State actions taken to protect human health and the environment. In its response to the draft report, EPA agreed with all of our recommendations and its **proposed corrective actions should address our recommendations**. However, the recommendations will remain open until the agreed-upon actions are completed."

The Report's findings are relevant to and therefore should be discussed and applied to the proposed cleanup plan. Because the proposed EPA plan does not mention this Report, it is impossible to determine if the IG's findings and deficiencies have been addressed and corrective actions taken to remedy deficiencies.

Sincerely,

Bill Wolfe, Director  
NJ PEER  
PO Box 112  
Ringoes, NJ 08551



sunnyb21 to: Joseph Battipaglia, Cecilia Echols  
Please respond to [REDACTED]

03/08/2012 08:26 PM

Hi, my name is [REDACTED], my address is [REDACTED]. I would like to make a plea to you and the rest of this panel and our elected officials to please consider a full remediation for the American Cyanamid Superfund site. As you know the 500 acre contaminated site sits adjacent to the Rahway River which is a drinking source for many residents in the region. Even if there's a little bit of flooding this area gets covered up resulting in the spread of toxins. If there is such a plan that can completely and thoroughly clean up the area, I think the EPA has an obligation to the people to endorse that plan. I hope the EPA's agenda represents the communities best interest and not the interest of saving as much money as possible for Pfizer. It is sad that I have to point this out to the ENVIRONMENTAL PROTECTION AGENCY, however your agency has a pretty suspicious record when it comes to protecting big corporations; case in point being DuPont site in Pompton Lakes. Dupont has a former EPA administrator (William K. Reilly) sitting on their board of directors. You can't expect any of us to believe that this has 0% impact on how much you force them to clean up their site or how you shape your feasibility studies. So let's be real here, it is now 2012, and if the tea party and occupy wall street movements are any indication, we as a people will not stand for this sort of behavior anymore. We the public are not extremists, we just want you to work for US- living, breathing, compassionate people, not fake persons called corporations. Please work with us and take the time to find the best solution that completely remediates the site. It is also critical that we consider the long term effectiveness of any plan. Also, please consider the issue of flooding as you make your endorsement. I do not believe you can put a price cap on efforts to clean up the environment and i believe this should also be the stance of the EPA. Which alternative do you believe is the most comprehensive and thorough independent of cost? Do you think it is appropriate to pick a plan just solely based on cost and the quickest time that redevelopment can occur? This sort of logic seems to only point towards an alternative that is not the most thorough, what do you think?

If you could answer my questions I would greatly appreciate it. Let me be clear I do not hold you specifically responsible for the problem that is the revolving door/corruption that has been going on between our government and big corporations however you can be a huge part in the solution.

Thank you for your consideration,  
[REDACTED]

R2-0007903



Pfizer

[REDACTED]

to:

Joseph Battipaglia

04/10/2012 01:24 PM

Hide Details

From: [REDACTED]

To: Joseph Battipaglia/R2/USEPA/US@EPA

Please respond to [REDACTED]

Dear Sir,

Hello, my name is [REDACTED], and I am a Bridgewater, NJ resident. I am in the water treatment operations business and I was wondering if you could give me some info of the status of the groundwater remediation facility at Pfizer, whether it is operating or when it will start up, and also, who is the contract operations company doing the work.

I am an N-4 Industrial License holder, and this would be a great spot to work. Thanks for any info you may provide or info of other sites that may need operators.

Thanks again

[REDACTED]

May 14th, 2012

U.S. EPA Attn: Mr. Joseph Battipaglia,  
Remedial Project Manager,  
290 Broadway, 19th Floor,  
New York, NY 10007-1866

Dear Mr. Battipaglia,

I attended the Public Hearing on the American Cyanamid Superfund site March 8th in Bridgeport and heard the presentation and Q&A. Have also reviewed the various plans.

I was totally shocked by the pollutants leaching into the Rantan for the past many years. I am concerned about the possible impact during large flood events on the DTR Canal, relatively adjacent to this site. Hopefully this is not a problem, as it is my primary drinking water source.

Restoring the Rantan is very important for fish, birds, animals, and for human boating safety. As it was agreed at the hearing that the whole site is in the current flood plain, any solution which leaves contaminants in the soil, even if buried, is no solution to the problem, only temporary at best. Such a solution would merely leave the final cure to later generations, which is unwise, unethical and maybe immoral.

The only satisfactory solution to the problems on this site is either removal of all contaminants from the site for treatment elsewhere, or treatment on-site where possible to remove the contaminants or a combination of both approaches.

We have a similar problem on a smelter seal in Milltown  
Middlesex County, and we are determined not to allow capping  
to be used there, particularly as it is a drinking water supply.

The Pantan site has been allowed, for whatever reasons, to  
pollute the Pantan and surrounding area for decades. This must  
be remedied starting very soon.

I am personally involved with protection of the environment  
in the Lawrence Brook Watershed and in the Borough of Milltown.

I will be pleased to assist in whatever way I am able.

Thank you.

Sincerely,





echols.cecilia@epa.gov

to:

Joseph Battipaglia

02/22/2012 03:34 PM

Hide Details

From:

To: Joseph Battipaglia/R2/USEPA/US@EPA

History: This message has been forwarded.

1 Attachment



20120223030550948.pdf

Dear Mr. Battipaglia,

I read a recent article that the EPA was encouraging public comment on the American Cyanamid Superfund site and I would like to find out if this site may have contaminated the wells in our neighborhood. My home is northeast of the site about 2000' from the site boundary and we have well water, so do many of my neighbors. We have been in our home for 25 years, but some of our neighbors have been there much longer. I am concerned that the contamination may have migrated from the site over this period of time when pumps have failed, flooding has occurred or through the shale. Could the EPA as part of this proposed clean up test the wells in our neighborhood to assure us that the contamination has not migrated to our wells? I marked our location as a dot on the site plan from your report and crosshatched the approx. neighborhood that has well water for your information.

Thank you,



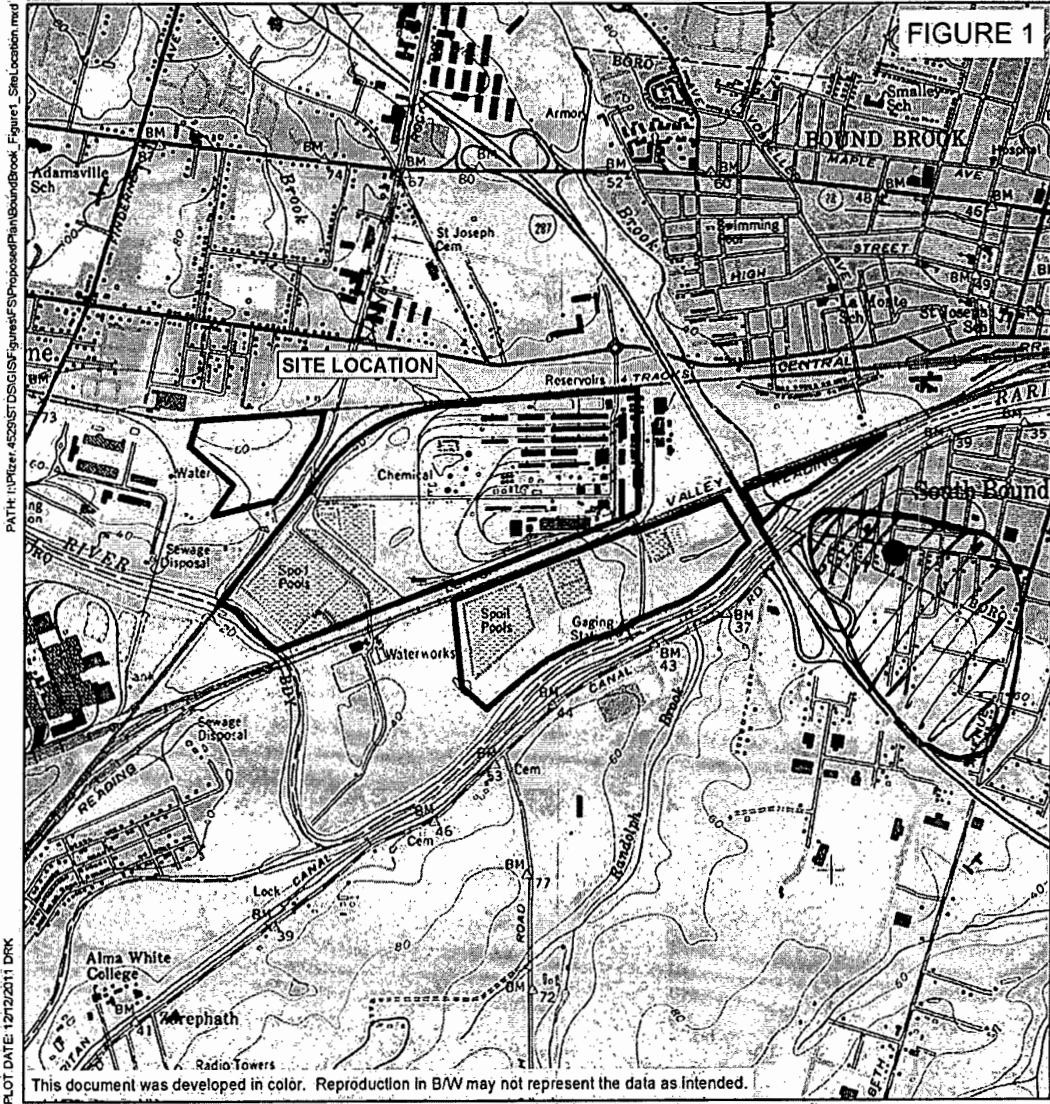


FIGURE 1

PATH: U:\P\er\_4529\STDS\GIS\figure1\Figure1\BoundBrook\_Figure1\_SiteLocation.mxd  
 PLOT DATE: 12/12/2011 DRK

This document was developed in color. Reproduction in B/W may not represent the data as intended.

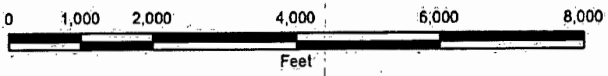
ADAPTED FROM: BOUND BROOK, NEW JERSEY USGS QUADRANGLE

WYETH HOLDINGS CORPORATION  
 AMERICAN CYANAMID  
 SUPERFUND SITE  
 SITE-WIDE FEASIBILITY STUDY



MAP LOCATION

SITE LOCATION



DECEMBER 2011  
 4529/47194

1:24,000







RE: echols.cecilia@epa.gov

[REDACTED]

to:

Joseph Battipaglia

04/16/2012 10:34 PM

Cc:

echoes.cecilia

[Hide Details](#)

From: [REDACTED]

To: Joseph Battipaglia/R2/USEPA/US@EPA

Cc: <echoes.cecilia@epa.gov>

History: This message has been replied to and forwarded.

The site is not north of us, it is to the southwest of our home, within 2000'. The problem is that our home is located northeast of the site, which is also the direction of flow of contamination during flooding. Can I get a copy of the water testing in my neighborhood, with the location from which the test was taken. I hope you can appreciate my concerns, there are many homes in the area just north of Rt 287, east of the Raritan river with wells (the section of Franklin Township divided by Rt.287 on one side and surrounded by the Raritan River on the other 3 sides) that have well water and children. I believe it would be prudent and a small cost to the EPA to test some of the homes wells in our area. In the last flood the water from the Cyanamide site was completely flooded which extended across the canal, canal road and closed the 287 entry/exit ramp due to flooding east of the site and within a few hundred feet of our home. Also I have read that that the some or all the pumps around the site have been shut down on many occasions due to various causes.

Thank you for your response and further consideration in this matter.

[REDACTED]



american cyanamid superfund

to: Joseph Battipaglia, Cecilia Echols

03/23/2012 11:33 AM

History: This message has been forwarded.

Dear Mr. Joseph Battipaglia and Ms. Cecilia Echols,

I have some questions regarding the American Cyanamid Superfund Site and I am hoping that you will be able to shed some light on it for me. I have been working at the Somerset Patriots Ballpark for 8+ years, spending 40+ hours a week at the site for 6 years and for the past two years 24+ hours. I understand through reading material published through the EPA, the site in which the Ballpark was built used to be considered Superfund but was unclassified as this in 1998. What tests were done to determine that it was safe for people to work at that site? Was remediation done at the site?

Also, this area floods frequently, the latest being with Hurricane Irene in August 2011. Has the soil and water been tested for safety since then?

Has the air inside the Ballpark offices and inside the Somerset Medical Center Sports Performance and Rehabilitation Center been tested for vapor intrusion?

Does frequent handwashing/ showering at the ballpark pose any risk to human health?

Are there any long term exposure concerns for those who work at the Ballpark?

I greatly appreciate your time in answering my questions. If you cannot answer these questions for me, can you please put me into contact with someone who can?

Respectfully,

[Redacted signature]

R2-0007910



**Fw: american cyanamid supferfund**  
Melissa Dimas to: Joseph Battipaglia

04/11/2012 08:28 AM

History: This message has been replied to and forwarded.

Could you answer the question about residential vs. commercial?

Melissa Dimas  
International Affairs Program Manager and Community Liaison  
Environmental Protection Agency-Region 2  
dimas.melissa@epa.gov  
Phone:212-637-3677

----- Forwarded by Melissa Dimas/R2/USEPA/US on 04/11/2012 08:25 AM -----

From: [REDACTED]  
To: Melissa Dimas/R2/USEPA/US@EPA  
Date: 04/11/2012 06:51 AM  
Subject: american cyanamid supferfund

Hi Melissa

I did have one other question about the American Cyanamid Superfund Site. I know that the "Hill Property" was zoned for commercial, but given the levels of contaminants that were most recently tested, say after the Hurricane 8/2011, are the levels low enough to be zoned as residential?  
Thanks again for all of your help,  
[REDACTED]

R2-0007911



May 8, 2012

Joseph Battipaglia  
Remedial Project Manager  
United States Environmental Protection Agency  
290 Broadway, 19th Floor  
New York, New York 10007-1866  
Email: [battipaglia.joseph@epa.gov](mailto:battipaglia.joseph@epa.gov)

Dear Mr. Battipaglia,

Following are the public comments of Steve Kalafer, Chairman of the Somerset Patriots, with respect to the Proposed Plan for the American Cyanamid Superfund Site in the Township of Bridgewater, Somerset County, New Jersey.

#### **Overview**

The Somerset Patriots provide affordable family entertainment, and have, for the past 15 years, been the premier community-gathering place in Central New Jersey. With over 5,300 fans per game, an average of 375,000 fans per season, and close to 5,000,000 fans in their history, the Somerset Patriots have proven to be a model of consistency in being a destination site for families, businesses, and community organizations.

#### **Economic Impact**

Since 1999, upon completion of what is now TD Bank Ballpark, the Somerset Patriots have been an integral part of the economy of Bridgewater Township and Somerset County. In addition to the 20 full-time staff members that are employed by the Somerset Patriots, there are over 200 seasonal employees and local vendors that work the season at the ballpark. The Somerset Patriots provide an anchor business that ultimately benefits other businesses from people coming into the area to enjoy games and ballpark events. The franchise spends an average of over \$2,200,000 per year to over 240 vendors who are located in over 100 different communities throughout New Jersey.

Joseph Battipaglia

### **Corporate Citizenship**

The Corporate Citizenship and Philanthropy of the team, its players, vendors and supporters has been exemplary, and has provided significant support to a wide range of charitable and community organizations. The Somerset Patriots' mission extends well beyond the ballpark, as we strive to be a strong positive force in our community and be the very best neighbors possible. The Somerset Patriots have helped raise hundreds of thousands of dollars each season for charities throughout the area and have raised millions of dollars for charities since opening the ballpark in 1999. At every game, there are fundraisers and awareness events being held for non-profit organizations or charities. Groups that have utilized the ballpark for these events range from national organizations such as the National MS Society, American Diabetes Association, Special Olympics, American Cancer Society, American Heart Association, to more local non-profits such as Somerset Medical Center Foundation, Operation Shoebox New Jersey, YMCA, and The Beez Foundation. The Somerset Patriots host special events for non-profit organizations at the ballpark, including the American Diabetes Association's Step Out Walk To Fight Diabetes and Operation Shoebox New Jersey packing events to support our troops. The team has created the Somerset Patriots Children's Educational and Sportsmanship Foundation to help charities the team supports. Events that help raise money for the foundation consist of an annual golf outing, a 5K run, and open player tryouts. Organizations such as Operation Shoebox New Jersey, American Diabetes Association, National MS Society, HCMAP, Somerset Council, and The Beez Foundation have benefitted substantially from these events over the past ten years.

### **Quality of Life**

Since 1999, upon completion of what is now the TD Bank Ballpark, the Somerset Patriots and TD Bank Ballpark itself has created an essential element of the community's quality of life that is unmatched and is an integral part of Bridgewater Township and Somerset County. The ballpark provides a family-friendly and safe environment for those in attendance. Ticket admission prices and concessions for the Somerset Patriots ballgames are affordable and provide families with a viable and enjoyable way to enjoy sporting events. The ballpark offers a convenient, affordable, and safe parking facility for families who attend the games. It is a true gathering place for the members of the community – not only for residents of Bridgewater, but for Somerset County in general.

### **Conditions for Remediation**

The Somerset Patriots support an expeditious and environmentally appropriate remediation of the American Cyanamid Site and want assurance from the USEPA, NJDEP and Pfizer that all activities in support of the remediation will be conducted in a manner that does not adversely affect, interfere with, or obstruct the ability of the Somerset Patriots to conduct its operations. The Somerset Patriots must be provided with assurance that any developments placed at the site not adversely impact, interfere with, or obstruct any of its operations. Additionally, the Patriots request that its representatives be included in all planning and discussions concerning potential development at the site.

Joseph Battipaglia

We urge that whatever remedial activities are approved by the USEPA and the NJDEP and carried out by Pfizer and its remediation contractors and consultants be performed in a manner that:

1. Is conducted transparently and communicated in a timely manner to the community;
2. Is conducted in a safe and responsible manner;
3. Minimizes or eliminates potential and actual environmental impacts on neighboring businesses and the community; and
4. Minimizes or eliminates potential and actual adverse impacts on the operations of neighboring businesses.

Toward that end, we urge that USEPA mandate, as a condition to the conduct of the Remedial Plan, that an onsite liaison to the community be appointed who shall be responsible for the following activities:

1. Interface with and be available to the community during the duration of the remedial activities;
2. Provide the community with periodic updates on all remedial activities and advance notice of all scheduled activities pertaining to the remediation;
3. Provide advance notice of remedial or other activities that may adversely affect the health, welfare and property of the citizenry, as well as adverse impacts on business operations or community activities; and
4. Have as a primary responsibility the duty to work with the community, business operators and governmental representatives to mitigate or eliminate all such adverse impacts of the remedial activities.

Thank you very much for your consideration. If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

*Steve Kalafer*

Chairman  
Somerset Patriots  
1 Patriots Park  
Bridgewater, New Jersey 08807

RESOLUTION AUTHORIZING THE SUBMISSION OF  
OFFICIAL COMMENTS TO EPA

WHEREAS, The Somerset Raritan Valley Sewerage Authority is a significant stakeholder in the water quality of the Raritan River and has an NJPDES Permit that controls and sets standards for the Authority's discharge of treated wastewater effluent to the environment; and

WHEREAS, the Authority has invested significant resources in monitoring, studying and modeling the Raritan River in order to aid it in identifying and addressing water quality issues in the Raritan River and the applicable environmental discharge permit limits; and

WHEREAS, the Authority has provided testimony at the March 8, 2012 Public Hearing on the proposed Feasibility Study dated February 2012 for the management and remediation of the contaminated groundwater and property. In its comments the Authority raised concerns regarding EPA/Pfizer's application to NJDEP for a NJPDES Permit Equivalency General Permit for the discharge to surface water of remediated groundwater. The Authority believes that a General Permit is not applicable to this site and discharge limits need to be set based on water quality standards because the Raritan River is currently listed as impaired for both Benzene and Arsenic.

NOW, THEREFORE, BE IT RESOLVED by The Somerset Raritan Valley Sewerage Authority Board of Commissioners that it has reviewed and approves the submission of written comments (within the mandated Public Comment timeline) expanding on the water quality issues we addressed at the Public Hearing and additional environmental concerns.

INTRODUCED BY: Robert Albano  
SECONDED BY: Gail Quabeck

Roll Call Vote:

Arthur Quade	Yes	Richard Mathews	Yes
Richard DeLuca	Absent	Robert McCray	Yes
Carlos Mosquera	Yes	Joseph Lifrieri	Yes
Philip Petrone	Absent	Gail Quabeck	Yes
Peter Stires	Yes	Robert Albano	Yes
Carolañ Garafola	Yes	Edward Machala	Yes
Herbert Vollers	Absent		

CERTIFICATION

I, Glen D. Petruski, Executive Director and Certifying Agent of The Somerset Raritan Valley Sewerage Authority, **HEREBY CERTIFY** that the foregoing is a true copy of a Resolution adopted at a Regular Meeting of The Authority held on the 26<sup>th</sup> day of March 2012 as the same appears on record in the Minute Book of The Authority.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the Seal of The Authority this 27<sup>th</sup> day of March 2012.



Glen D. Petruski  
Executive Director

GDP/rel



The  
Somerset Raritan Valley  
Sewerage Authority

March 22, 2012

VIA EMAIL AND USPS

Joseph Battipaglia, Remedial Project Manager  
U.S. Environmental Protection Agency  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

**RE: COMMENTS ON PROPOSED PLAN  
AMERICAN CYANAMID (PFIZER) SUPERFUND SITE  
BRIDGEWATER TOWNSHIP, SOMERSET COUNTY, NEW JERSEY**

Dear Mr. Battipaglia:

On behalf of the Somerset Raritan Valley Sewerage Authority (SRVSA), I would like to thank you and the other EPA staff for your March 8, 2012 public presentation of the proposed remedial plan for the American Cyanamid (Pfizer) site. SRVSA has great interest in this project for three major reasons. First, the SRVSA treatment plant property is directly adjacent to this Superfund site. Second, SRVSA has treated the site's contaminated groundwater for many years, the quality of which can have a great impact on SRVSA's treatment efficiency and therefore the quality of SRVSA's effluent. Third, SRVSA has worked tirelessly to improve water quality in the Raritan River, which is now being impacted by the American Cyanamid site.

I have prepared this letter to provide our comments on the proposed plan for remediating the site as summarized in EPA's February 2012 summary document and as described in EPA's presentation at the Public Hearing on March 8, 2012. Our comments are focused on the treatment of the contaminated shallow groundwater, which is presently leaching out into the Raritan River at concentrations orders of magnitude over surface water quality standards.

SRVSA is very supportive of the decision made by EPA and Pfizer to construct a treatment facility dedicated to treating the contaminated shallow groundwater (on the American Cyanamid site). Given the pollutant concentrations detected in this shallow groundwater, SRVSA was very concerned about accepting this waste stream for treatment at its plant, even with pre-treatment, which would likely have been required. Furthermore, we have been informed by Pfizer that it is their intention to discontinue sending its contaminated deep groundwater to SRVSA within the next five years, and we are quite supportive of that plan as well.

Our only concern with the proposed construction of the on-site wastewater treatment plant to treat the American Cyanamid contaminated groundwater is that its discharge quality be maintained in such a fashion that water quality in the receiving streams (Cuckels Brook and



Raritan River) be maintained. This issue was addressed by SRVSA's Water Quality Consultant, James Cosgrove of Omni Environmental LLC, in a letter to NJDEP dated March 9, 2012 (attached). Simply stated, it is critical that the Pfizer discharge be required to satisfy all New Jersey Surface Water Quality Standards. We are concerned that generic, pre-defined and non-site specific effluent standards are going to be applied to this discharge (N.J.A.C. 7:14A-12: Appendix B). Should such effluent standards be applied, given the very small amount of assimilative capacity in Cuckels Brook under critical low flow conditions, stream standards are guaranteed to be violated. Therefore, it is imperative that water quality based effluent limits be set for this discharge.

Furthermore, Pfizer is proposing to discharge the effluent from its treatment plant to Cuckels Brook, which is SRVSA's current receiving stream. It is critical that EPA recognize that SRVSA has recently constructed a new outfall directly to the Raritan River. Therefore, the flow from SRVSA, which typically makes up more than 90% of the water in Cuckels Brook, will no longer be available for assimilative capacity for the Pfizer discharge. Water quality based effluent limits must be established without the benefit of the SRVSA flow.

Once the proper effluent limits are set for the proposed discharge, how is EPA proposing to monitor the impact on the receiving streams? Has EPA collected baseline water quality data in Cuckels Brook and the Raritan River to have a means of comparison with water quality in the future? If so, SRVSA would appreciate being provided with such data. Will EPA be monitoring the receiving streams to evaluate the benefit of removing the contaminated seeps, treating the contaminated groundwater, and discharging it to Cuckels Brook? Since the Raritan River in the area of the American Cyanamid property is listed as being impaired for arsenic and benzene (two of the many contaminants found at extremely high levels in the site's groundwater), it is critical that a monitoring program be implemented so that the ultimate goal of obtaining compliance with stream standards can be quantified.

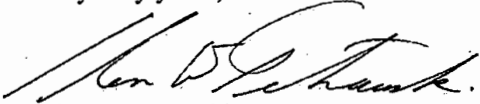
It is also important to note that SRVSA has been collecting water quality data in Cuckels Brook and the Raritan River for over two decades. We have utilized those data to develop sophisticated water quality models of the system. Our consultant, Omni Environmental LLC, recently worked with NJDEP to model the waterways in the entire Raritan River Basin for the Total Maximum Daily Load (TMDL) study, but was not able to finalize the TMDL in this segment of the Raritan River because of the unexplained effects on dissolved oxygen dynamics, which may be due to the toxics originating from the American Cyanamid site. We believe that SRVSA and Omni Environmental may have more information on water quality in the receiving streams in this area than any other entity, and we would be pleased to share our knowledge with EPA.

Obviously, given SRVSA's location, its partnership with Pfizer in treating its contaminated groundwater for so many years, and its work with the NJDEP Divisions of Water Quality and Watershed Management, the Authority believes we are a major stakeholder in this process and in maintaining/enhancing water quality in the watershed. SRVSA stands ready to assist EPA in its role in cleaning up this site and removing a major source of contamination to the nearby waterways.

Joseph Battipaglia  
March 22, 2012  
Page 3 of 3

We thank you for the opportunity to offer our comments and look forward to discussing these matters with you in the near future.

Very truly yours,



Glen D. Petruski  
Executive Director

c: Board of Commissioners  
Joseph J. Maraziti, Jr., Esq.  
James F. Cosgrove, Jr., P.E.  
SRVSA Participants  
Robert P. Bzik, Somerset County Planning Board



American Cyanamid Superfund Site - Bridgewater Township, N.J.

Bastura, Tara

to:

Joseph Battipaglia

02/16/2012 02:34 PM

Hide Details

From: "Bastura, Tara" <tbastura@sealandenviro.com>

To: Joseph Battipaglia/R2/USEPA/US@EPA

Hello Joseph:

Do you have an estimate as to when the American Cyanamid Superfund Site in Bridgewater Township, NJ will come out for bid? Thank you for your time. Tara

Tara Bastura  
Business Development Coordinator  
Sealand Enviro, LLC  
58 Pomfret Street  
Putnam, CT 06260  
p. 413.540.1407  
f. 860.315.9019  
[www.sealandenviro.com](http://www.sealandenviro.com)

---

This electronic mail message and any attachments thereto may contain confidential and/or privileged information intended only for the addressee(s) named herein. If you are not the intended recipient, you are hereby notified that the reading, disclosure, copying, distribution or use of all or any part of this communication is strictly prohibited. If you received this transmission in error, please permanently delete it and any copy or printout thereof and notify our e-mail security officer immediately either by telephone at 413-540-1301 or by sending an electronic message to [administrator@oconnells.com](mailto:administrator@oconnells.com).



**SEALAND ENVIRO**  
AN O'CONNELL COMPANY



**Committed to the restoration of our  
natural environment and the protection  
of human health and safety.**



**O'CONNELL**

The O'Connell Companies, Inc.

R2-0007920



## SEALAND ENVIRO

Sealand Enviro is a national environmental services company providing management and construction services for the restoration of sites contaminated by hazardous, toxic and low-level radioactive waste. We provide a comprehensive range of services for site remediation, restoration and environmental response. Sealand Enviro is headquartered in Putnam Connecticut and is owned by The O'Connell Companies and Sealand Enviro management. We draw from the considerable resources, 130 year operating history and culture of our parent company and its affiliates. Our customers include large industrial and real-estate companies, Federal and state agencies, and leading engineering and design firms. We are committed to assisting in the restoration of our natural environment and the protection of human health and safety.

## OUR SERVICES

Sealand Enviro provides its management and construction services as a prime contractor or team participant on large scale and complex assignments involving the remediation and restoration of sites contaminated by hazardous, toxic or low-level radioactive waste. Our assignments range from Superfund, and Federal property restoration to large scale Brownfield redevelopment. Our projects may include some of the following remediation and restoration services. We do not own or license environmental technologies allowing us to select the most appropriate and cost effective solution for each specific project. Sealand Enviro qualifies as a small business under the Company's primary Federal NAICS code 562910 — Environmental Remediation Services (500 employees).

## AREAS OF SPECIALIZATION

- Remedial construction and site closure
- Decontamination and decommissioning
- Demolition and beneficial reuse
- In situ and ex situ soil treatment
- Thermal desorption
- Soil vapor extraction
- Bioremediation
- Stabilization and fixation
- Contaminant containment
- Slurry walls and landfill capping
- Contaminated sediment dredging and handling
- Groundwater recovery and treatment
- Transportation and disposal of HTRW
- Volume reduction of LLRW
- Ecological restoration
- Natural disaster response

## PROJECTS

Sealand Enviro is an accomplished environmental remediation contractor. We have completed complex restoration projects for government agencies and private sector clients nationwide. Our projects are performed in compliance with CERCLA, RCRA, SARA, HSWA, TSCA, CWA, CAA and other Federal and state regulations.

## SUPERFUND

### **Montclair West Orange and Glen Ridge Radium Sites, NJ,**

Excavation and disposal of 100,000 CY of low-level radioactive waste.

### **Salem Acres Superfund Site, MA,**

Remediation of 100,000 CY of hazardous sludge and soils from onsite lagoons.

### **McGillis & Gibbs Superfund Site, MN,**

Remediation of old pole wood treatment facility of hazardous waste.

### **North Lawrence Superfund Site, MA,**

Remediation of heavy metal contamination by stabilization/solidification and construction of onsite storage cell.

### **Li Tungsten Superfund Site, NY,**

Remediation of radioactive tungsten ore and debris from 26 acre site.

### **Sayerville Landfill Superfund Site, NJ,**

Remediation including removal of hundreds of 55 gallon drums of RCRA TSCA materials and construction of landfill containment cap.

## BROWNFIELD

### **Worcester Medical City Site, MA,**

Remediation of 42 commercial and industrial properties on 25 acres resulting in model brownfields redevelopment.

### **Reed and Prince, MA,**

Remediation of 13 acre site of former screw manufacturing facility in Worcester, MA.

### **Waterbury Scovill Brass Industrial Facility, CT,**

Remediation of 96 acre site including 150,000 CY of contaminated soils and on-site treatment.

### **Natick RUST Program, MA,**

Pilot residential underground storage tank removal and remediation project at 500 home sites.

### **Westinghouse Manufacturing Site,**

**MA,** Remediation and redevelopment of 39 acre site in Springfield MA.

## FEDERAL, STATE & MUNICIPAL

### **DOD Loring Air Force Base, ME,**

Remediation of various operable units on 9,000 acre site over four year period as part of base closure.

### **DOD Fort Bliss Oil Pits, TX,**

Remediation of 30,000 CY of oil and pesticide contaminated soils using a transportable direct fired thermal desorption unit.

### **Airport Remediation, NY & NJ,**

Remediation of contaminated sites at LaGuardia, Kennedy and Newark airports including emergency response services.

### **MHD Storrow Drive Bridge, MA,**

Environmental work, Dredging, management and disposal of TSCA contaminated sediment.

### **DOE Brookhaven National Labs, NY,**

Excavation and on-site landfill capping of low-level radioactive waste.

### **SWSC Indian Orchard Pump Station, MA,**

Environmental work, Remediation and disposal of RCRA and TSCA contaminated soils.

### **MDT Lyman Street Bridge**

**Replacement, MA,** Environmental work, Excavation and disposal of contaminated soils and water.

### **Palmer Dam Dean's Mill Water**

**Treatment Plant, CT,** Environmental work, Demolition and remediation of contaminated materials and sediments.

### **MDC Aeration & Final Settling Tanks,**

**CT,** Environmental work, excavation and disposal of 80,000 CY of contaminated soil.

### **Groundwater Removal and Treatment System, North Carver, MA,**

Groundwater VOC remediation system for MA DEP.

### **Emergency Response TWA Flight**

**843, JFK International, NY,** Emergency response and remedial activities.



## INSURANCE AND SURETY

Sealand Enviro benefits from the 130 year legacy and strong financials of our parent company. Sealand Enviro maintains its own A+ rated insurance and surety coverage as follows;

### **Insurance**

Sealand Enviro maintains Commercial General Liability, Environmental Liability and Professional Services Liability coverage of \$12 million with an A+ rated insurance company.

### **Surety**

Sealand Enviro maintains a surety total work program exceeding \$75 million with A+ rated Travelers Casualty and Surety Company of America.

For additional information on our insurance and surety coverage please contact Melissa J. Piers at [mpiers@thewattsgroup.com](mailto:mpiers@thewattsgroup.com)



## SEALAND ENVIRO

### **ENVIRONMENTAL, HEALTH SAFETY (EHS) POLICY**

Sealand Enviro is a prime environmental contractor providing services on large scale and complex assignments involving the restoration of sites contaminated by hazardous, toxic and low-level radioactive waste. Due to the nature of our work, protection of human health, safety and the environment is of utmost importance. Our commitment to these goals includes the following:

- We work toward a goal of zero employee injuries and occupational illness.
- All levels of leadership are accountable for implementing our EHS Policy.
- All employees are accountable for following safe work practices and procedures.
- We comply with all applicable EHS laws and regulations that apply to our work.
- We provide workplace policies, procedures, training and equipment to all employees.
- We track and report performance against our EHS standards and seek opportunities to improve upon our EHS program at all times.
- We work to ensure the health and safety of our subcontractors in our shared work environment.
- We work to lessen the environmental impact of our operations and incorporate sustainability in all business areas.

Our commitment to EHS is unwavering. We evaluate our procedures and operations on a quarterly basis and incorporate improvements where appropriate. We will always work to continually improve upon our EHS policies and procedures.

A handwritten signature in black ink, appearing to read 'B. Mackenzie'.

Brian L. Mackenzie, 2011  
President/CEO, Sealand Enviro





## THE O'CONNELL COMPANIES HISTORY

The history of our company begins in 1879, on the streets of Holyoke, Massachusetts. Our company's founder, Daniel O'Connell, quit his job as Holyoke's Superintendent of Streets, rather than fire his crew to make room for a new Mayor's friends. The next day, this company was founded.

A century later, in 1979, The O'Connell Companies was established as the parent company of Daniel O'Connell's Sons, O'Connell Development Group, Appleton Corporation and a number of other O'Connell subsidiaries, including Sealand Enviro. The history of The O'Connell Companies is the story of hard-working people building a reputation of integrity and quality, and always following Daniel's motto to "Strive for Excellence."

Beginning in the 1970s our company expanded and diversified beyond the local market and into fields related to construction, including real estate development and property management, hydroelectric facilities, and sludge processing facilities.

**Daniel O'Connell's Sons** has grown since 1879 from a local general contractor building roads and bridges to a regional construction company offering sophisticated construction management and general contracting services to both public and private clients.

**NEFCO** (New England Fertilizer Company) was formed in 1993 to operate a plant in Massachusetts which converts sewage sludge into pelletized fertilizer. Today NEFCO operates additional fertilizer treatment plants in Massachusetts, Florida, Maryland, and Minnesota.

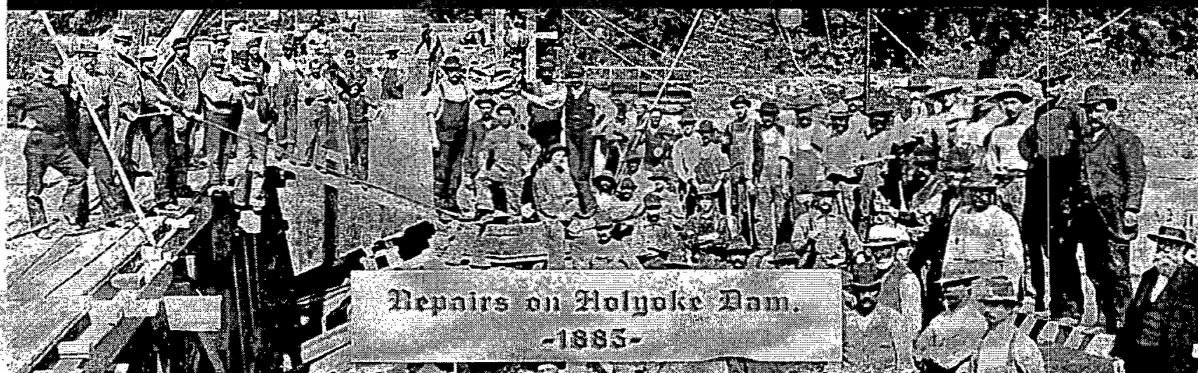


**O'Connell Development Group** (ODG) pursues development opportunities for both The O'Connell Companies and outside clients. One particular focus of ODG was the development of hydroelectric facilities, and O'Connell Energy Group evolved from ODG to develop, finance, construct, operate, and manage hydroelectric facilities throughout the Northeast.

**Appleton Corporation** manages real estate, and provides facilities management for both residential and commercial customers, resident services pro-grams, security, and accounting and financial services.



**Sealand Enviro** is the newest subsidiary in our family of companies. With O'Connell's expertise in environmentally-friendly ventures and Sealand's focus on environmental remediation, the blending of our two companies was a natural fit. Our customers benefit from the combined experience and know-how of our senior management, who successfully tackle the most technically-complex projects.



## SEALAND ENVIRO FACT SHEET

### HEADQUARTERS

58 Pomfret Street  
Putnam, CT 06260  
Phone 413.540.1405

### Bonding limit

- \$100M

### Standard insurance coverage

- \$12M

### Small business qualification

- NAICS 562910 Environmental Remediation Services  
(<500 employees)

### CLIENTS

U.S. Federal, state and local agencies  
Private corporations, including Fortune 500 companies.

### PROJECT LOCATIONS

U.S. and Canada

### PROJECT TYPES

Self performed environmental remediation  
and restoration services

### ENVIRONMENTAL HEALTH & SAFETY

Behavior based Health & Safety program  
ISO 14001 and OHSAS 18001 based

## CORPORATE INFO

### PARENT COMPANY

The O'Connell Companies  
480 Hampden Street  
Holyoke, MA 01040

### Year parent company established

- 1879

### AFFILIATE COMPANIES

- O'Connell Development Group
- Daniel O'Connell's Sons
- NEFCO
- Appleton Corporation



American Cyanamid Superfund Project

Bastura, Tara

to:

Joseph Battipaglia

03/07/2012 12:59 PM

Hide Details

From: "Bastura, Tara" <tbastura@sealandenviro.com>

To: Joseph Battipaglia/R2/USEPA/US@EPA

History: This message has been replied to.

2 Attachments



Sealand Enviro Brochure.pdf Sealand Enviro Fact Sheet.pdf

Hello Joseph:

I am writing to introduce our company Sealand Enviro, LLC. We are a remediation contractor with extensive experience in HTRW environmental cleanup projects. Our parent company - The O'Connell Companies provides exceptional financial and technical resources support on each of our assignments. Attached please find a brief overview on us. I would like to inquire who I need to contact to find out more about the opportunity to bid on the upcoming American Cyanamid Superfund Project. Thank you for your assistance. Tara

Tara Bastura  
Business Development Coordinator  
Sealand Enviro, LLC  
58 Pomfret Street  
Putnam, CT 06260  
p. 413.540.1407  
f. 860.315.9019

[www.sealandenviro.com](http://www.sealandenviro.com)

This electronic mail message and any attachments thereto may contain confidential and/or privileged information intended only for the addressee(s) named herein. If you are not the intended recipient, you are hereby notified that the reading, disclosure, copying, distribution or use of all or any part of this communication is strictly prohibited. If you received this transmission in error, please permanently delete it and any copy or printout thereof and notify our e-mail security officer immediately either by telephone at 413-540-1301 or by sending an electronic message to [administrator@oconnells.com](mailto:administrator@oconnells.com).



**Fw: Safety Kleen Cleanup at American Cyanamid Superfund Site in  
Bridgewater Township, N.J.**

Elias Rodriguez to: Joseph Battipaglia

02/17/2012 10:09 AM

---

History: This message has been replied to.

----- Forwarded by Elias Rodriguez/R2/USEPA/US on 02/17/2012 10:09 AM -----

From: "Cantelmo, Michael C" <Michael.Cantelmo@safety-kleen.com>  
To: Elias Rodriguez/R2/USEPA/US@EPA  
Date: 02/17/2012 10:03 AM  
Subject: Safety Kleen Cleanup at American Cyanamid Superfund Site in Bridgewater Township, N.J.

---

Hope all is well. I would like to introduce myself. My name is Michael Cantelmo from Safety-Kleen Systems, Inc. I would like to know if we can help you with the Cleanup at American Cyanamid Superfund Site in Bridgewater Township, N.J. If there is anything that I can quote, please let me know. My contact info is listed below.

Have a great day,

**Michael Cantelmo**  
**Market Sales Specialist**  
**Safety-Kleen Systems, Inc**  
E [michael.cantelmo@safety-kleen.com](mailto:michael.cantelmo@safety-kleen.com)  
P 908.791.9600  
C 908.463.6251  
F 908.791.9620  
W [www.safety-kleen.com](http://www.safety-kleen.com)

R2-0007929



American Cyanamid Site in Bridgewater

to:  
Joseph Battipaglia  
02/16/2012 02:54 PM

Cc:

Hide Details

From: [REDACTED]  
To: Joseph Battipaglia/R2/USEPA/US@EPA

Cc: [REDACTED]

1 Attachment



image001.gif

Joseph Battipaglia,

Has on-site thermal destruction been taken off the table for consideration on this site? Obviously it would provide the cleanest methodology that would clean up the site in the shortest period of time. There is a thermal treatment that has no emissions that you might not yet know about - <http://www.sarexusa.com/index.htm>. I'd appreciate your thoughts on the potential of this cost saving technology and the potential of this technology for this cleanup.

Sincerely,

[REDACTED]

# Local 472

## Heavy and General Construction Laborers' Union

JOSEPH P. MADDEN BUILDING, 700 RAYMOND BOULEVARD, NEWARK, NEW JERSEY 07105  
PHONE: (973) 589-5050 • FAX: (973) 589-0582

**PARENT ORGANIZATION:**  
LABORERS' INTERNATIONAL  
UNION OF NORTH AMERICA

**AFFILIATED WITH:**  
NEW JERSEY STATE AFL-CIO,  
NEW JERSEY STATE BUILDING  
AND CONSTRUCTION  
TRADES COUNCIL

May 15, 2012

Mr. Joseph Battipaglia  
Remedial Project Manager  
USEPA  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

My name is Tony Oliveira, I am Business Manager of Heavy Construction Laborers Local 472, representing roughly seven thousand (7,000) members in Northern New Jersey.

I am writing to you in support of Remedial Action 4a which encompasses consolidation/treatment soil cover/stabilization and capping. We believe the preferred alternative will provide the best tradeoff among all the other alternatives based on the extensive study conducted by the EPA. The remedial alternative chosen consists of two components very important to our members, many who live in nearby communities. The key components are the protection of the environment and human health.

I think it's important to note that approximately twenty percent (20%) of our entire membership are eighty (80) hour Haz-Mat trained in addition to, and equally worth noting is that Local 472 members have been working on that site for almost twenty (20) years. First with American Cyanamid then Wyeth and now Pfizer and now we look forward to working with the EPA on the project going forward.

Lastly, the project will provide many good paying jobs with benefits for our members. Local 472 members are ready, willing and able to assist the EPA in the continued remediation of the site and look forward to seeing it to completion.

Sincerely,



Tony Oliveira  
Business Manager

**WORK JURISDICTION:** ROCK DRILLING, BLASTING, ROADS, SEWERS, BRIDGES,  
TUNNELS, DAMS, FOUNDATIONS, EXCAVATIONS, CONCRETE WORK ON HEAVY AND GENERAL CONSTRUCTION.

**TERRITORIAL JURISDICTION:** COUNTIES: BERGEN, ESSEX, HUDSON,  
HUNTERDON, MIDDLESEX, MONMOUTH, MORRIS, PASSAIC, SOMERSET, SUSSEX, UNION AND WARREN.

R2-0007931



American Cyanamid Superfund Site - New Jersey

Kurt Pugh

to:

Joseph Battipaglia

02/17/2012 03:23 PM

Hide Details

From: Kurt Pugh <kpugh@terracontracting.net>

To: Joseph Battipaglia/R2/USEPA/US@EPA

Hello Mr. Battipaglia –

We are an environmental contractor based in Michigan with extensive experience in contaminated soil removal and have worked on several Superfund sites.

We would like to contact the engineering firm who will be handling this project – do you know which firm that is and who the contact would be?

Or if there is someone else I should contact for this information please advise.

Thank you.

**KURT PUGH** | BUSINESS DEVELOPMENT | [kpugh@terracontracting.net](mailto:kpugh@terracontracting.net)

Terra Contracting, LLC | 5787 Stadium Drive | Kalamazoo, MI 49009

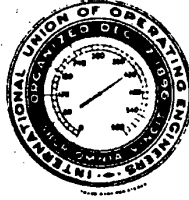
P: (269) 375-9595 | F: (269) 375-2830 | (866) 354-8963

[www.terracontracting.net](http://www.terracontracting.net)

INTEGRITY   SAFETY   CUSTOMER FOCUS   INTENSITY   TRAINING   TEAMWORK



BRANCH OFFICE  
6 WESLEY COURT  
MIDDLETOWN, NEW YORK 10941  
(914) 692-0101  
FAX 1-914-692-0147



BRANCH OFFICE  
5 ALLISON DRIVE  
CHERRY HILL, NEW JERSEY 08003  
(856) 424-0590  
FAX 1-856-424-0914

## *International Union of Operating Engineers*

AFFILIATED WITH AFL-CIO

*Local Union No. 825, 825A, 825B, 825C, 825D, 825R, 825RA*

65 SPRINGFIELD AVENUE  
SPRINGFIELD, NEW JERSEY 07081  
(973) 921-1900



USEPA  
290 Broadway 19<sup>th</sup> floor  
New York, NY 10007-1866

May15, 2012

**Attn: Joseph Battipaglia**  
**Remedial Project Manager**

**Re: American Cyanamid Superfund /Pfizer Site**

To Mr. Battipaglia,

The International Union of Operating Engineers Local 825 has members that reside in Somerset County, NJ, where The American Cyanamid /Pfizer Site is located. The site encompasses approximately 435 acres and was used for chemical and pharmaceutical manufacturing operations during the past 80 years.

We support the EPA Remedial Alternative 4A Consolidation/Treatment/Soil Cover and Stabilization/Capping with Hydraulic Control/Treatment of Ground Water. This is a responsible alternative that will provide a safe and effective way to remediate the American Cyanamid/ Pfizer Site.

On behalf of our Somerset County members, we would like to thank the USEPA for the proposed plant for the American Cyanamid Pfizer Site in the Township of Bridgewater, New Jersey. The project will provide an opportunity for Local 825 members to work and become a part of the cleanup efforts.

Thank You,  
Lino Santiago  
Business Representative  
IUOE Local 825  
Phone: 973-671-6961  
Fax No: 973-671-9261  
Cell: 973-617-6431  
Email: lsantiago@iuoe825.org

R2-0007933