

Record of Decision

Mansfield Trail Dump Superfund Site

Operable Unit 1: Contaminated Potable Wells at Residential Properties

Byram Township
Sussex County, New Jersey

United States Environmental Protection Agency

Region 2

September 2017

DECLARATION STATEMENT RECORD OF DECISION

SITE NAME AND LOCATION

Mansfield Trail Dump Superfund Site (NJN000206345), Byram Township, Sussex County, New Jersey. Operable Unit 1 – Contaminated Potable Wells at Residential Properties.

STATEMENT OF BASIS AND PURPOSE

This decision document presents the remedy selected to address contaminated potable wells at residential properties at the Mansfield Trail Dump Superfund Site in Byram Township, Sussex County, New Jersey. The selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record established for this Site.

The State of New Jersey concurs with the selected remedy.

ASSESSMENT OF THE SITE

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

DESCRIPTION OF THE SELECTED REMEDY

The selected remedy described in this document represents the first of two planned remedial phases, or operable units (OUs), for the Mansfield Trail Dump Superfund Site which is located in Byram Township, Sussex County, New Jersey.

The selected remedy addresses the contaminated potable wells at residential properties at the Site. The second OU will address the Site-wide contaminated groundwater, vapor intrusion and potential residual soil contamination.

The major components of the selected remedy include:

- Provision of potable water to impacted properties through the construction of a water line and connections;
- Any necessary upgrades to the water supply system; and
- The abandonment of private residential potable wells.

DECLARATION OF 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 applicable or relevant and appropriate to the remedial actions, is cost effective, and utilizes permanent solutions and treatment technologies to the maximum extent practicable.

Part 2: Statutory Preference for Treatment

Treatment is not a principal element in the OU1 selected remedy.

Part 3: Five-Year Review Requirements

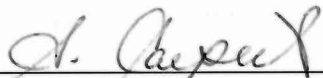
Because the remedy will result in hazardous substances, pollutants, or contaminants remaining above levels that allow for unlimited use and unrestricted exposure, a statutory five-year review will be required. The first review will be conducted within five years of construction completion for the Site to ensure that the remedy is, or will be, protective of human health and the environment.

ROD DATA CERTIFICATION CHECKLIST

The following information is included in the Decision Summary section of this ROD. Additional information can be found in the Administrative Record for the OU1 ROD.

- Chemicals of concern and their respective concentrations may be found in the “Site Characteristics” section.
- Baseline risk represented by the chemicals of concern may be found in the “Summary of Site Risks” section.
- A discussion of remediation goals may be found in the “Remedial Action Objectives” section.
- A discussion of source materials constituting principal threats may be found in the “Principal Threat Waste” section.
- Current and reasonably anticipated future land use assumptions are discussed in the “Current and Potential Future Site and Resource Uses” section.
- Estimated capital, annual operation and maintenance (O&M) and total present worth costs are discussed in the “Description of Alternatives” section.
- Key factors that led to selecting the remedy (i.e., how the selected remedy provides the best balance of tradeoffs with respect to the balancing and modifying criteria,

highlighting criteria key to the decision) may be found in the “Comparative Analysis of Alternatives” and “Statutory Determinations” sections.



Angela Carpenter, Acting Director
Emergency & Remedial Response Division
EPA – Region 2

9.29.17

Date

Decision Summary

Mansfield Trail Dump Superfund Site

Operable Unit 1: Contaminated Potable Wells at Residential Properties

Byram Township
Sussex County, New Jersey

United States Environmental Protection Agency

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SITE NAME, LOCATION, AND DESCRIPTION

The Mansfield Trail Dump Superfund Site (Site) is located in a residential neighborhood in Byram Township, Sussex County, New Jersey. The Site consists of former waste disposal trenches in a wooded area and groundwater contamination in the area. Trichloroethylene (TCE) from the former waste disposal trenches has migrated into the groundwater to nearby residential potable wells. The former waste disposal trenches are bounded to the north, south, and west by upland woods, and by a former rail line to the east (Figure 1). The Operable Unit 1 (OU1) Study Area includes the impacted residential potable wells. The OU2 Study Area includes the Site-wide contaminated groundwater, potential residual soil contamination and related vapor intrusion at the Site.

The U.S. Environmental Protection Agency (EPA) is the lead agency, and the New Jersey Department of Environmental Protection (NJDEP) is the support agency for this Site.

SITE HISTORY AND ENFORCEMENT ACTIVITIES

It is suspected that the Site was used as a dump for septic and other industrial wastes from the late 1950s through at least the early 1970s. In May 2005, the Sussex County Department of Health and Human Services and NJDEP became aware of TCE contamination in residential potable wells serving homes on Brookwood and Ross Roads, and notified residents in the neighborhood of the contamination. Point-of Entry-Treatment Systems (POETS) were installed, primarily by NJDEP, at impacted residential properties to provide safe drinking water. By June 2005, 13 residential potable wells were known to be contaminated with TCE at concentrations in excess of New Jersey Ground Water Quality Standards (NJ GWQS) and additional POETS were installed. Currently, nineteen homes are equipped with POETS, installed by NJDEP or by homeowners, to remove the contamination and to ensure a safe potable water source for area residents.

In addition, from 2006 to 2008, NJDEP collected indoor air and sub-slab soil gas samples from homes throughout the affected neighborhood. NJDEP installed vapor intrusion mitigation systems or modified existing radon mitigation systems in five of the affected homes to prevent the migration of harmful vapors from entering the homes.

NJDEP first identified the former waste disposal trenches at the Site in 2009 during an effort to determine the source of the contamination detected in the nearby residential potable wells along Brookwood and Ross Roads. On October 16, 2009, NJDEP submitted a request to the EPA Emergency and Remedial Response Division (ERRD), to evaluate the Site for a Removal Action under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA). Subsequent reconnaissance efforts conducted by NJDEP, EPA, and contractors in December 2009 and May 2010 indicated disposal trenches that were designated Dump Areas A, B, C, D and E (Figure 2). EPA collected soil and sludge-like-waste, groundwater (on-site monitoring wells), and residential well samples from February to May 2010. EPA also installed a background monitoring well, MW-3, south of NJDEP's previously installed monitoring wells, MW-1 and MW-2 (Figure 3). Concurrently, in February and March of 2010, EPA collected well water samples from 21 residences along Brookwood Road and Ross Road

and from the Byram Intermediate School wells. The school well samples did not exceed Maximum Contaminant Levels (MCLs), set by state and federal drinking water standards, for site-related contaminants.

Based on NJDEP and EPA's sampling from 2009 to 2010, the groundwater plume was found to begin at the former waste disposal trenches and extend downgradient toward the Brookwood Road and Ross Road residential area. The contaminated waste and soil that was present within the trench areas was determined to be a source of TCE to the underlying aquifer and presented a direct contact threat to the public via groundwater. After performing a Removal Site Evaluation (RSE), EPA concluded that a CERCLA removal action was warranted to address the threats posed by the former waste disposal areas (i.e., trenches) at the Site.

In March 2011, based on the impacted disposal and residential areas outlined above, the Site was added to the National Priorities List (NPL). On September 29, 2011, an Action Memorandum was approved by EPA for the excavation and off-Site disposal of TCE-contaminated soil at the Site. From February 21 to May 30, 2012, EPA completed excavation activities to remove soil contamination from Dump Areas A, B, C, D and E. Approximately 11,170 tons of non-hazardous soil and debris and 383 tons of hazardous soil were removed from the Site and transported to approved off-site disposal facilities. The removal action was completed on July 23, 2012. The contaminated waste disposal trenches were excavated to bedrock and re-graded and restored to match the former topography.

From August 2013 to December 2015 as part of the Site-wide groundwater investigation, EPA performed remedial investigation activities at the Site. During this time, EPA installed ten multi-level monitoring wells and eleven overburden groundwater wells (Figure 3). EPA collected environmental data, including overburden soil samples, subsurface soil samples, rock core samples, groundwater samples, and performed site reconnaissance activities. Samples were taken from both the former source area and the downgradient residential neighborhood. Additional environmental data will be collected as part of the OU2 investigation. In April 2014, EPA collected water samples from residential potable wells equipped with POETS, plus an additional eight wells. NJDEP continues to monitor and maintain POETS at impacted residences in accordance with the state Spill Compensation Fund.

Enforcement Activities

Currently, the properties containing the former waste disposal trenches are owned by two parties: the estate of Anna McConnell (who, along with her husband Dennis J. McConnell owned the Site when it was in operation) and the Hopatcong Land Development Company, Inc., which purchased part of the Site from the McConnells in 1990. To date, EPA has sent request for information letters to potentially responsible parties. A Notice of Potential Liability pursuant to Section 107(a) of CERCLA, 42 U.S.C. Section 9601(a), was sent to Hopatcong Land Development, Inc. in October 2014 and to the Estate of Anna McConnell in July 2015. EPA has funded the removal work and remedial work performed to date.

HIGHLIGHTS OF COMMUNITY PARTICIPATION

EPA has worked closely with local residents, public officials, and other interested members of the community since NJDEP requested assistance with the Site in 2009. At the completion of the Focused Feasibility Study (FFS) for OU1, EPA prepared a Proposed Remedial Action Plan (Proposed Plan) presenting remedial alternatives as well as EPA's preferred remedy for the contaminated residential potable wells. The Proposed Plan and supporting documentation for OU1 were released to the public for comment on June 13, 2017. The Proposed Plan and index for the Administrative Record were made available to the public online, and the Administrative Record files were made available at the EPA Administrative Record File Room, 290 Broadway, 18th Floor, New York, New York and the Sussex County Library Louise Childs Branch, 21 Sparta Road, Stanhope, New Jersey.

On June 13, 2017, EPA published a Public Notice in the *NJ Herald* newspaper that provided information about the public comment period, the public meeting for the Proposed Plan, and the availability of the Administrative Record for the OU1 Proposed Plan. EPA also published a press release on June 13, 2017, to announce the release of the Proposed Plan. The public comment period closed on July 13, 2017.

A public meeting was held on June 27, 2017, at the Byram Township Municipal Building, 10 Mansfield Drive, Sparta, New Jersey. The purpose of this meeting was to inform residents, local officials, and interested members of the public about the Superfund process, present details about the Proposed Plan, and to take comments and respond to questions from area residents and other interested parties on the Proposed Plan. Responses to the comments received at the public meeting, and in writing during the public comment period, are included in the Responsiveness Summary, attached as Appendix IV to this ROD.

SCOPE AND ROLE OF THIS OPERABLE UNIT

The selected remedy described in this document represents the first of two planned remedial phases, or operable units (OUs), for the Mansfield Trail Dump Superfund Site. The OU1 Study Area includes residential properties downgradient of the former waste disposal trenches where residential potable wells are known to be impacted (Figure 4) by the Site's contaminated groundwater plume. To address current exposure, NJDEP has installed POETS at impacted properties where contaminant concentrations above the NJ GWQS have been confirmed. NJDEP monitors and maintains these POETS in accordance with the Spill Compensation Fund. NJDEP will install and maintain additional POETS as necessary until EPA implements the OU1 response action.

The scope of the response action for OU1 is to address human health risks associated with contaminants above the most stringent of the state and federal drinking water standards in residential potable wells impacted by contaminated groundwater at the Site. Groundwater restoration, vapor intrusion and potential residual soil contamination within the former source area will be addressed in OU2.

SITE CHARACTERISTICS

The Site is bordered to the east by a steep, narrow valley. An abandoned railroad bed and a waterway, Cowboy Creek, that flows north are located on the valley floor. Cowboy Creek flows to Lubbers Run and the Musconetcong River. Both Lubbers Run and the Musconetcong River are used for recreation, including fishing, boating, and hiking. Information obtained from the New Jersey Division of Fish and Wildlife indicates that portions of the Musconetcong River are fished for human consumption. Segments of the Musconetcong River downstream of the Site are federally designated as a Wild and Scenic River. Water samples taken from the unnamed stream did not indicate any contamination.

At the Site, contamination from the former waste disposal trenches entered groundwater through the bedrock. Bedrock outcrops are located across the Site, and the depth to bedrock throughout the Site ranges from near-surface to approximately 25 feet below ground surface (feet bgs). In the residential area north of the Site, the bedrock elevation drops almost 300 feet from the ridge north toward Cowboy Creek. The shallow, intermediate and deep bedrock aquifers are considered to be up to 50 feet, 50 to 200 feet, and more than 200 feet below bedrock surface, respectively.

Based on the topography and the detections of volatile organic compounds (VOCs) in the residential potable wells, it is likely that shallow groundwater flows beneath Former Dump Area A, which lies on the west side of the ridge, to the west-northwest toward the Brookwood and Ross Roads neighborhood. The ridge forms a local groundwater divide and sources to the east (i.e., former Dump Areas B, D, and E) overlie a separate surficial aquifer. Groundwater was encountered in overburden near Dump Area E at 10 feet bgs. Prior investigations have shown no receptors to be impacted by this surficial aquifer. Site-wide investigation is ongoing, including in areas to the southeast and east of the former dump areas.

Nature and Extent of Contamination

Source Area

Dump Area A consisted of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E were situated on the east side of the ridge. The Dump Area A lower trench was approximately 120 feet long and 10 feet wide. The upper trench A was approximately the same length as the lower trench. On the east side of the ridge, Dump Area B consisted of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consisted of an open, roughly circular patch of disturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D consisted of four trenches (designated as Trenches 1 - 4). Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds, which are likely to be small berms surrounding the Area D trenches.

The waste disposal trenches consisted of contaminated soil and sludge-like-waste from unknown origins. Analytical results of soil and waste samples collected during the waste-source-

delineation phase indicated the presence of VOCs, such as TCE, 1,2-dichloroethylene (1,2-DCE), and benzene, ethylbenzene, toluene, and xylene (BTEX) compounds, as well as various chlorinated benzene compounds throughout the former waste disposal trenches.

Although former Dump Area C was observed to be littered with tires and miscellaneous trash, and was considered an additional area of concern, no evidence was found of the same type and method of waste deposition as the other disposal trenches (i.e., excavated trenches and sludge-like-waste material). Polychlorinated biphenyls (PCBs) were detected in composite samples collected from the former Dump Area A lower trench, Dump Area B, and Dump Area D, trenches 1 and 2. Contaminants were not detected in the former Dump Area D, Trench 4.

Sampling done by NJDEP in 2009 showed elevated concentrations of TCE, 1,2-DCE, and vinyl chloride (VC) in groundwater.

Groundwater Downgradient of Source Area

Groundwater flow through the bedrock is mostly restricted to connected water-bearing fractures and conductive zones. Geophysical studies of monitoring well boreholes were used to evaluate these bedrock fractures. Contaminated groundwater in bedrock appears to migrate laterally into overburden north and northwest of the former source area as the bedrock surface drops off along Brookwood Road.

Previous investigations included installation of overburden groundwater monitoring wells and multi-level bedrock groundwater monitoring wells to determine the nature and extent of groundwater contamination. Twenty-four monitoring wells were sampled in the shallow and deep groundwater aquifer between March 2014 and December 2015 (Figure 3). Sampling during this time period found that TCE levels exceeded the NJ GWQS of 1 µg/L in six out of 13 shallow groundwater samples and 62 out of 94 deep groundwater samples. Concentrations of TCE ranged between 0.11 µg/L and 320 µg/L. Continued sampling is planned to further delineate the extent of groundwater contamination as part of the ongoing OU2 investigation. Additional data from Site-wide investigation work will be documented as part of the OU2 Remedial Investigation/Feasibility Study report (RI/FS).

Residential Groundwater Sampling

The March 2006 sampling of the residential potable wells in the Brookwood and Ross Roads neighborhood conducted by NJDEP indicated the presence of TCE concentrations that ranged from 3.9 to 70 µg/L. Sampling performed by EPA in 2010 detected TCE in 15 of the sampled residential potable wells serving 56 residents. In April 2014, EPA collected water samples from residential potable wells equipped with POETS, plus an additional eight wells. Samples were taken prior to treatment. To date, approximately 75 residential potable wells have been sampled and 19 POETS have been installed since 2005, at properties where contamination was confirmed above NJ GWQS for TCE. The standard for NJ MCLs and NJ GWQSs for TCE is 1 mg/L, and is more stringent than the federal MCL for TCE, which is 5 mg/L. NJDEP continues to monitor and maintain POETS at impacted residences in accordance with the state Spill Compensation Fund. All Chemicals of Concern (COCs) identified in residential potable wells were compared to the

lesser of NJ GWQS and state and federal MCLs in the Brookwood and Ross Road neighborhood. A full discussion of COCs at the Site can be found in the Baseline Human Health Risk Assessment (BHHRA).

CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES

Groundwater Uses

Area groundwater is classified by NJDEP as a Class IIA resource; it is a current source of drinking water, and it is expected to remain a source of drinking water in the future. Properties with potable wells that have tested above NJ GWQSs have been referred to NJDEP for further evaluation and action, which includes confirmation sampling, and the installation and maintenance of POETS until EPA has implemented a remedy for the OU1 Study Area.

SUMMARY OF SITE RISKS

As part of the OU1 FFS, EPA conducted a baseline risk assessment to estimate the current and future effects of contaminants on human health. 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 and groundwater uses. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed by the remedial action. This section of the ROD summarizes the results of the baseline human health risk assessment for the Site.

Human Health Risk Assessment

A four-step process is utilized for assessing site-related human health risks for a reasonable maximum exposure scenario:

- *Hazard Identification* – uses the analytical data collected to identify the contaminants of potential concern at the site for each medium, with consideration of a number of factors explained below;
- *Exposure Assessment* - estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathways (e.g., ingesting contaminated well-water) by which humans are potentially exposed;
- *Toxicity Assessment* - determines the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure (dose) and severity of adverse effects (response); and
- *Risk Characterization* - summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site-related risks. The risk characterization also identifies contamination with concentrations which exceed acceptable levels, defined by the NCP as an excess lifetime cancer risk greater than 1×10^{-6} – 1×10^{-4} , an excess of lifetime cancer risk greater than 1×10^{-6} (i.e., point of departure) combined with site-specific circumstances, or a Hazard Index greater than 1; contaminants at these concentrations are considered COCs and are typically those that

will require remediation at the Site. Also included in this section is a discussion of the uncertainties associated with these risks.

Hazard Identification

In this step, the chemicals of potential concern (COPCs) in each medium were identified based on such factors as toxicity, frequency of occurrence, fate and transport of the contaminants in the environment, concentrations, mobility, persistence and bioaccumulation. The risk assessment for the OU1 study area focused on groundwater related to the Mansfield Trail Dump site which may pose significant risk to human health. Analytical information that was collected to determine the nature and extent of contamination revealed the presence of VOCs in groundwater at concentrations of potential concern.

This ROD focuses on the groundwater plume in the area immediately downgradient of the former waste disposal trenches. Groundwater is used by residents for drinking water purposes. Although POETS have been installed within impacted homes, if additional wells become contaminated or the POETS are not maintained, exposure to contaminated groundwater could occur. A comprehensive list of all COPCs can be found in the BHHRA in the Administrative Record. Only the COCs, or the chemicals requiring remediation at the Site, are listed in Table 1.

Exposure Assessment

Consistent with Superfund policy and guidance, the BHHRA is a baseline human health risk assessment and therefore assumes no remediation or institutional controls to mitigate or remove hazardous substance releases. Cancer risks and noncancer hazard indices were calculated based on an estimate of the reasonable maximum exposure (RME) expected to occur under current and future conditions at the Site. The RME is defined as the highest exposure that is reasonably expected to occur at a site.

The primary land use in the OU1 study area is residential. It is anticipated that the future land use for this area will remain consistent with current use.

Exposure pathways were identified for each potentially exposed population and each potential exposure scenario for exposure to groundwater. Exposure pathways assessed in the BHHRA are presented in Table 2 and include exposure of residents to groundwater ingestion, dermal contact with groundwater and inhalation of volatiles while showering. Adult and child residents have been identified as potentially exposed populations. Typically, exposures are evaluated using a statistical estimate of the exposure point concentration, which is usually an upper-bound estimate of the average concentration for each contaminant, but in some cases may be the maximum detected concentration. A summary of the exposure point concentrations for the site-related COCs in groundwater can be found in Table 1, while a comprehensive list of the exposure point concentrations for all COPCs can be found in the BHHRA.

Toxicity Assessment

Under current EPA guidelines, the likelihood of carcinogenic risks and noncancer hazards due to exposure to site chemicals are considered separately. Consistent with current EPA policy, it was assumed that the toxic effects of the site-related chemicals would be additive. Thus, cancer and noncancer risks associated with exposures to individual COPCs were summed to indicate the potential risks and hazards associated with mixtures of potential carcinogens and noncarcinogens, respectively.

Toxicity data for the human health risk assessment were provided by the Integrated Risk Information System (IRIS) database, the Provisional Peer Reviewed Toxicity Database (PPRTV), or another source that is identified as an appropriate reference for toxicity values consistent with EPA's directive on toxicity values. This information for the site-related COCs is presented in Table 3 (noncancer toxicity data summary) and Table 4 (cancer toxicity data summary). Additional toxicity information for all COPCs is presented in the BHHRA.

Risk Characterization

Noncarcinogenic risks were assessed using a hazard index (HI) approach, based on a comparison of expected contaminant intakes and benchmark comparison levels of intake (reference doses, reference concentrations). Reference doses (RfDs) and reference concentrations (RfCs) are estimates of daily exposure levels for humans (including sensitive individuals) which are thought to be safe over a lifetime of exposure. The estimated intake of chemicals identified in environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) is compared to the RfD or the RfC to derive the hazard quotient (HQ) for the contaminant in the particular medium. The HI is obtained by adding the hazard quotients for all compounds within a particular medium that impacts a particular receptor population.

The HQ for oral and dermal exposures is calculated as below. The HQ for inhalation exposures is calculated using a similar model that incorporates the RfC, rather than the RfD.

$$\text{HQ} = \text{Intake/RfD}$$

Where: HQ = hazard quotient
 Intake = estimated intake for a chemical (mg/kg-day)
 RfD = reference dose (mg/kg-day)

The intake and the RfD will represent the same exposure period (i.e., chronic, subchronic, or acute).

As previously stated, the HI is calculated by summing the HQs for all chemicals for likely exposure scenarios for a specific population. An HI greater than 1 indicates that the potential exists for noncarcinogenic health effects to occur as a result of site-related exposures, with the potential for health effects increasing as the HI increases. When the HI calculated for all chemicals for a specific population exceeds 1, separate HI values are then calculated for those chemicals which are known to act on the same target organ. These discrete HI values are then

compared to the acceptable limit of 1 to evaluate the potential for noncancer health effects on a specific target organ. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. A summary of the noncarcinogenic hazards associated with these chemicals for each exposure pathway is contained in Table 5.

Table 5 shows that the total HI for noncancer effects is 107 for the adult resident and 100 for the child resident from exposure to *cis*-1,2-DCE, TCE, VC, chromium, cobalt and nickel in groundwater. The noncarcinogenic risks for both populations were attributable primarily to TCE.

For carcinogens, risks are generally expressed as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to a carcinogen, using the cancer slope factor (SF) for oral and dermal exposures and the inhalation unit risk (IUR) for inhalation exposures. Excess lifetime cancer risk for oral and dermal exposures is calculated from the following equation, while the equation for inhalation exposures uses the IUR, rather than the SF:

$$\text{Risk} = \text{LADD} \times \text{SF}$$

Where: Risk = a unitless probability (1×10^{-6}) of an individual developing cancer
LADD = lifetime average daily dose averaged over 70 years (mg/kg-day)
SF = cancer slope factor, expressed as $[1/(\text{mg/kg-day})]$

These risks are probabilities that are usually expressed in scientific notation (such as 1×10^{-4}). An excess lifetime cancer risk of 1×10^{-4} indicates that one additional incidence of cancer may occur in a population of 10,000 people who are exposed under the conditions identified in the assessment. Again, as stated in the NCP, the point of departure is 10^{-6} and the acceptable risk range for site-related exposure is 10^{-6} to 10^{-4} .

A summary of the estimated cancer risks is presented in Table 6. The results indicated that the cancer risks exceeded the acceptable risk range for residential exposure to tap water and shower vapors due to groundwater concentrations of TCE, VC and chromium.

Ecological Risk Assessment

An Ecological Risk Assessment was not done for OU1 because this OU addresses human exposure to contaminated potable water wells. An Ecological Risk Assessment will be included as part of the OU2, which will address Site-wide groundwater contamination, vapor intrusion and potential residual soil contamination.

Uncertainties

The procedures and inputs used to assess risks in this evaluation, as in all such assessments, are subject to a wide variety of uncertainties. In general, the main sources of uncertainty include:

- environmental data
- exposure parameter estimation

- exposure point concentrations
- toxicity values
- risk characterization

Two of the primary sources of uncertainty identified in the HHRA were associated with exposure parameters and toxicological data. Uncertainty in exposure parameters was related to many of the parameters being associated with default values since site-specific values were not available. This would provide a conservative estimate of potential risk and hazards.

Another important source of uncertainty was toxicological data. The toxicity factors used in the quantitative evaluation of potential risks and hazards were primarily selected from the Integrated Risk Information System (IRIS). For many chemicals, there is a lack of appropriate information on effects in humans (i.e., epidemiologic studies). Therefore, animal studies are generally used to develop toxicity values in human health risk assessments, which may under- or over-estimate potential risks and hazards.

The chromium and nickel maximum values used for exposure point concentrations in the HHRA were anomalously higher (several orders of magnitude) compared to other wells onsite and results from previous sampling events. A statistical outlier test was performed to determine whether these concentrations can be considered representative of site exposure based on data collected from other monitoring wells within the groundwater plume. The outlier testing concluded that both chromium and nickel sampling results contained outliers from the same sample multi-level system (MLS-3) location. When these outliers were replaced with the next highest concentration detected from that location, the total risk from all carcinogens decreased to 5×10^{-3} (one-in-one thousand). Although the adjusted risk still exceeds EPA thresholds, the outlier test indicated TCE and VC are the primary contributors of site-related risk. Exposure to TCE and VC individually accounted for risks of 5×10^{-4} and 4×10^{-3} , respectively. In addition, cancer risk due to chromium may be overestimated because it was assumed that all of the chromium present is in the more toxic hexavalent form. This is conservative since chromium in the environment is generally dominated by the less toxic, trivalent form.

More specific information concerning uncertainty in the health risks is presented in the baseline human health risk assessment report.

Risk Assessment Summary

In summary, VOCs contributed to unacceptable risks and hazards to future residents from exposure to Site groundwater. Based on the results of the human health risk assessment, the response action selected in the ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of contaminants into the environment.

REMEDIAL ACTION OBJECTIVES

Remedial action objectives (RAOs) are specific goals to protect human health and the environment. These objectives are based on available information and standards such as applicable or relevant and appropriate requirements (ARARs) and risk-based levels established in the risk assessment.

A primary objective of any remedial strategy is overall protectiveness. The RAO for the Mansfield Trail Dump OU1 Study Area is:

- Prevent or minimize current and future human exposures from ingestion of, inhalation of, and dermal contact with contaminants in potable water attributable to contaminated groundwater at the Site.

Groundwater restoration and potential vapor intrusion and residual soil contamination within the former source area will be addressed in OU2.

DESCRIPTION OF REMEDIAL ALTERNATIVES

CERCLA requires that remedial actions be protective of human health and the environment, be cost-effective, comply (or waive) ARARs, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practical. In addition, CERCLA includes a preference for the use of treatment as a principal element for the reduction of toxicity, mobility, or volume of the hazardous substances.

Potential technologies applicable to groundwater remediation were identified and screened by effectiveness, implementability, and cost criteria, with emphasis on effectiveness. Because all alternatives would result in hazardous substances, pollutants, or contaminants remaining at the properties above levels that would allow for unlimited use and unrestricted exposure, EPA would review conditions at the Site every five years.

Detailed descriptions of the remedial alternatives for alternate water supplies for OU1 are presented below. The use of the 30-year timeframe does not imply that the remedy would become ineffective or be removed after 30 years. Construction time is the time required to construct and implement the alternative and does not include the time required to design the remedy, negotiate performance of the remedy with responsible parties, or procure contracts for design and construction. Detailed information regarding the alternatives can be found in the final FFS Report.

Alternative 1 - No Action

The NCP requires that a “No Action” alternative be evaluated to establish a baseline for comparison with other remedial alternatives. Under the no action alternative, no remedial actions would be taken to reduce the levels of contamination in residential potable wells. Additionally, this option does not include the cost of continuation of any existing treatment systems, nor the implementation of any new institutional controls or remedial action. Any improvement of groundwater quality would be through natural attenuation processes.

| | |
|----------------------------|---------|
| Total Capital Cost: | \$0 |
| Operation and Maintenance: | \$0 |
| Total Present Net Worth: | \$0 |
| Construction Timeframe: | 0 years |

Alternative 2 – Treatment via POETS

Alternative 2 relies on the continued operation of existing POETS. The existing POETS would be assessed and necessary upgrades would be evaluated. The cost estimate includes upgrades to five of the systems. All existing systems would then need to be operated, monitored, and maintained in accordance with current practices.

Previous investigations do not indicate the imminent spread of groundwater contamination beyond the area that has been impacted, but monitoring of potable wells in the vicinity would be conducted to assure that they meet drinking water standards of 1 µg/L of TCE. POETS would need to be installed, operated, monitored, and maintained if potable wells at these homes were to become impacted.

| | |
|---------------------------------|-------------|
| Capital Cost: | \$381,872 |
| Annual O&M Cost (Year 1 to 5): | \$219,612 |
| Annual O&M Cost (Year 6 to 30): | \$231,844 |
| Present-Worth Cost: | \$3,209,000 |
| OM&M of POET Systems: | 30 years |
| Time to Install POETS: | 5 weeks |

Alternative 3 – Connection to an Existing Water Supply System

Alternative 3 includes the provision of potable water to impacted properties through construction of a water line and abandonment of residential potable wells. Service connections to each impacted house from an existing water supply system in the area would be made in accordance with Byram Township, Sussex County, and New Jersey regulations.

For cost estimation purposes, the closest privately owned water supplier, East Brookwood Estate Property Owners Association (EBEPOA), was used as the water supply system. In order to add the impacted area to the EBEPOA, upgrades to the existing system and consent of the owners of the EBEPOA would be necessary. The specifications of the water supply and water line, along with any upgrades necessary for connection of additional homes, will be determined during remedial design.

During the design and construction phases of the water line, POETS that have been installed at potable wells where water exceeds the TCE standard of 1 µg/L would need to be operated and maintained in accordance with current practices, until individual residences are switched over to the alternate water supply. EPA would periodically monitor residential potable wells in the vicinity of the impacted area that are currently not impacted above state and federal drinking water standards. If these wells were to become impacted, POETS would need to be installed at

these additional locations until the remedy has been constructed and an alternate potable water source is available.

After the remedy is in place, homes in the vicinity of the impacted area would continue to be monitored. If any of any of the potable wells at these monitored homes were to become impacted, connection to the water line would be made available. The capacity of the water supply system would then be reassessed.

| | |
|---------------------------------|-------------|
| Capital Cost: | \$8,333,160 |
| Annual O&M Cost (year 1): | \$77,278 |
| Annual O&M Cost (year 1 to 30): | \$27,016 |
| Present-Worth Cost: | \$8,746,000 |

Time to Complete Construction: 8 months

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 CFR §300.430(e)(9) and OSWER Directive 9355.3-01. The detailed analysis consisted of an assessment of each of the individual response measures per remedy component against each of nine evaluation criteria and a comparative analysis focusing upon the relative performance of each response measure against the criteria.

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, No Action, would not provide overall protection of human health and the environment. This alternative would not achieve the RAO because it does not prevent the current and future use of contaminated groundwater which presents an unacceptable human health risk.

Alternatives 2 and 3 would be protective of human health as both alternatives prevent ingestion and dermal contact with contaminated groundwater. Alternative 2, would be protective of human health because contaminated groundwater would continue to be treated prior to use by residents within the impacted area. This alternative relies on consistent long-term maintenance of individual systems in order to ensure effectiveness of the treatment.

Alternative 3, would be protective of human health in the impacted area by providing potable water through construction of a water line and abandonment of residential potable wells. Other

homes in the vicinity of the impacted area would be monitored, as a safeguard, and offered connection to the system if the potable wells showed TCE contamination exceeding 1 µg/L.

Because the “no action” alternative, Alternative 1, is not protective of human health and the environment, it was eliminated from further consideration under the remaining eight criteria.

2. Compliance with applicable or relevant and appropriate requirements (ARARs)

Section 121(d) of CERCLA and NCP §300.430(f) (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 address 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.

ARARS for groundwater are the most stringent of the state and federal drinking water standards. A listing of ARARs is provided in Table 7 (see Appendix I). Alternatives 2 and 3 would both comply with action-specific and location-specific ARARs. Alternative 2 and Alternative 3 through the use of POETs during the construction of the water line would meet chemical-specific ARARs by providing potable water to meet state and federal drinking water standards as long as the POETS are maintained. POETS require diligent operation and maintenance to assure that they continue to properly address groundwater contamination in each residence over time in order to provide safe potable water. However, Alternative 3 is the alternative that best meets this criterion as it provides for residences to be connected to an alternate water supply, because operators of water supply systems are legally required to meet state and federal drinking water standards as well as other legal requirements.

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

3. Long-Term Effectiveness and Permanence

Long-term effectiveness and permanence refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once cleanup 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.

Alternative 3 provides the greatest degree of long-term effectiveness and permanence because this alternative relies on permanent infrastructure to convey water from a reliable source of potable water. Alternative 2 would require significantly more maintenance to remain reliable, such as confirmation sampling and carbon replacement in order for POETS to remain protective, and is therefore not considered as permanent as Alternative 3.

4. Reduction of Toxicity, Mobility, 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.

Alternatives 2 and 3 would not reduce the toxicity, mobility, or volume of the contaminants in groundwater through treatment but would prevent the exposure of the residents to the contaminants. The POETS would control exposure to contaminant concentrations above MCLs by treatment at the point of use. Connection to a water system would provide an alternate supply of potable water, therefore eliminating exposure to the contaminants.

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.

Alternative 2 would require limited site work, resulting in minimal short-term impacts to the community and workers. Potential upgrades to systems, as part of Alternative 2, are estimated to take two hours per system, resulting in minimal implementation time. The necessity to construct parts of the remedies on the property of land owners, in roadways and right-of-ways for Alternative 3 would result in some short-term adverse effects to the surrounding community.

Construction of Alternative 3 would result in the most significant short-term effects in the community, with the installation of a water line. These effects would be limited to the construction work in the neighborhood and on private property for connections. However, EPA would work with the community to alleviate concerns. In addition, standard health and safety

practices would be used to mitigate any impacts on workers. There would be no adverse environmental impacts to habitats or vegetation as implementation would only affect previously developed areas such as roads and private properties. Duration time for construction of a water main, as part of Alternative 3, is estimated at 8 months.

Air monitoring, engineering controls and appropriate worker personal protective equipment would be used to protect the community and workers as necessary for Alternatives 3.

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.

Alternatives 2 and 3 are implementable as no special techniques, materials or labor are required to implement these alternatives. Under Alternative 2 it is expected that not all homes would need upgrades to their existing systems. The limited site work would be easily implemented.

Alternative 3 would be implementable using conventional construction methods and readily available materials. Due to construction required on roads, disruptions to local traffic would be likely. Right-of-way access and coordination with local government would be needed as well. The public water supply selected, the distance from the impacted properties and the capacity of the system might affect implementability.

7. Cost

Includes estimated capital and O&M costs, and net present worth value of capital and O&M costs.

The estimated present worth of Alternative 2 is \$3,209,000. This cost includes an estimated number of upgrades to existing systems as well as the installation of an estimated number of new systems in the vicinity of the impacted properties. Also included in this cost is residential water sampling to ensure POETS are operating properly. This alternative assumes O&M on the POETS and monitoring over a 30-year time period.

The present worth of the estimated cost for Alternative 3 is \$8,746,000. This estimate includes construction of the proposed water line as well as O&M of the alternate supply system for one year. O&M costs for the monitoring program are estimated over a 30-year time period.

For costing purposes, each alternative has an estimated duration of 30 years. The OU2 investigation will address the Site-wide groundwater contamination and consider duration and costs of groundwater remedial alternatives.

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 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 the selected remedy.

9. Community Acceptance

Summarizes the public’s general response to the alternatives 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 response measures proposed for the Site. Oral comments presented at the public meeting were recorded, and EPA received written comments during the public comment period. The Responsiveness Summary addresses all public comments received by EPA during the public comment period. Overall, the community members, elected officials, and stakeholders were in favor of EPA’s recommended alternative.

PRINCIPAL THREAT WASTE

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. Contaminated groundwater is generally not considered to be source material; however, Non-Aqueous Phase Liquids (NAPLs) in groundwater may be viewed as source material. Investigation of Site-wide groundwater will be addressed as part of OU2 of the Site. EPA’s removal actions at the source area of the Mansfield Trail Dump Site addressed hazardous materials and soils in former waste disposal trenches. These actions removed the “principal threat waste” at the Site.

SELECTED REMEDY

Based upon consideration of the results of the Site investigations, the requirements of CERCLA, the detailed analysis of the remedial alternatives, and public comments, EPA has determined that Alternative 3, connection to an alternate water supply and abandonment of impacted residential potable wells, is the appropriate remedy for OU1. The remedy best satisfies the requirements of CERCLA Section 121 and the NCP’s nine evaluation criteria for remedial alternatives, 40 CFR § 300.430(e)(9). The major components of the selected remedy include:

- Provision of potable water to impacted properties through the construction of a water line and connections;
- Any necessary upgrades to the water supply system; and
- The abandonment of private residential potable wells.

The selected remedy alternative for OU1 was selected over the other alternatives because EPA believes an alternate water supply would effectively mitigate exposure to contaminated drinking water. The preference for Alternative 3 is based upon two factors: (1) Site-wide groundwater investigation is ongoing and groundwater restoration will be evaluated under OU2; and (2) the reliability and permanence of an alternate water supply as compared to individual treatment systems. The installation of an alternate water supply in the area affected by the contaminated groundwater would eliminate risks to residents from consumption of, inhalation of, and dermal contact with contaminated drinking water. The operator of the water supply system to which the EPA connects the homes with contaminated potable wells will be required to meet the requirements of the Safe Drinking Water Act. EPA expects this to be the final remedy for impacted residential potable wells at the Site.

POETS will need to be operated and maintained until individual residences are switched over to the alternate water supply. EPA will periodically monitor residential potable wells in the vicinity of the impacted area that are not currently above 1 µg/L, the applicable standard for TCE. If these wells become impacted above that criterion, they will be referred to NJDEP for further evaluation and action, including confirmation sampling, and the installation and maintenance of POETS until EPA has implemented a remedy and an alternate potable water source is available. Properties connected to the alternate water supply will be responsible for payment of water bills once the connections are complete.

Based on the information available at this time, EPA and NJDEP believe the selected remedy provides the best balance of trade-offs among the response measures with respect to the nine evaluation criteria.

Summary of the Rationale for the Selected Remedy

The selection of Alternative 3 provides the best alternative with respect to the evaluation criteria. EPA and NJDEP agree that the selected alternative will be 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, is cost-effective, and will utilize permanent solutions to the maximum extent practicable.

Summary of the Estimated Remedy Costs

The estimated capital and total present-worth cost for the selected alternate water supply remedy are \$8,333,160 and \$8,746,000, respectively. Table 8 provides the basis for the cost estimate for Alternate 3.

It should be noted that these cost estimates are order-of-magnitude engineering cost estimates that are expected to be within plus 50 to minus 30 percent of the actual project cost. These cost estimates are based on the best available information regarding the anticipated scope of the selected remedy. Changes in the cost estimates are likely to occur as a result of new information and data collected during the engineering design of the remedy.

Groundwater Use

Under the selected remedy, residential use of groundwater at impacted properties will be terminated after the remedy is fully operational. A survey will be conducted during the design phase to provide an accurate number of properties requiring public water. After impacted properties are connected to the alternate water supply, residential potable wells within the OU1 Study Area will be abandoned in accordance with applicable requirements. Groundwater will no longer be used as a source of drinking water accessed through residential wells at these properties.

Green Remediation

Consistent with EPA Region 2's Clean and Green policy, EPA will evaluate the use of sustainable technologies and practices with respect to implementation of all components of the selected remedy.

STATUTORY DETERMINATIONS

As was previously noted, CERCLA §121(b)(1) mandates that remedial actions must be protective of human health and the environment, cost-effective, and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ treatment to permanently and significantly reduce the volume, toxicity or mobility of the hazardous substances, pollutants, or contaminants at a site. CERCLA §121(d) further specifies that a remedial action must attain a degree of cleanup that satisfies ARARs under federal and state laws, unless a waiver can be justified pursuant to §121(d)(4).

Protection of Human Health and the Environment

The selected remedy, Alternative 3, will be protective of human health and the environment through the connection of residential properties to an existing water supply. The next phase of the remedy, OU2, will address the Site-wide groundwater contamination, potential residual soil contamination and related vapor intrusion at the Site.

The remedy will, once complete, eliminate all significant risks to human health associated with the TCE-contaminated groundwater posed by residential wells. This action will result in the reduction of potential exposure to contaminated groundwater to within EPA's generally acceptable risk range. Implementation of the selected remedy will not pose unacceptable short-term risks or adverse cross-media impacts.

Compliance with ARARs

The selected remedy will comply with chemical-specific, action-specific and location-specific ARARs.

The selected remedy for potable water has been developed to meet federal and state ARARs for drinking water. A comprehensive ARAR discussion is included in the final FFS and a complete listing of ARARs for the selected remedy is included in Table 7 (see Appendix I).

Cost Effectiveness

EPA has determined that the selected remedy is cost-effective and represents a reasonable value. In making this determination, the following definition was used: "A remedy shall be cost-effective if its costs are proportional to its overall effectiveness." (NCP §300.430 (f) (1) (ii) (D)). EPA evaluated the "overall effectiveness" of those alternatives that satisfied the threshold criteria (i.e., were both protective of human health and the environment and ARAR-compliant). Overall effectiveness was evaluated by assessing three of the five balancing criteria in combination (long-term effectiveness and permanence; reduction in toxicity, mobility, or volume through treatment; and short-term effectiveness). Overall effectiveness was then compared to costs to determine cost-effectiveness. The relationship of the overall effectiveness of the selected remedy was determined to be proportional to costs and hence, this alternative represents a reasonable value for the money to be spent.

Each of the alternatives has undergone a detailed cost analysis. In that analysis, capital and annual operation and maintenance costs have been estimated and used to develop present-worth costs. In the present-worth cost analysis, annual operation and maintenance costs were calculated for the estimated life of an alternative using a 7% discount rate. The estimated present-worth cost of the selected OU1 alternate water supply remedy is \$8,746,000. EPA believes that the cost of the selected alternative is proportional to its overall effectiveness because it eliminates exposure to contaminated water, providing greater protectiveness than Alternative 2.

Utilization of Permanent Solutions and Alternative Treatment Technologies

EPA has determined that 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 (or provide a basis for invoking a waiver), EPA has determined that the selected remedy provides the best balance of trade-offs in terms of the five balancing criteria, while also considering the statutory preference for treatment as a principal element and State and community acceptance.

The selected remedy will provide adequate long-term control of risks to human health and the environment through provision of potable water to impacted properties through the construction of a water line and connections, abandonment of residential potable wells, and long-term monitoring of properties in the vicinity of the impacted area. The selected remedy does not present short-term risks different from the other alternatives.

Preference for Treatment as a Principal Element

The statutory preference for remedies that employ treatment as a principal element is not satisfied under the selected alternate water supply remedy since no treatment is included. EPA's prior removal actions at the Mansfield Trail Dump site addressed hazardous materials and soils in the former waste disposal trenches that are considered principal threat waste

Five-Year Review Requirements

Because the remedy will result in hazardous substances, pollutants, or contaminants remaining above levels that allow for unlimited use and unrestricted exposure, a statutory five-year review will be required. The first review will be conducted within five years of construction completion for the OU1 remedy to ensure that the remedy is, or will be, protective of human health and the environment.

DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan for the OU1 Study Area was released for public comment on June 13, 2017. The comment period closed on July 13, 2017. The Proposed Plan identified Alternative 3 (connection to an existing water supply) as the preferred alternative to address contaminated residential potable wells at the Site. Upon review of all comments submitted, EPA has determined that no significant changes to the preferred alternative, as it was presented in the Proposed Plan, are warranted.

APPENDIX I
Tables & Figures

TABLE 1
Summary of Chemicals of Concern and
Medium-Specific Exposure Point Concentrations

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater

| Exposure Point | Chemical of Concern | Concentration Detected | | Concentration Units | Frequency of Detection | Exposure Point Concentration (EPC) | EPC Units | Statistical Measure |
|----------------|------------------------|------------------------|------|---------------------|------------------------|------------------------------------|-----------|------------------------|
| | | Min | Max | | | | | |
| Groundwater | cis-1,2-Dichloroethene | 1.7 | 90 | ug/L | 10/10 | 53 | ug/L | 95% Student's-t UCL |
| | Trichloroethylene | 3.8 | 270 | ug/L | 10/10 | 184 | ug/L | 95% Adjusted Gamma UCL |
| | Vinyl Chloride | 0.18 J | 50 | ug/L | 6/10 | 19.7 | ug/L | 95% KM (t) UCL |
| | Chromium | 0.48 J | 622 | ug/L | 10/10 | 622 | ug/L | Max |
| | Cobalt | 1.2 | 19.5 | ug/L | 5/10 | 14.2 | ug/L | 95% Adjusted Gamma UCL |
| | Nickel | 1.1 | 1260 | ug/L | 9/10 | 1260 | ug/L | Max |

J – qualifier for estimated value

95% Student's-t UCL – 95% upper confidence limit, Student's-t statistic (mean, STD)

95% Adjusted Gamma-UCL – 95% upper confidence limit, Adjusted Gamma statistic (mean, STD)

95% KM (t)-UCL – 95% upper confidence limit, Kaplan Meier statistic (mean, STD)

Max – maximum detected concentration

Summary of Chemicals of Concern and Medium-Specific Exposure Point Concentrations

This table presents the chemicals of concern (COCs) and exposure point concentrations (EPCs) for the COCs in groundwater. The table includes the range of concentrations detected for each COC, as well as the frequency of detection (i.e., the number of times the chemical was detected in the samples collected at the site), the EPC and how it was derived.

TABLE 2
Selection of Exposure Scenarios

| Scenario Timeframe | Medium | Exposure Medium | Exposure Point | Receptor Population | Receptor Age | Exposure Route | Type of Analysis |
|--------------------|-------------|-----------------|-----------------------|---------------------|-------------------------------------|----------------|------------------|
| Current/Future | Groundwater | Tap Water | Tap Water/Shower Head | Resident | Adult and Child (birth to <6 years) | Ing/Der/Inh | Quantitative |

Ing – Ingestion
Der – Dermal
Inh – Inhalation

Summary of Selection of Exposure Pathways

This table describes the exposure pathways that were evaluated for the risk assessment. Exposure media, exposure points, and characteristics of receptor populations are included.

TABLE 3
Non-Cancer Toxicity Data Summary

Pathway: Oral/Dermal

| Chemical of Concern | Chronic/ Subchronic | Oral RfD Value | Oral RfD Units | Absorp. Efficiency (Dermal) | Adjusted RfD (Dermal) | Adj. Dermal RfD Units | Primary Target Organ | Combined Uncertainty /Modifying Factors | Sources of RfD: Target Organ | Dates of RfD: |
|------------------------|------------------------|-------------------|----------------|-----------------------------------|---------------------------|--------------------------|--|--|---------------------------------|---------------|
| cis-1,2-Dichloroethene | Chronic | 2.0E-01 | mg/kg-day | 1 | 2.0E-01 | mg/kg-day | Kidney | 3,000 | IRIS | 11/12/2016 |
| Trichloroethylene | Chronic | 5.0E-04 | mg/kg-day | 1 | 5.0E-04 | mg/kg-day | Heart, Immune System, Developmental, Kidney | 10 to 1,000 | IRIS | 11/12/2016 |
| Vinyl Chloride | Chronic | 3.0E-03 | mg/kg-day | 1 | 3.0E-03 | mg/kg-day | Liver | 30 | IRIS | 11/12/2016 |
| Chromium ¹ | Chronic | 3.0E-03 | mg/kg-day | 0.025 | 7.5E-05 | mg/kg-day | None reported | 300 | IRIS | 11/12/2016 |
| Cobalt | Chronic | 3.0E-04 | mg/kg-day | 1 | 3.0E-04 | mg/kg-day | Thyroid | 3,000 | PPRTV | 8/25/2008 |
| Nickel ² | Chronic | 2.0E-02 | mg/kg-day | 0.04 | 8.0E-04 | mg/kg-day | Body and organ weight | 200 | IRIS | 12/1/2016 |

Pathway: Inhalation

| Chemical of Concern | Chronic/ Subchronic | Inhalation RfC | Inhalation RfC Units | Primary Target Organ | Combined Uncertainty /Modifying Factors | Sources of RfC: Target Organ | Dates: |
|------------------------|------------------------|-------------------|-------------------------|-----------------------------|--|---------------------------------|------------|
| cis-1,2-Dichloroethene | NA | NA | NA | NA | NA | NA | NA |
| Trichloroethylene | Chronic | 2.0E-03 | mg/m ³ | Heart, Immune System, Liver | 10 to 100 | IRIS | 11/12/2016 |
| Vinyl Chloride | Chronic | 1.0E-01 | mg/m ³ | Liver | 30 | IRIS | 11/12/2016 |

Key

NA: No information available
 IRIS: Integrated Risk Information System
 PPRTV: Provisional Peer Reviewed Toxicity Value
¹ based on chromium (VI)
² based on nickel, soluble salt

Summary of Toxicity Assessment

This table provides non-carcinogenic risk information which is relevant to the contaminants of concern. When available, the chronic toxicity data have been used to develop oral reference doses (RfDs) and inhalation reference concentrations (RfCs).

TABLE 4
Cancer Toxicity Data Summary

Pathway: Oral/Dermal

| Chemical of Concern | Oral Cancer Slope Factor | Units | Adjusted Cancer Slope Factor (for Dermal) | Slope Factor Units | Weight of Evidence/ Cancer Guideline Description | Source | Date |
|------------------------|--------------------------|-----------|---|--------------------|---|--------|------------|
| cis-1,2-Dichloroethene | NA | NA | NA | NA | Inadequate information to assess carcinogenic potential | IRIS | 11/12/2016 |
| Trichloroethylene | 4.6E-02 | mg/kg-day | 4.6E-02 | mg/kg-day | Carcinogenic to humans | IRIS | 11/12/2016 |
| Vinyl Chloride | 7.2E-01 | mg/kg-day | 7.2E-01 | mg/kg-day | A | IRIS | 11/12/2016 |
| Chromium ¹ | 5.0E-01 | mg/kg-day | 2.0E+01 | mg/kg-day | Likely to be carcinogenic to humans | NJDEP | 4/8/2009 |
| Cobalt | NA | NA | NA | NA | NA | NA | NA |
| Nickel | NA | NA | NA | NA | NA | NA | NA |

Pathway: Inhalation

| Chemical of Concern | Unit Risk | Units | Weight of Evidence/ Cancer Guideline Description | Source | Date |
|------------------------|-----------|------------------------------------|---|--------|------------|
| cis-1,2-Dichloroethene | NA | NA | Inadequate information to assess carcinogenic potential | IRIS | 11/12/2016 |
| Trichloroethylene | 4.1E-06 | (ug/m ³) ⁻¹ | Carcinogenic to humans | IRIS | 11/12/2016 |
| Vinyl Chloride | 4.4E-06 | (ug/m ³) ⁻¹ | A | IRIS | 11/12/2016 |

Key:

A: Human Carcinogen

¹ – based on chromium (VI)

NA: No information available

IRIS: Integrated Risk Information System

NJDEP: New Jersey Department of Environmental Protection

Summary of Toxicity Assessment

This table provides carcinogenic risk information which is relevant to the contaminants of concern. Toxicity data are provided for both the oral and inhalation routes of exposure.

| | |
|--|--|
| <p style="text-align: center;">TABLE 5 Risk Characterization Summary - Noncarcinogens</p> | |
|--|--|

| | |
|-----------------------------|----------------|
| Scenario Timeframe: | Current/Future |
| Receptor Population: | Site Resident |
| Receptor Age: | Adult |

| Medium | Exposure Medium | Exposure Point | Chemical of Concern | Primary Target Organ | Non-Carcinogenic Risk | | | |
|-------------|-----------------|-----------------------|------------------------|--|-----------------------|--------|------------|-----------------------|
| | | | | | Ingestion | Dermal | Inhalation | Exposure Routes Total |
| Groundwater | Groundwater | Tap water/shower head | cis-1,2-Dichloroethene | Kidney | 0.8 | NA | NA | 0.8 |
| | | | Trichloroethylene | Heart, Immune System, Developmental, Kidney, Liver | 11 | 1.9 | 80 | 93 |
| | | | Vinyl Chloride | Liver | 0.2 | 0.01 | 0.2 | 0.4 |
| | | | Chromium | None reported | 6.2 | 2.8 | NA | 9 |
| | | | Cobalt | Thyroid | 1.4 | 0.003 | NA | 1.4 |
| | | | Nickel | Body and organ weight | 1.9 | 0.05 | NA | 2 |

| | | |
|--|---------------------|-----|
| | Hazard Index Total= | 107 |
|--|---------------------|-----|

| | |
|-----------------------------|----------------|
| Scenario Timeframe: | Current/Future |
| Receptor Population: | Site Resident |
| Receptor Age: | Child |

| Medium | Exposure Medium | Exposure Point | Chemical of Concern | Primary Target Organ | Non-Carcinogenic Risk | | | |
|-------------|-----------------|-----------------------|------------------------|--|-----------------------|--------|------------|-----------------------|
| | | | | | Ingestion | Dermal | Inhalation | Exposure Routes Total |
| Groundwater | Groundwater | Tap water/shower head | cis-1,2-Dichloroethene | Kidney | 1.3 | NA | NA | 1.3 |
| | | | Trichloroethylene | Heart, Immune System, Developmental, Kidney, Liver | 18 | 3.1 | 57 | 78 |
| | | | Vinyl Chloride | Liver | 0.3 | 0.02 | 0.1 | 0.4 |
| | | | Chromium | None Reported | 10 | 4.5 | NA | 15 |
| | | | Cobalt | Thyroid | 2.4 | 0.005 | NA | 2.4 |
| | | | Nickel | Body and organ weight | 3.1 | 0.09 | NA | 3.2 |

| | | |
|--|--------------------|-----|
| | Hazard Index Total | 100 |
|--|--------------------|-----|

Summary of Risk Characterization - Non-Carcinogens

The table presents hazard quotients (HQs) for each route of exposure and the hazard index (sum of hazard quotients) for exposure to groundwater containing site-related chemicals. The Risk Assessment Guidance for Superfund states that, generally, a hazard index (HI) greater than 1 indicates the potential for adverse non-cancer effects.

TABLE 6
Risk Characterization Summary - Carcinogens

| Scenario Timeframe: | | Future | | | | | |
|--|-----------------|------------------------|------------------------|-------------------|---------|---------------------|-----------------------|
| Receptor Population: | | Site Resident | | | | | |
| Receptor Age: | | Lifetime (Adult/child) | | | | | |
| Medium | Exposure Medium | Exposure Point | Chemical of Concern | Carcinogenic Risk | | | |
| | | | | Ingestion | Dermal | Inhalation | Exposure Routes Total |
| Groundwater | Groundwater | Tap water/shower head | cis-1,2-Dichloroethene | NA | NA | NA | NA |
| | | | Trichloroethylene | 1.6E-04 | 2.6E-05 | 3.2E-04 | 5E-04 |
| | | | Vinyl Chloride | 9.2E-04 | 4.9E-05 | 2.8E-03 | 4E-03 |
| | | | Chromium | 4.0E-03 | 1.8E-03 | NA | 6E-03 |
| | | | Cobalt | NA | NA | NA | NA |
| | | | Nickel | NA | NA | NA | NA |
| | | | | | | Total Risk = | 1E-02 |
| <p align="center">Summary of Risk Characterization – Carcinogens</p> <p>The table presents site-related cancer risks for groundwater exposure. As stated in the National Contingency Plan, the point of departure is 10⁻⁶ and the acceptable risk range for site-related exposure is 10⁻⁶ to 10⁻⁴. The cancer risk from trichloroethylene, vinyl chloride and chromium in groundwater exceeds the acceptable risk range, indicating an unacceptable risk from exposure to groundwater.</p> | | | | | | | |

Table 7
Chemical-Specific ARARs, Criteria, and Guidance
Mansfield Trail Dump Site - OU1
Byram Township, Sussex County, New Jersey

| Regulatory Level | ARAR | Status | Requirement Synopsis | Comments |
|------------------|---|--------|---|--|
| Federal | National Primary Drinking Water Standards-MCLs and MCLGs (40 CFR 141) | ARAR | Establishes health-based standards for public drinking water systems. Also establishes drinking water quality goals set at levels at which no adverse health effects are anticipated with an adequate margin of safety. | Note that these MCLs are considered applicable for groundwater which is a current source of drinking water (CERCLA Section 300.430[e][2][i][B]). |
| State | NJDEP Safe Drinking Water Standards (N.J.A.C. 7:10 Subchapter 5) | ARAR | Sets MCLs for public drinking water supplies that are generally equal to or more stringent than MCLs. | The standards will be used during construction of the water line for the POETS which continue to treat potable wells |

Key:

ARAR - applicable or relevant and appropriate requirements
MCL - Maximum Contaminant Level
MCLG - Maximum Contaminant Level Goals
CFR - Code of Federal Regulations
LSRPs - Licensed Site Remediation Professional
TBC - To Be Considered

N.J.A.C. - New Jersey Administrative Code
NJDEP - New Jersey Department of Environmental Protection
PRG - preliminary remediation goal
OSHA - Occupational Safety and Health Administration
POET - Point of entry treatment system

Table 7
Action-Specific ARARs, Criteria, and Guidance
Mansfield Trail Dump Site - OU1
Byram Township, Sussex County, New Jersey

| Regulatory Level | ARAR | Status | Requirement Synopsis | Comments |
|---------------------------------|--|------------------------|--|--|
| General Site Remediation | | | | |
| Federal | Policy on Floodplains and Wetland Assessments for CERCLA Actions (OSWER Directive 9280.0-12, 1985) | TBC | Policy guiding actions affecting floodplains and wetlands. | TBC construction implemented at the site. |
| State | State of New Jersey Groundwater Quality Standards (N.J.A.C. 7:9-6 Groundwater Quality Standards) | ARAR | Establishes standards for the protection of ambient groundwater quality. Used as the primary basis for setting numerical criteria for groundwater cleanups. | ARAR for Class IIA aquifers. |
| State | New Jersey Soil Erosion and Sediment Control Act (N.J.A.C. 2:90) | Potentially Applicable | Requires soil erosion and sediment control measure for construction that will potentially result in erosion of soils and sediment. Applicable to land disturbance activities involving greater than 5,000 square feet. | This standard will be applied to any construction implemented at the site as part of the remedy. |
| State | New Jersey Ambient Air Quality Standards (N.J.A.C. 7:27-13) | ARAR | This standard provides the requirement for ambient air quality control. | This standard will be applied to any construction implemented at the site as part of the remedy. |
| State | New Jersey Noise Control (N.J.A.C. 7:29-1; NJSA 13:1G-1 et. seq.) | ARAR | This standard provides the requirement for noise control. | This standard will be applied to any construction implemented at the site as part of the remedy. |

Key:

ARAR - applicable or relevant and appropriate requirements
MCL - Maximum Contaminant Level
MCLG - Maximum Contaminant Level Goals
CFR - Code of Federal Regulations
LSRPs - Licensed Site Remediation Professional
TBC - To Be Considered

N.J.A.C. - New Jersey Administrative Code
NJDEP - New Jersey Department of Environmental Protection
PRG - preliminary remediation goal
OSHA - Occupational Safety and Health Administration
POET - Point of entry treatment system

Table 7
Action-Specific ARARs, Criteria, and Guidance
Mansfield Trail Dump Site - OU1
Byram Township, Sussex County, New Jersey

| Regulatory Level | ARAR | Status | Requirement Synopsis | Comments |
|---|---|--------|--|--|
| Water Supply | | | | |
| State | NJDEP Granular Activated Carbon Point-of-Entry Treatment System Minimum Specifications for LSRPs (NJDEP GAC-LSRP 3/26/2015) | ARAR | This standard provides the minimum specifications for a POET system. | This standard will be applied to any POET systems installed and/or maintained at the site. |
| State | Sealing of Abandoned Wells - Well Abandonment Procedures (NJAC 7:9-9) | ARAR | General requirements for sealing of all wells (e.g., single cased, multiple cased, hand dug, test wells, boreholes and monitoring wells, abandoned wells). | ARAR if any existing wells need to be abandoned and sealed. |
| State | State of New Jersey Division of Water Supply - Water Supply Allocation Rules (N.J.A.C. 7:19) | ARAR | Regulates new water supply connections and extensions, responsible for managing New Jersey's water supply. | ARAR for Alternate Water Supply/Municipal Well Connection. |
| <p>Key:</p> <div style="display: flex; justify-content: space-between;"> <div> ARAR - applicable or relevant and appropriate requirements MCL - Maximum Contaminant Level MCLG - Maximum Contaminant Level Goals CFR - Code of Federal Regulations LSRPs - Licensed Site Remediation Professional TBC- To Be Considered </div> <div> N.J.A.C. - New Jersey Administrative Code NJDEP - New Jersey Department of Environmental Protection PRG - preliminary remediation goal OSHA - Occupational Safety and Health Administration POET - Point of entry treatment system </div> </div> | | | | |

Table 7
Location-Specific ARARs, Criteria, and Guidance
Mansfield Trail Dump Site - OU1
Byram Township, Sussex County, New Jersey

| Regulatory Level | ARARs | Status | Requirement Synopsis | Comments |
|---|---|------------------------|--|--|
| Federal | National Historic Preservation Act (40 CFR 6.301) | Potentially applicable | This statute requires federal agencies to take into account the effect of any federally assisted undertaking on historical structures and archeological data. If the project results in adverse effects, the agency must consult with NJHPO to develop ways to avoid, reduce, minimize and mitigate the impacts. | If historical and/or archeological material is encountered during installation of the water line, applicability of the National Historic Preservation Act will be evaluated. |
| Federal | Endangered Species Act (16 U.S.C. 1531) | Potentially applicable | This statute restricts activities where endangered species may be present. | This will be applicable if endangered species are observed at the site during ecological site assessments. |
| State | New Jersey Highlands Water Protection and Planning Act (N.J.S.A. 13:20-1 et seq.) | ARAR | This requirement preserves open space and natural resources (including water resources) within the Highlands Region of New Jersey. | Since the site is located within the preservation area, remedial alternatives that are considered "major Highlands development" as defined by this act. Consultation with NJDEP will establish compliance. |
| <p>Key:</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Liability Act ARAR - applicable or relevant and appropriate requirements</p> <p>CFR - Code of Federal Regulations</p> <p>CWA - Clean Water Act</p> <p>EPA - Environmental Protection Agency</p> <p>EO - Executive Order</p> <p>USC - United States</p> </div> <div> <p>CERCLA - Comprehensive Environmental Response, Compensation, and</p> <p>NEPA - National Environmental Policy Act</p> <p>N.J.A.C. - New Jersey Administrative Code</p> <p>NJDEP - New Jersey Department of Environmental Protection</p> <p>N.J.S.A. - New Jersey Statutes Annotated</p> <p>OSWER - Office of Solid Waste and Environmental Response</p> <p>TBC- To Be Considered</p> </div> </div> | | | | |

TABLE 8

Cost Estimate for Alternative 3:
Mansfield Trail Dump Superfund Site-OU1 ROD

Cost Estimate Summary

| No. | Description | Cost |
|-----|--|---------------------------|
| | Remedial Action | |
| 01 | General Requirements | \$710,000 |
| 02 | Alternate Water Supply | \$5,603,000 |
| | <i>Subtotal</i> | <i>\$6,313,000</i> |
| | Contingency (20%) | \$1,262,600 |
| | <i>Subtotal</i> | <i>\$7,575,600</i> |
| | General Contractor Markup (Insurance, Bonds, Fees, etc.) 10% | \$757,560 |
| | <i>Subtotal of Remedial Action</i> | <i>\$8,333,160</i> |
| | | |
| | OPERATION AND MAINTENANCE COSTS | |
| 02 | Annual O&M Cost for Alternate Water Supply (Year 1) | \$77,278 |
| 02 | Annual Monitoring and Sampling Cost (Year 1 to Year 30) | \$27,016 |
| | <i>Present Worth for O&M (Year 0 to Year 30)</i> <i>Includes 1 Year of Alternate Water Supply O&M Cost and 30 Years of Monitoring and Sampling</i> | <i>\$412,521</i> |
| | | |
| | Total Present Worth | \$8,746,000 |

TABLE 8

Cost Estimate for Alternative 3:

Mansfield Trail Dump Superfund Site-OU1 ROD

Individual Cost Item Backup

| Description | | | | |
|---|-----------------|-------------|------------------|------------------|
| 01 - General Requirements | | | | |
| <i>Assume project will take a total of 8 months to complete</i> | | | | |
| <i>Assume pre-construction work plans and meetings will take 1.5 months</i> | | | | |
| General Conditions | | | | |
| | Quantity | Unit | Unit Cost | Total |
| A) Project Management | | | | |
| <i>Assume the following staff for 20 hours per week for the duration of project:</i> | | | | |
| Project Manager | 672 | hour | \$150 | \$100,800 |
| Project Engineer | 672 | hour | \$110 | \$73,920 |
| Procurement Staff | 672 | hour | \$90 | \$60,480 |
| <i>Subtotal</i> | | | | <i>\$235,200</i> |
| B) Work Plan Preparation | | | | |
| Project Engineer | 252 | hour | \$110 | \$27,720 |
| Project Manager (Half-Time) | 126 | hour | \$150 | \$18,900 |
| <i>Subtotal</i> | | | | <i>\$46,620</i> |
| C) Permits | | | | |
| Permit Specialist | 40 | hour | \$125 | \$5,000 |
| Project Manager | 20 | hour | \$150 | \$3,000 |
| <i>Subtotal</i> | | | | <i>\$8,000</i> |
| D) Safety and Health Requirements | | | | |
| <i>Safety and Health Requirements to include the Site Health and Safety Officer (SHSO) and personnel protective equipment and supplies.</i> | | | | |
| <i>Assume SHSO is onsite during any onsite activities, approximately 20 hours a week.</i> | | | | |
| Total Construction Duration: | 8 | months | | |
| | | | | |
| SHSO | 672 | hour | \$125 | \$84,000 |
| PPE for All Onsite Staff | 168 | day | \$100 | \$336,000 |
| <i>Subtotal</i> | | | | <i>\$420,000</i> |
| | | | | |
| TOTAL COST FOR GENERAL REQUIREMENTS | | | | \$710,000 |

TABLE 8

Cost Estimate for Alternative 3:

Mansfield Trail Dump Superfund Site-OU1 ROD

Individual Cost Item Backup

| Description | | | | |
|--|----------|-------------|-----------|--------------------|
| 02 - Alternate Water Supply | | | | |
| <i>Costs are based on the Hopewell 100% Design Cost Estimate to USACE. Unit costs were derived from dividing total costs by total LF used in Hopewell Design</i> | | | | |
| <i>All costs include the following GR costs: project-dedicated supervisory staff and equipment, temporary facilities, surveying, and best management practices</i> | | | | |
| | Quantity | Unit | Unit Cost | Total |
| A) Project Management | | | | |
| Upgrade Well No. 2 Pump from 18 gpm to 30 gpm | | | | \$15,000 |
| Upgrade Well No. 2 Electrical & Back-up Power Improvement | | | | \$90,000 |
| Well Treatment Facility with Submersible Wastewater Pump & Finished Water Pump System | | | | \$1,400,000 |
| Raw Water Main from Well No. 2 to Well Treatment Facility | 1,350 | linear foot | \$400 | \$540,000 |
| Wastewater Force Main from Well Treatment Facility | 1,000 | linear foot | \$300 | \$300,000 |
| 8" Water Main from Well Treatment Facility to Impacted Area | 6,400 | linear foot | \$450 | \$2,880,000 |
| Install Water Service Line, Remove POET Systems & Abandon Private Wells | 18 | each | \$21,000 | \$378,000 |
| <i>Subtotal</i> | | | | <i>\$5,603,000</i> |
| TOTAL CAPITAL COST FOR ALTERNATE WATER SUPPLY | | | | \$5,603,000 |
| TOTAL ANNUAL O&M COST FOR ALTERNATE WATER SUPPLY (178 CONNECTIONS)* | | | | \$77,278 |
| | | | | |

*A more detailed breakdown of the O&M Costs can be found in the Mansfield Trail Dump OU1 FFS Report.

TABLE 8

Cost Estimate for Alternative 3:

Mansfield Trail Dump Superfund Site-OU1 ROD

Individual Cost Item Backup

| Description | | | | |
|--|-----------------|-------------|------------------|--------------|
| 03 - Monitoring and Sampling (M&S) | | | | |
| <i>Assume 11 nearby properties will be monitored annually for 30 years. If any of the nearby properties become impacted within the 30-year period, the option for additional connections to the water supply system will be evaluated at that point in time and is not included in this cost estimate.</i> | | | | |
| Estimated Number of Monitored Only Homes | | 11 | homes | |
| <i>Assume the following Monitoring and Sampling Event Schedule</i> | | | | |
| Pre-construction Work Plans and Meetings | | 3 | days | |
| Field Mobilization, Installation, and Demobilization | | 3 | days | |
| Project Closeout | | 3 | days | |
| Total Project Duration | | 9 | days | |
| | Quantity | Unit | Unit Cost | Total |
| A) Project Management and Site Supervisory | | | | |
| <i>Assume the following staff for 10 hours per week for the duration of project:</i> | | | | |
| Project Manager | \$150 | hour | 9 | \$1,350 |
| Project Engineer | \$110 | hour | 9 | \$990 |
| Procurement | \$90 | hour | 9 | \$810 |
| Total Management and Office Support: | | | | \$3,150 |
| B) Onsite supervisory | | | | |
| <i>Assume the following full time site supervisory staff for the 3 days of field events</i> | | | | |
| Site Superintendent | \$120 | hour | 36 | \$4,320 |
| Pickup Truck | \$100 | day | 3 | \$300 |
| Per Diem | \$142 | day | 3 | \$426 |
| Total Onsite Supervisory Staff for Field Duration: | | | | \$6,000 |
| <i>Safety and Health Requirements to include the Site Health and Safety Officer (SHSO) and personnel protective equipment and supplies</i> | | | | |
| <i>Assume PPE required for 2 people per work day for the duration of O&M activities.</i> | | | | |
| | | | | |
| SHSO | \$125 | hour | 36 | \$4,500 |
| PPE | \$10 | day | 3 | \$600 |
| Subtotal Cost for Monitoring and Sampling General Requirements Annually | | | | \$15,000 |

TABLE 8

Cost Estimate for Alternative 3:

Mansfield Trail Dump Superfund Site-OU1 ROD

Individual Cost Item Backup

| Description | | | | Cost |
|---|-----------------|-------------|------------------|-----------------|
| 03 - Monitoring and Sampling (M&S) | | | | |
| | Quantity | Unit | Unit Cost | Total |
| C) Field Sampling (<i>Assume 1 person, 3 days x 12 hours per day for sampling</i>) | | | | |
| Project Manager | 2 | hour | \$150 | \$300 |
| Purchasing Specialist | 3 | day | \$90 | \$270 |
| Project Scientist | 3 | day | \$1,200 | \$3,600 |
| Van/Car Rental | 3 | day | \$100 | \$300 |
| Equipment and PPE | 3 | day | \$300 | \$900 |
| Shipping | 3 | day | \$100 | \$300 |
| Per Diem for 1 Person | 3 | day | \$142 | \$426 |
| Miscellaneous | 3 | hour | \$100 | \$300 |
| Subtotal (Annually) | | | | \$6,396 |
| | | | | |
| D) Sample Analysis | | | | |
| <i>(Assume raw water from impacted homes and monitored homes will be sampled annually but a sample will be taken between GAC tanks from each POET system quarterly)</i> | | | | |
| | | | | |
| <i>Year 1 through Year 5 (1st Quarter)</i> | | | | |
| Field Samples | 11 | count | | |
| Field Duplicates | 1 | count | | |
| Trip Blanks | 1 | count | | |
| VOC Analysis | 13 | each | \$80 | \$1,040 |
| Data Management | 6.5 | hour | \$100 | \$650 |
| Data Analysis/Summary | 13 | hour | \$110 | \$1,430 |
| Subtotal (Annual) | | | | \$3,120 |
| | | | | |
| Sampling Report | | | | |
| Project Manager | 2 | hour | \$150 | \$300 |
| Project Engineer | 20 | hour | \$110 | \$2,200 |
| Annual Subtotal Reporting Cost | | | | \$2,500 |
| | | | | |
| TOTAL ANNUAL OM&M COST | | | | \$27,016 |
| | | | | |

TABLE 8

Cost Estimate for Alternative 3:

Mansfield Trail Dump Superfund Site-OU1 ROD

Individual Cost Item Backup

| | | | | |
|--|---------------------------------------|--|--|--|
| | | | | |
| <u>Present Worth Calculation for Operation and Maintenance Cost</u> | | | | |
| | | | | |
| This is a recurring cost every year | This discount factor is $(P/A, i, n)$ | | | |
| This discount factor is $(P/A, i, n)$ | | | | |
| P = Present Worth | | | | |
| A = Annual amount | | | | |
| i = interest rate | 7% | | | |
| | | | | |
| $P = A \times \frac{(1+i)^n - 1}{i(1+i)^n}$ | | | | |
| | | | | |
| O&M Cost for 30 Years | | | | |
| n = number of years | 30 | | | |
| The multiplier for $(P/A) =$ | 12.409 for 30 years | | | |

APPENDIX II
Administrative Record

ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL
09/07/2017

REGION ID: 02

Site Name: MANSFIELD TRAIL DUMP
CERCLIS ID: NJN000206345
OUID: 01
SSID: A238
Action:

| DocID: | Doc Date: | Title: | Image Count: | Doc Type: | Addressee Name/Organization: | Author Name/Organization: |
|------------------------|------------|---|--------------|-----------------------------|--|---|
| 510503 | 09/07/2017 | ADMINISTRATIVE RECORD INDEX FOR OU1 FOR THE MANSFIELD TRAIL DUMP SITE | 3 | Administrative Record Index | | (US ENVIRONMENTAL PROTECTION AGENCY) |
| 395977 | 05/01/2016 | REDACTED REVISED DATA EVALUATION SUMMARY REPORT, VOLUME 1 OF 2 TEXT FOR THE MANSFIELD TRAIL DUMP SITE | 299 | Report | (US ENVIRONMENTAL PROTECTION AGENCY) | (EES JV) |
| 471815 | 02/06/2017 | FINAL HUMAN HEALTH RISK ASSESSMENT FOR THE FOCUSED FEASIBILITY STUDY OU1 FOR THE MANSFIELD TRAIL DUMP SITE | 206 | Report | (US ENVIRONMENTAL PROTECTION AGENCY) | (CDM SMITH) |
| 451935 | 02/21/2017 | FINAL FOCUSED FEASIBILITY STUDY FOR OU1 FOR THE MANSFIELD TRAIL DUMP SITE | 85 | Report | | (CDM SMITH) |
| 510564 | 06/08/2017 | PROPOSED PLAN FOR OU1 FOR THE MANSFIELD TRAIL DUMP SITE | 11 | Publication | | (US ENVIRONMENTAL PROTECTION AGENCY) |
| 279202 | 11/17/2009 | CORRESPONDENCE REGARDING EPA'S CONFIRMATION OF THE NJDEP'S REMOVAL ACTION REQUEST FOR THE MANSFIELD TRAIL DUMP SITE | 1 | Letter | PUTNAM,EDWARD (US ENVIRONMENTAL PROTECTION AGENCY) | ROTOLO,JOSEPH (US ENVIRONMENTAL PROTECTION AGENCY) |
| 363178 | 03/01/2011 | NPL SITE LISTING NARRATIVE FOR THE MANSFIELD TRAIL DUMP SITE | 1 | Publication | | (US ENVIRONMENTAL PROTECTION AGENCY) |
| 263724 | 03/04/2011 | REMOVAL SITE EVALUATION (RSE) FOR THE MANSFIELD TRAIL DUMP SITE | 10 | Report | | MAGRIPLES,NICK (US ENVIRONMENTAL PROTECTION AGENCY) |

ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL
09/07/2017

REGION ID: 02

Site Name: MANSFIELD TRAIL DUMP
CERCLIS ID: NJN000206345
OUID: 01
SSID: A238
Action:

| DocID: | Doc Date: | Title: | Image Count: | Doc Type: | Addressee Name/Organization: | Author Name/Organization: |
|------------------------|------------|--|--------------|-----------------------------|---|--|
| 263723 | 09/29/2011 | ACTION MEMORANDUM RV1 - REQUEST FOR APPROVAL AND FUNDING FOR A REMOVAL ACTION AND \$2 MILLION EXEMPTION FOR THE MANSFIELD TRAIL DUMP SITE | 26 | Memorandum | ENCK,JUDITH,A (US ENVIRONMENTAL PROTECTION AGENCY) MUGDAN,WALTER,E (US ENVIRONMENTAL PROTECTION AGENCY) | DIGUARDIA,LOUIS (US ENVIRONMENTAL PROTECTION AGENCY) |
| 263721 | 12/01/2011 | REMOVAL ADMINISTRATIVE RECORD INDEX FOR THE MANSFIELD TRAIL DUMP SITE | 7 | Administrative Record Index | | |
| 279405 | 01/03/2013 | FINAL REMOVAL ACTION REPORT - EPA CONTRACT NO.: EP-W-06-072 - TDD NO.: TO-0027-0023 - DCN NO.: RST-2-02-F-2132 FOR THE MANSFIELD TRAIL DUMP SITE FOR THE MANSFIELD TRAIL DUMP SITE | 368 | Report | | |
| 503992 | 02/15/2013 | WORK PLAN - VOLUME I, REVISION 3, TECHNICAL APPROACH, REMEDIAL INVESTIGATION / FEASIBILITY STUDY FOR THE MANSFIELD TRAIL DUMP SITE | 62 | Work Plan | (US ENVIRONMENTAL PROTECTION AGENCY) | (EES JV) |
| 503998 | 09/04/2013 | FINAL RELEASE - PUBLIC HEALTH ASSESSMENT, PUBLIC HEALTH IMPLICATIONS OF SITE-RELATED EXPOSURES TO TRICHLOROETHYLENE FOR THE MANSFIELD TRAIL DUMP SITE | 68 | Report | | (NEW JERSEY DEPARTMENT OF HEALTH) |
| 506523 | 09/18/2013 | REDACTED QUALITY ASSURANCE PROJECT PLAN, REVISION 3, REMEDIAL INVESTIGATION / FEASIBILITY STUDY, APPENDIX A FOR THE MANSFIELD TRAIL DUMP SITE | 650 | Work Plan | (US ENVIRONMENTAL PROTECTION AGENCY) | (EES JV) |

ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL
09/07/2017

REGION ID: 02

Site Name: MANSFIELD TRAIL DUMP
CERCLIS ID: NJN000206345
OUID: 01
SSID: A238
Action:

| DocID: | Doc Date: | Title: | Image Count: | Doc Type: | Addressee Name/Organization: | Author Name/Organization: |
|------------------------|------------|--|--------------|-----------|---|--|
| 503999 | 06/05/2017 | TRANSMITTAL OF THE DRAFT PROPOSED PLAN OU1 WITH NEW JERSEY FINAL EDITS FOR THE MANSFIELD TRAIL DUMP SITE | 2 | Email | Garcia,Diego (US ENVIRONMENTAL PROTECTION AGENCY) | MUMFORD,FRED (NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION) |

APPENDIX III
State Letter



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
SITE REMEDIATION & WASTE MANAGEMENT PROGRAM

Mail Code 401-06

P. O. Box 420

Trenton, New Jersey 08625-0420

Tel. #: 609-292-1250

Fax. #: 609-777-1914

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

September 21, 2017

Mr. John Prince, Acting Director
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Region II
290 Broadway
New York, NY 10007-1866

Re: Mansfield Trail Dump Superfund Site
Record of Decision Operable Unit 1
EPA ID# NJN000206345
DEP PI# 253990

Dear Mr. Prince:

The New Jersey Department of Environmental Protection (DEP) completed its review of the "Record of Decision, Mansfield Trail Dump Superfund Site, Operable Unit 1: Contaminated Potable Wells at Residential Properties, Byram Township, Sussex County, New Jersey" prepared by the U.S. Environmental Protection Agency (EPA) Region II in September 2017 and concurs with the selected remedy to address contaminated potable wells at residential properties.

The selected remedy included in this Record of Decision covers the first of two planned remedial phases, or operable units, for the Mansfield Trail Dump Superfund Site. Operable Unit 1 includes extending a public water line to provide potable water to approximately 18 residential properties. Operable Unit 2 will address the site-wide contaminated groundwater, vapor intrusion and potential residual soil contamination from the site.

The major components of the selected remedy include:

- Provision of potable water to impacted properties through the construction of a water line and connections;
- Any necessary upgrades to the water supply system; and,
- The abandonment of private residential potable wells.

DEP appreciates the opportunity to participate in the decision-making process to select an appropriate remedy for this site. Further, DEP is looking forward to future cooperation with EPA during remedial actions to provide safe drinking water for residential properties and to ensure appropriate cleanup of groundwater and further monitoring at this site.

If you have any questions, please call me at 609-292-1250.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark J. Pedersen", with a long horizontal flourish extending to the right.

Mark J. Pedersen
Assistant Commissioner
Site Remediation & Waste Management Program

C: Kenneth J. Kloo, Director, Division of Remediation Management, DEP
Edward Putnam, Assistant Director, Publicly Funded Response Element, DEP
Carole Petersen, Chief, New Jersey Remediation Branch, EPA Region II

APPENDIX IV
Responsiveness Summary

RESPONSIVENESS SUMMARY

Mansfield Trail Dump Superfund Site
Byram, New Jersey

INTRODUCTION

This Responsiveness Summary provides a summary of the public's comments and concerns regarding the Proposed Plan for the Mansfield Trail Dump Superfund Site's (Site) Operable Unit 1 (OU1) preferred remedy, 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 remedial alternatives 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.

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

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

III. ATTACHMENTS

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

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

Attachment B contains the public notices that appeared in the NJ Herald;

Attachment C contains the transcript of the public meeting; and

Attachment D contains the written comments received by EPA during the public comment period.

I. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

EPA has worked closely with local residents, public officials, and other interested members of the community since the New Jersey Department of Environmental Protection (NJDEP) requested assistance with the Site in the early 2000s. The Site was added to the NPL in March 2011. EPA then completed removal of former waste disposal trenches containing source material from February to May of 2012. On May 9, 2016, EPA released the Proposed Plan and supporting documentation for the potable water remedy to the public. The Proposed Plan and index for the Administrative Record were made available to the public online, and the Administrative Record files were made available at the EPA Administrative Record File Room, 290 Broadway, 18th

Floor, New York, New York; and the Sussex County Library Louise Childs Branch, 21 Sparta Road, Stanhope, New Jersey.

On June 13, 2017, EPA published a Public Notice in the NJ Herald newspaper that provided information about the public comment period, the public meeting for the Proposed Plan, and the availability of the administrative record for the Site. EPA also published a press release on June 13, 2017, to announce the release of the Proposed Plan. The public comment period closed on July 13, 2017.

A public meeting was held on June 27, 2017, at the Byram Township Municipal Building at 10 Mansfield Drive, Stanhope, New Jersey. The purpose of this meeting was to inform residents, local officials, and interested members of the public about the Superfund process, present details about EPA's remedial plan, receive comments on the Proposed Plan, and respond to questions from area residents and other interested parties.

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

Part 1: Verbal Comments

This section provides a summary of verbal comments received from the public during the public comment period and EPA's responses.

A. SUMMARY OF QUESTIONS AND EPA'S RESPONSES FROM THE PUBLIC MEETING CONCERNING THE MANSFIELD TRAIL DUMP SITE – June 27, 2017

A public meeting was held on June 27, 2017, at the Byram Township Municipal Building at 10 Mansfield Drive, Stanhope, New Jersey. In addition to a presentation of the investigation findings, EPA presented the Proposed Plan and preferred alternatives for the Site, received comments from meeting participants, and responded to questions regarding the remedial alternatives under consideration. A transcript of the public meeting is provided in Attachment C.

A summary of comments raised by the public following EPA's presentation are categorized by relevant topics and presented below:

General Comments

***Comment 1:** Several commenters asked if they would be offered the ability to hook up to the waterline even if their Point-of-Entry Treatment Systems (POETS) are not currently being maintained by the state.*

EPA response: All properties with potable wells which are known to be contaminated with TCE at concentrations in excess of New Jersey Ground Water Quality Standards (eligible properties) will be eligible for connection to water lines provided as part of EPA's remedy regardless of whether those homes have POETS maintained by NJDEP. There would be no cost to residences or owners for the installation, connection to the

water line, or for associated restoration work. Homeowners would be responsible for the payment of water bills after the remedy is implemented.

Comment 2: *A commenter asked if the state or EPA would continue to maintain a POETS if a homeowner decided not to hook up to the waterline.*

EPA response: EPA will not be maintaining POETS for homeowners who decide not to hook up to the waterline. Also, it is EPA's understanding that after the waterline is installed and connections are offered to the impacted properties, the NJDEP will not be maintaining the existing POETS. Thus, homeowners that choose not to hook up to the alternate water supply will be responsible for maintaining their own POETS. For confirmation of NJDEP's intentions, please contact NJDEP.

Comment 3: *Several commenters asked if there was a way for the federal government to pay for maintenance of the treatment systems for both homes that have already been dropped from the state's program or for the new owners if they were to sell their homes. One stated that they thought it should be included as part of the remedy.*

EPA response: EPA does not pay for maintenance of POETS at this Site; that responsibility lies with NJDEP. One of the reasons that EPA selected Alternative 3 is because it provides a more permanent solution than POETS. It is EPA's understanding that NJDEP will continue to maintain existing systems for properties in accordance with the state Spill Compensation Fund, until EPA's remedy has been implemented and that properties that are currently privately maintained will need to be privately maintained until the remedy is implemented at the Site. For confirmation of NJDEP's intentions, please contact NJDEP.

Comment 4: *A commenter asked if a homeowner were to rent their home would the state still maintain the POETS.*

EPA response: Questions regarding eligibility under the NJDEP Spill Compensation Fund and are deferred to NJDEP.

Comment 5: *A commenter asked if there were any new homes that were affected.*

EPA response: As part of a recent private property inspection, testing at an additional residential potable well indicated trichloroethylene (TCE) levels exceeding New Jersey Safe Drinking Water Standards. The property was referred to NJDEP for further evaluation and action, which included confirmation sampling, and the installation and maintenance of POETS. The NJDEP informed EPA that they will install POETS if the TCE levels in a residential potable well are at or exceed 1 part per billion, and that POETS would be sampled and maintained by the NJDEP until EPA's remedy is implemented at the Site.

Comment 6: *A commenter asked if a homeowner wanted their well tested would EPA or the state pay for the testing.*

EPA response: Residents in close proximity to the Site may be contacted by EPA in the future to sample their well, or should contact EPA to discuss previous and future testing of their property. EPA will be conducting additional sampling, at residential properties in the proximity of the Site as determined by EPA, throughout the OU2 Remedial Investigation (RI) and the OU1 Remedial Design (RD) phase.

***Comment 7:** A commenter asked if the funding for the preferred alternative was already approved and if not what the likelihood of getting funding would be?*

EPA response: No. Before a remedy can be implemented, EPA will need to begin the RD phase of the remedy. Once the RD phase is completed, the project will then seek funding for the construction phase of the project. EPA is also currently determining the extent of TCE in the source areas. While EPA cannot guarantee that funds will be available when needed for cleanups, there is a process for securing funds. EPA first tries to get private funding from Potentially Responsible Party(s) (PRPs), to implement a remedy, so that public monies are not spent unless necessary. At this time, no viable PRPs have been identified for the Site. If the project is federally funded, the project will be evaluated with other EPA projects, and different factors are weighed in the process of providing funding. If the project is federally funded, the state contributes ten percent, as well.

Alternate Water Supply Remedy

***Comment 8:** A commenter asked how long it would take for a water source to be connected to the impacted homes.*

EPA response: Once the OU1 ROD is final, the remedial process progresses in phases. First, the RD phase will begin, during which specifications and plans for the selected remedy are developed. A Remedial Action (RA) phase is initiated after RD is completed. At this stage construction of the remedy begins. The process of RD is expected to take several years. Construction of EPA's preferred Alternative is estimated to take 8 months but may be longer depending on the conclusion of the RD.

***Comment 9:** A commenter asked if the current systems would be maintained until the alternate water supply is constructed and who would maintain the systems?*

EPA response: NJDEP has informed EPA that the POETS which are currently sampled and maintained by NJDEP will continue to be sampled and maintained by NJDEP in accordance with the state Spill Compensation Fund, until the OU1 remedy is implemented for the Site. NJDEP has also informed EPA that properties with POETS that are not sampled and maintained by NJDEP will need to be privately maintained until the OU1 remedy is implemented at the Site. NJDEP, as the agency responsible for POETS, should be contacted with further questions regarding the POETS.

Comment 11: *A commenter stated that they were hesitant to join a water company that is run by volunteers and that has their own contamination issues. They then asked if EPA would monitor the water system after the water line was constructed and connections were made.*

EPA response: The Superfund program does not monitor water systems once connection to a water line is complete. It is the responsibility of the water system to ensure that drinking water supplied to residents meets all current state and federal regulations. However, EPA would only select a water supply which is able to meet applicable federal and state drinking water standards at the time that the water supply is connected to residences. Necessary upgrades to any selected water system are included in the preferred remedy and would be funded by EPA.

Comment 12: *A commenter asked when we would make public our decision as to which water supply will be used. This commenter also asked which water sources we have already been in discussions with.*

EPA response: EPA will be in communication with the community throughout RD of the project, which is expected to take several years. Area water systems such as West Brookwood, Stanhope public water and East Brookwood Estates Property Owners Association (EBEPOA) have already been contacted in regard to the preferred remedy. EPA will have more formal discussions with necessary water system stakeholders throughout RD.

Comment 13: *A commenter asked if other water systems, besides EBEPOA, were still in consideration.*

EPA response: A comprehensive search in the nearby area for public and private water systems was completed as part of the Feasibility Study. As part of the remedy, EPA will formally begin discussions with appropriate nearby water systems to explore the feasibility of these options. Selection of the alternate water supply will be finalized in the RD phase of the project.

Comment 14: *A commenter stated that they felt it was premature to choose a waterline remedy before choosing a water supply source.*

EPA response: EPA selected Alternative 3 on the basis that it would provide a permanent solution. Specifics including selection of the alternate water supply and configuration of the new connections will be determined in the RD phase. EPA does not believe it would be appropriate to make a final decision regarding a water supply source until a Record of Decision is issued.

Comment 15: *A commenter asked if, when a water system is selected, the community members that are a part of that system will be able to discuss the decision.*

EPA response: EPA has historically apprised the township and community stakeholders of project milestones during Community Advisory Group (CAG) meetings and via telephone, email, and community updates. EPA expects to continue to have meaningful public input throughout the implementation of the remedy in this manner. In addition, the commenter should refer to any rules or regulations of the body which governs the selected public or private water system to determine what, if any processes, will be followed prior to agreeing to provide water to additional homes.

***Comment 16:** A commenter asked what would happen if the selected water system chose not to work with EPA to extend a line to the impacted area of the community and if the water system had a choice about whether or not to hook up additional residences.*

EPA response: EPA has not yet selected a water supplier for the remedy. EPA does not intend to force any private water supplier to add additional residences to their system at this Site, absent the agreement of that water supplier. Specifically, EPA intends to work with the legal owners or governing boards of any system during the RD phase to negotiate connecting the residences with contaminated potable wells. Design and construction costs related to the connections would be funded by EPA.

Site Investigation

***Comment 17:** A commenter asked if the investigation was extended to further areas of the community and if in the investigation EPA saw the contaminant levels dropping?*

EPA response: Concentrations of the TCE contamination at the Site fluctuate seasonally but have been generally consistent over time. A more detailed analysis of concentration trends will be included as part of the OU2 ROD. Data collected as part of the first phase of the site-wide remedial investigation, documented in the Data Evaluation Summary Report (DESR), has preliminarily shown limited potential for measureable improvement in the aquifer within a reasonable time frame. This information informed EPA during selection of the alternative water supply option; it appears that this option is the most protective of human health and the environment.

***Comment 18:** A commenter asked if a map could be made available to show the extent of the delineation so far. It was also asked if testing for NAPL had been conducted in the bedrock.*

EPA response: Figure 3 of the ROD shows the existing monitoring wells throughout the Site. More information on contaminated groundwater delineation can also be found in the DESR, which is a part of the Administrative Record. The delineation of site-wide groundwater contamination will be further investigated during the Remedial Investigation for OU2.

***Comment 19:** A commenter asked if the OU that is planned to address the site-wide contaminated groundwater would potentially remediate the residential wells (before the waterline would be put in).*

EPA response: Please refer to EPA's response to Comment 17. The DESR, has preliminarily shown limited potential for measureable improvement in the aquifer within a reasonable time frame. For this reason, EPA has chosen the preferred remedy which will provide a permanent solution that is protective of human health and the environment.

Part 2: Other Written and Verbal Comments Received During the Public Comment Period

Written comments were received from various people and organizations during the public comment period. They are included below, followed by EPA's responses. Responses are divided into sections, as needed, for clarity.

The following written comments were received via email:

Commenter 1 asked:

1a: When you make any changes to the permanent alternate water supplier's system will you be using EPA standards or NJDEP standards? For instance, maximum contaminant levels can be different between the EPA and NJDEP. Water systems must comply with NJDEP standards and regulations in NJ. The EPA stated they would pay to have a permanent alternate water supply provided to these 19 homes. Will the EPA be paying for everything that is necessary to meet NJDEP standards?

EPA Response 1a: As part of the selected remedy EPA would perform any upgrades necessary to ensure the water system is able to supply the impacted residents. Furthermore, EPA will meet the more stringent standard, in this case, the NJDEP standard of 1 part per billion. The water system supplying the drinking water must also show, through quarterly testing, as required under the Safe Drinking Water Act, that contaminant concentrations are below current state and federal standards. In addition, the water being supplied must also meet the standards for all compounds that are regulated, not just Site-related contaminants. This ensures that all water supplied to residents meets all current state and federal standards. See also Comment 11 above.

1b: Will you be contacting the 19 homes in order to determine if they are willing to connect to an alternate permanent water supply before you proceed with the design phase? How can you plan to build a water system before finding out how many people intend to connect to it? Are you going to proceed even if only a few homes decide to connect? Are you contacting other surrounding homes (beyond the 19 that are contaminated) in that area to determine their willingness to connect? Will you require that written commitments be provided in order to connect to the system? If so will these commitments be required of both the 19 contaminated homes as well as any surrounding homes wishing/needing to connect? Doesn't the design of the water system modifications depend on how many homes intend to connect to the system?

EPA Response 1b: EPA will be speaking with individuals impacted by this remedy as the project moves ahead to try to address any individual concerns they may have. It is EPA's understanding that the community is generally interested in connecting to an alternate water supply because of the permanent access to potable water it would provide.

EPA does not intend to require that property owners hook up to the water supply when it is offered.

1c: How do you expect the public to intelligently comment on your choice of a "permanent alternate water supplier" when you do not name the water company you intend to use? There is a significant difference in the cost of the water between the many local water systems under consideration. Some have meters while others do not. Others are run by a municipality while others are run by a volunteer homeowner association board. Some systems are newer while others are older and will require costly capital improvements. How are the present users of the nearby water systems able to comment if they do not know they are being considered as the alternate water source and may have to incur the burden of future maintenance for these 19 homes which may raise their rates and negatively impact the quality and supply/pressure of their water? One water system is considering selling their system and the sale price may be impacted by the fact that the EPA may be willing to pay for capital improvements to supply these 19 homes which if true would allow the water company to increase the sale price of their water system.

EPA Response 1c: As stated elsewhere in the responses, EPA will apprise the township and community stakeholders of project milestones during CAG meetings and via telephone, email, and community updates. See specifically EPA Response to Comment 16 regarding choice of water supplier. In addition, EPA expects to continue to have meaningful public input throughout the implementation of the remedy. Finally, EPA is not involved in private sales of water systems and therefore is unable to comment on the question referring to the price of the water system.

1d: Have you determined what the effect of decommissioning the 19 private wells might cause on the flow of contaminated TCE water within the aquifer? Could this cause other wells to become contaminated as those 19 wells will no longer be pulling water from the aquifer and cause the flow of ground water to change?

EPA Response 1d: Data from the DESR shows that the plume is roughly at steady state, thus, EPA does not expect the plume to spread significantly beyond its current extent. However, there is variability on the local level, and for this reason, it is impossible to accurately make predictions about future local impacts. Thus it does not appear, at this time, that decommissioning the wells would have a significant effect on TCE within the aquifer.

1e: Did the East Brookwood Estates Property Owners Association board state that they are willing to work with the EPA to supply these 19 contaminated homes with water?

EPA Response 1e: EPA was notified through email and through verbal discussions that EBEOA would be interested in working with EPA to supply the impacted residents.

Commenter 2:

2a: Commenter two began by stating that he/she has been a CAG member since the Mansfield Trail Dump site was added to the EPA Superfund National Priorities List. He/she added:

“My primary objective was to represent the members of the East Brookwood Estates Property Owners Association of which I have been a member since 1964. I was Vice President of EBEPOA for the majority of my involvement on the CAG. I cannot carry out my role as a CAG member to promote community awareness regarding the Site without cooperation from the EPA. You, Pat and Diego are those sources.”

EPA Response 2a: EPA has been actively involved in keeping the community up to date through regular CAG meetings. CAG meetings have been held quarterly since the CAG’s formation in 2010 and have been well attended by CAG members and other interested parties. EPA will continue to hold CAG meetings in the future and they are always open to all members of the public.

2b: The press release does not reveal the FACT that the EBEPOA is named in the FFS and is a permanent alternate water supply being considered in the proposal plan according to the EPA info in the link. In my opinion the uncertain statements are the EPA’s unwillingness to provide a factual proposal as to naming a designated water supply. The public cannot realistically comment or ask meaningful questions about the proposed plan if you don’t name the water supply.

EPA Response 2b: The EBEPOA was used in the FFS for costing purposes only. EPA has not chosen the EBEPOA or any other water system as such an action would be premature before EPA issued a Proposed Plan and received and considered input from the public. Now that a ROD has been issued which selects an extended water line as a permanent solution for the residences with contaminated wells, EPA will contact and select an appropriate water system. EPA believes that the public had ample opportunity to consider the fact that EPA used EBEPOA for costing purposes in the FFS notwithstanding that the press release did not specifically name EBEPOA. All facts relevant to EPA’s selection of a remedy were contained in the FFS. In addition, the issue of the EBEPOA being used for costing purposes was extensively discussed during CAG meetings and at the Public meeting. See EPA Response to 2a.

2c: “EBEPOA is preparing to sell our water association, if the sale occurs, we will not be voting since we will no longer be the owners. Suez is offering a price for our association based on the amount of expenditures they project are needed for capital improvements. These expenditures would be effected [sic] if the EPA provides the financing for these capital improvements. This EPA proposal could affect the selling price that we are negotiating with Suez and the amount that EBEPOA members may be receiving as a distribution of funds after all expenses of the dissolution are paid.”

EPA Response 2c: In implementing the remedy selected in the ROD, EPA will be evaluating and discussing extending the water line to the residences with contaminated wells with the owners of all appropriate water systems. EPA will contact the legal owners of each of these water systems at that time. In discussions with EBEPOA, EPA will hold discussions with whoever is the legal owner of that system at that time. In

addition, EPA believes that having issued the decision in the ROD allows discussions with any appropriate water system to be made with more certainty.

2d: “In my opinion any viable water system being considered should have been named in the press release so consumers in those systems were aware this could impact them and they had an opportunity to comment at the meeting or within the comment period. I feel that our water company’s name is being withheld until we sell, since our board is only interested if we sell. If we vote to sell, the EPA will announce that SUEZ water is the permanent alternate water supply for the proposed plan.”

EPA Response 2d: See EPA Response 2b and 2c above. EPA intends to hold any discussions with the legal owners of water system at the time that the remedy is being implemented. EPA does not believe that the use of EBEPOA for costing purposes has ever been withheld. In fact, that use was discussed extensively at the CAG meeting held on February 23rd, 2017 and in the notification of the FFS release which was publicly released and emailed to members on February 21st, 2017.

2e: “If you stated in your press release during the comment period, that the water supply was EBEPOA the members would have had the opportunity to react and weigh in with a vote. Our board has chosen to control the options by not sharing their game plan and not allowing the members to participate in this decision.”

EPA Response 2e: EPA has been fully transparent with regard to use of the EBEPOA for costing purposes. See Responses to 2b, 2c and 2d above. Any issues with regards to the Board of the EBEPOA should be addressed to that entity.

2f: Myself, as well as, our board and you and Diego have no idea how this will play out for us in the future. For most of us in the EBEPOA our homes are our biggest investment in my opinion your lack of transparency along with our under represented board has put our future health and water supply in jeopardy. I believe given the opportunity many of our members would vote NO if they thought that our water supply would be connected with the stigma of the TCE contaminated homes.

EPA Response 2f: See Responses to comments 16 and 2c, 2d and 2e above. EPA does not intend to force any water system to connect. Any issues with regard to the governance of the EBEPOA should be addressed to that entity, as EPA has no authority over a private home owners’ association.

2g: I also believe that the only reason the EPA would reconsider the two other water companies that initially said no to the proposed plan, would be if EBEPOA doesn’t sell to Suez. How will the EPA proceed if the 19 TCE contaminated homeowners split their decision regarding connecting into a waterline? Will you proceed with the proposed plan with less than a majority number of the TCE homes agreeing to connect?

EPA Response 2g: Although the Superfund process takes into account public comments prior to issuing a ROD, EPA decisions are made based on protection of human health and

the environment, among other factors, as determined by data collected by EPA. In issuing this ROD, EPA is making the decision to construct and connect eligible properties to a water line.

For a summary of EPA's Superfund process see the following EPA publications "Superfund Cleanup Process" and "This is Superfund":

<https://semspub.epa.gov/work/HQ/175197.pdf>

<https://www.epa.gov/superfund/superfund-cleanup-process>.

2h: I spoke with George Zachos, EPA Public Liaison for Region 2, who was unaware of a written protocol for naming the water supply in the design phase of the proposed plan. Although he was unfamiliar with the Site and the project managers he contacted Anne. Mr. Zachos said that a water supply cannot be named until a contract is signed. I never heard Anne or Diego state that was the case. Please provide me with where this info is available for the public to review.

EPA Response 2h: As stated in the Proposed Plan and at the public meeting held on June 27th, 2017, no water supply has been selected for the Mansfield Trail Dump Site. The Proposed Plan identifies potential water purveyors. As no water supply has been chosen, no contract or other legal agreement has been signed or executed. For a fuller understanding of the Superfund process, please see the links in EPA Response 2g, above.

Commenter 3:

3a: As a member of the East Brookwood Estates Property Owners Association, I feel it's premature to identify our water supply as the answer to the problem affecting the 18 affected homes above us that have contaminated water. Our water company members have not voted to accept this solution. In fact, when I spoke to our Water Association President, Mr. Jim McCole, he advised me that he never said to the EPA that he was in favor of this alternative.

Please see EPA Responses 1e and 2h above.

3b: We currently have a contamination problem of our own as you well know. We currently cannot accept responsibility for future problems that may arise associated with the contamination of the 18 homes in question. If we are purchased by Suez in the near future, they may be open to this solution because they have the resources needed to address future problems – we do not.

At present, your choice of EBEPOA as your answer to getting rid of your responsibility in dealing with the POET systems in the 18 Homes affected by landfill contamination is definitely not acceptable to our members.

We are aware that the other water companies you have contacted have said they are not interested. We also are not interested.

EPA Response 3b: Please see EPA Response Comments 2b, 2c, 2d and 16, above. In addition, as part of the remedy EPA will include necessary upgrades that would be needed to assure the water system is able to supply the impacted residents.

Commenter 4:

I think we were taken back by the announcement prior to a CAG meeting to discuss the decision of the EPA. Many of us were under the impression that we would meet prior to public announcement or at least an email with a little more substance other than a decision was made and that you were going public.

I have a number of questions.

4a: Who is the water company?

EPA Response 4a: No water company has been selected as an alternate supply. EPA will be in communication with the community throughout RD of the project, which is expected to take several years. EPA will have formal discussions with necessary water system stakeholders throughout the RD phase. See Responses 2c and 2d.

4b: Timeframe of installation?

EPA Response 4b: Once the ROD is final, the remedial process progresses in phases. First, the RD phase will begin, during which specifications and plans for the selected remedy are developed. A RA phase is initiated after the design is completed, and is the stage where construction activity occurs. EPA cannot guarantee that funds will be available when needed for construction, however, there is a process for securing funds. The process of RD is expected to take several years. Construction of EPA's preferred Alternative is estimated to take 8 months.

4c: If we go with the water company, will the poet systems be removed by the state?

EPA Response 4c: It is EPA's understanding that the NJDEP would remove the POETS after a property is connected to the alternate water supply, and that this work would be covered by the state Spill Fund. For confirmation of NJDEP's intentions, please contact NJDEP.

4d: If the homeowner decides not to go with the water company, will the state continue to maintain the POET system?

EPA Response 4d: It is EPA's understanding that after the waterline is installed and connections are offered to the impacted properties, the NJDEP will not be maintaining the existing POETS. Thus, homeowners that choose not to hook up to the alternate water supply will be responsible for maintaining their own POETS. For confirmation of NJDEP's intentions, please contact NJDEP.

4e: If the homeowner decides not go to with the water company but 5 - 10 years later decides to hook up, what is the cost from the street to the home?

EPA Response 4e: The cost estimate completed by EPA for the FFS estimated the typical connection cost to be approximately twenty thousand dollars. This estimate includes the abandonment of the private well and removal of the POETS. It is important to note that the cost to EPA may not be comparable to the cost to a private party for the same or similar work. In addition, EPA is unable to estimate the exact cost of connection in 5 to 10 years.

4f: Our homes are large -- will there be enough water supply to accommodate our usage?

EPA Response 4f: EPA will include necessary upgrades to the selected system as part of the RA. The supply needs and the upgrades required to meet these needs will be determined as a part of the RD phase.

Attachment A
Proposed Plan



Mansfield Trail Dump Superfund Site

Byram Township, New Jersey

Proposed Plan

June 2017

EPA ANNOUNCES PROPOSED PLAN

This Proposed Plan identifies the Preferred Alternative to address contaminated residential potable wells at the Mansfield Trail Dump Superfund Site (Site) located in Byram Township, Sussex County, New Jersey. This action for impacted potable wells is referred to as Operable Unit 1 (OU1). An investigation of contaminated groundwater at the Site is underway as part of OU2.

The Environmental Protection Agency's (EPA) Preferred Alternative to address the contaminated potable wells at residential properties at the Site is Alternative 3, which includes the provision of potable water to impacted properties through construction of a water line, service connections, and abandonment of private potable wells.

This Proposed Plan includes a summary of all cleanup alternatives evaluated for OU1 at the Site. This document is issued by EPA, the lead agency for the Site, in consultation with the New Jersey Department of Environmental Protection (NJDEP), the support agency. EPA, in consultation with NJDEP, will select a final remedy for the contaminated potable water at the Site after reviewing and considering all information submitted during a 30-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 alternatives presented in this Proposed Plan.

EPA is issuing this Proposed Plan as part of its public participation responsibilities under Section

MARK YOUR CALENDARS

Public Comment Period

June 13, 2017 to July 13, 2017.

EPA will accept written comments on the Proposed Plan during the public comment period.

Public Meeting

June 27, 2017 at 7:00 P.M.

EPA will hold a public meeting to explain the Proposed Plan and all of the alternatives presented in the Focused Feasibility Study. Oral and written comments will also be accepted at the meeting. The meeting will be held at the Byram Township Municipal Building at 10 Mansfield Drive, Stanhope, New Jersey.

For more information, see the Administrative Record at the following locations:

EPA Records Center, Region 2

290 Broadway, 18th Floor

New York, New York 10007-1866

(212) 637-4308

Hours: Monday-Friday – 9 A.M. to 5 P.M.

EPA's website for the Mansfield Trail Dump site:

<https://www.epa.gov/superfund/mansfield-trail>

Sussex County Library Louise Childs Branch

21 Sparta Road

Stanhope, New Jersey 07874

(973) 770-1000

Please refer to website for hours:

<http://sussexcountylibrary.org>

117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). This Proposed Plan summarizes information that can be found in greater detail in the OU1 Focused Feasibility Study (FFS) report, Data Evaluation Summary Report (DESR) and other documents contained in the Administrative Record file for this Site.

SITE DESCRIPTION

The Mansfield Trail Dump Superfund Site consists of former waste disposal trenches in a wooded area and groundwater contamination in the area. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. When discovered in the wooded area, five discrete areas of concern (AOCs) were designated as Dump Areas A, B, C, D, and E. The former dump sites are located on wooded, undeveloped properties in Byram Township, Sussex County in northwestern New Jersey.

The Site was added to the National Priorities List (NPL) in March 2011 and consists of two OUs covering long-term remedial work.

OU1 includes 18 properties downgradient of the former dump areas where private drinking well water is known to be impacted by the Site's contaminated groundwater plume.

OU2 includes shallow and deep groundwater contamination. Any residual soil contamination and vapor intrusion also will be addressed during the ongoing investigation for OU2.

SITE HISTORY

Residential Area

In May 2005, the Sussex County Department of Health and Human Services and NJDEP became aware of trichloroethylene (TCE) contamination in residential wells serving homes on Brookwood and Ross Roads, and notified residents in the neighborhood of the contamination. Point-of Entry-Treatment Systems (POETS) were installed on impacted residential properties to provide safe drinking water primarily by NJDEP. By June 2005, 13 residential wells were known to be contaminated with TCE at concentrations in excess of New Jersey drinking water standards

and additional POETS were installed. Sampling of the residential wells in the Brookwood and Ross Roads neighborhood conducted by NJDEP in March 2006 indicated the presence of TCE concentrations that ranged from 3.9 to 70 micrograms per liter ($\mu\text{g/L}$). Currently, 18 homes are equipped with POETS through NJDEP or by homeowners to remove the contamination, and sampling continues to protect area residents' health.

In addition, from 2006 to 2008, NJDEP collected indoor air and sub-slab soil gas samples from homes throughout the affected neighborhood. NJDEP installed vapor intrusion mitigation systems or modified existing radon mitigation systems in five of the affected homes to prevent the migration of harmful vapors from entering the homes.

Source Area

NJDEP first identified the former waste disposal trenches at the Site in 2009 during an effort to determine the source of the TCE contamination detected in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP, EPA, and contractors in December 2009 and May 2010 indicated disposal trenches that were designated Dump Areas A, B, C, D and E. The Dump Areas consisted of contaminated soil and sludge-like-waste from unknown origins. Sampling done by NJDEP in 2009 showed elevated concentrations of TCE, 1,2-dichloroethylene (1,2-DCE), and vinyl chloride in groundwater. Soil samples in the dump areas indicated the presence of TCE, cis-1,2-dichloroethylene (cis-1,2-DCE), benzene, ethylbenzene, toluene, and xylene (BTEX) compounds, as well as various chlorinated benzene compounds. EPA collected soil and sludge-like-waste, groundwater (on-site monitoring wells), and residential well samples from February to May 2010. EPA also installed a background monitoring well (MW-3) south of NJDEP's monitoring wells (MW-1 and MW-2). Analytical results documented the presence of TCE and other volatile organic compounds (VOCs) above background conditions in these on-site wells. The TCE groundwater plume was found to begin at the former source areas and extends downgradient towards the Brookwood and Ross Road residential area.

During May and June 2010, EPA collected soil, groundwater, and composite waste samples from test borings advanced throughout the Site, using Geoprobe™ direct-push technology. Although former Dump Area C was observed to be littered with tires and miscellaneous trash, and was considered an additional AOC, no evidence was found of the same type and method of waste deposition as the other dump areas (i.e., excavated trenches and sludge-like-waste material).

Analytical results of soil and waste samples collected during the waste-source-delineation phase indicated the presence of VOCs, such as TCE, 1,2-DCE, and various chlorinated benzene compounds throughout the site. Polychlorinated biphenyls (PCBs) were detected in composite samples collected from the former Dump Area A lower trench, Dump Area B, and Dump Area D, trenches 1 and 2. Contaminants were not detected in the former Dump Area D, Trench 4. In March 2011, based on the impacted on-site and residential areas outlined above, the Site was added to the NPL.

From February 21 to May 30, 2012, EPA's Region 2 Removal Action Branch completed excavation to remove soil contamination from Dump Areas A, B, C, D and E. Approximately 11,170 tons of non-hazardous soil and debris and 383 tons of hazardous soil were removed from the Site and transported to approved off-site disposal facilities.

The dump areas were excavated to bedrock and re-graded and restored to match the former topography.

Additional Investigation

From August 2013 to December 2015, EPA performed remedial investigation activities at the Site. EPA collected environmental data, including overburden soil samples, subsurface soil samples, rock core samples, groundwater samples, and performed site reconnaissance activities. Samples were taken from both the source area and the downgradient residential neighborhood.

SITE CHARACTERISTICS

Setting/ Geology/ Hydrology

The Site is bordered to the east by a steep, narrow valley. An abandoned railroad bed and a waterway, Cowboy Creek, that flows north are located on the valley floor. Cowboy Creek flows to Lubbers Run and the Musconetcong River. Both Lubbers Run and the Musconetcong River are used for recreation, including fishing, boating, and hiking. Information obtained from the New Jersey Division of Fish and Wildlife indicates that portions of the Musconetcong River are fished for human consumption. Segments of the Musconetcong River downstream of the Site are federally designated as a Wild and Scenic River. Water samples taken from the unnamed stream did not indicate any contamination.

Based on the topography and the detections of VOCs in the residential wells, it is likely that shallow groundwater flows beneath Former Dump Area A, which lies on the west side of the ridge, is to the west-northwest toward the Brookwood and Ross Roads neighborhood. The ridge forms a local groundwater divide and sources to the east (i.e., former Dump Areas B, D, and E) overlie a separate surficial aquifer.

As a part of the ongoing OU2 remedial investigation, 24 monitoring wells were sampled in the shallow and deep groundwater aquifer between March 2014 and December 2015. Sampling during this time period showed that TCE levels exceeded the New Jersey Groundwater Quality Standards (NJ GWQS) in six out of 13 shallow groundwater samples and 62 out of 94 deep groundwater samples. Concentrations of TCE ranged between 0.11 ug/L and 320 ug/L. Installation of additional groundwater monitoring wells and continued sampling is planned to further delineate the extent of groundwater contamination.

Residential Groundwater Sampling

Based on sampling results conducted by local residents and NJDEP, 18 residential wells in the site area were found to contain TCE concentrations above the NJ GWQS of 1 µg/L. When contamination was discovered, NJDEP took protective actions including confirmation

sampling, and the installation and maintenance of POETS. Eighteen POETS have been installed since 2005 at properties where TCE contamination was confirmed above the NJ GWQS.

In April 2014, EPA collected water samples from residential wells equipped with POETS, plus an additional eight wells. This sampling was conducted as a part of the remedial investigation. Samples were taken from residential wells prior to treatment. NJDEP continues to monitor and maintain eligible POETS at impacted residences under the state Spill Compensation Fund.

SCOPE AND ROLE OF THE ACTION

As with many Superfund sites, the contamination at the Site is complex. In order to manage the cleanup of the Site more effectively, EPA has organized the work into two phases of long-term cleanup called OUs, under the authority of CERCLA. This Proposed Plan addresses OU1, which addresses providing potable water to impacted residents through connection to a water supply. The OU2 remedy will address any residual soil contamination, vapor intrusion, and the contaminated groundwater. A Remedial Investigation is underway for the OU2 portion of the Site.

HUMAN HEALTH RISK ASSESSMENT

EPA conducted a four-step baseline human health risk assessment (HHRA) as part of OU1 to assess site-related cancer risks and non-cancer health hazards in the absence of any remedial action. The four-step process is comprised of: Hazard Identification, Exposure Assessment, Toxicity Assessment, and Risk Characterization (see adjoining box “What is Risk and How is it Calculated”).

The HHRA began with selecting chemicals of potential concern (COPCs) in groundwater that could potentially cause adverse health effects in exposed populations. Groundwater onsite is being used for drinking water purposes. Although POETS have been installed within impacted homes, if additional wells become contaminated or the POETS are not maintained, exposure to contaminated groundwater could occur. Therefore, the current and future pathways and populations evaluated in the HHRA included

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.

adult and child residents potentially being exposed to groundwater via ingestion, dermal contact, and inhalation of chemical contaminants while showering/bathing.

In this assessment, exposure point concentrations were estimated using either the maximum detected concentration of a contaminant or the 95% upper-confidence limit (UCL) of the average concentration. Chronic daily intakes were calculated based on the reasonable maximum exposure (RME), which is the highest exposure reasonably anticipated to occur at the Site. The RME is intended to estimate a conservative exposure scenario that is still within the range of possible exposures. A more detailed discussion of the exposure pathways can be found in the baseline risk human health risk assessment.

Summary of Risks to Residential Receptors

Cancer risks and noncancer health hazards from exposure to contaminated groundwater were evaluated for adult and child residents. The estimated excess lifetime cancer risk estimate is 1×10^{-2} (one-in-one hundred), primarily driven by chromium, VC, and TCE. The calculated hazard index (HI) is 110 for an adult and 106 for a child. Noncancer hazards are driven by TCE and chromium, and to a lesser extent by nickel, cobalt, and cis-1,2-DCE. For these receptors, exposure to site-related contaminants in groundwater results in an excess lifetime cancer risk that exceeds EPA's target risk range of 1×10^{-4} (one-in-ten thousand) to 1×10^{-6} (one-in-one million) and a noncancer HI above the acceptable level of 1.

The chromium and nickel maximum values used for exposure point concentrations in the HHRA were anomalously higher (several orders of magnitude) compared to other wells onsite and results from previous sampling events. A statistical outlier test was performed to determine whether these concentrations can be considered representative of site exposure based on data collected from other monitoring wells within the groundwater plume. The outlier testing concluded that both chromium and nickel sampling results contained outliers from the same sample multi-level system (MLS-3) location. When these outliers were replaced with the next highest concentration detected from that location, the total risk from all carcinogens decreased to 5×10^{-3}

(one-in-one thousand). Although the adjusted risk still exceeds EPA thresholds, the outlier test indicated TCE and VC are the primary contributors of site-related risk. Exposure to TCE and VC individually accounted for risks of 5×10^{-4} and 4×10^{-3} , respectively. In addition, cancer risk due to chromium may be overestimated because it was assumed that all of the chromium present is in the more toxic hexavalent form. This is conservative since chromium in the environment is generally dominated by the less toxic, trivalent form. Further discussion of the outlier test can be found in the baseline human health risk assessment.

Summary of Human Health Risks

Residential exposure to contaminated groundwater, in the absence of any current or ongoing remedial action, yields Site risks and hazards that exceed EPA's acceptable cancer risk range (1×10^{-4} to 1×10^{-6}) and noncancer hazard threshold (HI of 1). It is EPA's current judgement that the Preferred Alternative identified in this Proposed Plan, or one of the other active measures considered in the Proposed Plan, is necessary to protect public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

REMEDIAL ACTION OBJECTIVES

Remedial Action Objectives (RAOs) are specific goals to protect human health and the environment. These objectives are based on available information and standards, such as applicable or relevant and appropriate requirements (ARARs), to-be-considered (TBC) guidance, and site-specific risk-based levels.

The primary objective of any remedial strategy is overall protectiveness. The RAO in the FFS has been developed to focus on preventing exposure to contaminated potable water. The RAO for the Mansfield Trail Dump OU1 is:

- Prevent or minimize current and future human exposures from ingestion or, inhalation or, dermal contact with contaminants in potable water attributable to contaminated groundwater at the Site.

SUMMARY OF REMEDIAL ALTERNATIVES

CERCLA, Section 121(b)(1), 42 U.S.C. Section 9621(b)(1), mandates that remedial actions must be protective of human health and the environment, cost-effective, comply with ARARs, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ, as a principal element, treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants, and contaminants at a site. CERCLA, Section 121(d), 42 U.S.C. Section 9621(d) further specifies that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants, which at least attains ARARs under federal and state laws, unless a waiver can be justified pursuant to CERCLA Section 121(d)(4), 42 U.S.C. Section 9621(d)(4).

The objective of the FFS for the OU1 Study Area was to identify and evaluate remedial action alternatives to meet the RAOs. A total of four alternatives were initially developed and screened in the FFS for overall implementability, effectiveness, and cost and three were carried over for further evaluation.

Three alternatives were retained for a detailed evaluation against the seven National Contingency Plan (NCP) evaluation criteria. The sections below present a summary of the alternatives that were retained and evaluated. The Present-Worth Costs are based on a 30-year timeframe in accordance with EPA guidance.

The time frames presented below for construction do not include the time for pre-design investigations, remedial design, or contract procurements.

Detailed descriptions of the remedial alternatives for the OU1 can be found in the FFS report.

Alternative 1 – No Action

The No Action Alternative was evaluated, as required by the NCP, and provides a baseline for comparison with other alternatives. No remedial

actions would be implemented as part of the No Action Alternative. Furthermore, this alternative would not involve any monitoring of groundwater or institutional controls. Although there are already existing POETS and vapor intrusion mitigation systems within the impacted area, it is assumed for the No Action Alternative that no additional remedial measures would be taken, and no monitoring would be conducted.

| | |
|--------------------|------|
| Capital Cost: | \$0 |
| Annual O&M Cost: | \$0 |
| Present-Worth Cost | \$0 |
| Duration Time: | None |

Alternative 2 – Treatment via POETS

Alternative 2 relies on the continued operation of existing POETS. The 18 existing POETS would be assessed and necessary upgrades would be evaluated. The cost estimate includes upgrades to five of the systems. All 18 systems would then need to be operated, monitored, and maintained in accordance with current practices.

Previous investigations do not support the imminent spread of groundwater contamination beyond the area that has been impacted, but monitoring of drinking water wells in the vicinity would be conducted to assure that they meet drinking water standards. POETS would need to be installed, operated, monitored, and maintained if homes were to become impacted.

| | |
|---------------------------------|-------------|
| Capital Cost: | \$381,872 |
| Annual O&M Cost (Year 1 to 5): | \$219,612 |
| Annual O&M Cost (Year 6 to 30): | \$231,844 |
| Present-Worth Cost: | \$3,209,000 |
| OM&M of POET Systems: | 30 years |
| Time to Install POETS: | 5 weeks |

Alternative 3 – Connection to an Existing Water Supply System.

Alternative 3 includes the provision of potable water to impacted properties through construction of a water line and abandonment of private potable wells. Service connections to each impacted house from an existing water supply system in the area would be made in accordance with Byram Township, Sussex County, and New Jersey regulations.

For cost estimation purposes, the closest privately owned water supplier, East Brookwood Estate Property Owners Association (EBEPOA), was used as the water supply system. In order to add the impacted area to the EBEPOA, upgrades to the existing system and consent of the owners of the EBEPOA would be necessary. The final water system configuration would be determined during design should this alternative be selected.

During the design and construction phases of the water main, eligible POETS would continue to be operated and maintained by NJDEP, until individual residences are switched over to the alternate water supply. EPA would periodically monitor residential wells in the vicinity of the impacted area that are currently not impacted above the cleanup goal for TCE. If these wells were to become impacted above that criteria, POETS would need to be installed at these locations until the remedy is implemented and an alternate potable water source is available.

After the remedy is in place, homes in the vicinity of the impacted area would continue to be monitored. If any of these monitored homes were to become impacted, connection to the water line would be made available. The capacity of the water supply system would then be reassessed.

| | |
|---------------------------------|-------------|
| Capital Cost: | \$8,333,160 |
| Annual O&M Cost (year 1): | \$77,278 |
| Annual O&M Cost (year 1 to 30): | \$27,016 |
| Present-Worth Cost: | \$8,746,000 |

Time to Complete Construction: 8 months

EVALUATION OF ALTERNATIVES

Nine criteria are used to evaluate the different remediation alternatives individually and against each other in order to select a remedy. This section of the Proposed Plan profiles the relative performance of each alternative against the nine criteria, noting how it compares to the other options under consideration. The nine evaluation criteria are discussed below. A detailed analysis of each alternative can be found in the FFS.

Overall Protection of Human Health and the Environment

The No Action Alternative (Alternative 1) is not considered protective of human health and the environment, because it does not prevent the current and future use of contaminated groundwater which presents an unacceptable human health risk. It also does not include any long-term groundwater monitoring to assess or address potential short or long term exposure to groundwater by area residents. Because Alternative 1 (No Action) is not protective of human health and the environment, it was eliminated from consideration under the remaining evaluation criteria.

Alternative 2 would be protective of human health because contaminated groundwater would continue to be treated prior to use by residents within the impacted area. This alternative relies on consistent maintenance of individual systems in order to ensure effectiveness of the treatment.

Alternative 3 would be protective of human health in the impacted area by providing potable water through construction of a water line and abandonment of private potable wells. Other homes in the vicinity of the impacted area would be monitored, as a safeguard, and offered connection to the system if necessary.

Compliance with ARARs

Actions taken at any Superfund site must meet all applicable or relevant and appropriate requirements under federal and state laws or provide grounds for invoking a waiver of those requirements.

Alternatives 2 and 3 would assure that potable water would meet NJ GWQS in the short term. However, Alternative 3 is the alternative that best meets this criterion as it provides for residences to be connected to an alternate water supply, ensuring that potable water meets all applicable standards due to state and federal regulations. Alternative 2 would provide for potable wells to meet NJ GWQS through the use of POETS. POETS require diligent operations and maintenance to assure that they continue to properly address groundwater contamination in each residence over time in order to provide safe potable water. All of the alternatives would comply with location- and action-specific ARARs such as the Freshwater Wetlands Protection Act, and the Federal Clean Water Act.

Long-Term Effectiveness and Permanence

Alternative 3 would be effective and permanent because this alternative relies on permanent infrastructure to convey water from a reliable source of potable water. In addition, it meets this criterion the best, as it is most effective in the long term. Alternative 2 would require significantly more maintenance to remain reliable, such as confirmation sampling and carbon replacement in order for POETS to remain protective, and is not considered as permanent as Alternative 3.

Reduction in Toxicity, Mobility or Volume (TMV) through Treatment

Alternatives 2 and 3 would reduce the TMV of the contaminants by preventing the exposure of the residents to the contaminants. The POETS would control exposure to contaminant concentrations above NJ GWQS by treatment at the point of use. Connection to a water system would provide an alternate supply of potable water, therefore eliminating exposure to the contaminants.

Short-Term Effectiveness

The necessity to construct parts of the remedies on the property of land owners, in roadways and right-of-ways for both Alternative 2 and 3 would result in some short-term adverse effects to the surrounding community. Alternative 2 would require limited site work and, therefore, resulting in minimal short-term impacts to the community and workers.

Construction of Alternative 3 would result in the most significant short-term effects in the community, with the installation of a water line. These effects would be limited to the construction work in the neighborhood and on private property for connections. However, EPA would work with the community to alleviate concerns. In addition, standard health and safety practices would be used to mitigate any impacts on workers. There would be no adverse environmental impacts to habitats or vegetation as implementation would only affect previously developed areas such as roads and private properties.

Implementability

Under Alternative 2 it is expected that not all homes would need upgrades to their existing systems. The limited site work would be easily implemented.

Alternative 3 would be implementable using conventional construction methods and readily available materials. Due to construction required on roads, disruptions to local traffic would be likely. Right-of-way access and coordination with local government would be needed as well. Depending on the chosen water system, distance from the impacted properties and capacity of the system might affect implementability.

Cost

The estimated present worth of Alternative 2 is \$3,209,000. This cost includes an estimated number of upgrades to existing systems as well as the installation of an estimated number of new systems in the vicinity of the impacted properties. Also included in this cost is residential water sampling to ensure POETS were operating properly. This alternative assumes O&M on the POETs and monitoring over a 30-year time period.

The present worth of the estimated cost for Alternative 3 is \$8,746,000. This estimate includes construction of the proposed water line as well as O&M of the alternate supply system for one year. O&M costs for the monitoring program are estimated over a 30-year time period.

For costing purposes, each alternative has an estimated duration of 30 years although, as discussed above, it is unknown what the period of time will be that contaminants remain above ARARs. The OU2 investigation and remedy will examine estimated duration of contaminants above ARARs in the aquifer.

State/Support Agency Acceptance

The State of New Jersey supports EPA's preferred remedy as presented in this Proposed Plan.

Community Acceptance

Community acceptance of the preferred alternatives 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

The preferred alternative for potable water is Alternative 3, which includes the provision of potable water to impacted properties through the construction of a water line, service connections, and abandonment of private potable wells, hereafter referred to as the Preferred Alternative. The preference for Alternative 3 is based upon two factors: (1) the limited potential for treatment or containment of groundwater contamination to result in a measureable improvement in groundwater quality anywhere in the aquifer within a reasonable time period; and (2) the reliability and permanence of an alternate water supply as compared to individual treatment systems.

EPA believes an alternate water supply would effectively mitigate exposure to contaminated drinking water. The installation of an alternate water supply in the area affected by the contaminated groundwater would eliminate risks to residents from consumption of, inhalation of, and dermal contact with contaminated drinking water. EPA expects this to be the final potable water remedy for the Site.

POETS would need to be operated and maintained, until individual residences are switched over to the alternate water supply. EPA will periodically monitor residential potable wells in the vicinity of the impacted area that are currently not impacted above the cleanup goal for TCE. If these wells become impacted above that criteria, POETS would be installed and maintained at these locations until the remedy is implemented and an alternate potable water source is available. Properties connected to the alternate water supply would be responsible for payment of water bills once the connections are complete.

Alternative 3 is believed to provide the most protective remedy for impacted residents. The Preferred Alternative is believed to provide the best balance of trade-offs among the alternatives with respect to the evaluation criteria. Based on the information available at this time, EPA believes the Preferred Alternative will be

protective of human health and the environment, and will comply with ARARs to the extent practicable.

Consistent with EPA Region 2's Clean and Green policy, EPA will evaluate the use of sustainable technologies and practices with respect to any remedial alternative selected for the Site.

COMUNITY 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 the Remedial Project Manager, Anne Rosenblatt, at the address provided. 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.

For further information on Mansfield Trail
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Written comments on this Proposed Plan
should be addressed to Ms. Rosenblatt.

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The public liaison for EPA Region 2 is:
George H. Zachos Regional Public Liaison
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Site Map

Attachment B
Public Notice

Ferries could be next wave for NYC commuters

HOBOKEN (AP) — The easiest way to commute into New York City exchanges asphalt and steel rails for a whiff of salt water and a soaring view of the Manhattan skyline, all in less time than it takes to finish a cup of joe.

It's also the most under-used, primarily due to logistics and cost. That could change, though, beginning this summer when ferries will act as a safety valve for New Jersey rail commuters because of disruptions caused by major repair work at New York's Penn Station.

In the long term, while the New York region's tunnels, bridges and railways burst at the seams with no relief in sight for a decade at best, ferries may be the final frontier for commuters sick of clogged roads and a notoriously unreliable and aging rail system.

On the New Jersey side, where a new governor will succeed outgoing Republican Chris Christie in January, change may be in the winds.

"Should the state, particularly a new administration, take a fresh look at how we deal with expanding demand to get across the Hudson?" said state Sen. Robert Gordon, vice-chair of a state transportation committee. "Maybe this is the time to think about a whole new approach to ferries."

Ferry service — historically the main mode of transportation for commuters to Manhattan island, now connected to other boroughs and suburbs by bridges and tunnels — has already been



AP Photo/Mark Lennihan, File

A commuter ferry crosses the Hudson River to New York City in April, as seen from Hoboken. Though more expensive than rail, the ferries may provide relief for commuters while repair work is going on at Penn Station.

expanded for commuters inside New York City. Last month, Mayor Bill de Blasio launched service that will eventually offer six routes between Manhattan and the other boroughs.

City transportation officials say the new ferry fleet will speed up travel time by as much as two-thirds, although plans to spend \$180 million

over six years subsidizing fares to keep them the same as a subway ride could be difficult to sustain.

This spring, two derailments at Penn Station, both at very low speed and neither involving serious injuries, sent delays rippling up and down the corridor between Boston and Washington. The second forced local rail lines

to drastically cut back service, leaving angry commuters accustomed to regular 15- to 30-minute delays facing double or triple that.

Meanwhile, not far from where thousands of cars jockey to fit into three lanes of the Lincoln Tunnel each morning, ferries crisscross the Hudson with dozens of empty seats.

Only about 2 percent of the more than 1.4 million people who commute into Manhattan on weekdays take ferries, according to a 2015 study by the New York Metropolitan Transportation Council that was funded by the U.S. Department of Transportation.

New York Waterway can carry about 9,000 more peo-

ple on its lines from Hoboken to lower Manhattan during the summer's rail disruption, company Chairman Armand Pohan told lawmakers last month. Tens of thousands more could be accommodated in the future if the company adds boats and builds another terminal, company founder Arthur Imperatore said.

But New York Waterway ferry service costs three or more times the PATH trains operated by the Port Authority of New York and New Jersey, while New Jersey transit offers commuter rail service directly into New York from points throughout New Jersey with discounts for monthly passes.

For some, the reliability is worth the extra cost.

"This is more predictable; it's every 15 minutes, and you don't have service disruptions like PATH has," said Joe Raconello, who commutes from northern New Jersey via NJ Transit into Hoboken and then boards a ferry. "It's also more relaxing, and you always get a seat."

Dave Berge, a resident of New York's Rockland County, on New Jersey's northern border, straddles both transportation modes. He takes the ferry from Hoboken in the morning but the train at night.

"This is peace of mind," Berge said, gesturing on a recent Friday toward the glittering skyline from the rear deck of a New York Waterway. "It's an indulgence, but I don't mind paying more."

Jersey City suspends four police after kicking of bystander

JERSEY CITY (AP) — Four Jersey City police officers, including a lieutenant with 24 years' experience, have been suspended indefinitely in the wake of an auto chase and fiery crash in which a video showed police kicking and dragging a bystander, the city's mayor announced Monday.

The June 4 video showed Miguel Feliz exiting his car before being kicked by the officers. The officers had been chasing a different man whose car resembled one used in a shooting several days earlier.

Feliz, of West New York, several miles from Jersey City, underwent surgery for burns last week and remains hospitalized.

All four officers are suspended indefinitely without pay, Mayor Steven Fulop said Monday. He deferred questions about a criminal probe into the incident to the Hudson County prosecutor's office, which is conducting the investigation.

"We have a strong track record here of supporting our police officers and acting



AP Photo/Seth Wenig

Jersey City Public Safety Director James Shea, left, and Mayor Steven Fulop take questions from journalists during a news conference in Jersey City on Monday.

swiftly with discipline when appropriate," Fulop said. "We're taking swift actions within our ability to do so, and residents should know we want to have a balance between resident concerns and policing concerns, and we feel we have that balance here."

Suspended were: Lt. Keith Ludwig and Officers M.D. Khan, Erik Kosinski and Francisco Rodriguez.

Public Safety Director James Shea said Ludwig, a 24-year veteran of the force, has an "excellent" record, and that the three officers, one of whom has been on the force for a year, "are average police officers." He didn't say if any had had previous disciplinary violations.

Shea wouldn't say if any of the suspended officers were the ones seen on video kicking Feliz.

"We repeat our call for a full and impartial investigation into this incident," Carmine Disbrow, president of the Jersey City Police Officers Benevolent Association, said in an email. "Unfortunately Mayor Fulop continues to indicate that he has no intention of allowing this to be the case."

Feliz wasn't the only person injured in the chase. Suspect Leo Pinkston suffered a leg injury after officers fired shots at his moving vehicle.

Shea said at least 20 officers were involved in some aspect of the response to the high-speed chase, which lasted for several miles. Several protocols were violated, he said, including the length of the chase, the firing of shots at a moving vehicle and the placing of a car as a road-block without approval from a supervisor.

Briefs

Teacher suspended after photos altered

WALL (AP) — A New Jersey school district has suspended a teacher after yearbook photos of two high school students were altered to remove President Donald Trump's name on their clothing.

Wall Township School Superintendent Cheryl Dyer told News 12 New Jersey on Monday the yearbook's adviser was suspended while an investigation is underway. Further details about the suspension and the investigation were not disclosed, and Dyer did not immediately respond Monday to an email from The Associated Press seeking further comment.

However, it remains unclear who altered the yearbook photos or why. A spokesman for Jostens, the company that takes the photographs and prints the yearbooks for the district, did not respond to requests for comment on Monday.

One student wore a sweater vest with Trump's name on it. Another student wore a T-shirt emblazoned with the words "Trump Make America Great Again." But neither feature appeared in the photos

published in the yearbook.

The only reason a student's image would be altered is if it was in violation of the district's dress code, such as clothing referencing drugs, alcohol or violence, Dyer has said.

The district also is probing why a Trump quote submitted by the freshman class president wasn't included under her photo, while a quote by President Franklin Delano Roosevelt appeared under the senior class president's photo.

Comey's dad says son laughs over leaking

ALLENDALE (AP) — The father of former FBI Director James Comey says his son laughs when the subject of leaking is brought up.

J. Brien Comey Sr. was responding after President Donald Trump tweeted Sunday morning: "I believe the James Comey leaks will be far more prevalent than anyone ever thought possible. Totally illegal? Very 'cowardly!'"

James Comey was in his New Jersey hometown of Allendale with his father on Sunday, days after testifying before a Senate panel on his meetings with Trump.

He declined to speak with a reporter from The Record newspaper. But his father told the newspaper his son wasn't aware of the tweets at the time.

Comey's father says his son turned over "one of his own documents" to a friend, which the elder Comey says isn't leaking.


Christie anti-opioid report coming soon

MORRISTOWN (AP) — New Jersey Gov. Chris Christie says a preliminary report from a White House commission to combat opioid addiction is expected in about three weeks.

Christie spoke to reporters Monday after an event on the drug crisis staged at Morristown Medical Center.

The Republican governor says the commission he's leading is considering recommending changes to medical privacy laws so parents could be notified if their children are revived with naloxone after an opioid overdose. But he declined to provide more details.

Christie, who is term-limited, is heading a White House commission that's studying the national opioid problem.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
INVITES PUBLIC COMMENT ON THE PROPOSED PLAN
FOR THE MANSFIELD TRAIL DUMP SUPERFUND SITE
BYRAM TOWNSHIP, NEW JERSEY

The U.S. Environmental Protection Agency (EPA) announces the opening of a 30-day comment period on the preferred plan to address the groundwater contaminated with trichloroethene (TCE), a volatile organic compound at the Mansfield Trail Dump Site in Byram Township, New Jersey. The preferred remedy and other alternatives are identified in the Proposed Plan.

The comment period begins on Tuesday, June 13, 2017 and ends on Thursday, July 13, 2017. As part of the public comment period, EPA will hold a public meeting on June 27th at 7 pm at the Byram Municipal Building at 10 Mansfield Drive in Byram Township, NJ.

The Proposed Plan is available electronically at the following address:

<https://www.epa.gov/superfund/mansfield-trail>

Written comments on the Proposed Plan, postmarked no later than close of business Thursday, July 13, 2017, may be emailed to Rosenblatt.Anne@epa.gov or mailed to Anne Rosenblatt, US EPA, 290 Broadway, 19th Floor, New York, NY 10007-1866.

The Administrative Record files are available for public review at the following information repositories:

The Sussex County Library Louise Childs Branch, 21 Sparta Road, Stanhope, NJ 07874 or at the USEPA Region 2, Superfund Records Center, 290 Broadway, 19th Floor, New York, NY 10007-1866.

For more information, please contact Pat Seppi, EPA's Community Liaison, at 646.369.0068 or seppi.pat@epa.gov



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Attachment C
Public Meeting Transcripts

1
2 UNITED STATES
3 ENVIRONMENTAL PROTECTION AGENCY

4 - - - - - x

5 RE:

6 MANSFIELD TRAIL DUMP SUPERFUND SITE,
7 BYRAM TOWNSHIP, NEW JERSEY

8 - - - - - x

9 June 27, 2017
10 7:00 P.M.

11 10 Mansfield Drive
12 Byram Township, New Jersey

13 A P P E A R A N C E S:

14 DIEGO GARCIA, Project Manager

15 MARK HERZBERG, Community Relations Coordinator

16 GREGORY BAKEMAN, Geologist/DEP

17 ELIZABETH LABLANC, Site Attorney/EPA

18 KATHERINE MISHKIN, Hydro-Geologist

19 ANNE ROSENBLATT, Remedial Project Manager

20 PATRICIA SEPPI, Community Involvement Coordinator/EPA

21 ABBY STATES, Risk Assessor for Site
22
23
24
25

1 Proceedings

2 MS. SEPPI: Thank you for
3 coming. We appreciate the fact that
4 you're here on time. The reason that
5 we are here tonight, as you know, is
6 to talk about EPA's preferred remedy
7 for our proposed plan. Before we get
8 into that Anne has a short
9 presentation, which is good. What we
10 would like to do, is, have an
11 introduction first.

12 So, I'm Pat Seppi. I'm from
13 the EPA. I'm the community liaison.

14 MS. ROSENBLATT: Anne
15 Rosenblatt. The RPM for the site,
16 remedial project manager.

17 MR. GARCIA: Diego Garcia,
18 project manager for the site as well.

19 MS. MISHKIN: Katherine
20 Mishkin, hydro-geologist for the site.

21 MS. STATES: Abbey States,
22 risk assessor for the site.

23 MS. LABLANC: Elizabeth
24 Lablanc, site attorney from EPA.

25 MS. SEPPI: And we have --

1 Proceedings

2 where is Mark? Oh, there he is.

3 MR. HERZBERG: Mark Herzberg,
4 NJDEP past-counterpart on the state
5 level, community relations.

6 MS. SEPPI: Greg.

7 MR. BAKEMAN: Greg Bakeman,
8 NJDEP geologist.

9 MS. SEPPI: So, this is pretty
10 much our team. We all work together
11 and we have been for awhile on this
12 site. Now, this is a little bit more
13 of a formal meeting. Not our usual
14 type of community advisory meetings.
15 You'll notice we have, Gina, our
16 stenographer here, and she's going to
17 be coming up with the transcript of
18 this whole meeting, and it's important
19 that, you know, she hear your comments
20 so she can get them down. So, we just
21 ask, when we get to the question
22 portion, if you remember just to state
23 your name and spell it for Gina so she
24 doesn't have to stop everything and go
25 back and ask for it again. So, that

1 Proceedings

2 will happen at the question and answer
3 part. Again, if you haven't signed
4 in, I would appreciate it if you would
5 do that, and that's the reason, as I
6 said, we are here tonight, to talk
7 about the proposed plan.

8 So, we fast-tracked and put
9 people on the CAG meetings focus
10 feasibility study. So, I know it
11 probably seems to everybody like this
12 is taking so long, but in the EPA
13 world, I have to say, this has gone
14 pretty quickly, you know, to get to
15 the point where we are now. So, we're
16 going to talk about EPA's preferred
17 remedy.

18 Has everyone had a chance to
19 take a look at the proposed plan on
20 our web page? If not, you know, we
21 have the address up here that we can
22 give you, take a look at it, but it's
23 important that you have a chance to
24 look at it. It's a somewhat technical
25 document, but it will give you a lot

1 Proceedings

2 of good background information.

3 Now, part of this is a 30-day
4 comment period, which started on June
5 13th. So, we try to do this meeting
6 kind of in the middle of that to give
7 you a chance to look at the proposed
8 plan, and the comment period will end
9 on July 13th. So, if you leave here
10 tonight, you think of some other
11 comments, you can send them in by
12 email or by regular mail, and she will
13 also have her information up there.

14 MS. ROSENBLATT: I put out
15 cards over there.

16 MS. SEPPI: Okay. So, the
17 format, again, it's a little bit
18 different than some of our other
19 meetings. You know, we had the
20 introduction, and the explanation of
21 why we're here, then we have a
22 presentation, and then we open the
23 floor up for any questions or comments
24 that you may have. And, again, Gina
25 will be taking all of those.

1 Proceedings

2 After this, after this
3 proposed plan comes our legally
4 binding document, which is called a
5 'Record of Decision,' and all the
6 comments that we hear tonight will be
7 included as an additional document in
8 that 'Record of Decision.' So, you'll
9 be able to go back and see your
10 comments and what our responses are.

11 So, this is the part I always
12 hate to do, I'd ask you, if possible,
13 could you hold your questions until
14 the end, only because so many times
15 somebody will ask a question, and it's
16 a good question, but maybe, you know,
17 two slides down the road it gets
18 answered. So, we would appreciate it
19 if you could do that, and then the
20 rest of the evening will be your's for
21 us to answer your questions. So,
22 Anne, I'm going to turn it over to
23 you.

24 MS. ROSENBLATT: Okay. So, I
25 just put up the agenda slide to give

1 Proceedings

2 you a little preview about what we're
3 going to talk about tonight. The next
4 slide kind of goes over what Pat just
5 talked about, which talks about the
6 comment period, which extends until
7 July 13th, and kind of how we respond
8 to those, and put them into the
9 records.

10 So, again, Pat talked a little
11 bit about the Superfund process and
12 how we go through the different steps.
13 First, after a site is discovered it
14 gets preliminary assessment and site
15 inspection. After that a site is
16 ranked and listed on the National
17 Priorities List, or NPL. Next comes a
18 remedial investigation and feasibility
19 study phase. The proposed plan,
20 'Record of Decision' is right now, and
21 then remedial design, and remedial
22 action and then construction happens,
23 and then construction completion and
24 O&M. So, right now the proposed plan
25 phase ends in September, then the

1 Proceedings

2 'Record of Decision.'

3 So, just a little background on the
4 site. In May of 2005, DEP and Sussex County
5 became aware of contamination in the residential
6 drinking water, and at that time 18 homes were
7 found to have elevated concentrations of a
8 contaminant called trichloroethylene or TCE, and
9 also at that time DEP installed POETS, or point of
10 entry treatment systems, to the homes.

11 Between 2006 and 2008 vapor
12 intrusion sampling was performed by the DEP at
13 homes and nearby schools, and in 2009 DEP located
14 the sledge-like-waste in their disposal trenches
15 along the Mansfield Bike Trail.

16 At this point EPA was handed this
17 site, and in March of 2011 the site was added to
18 the National Priorities List, or the NPL, and
19 between February and May of 2012 a removal was
20 completed to get rid of the source area
21 contamination that was in the trenches along the
22 bike path.

23 In 2012 VI sampling was performed by
24 EPA, and then in September of 2013 a more formal
25 remedial investigation began.

1 Proceedings

2 All information from the remedial
3 investigation was then summed up in the DESR or
4 Data Evaluation Summary Report, and that came out
5 in May of 2016, and that document, along with the
6 feasibility study, which came out this year, are
7 both available online at the website that was up
8 earlier, and I'll put it up again later.

9 So, to give you some geographic
10 information on this site, you can see in the red
11 lines there that's the general area where the
12 trenches were, and you can see a better picture of
13 them on the bottom right-hand corner, but also you
14 can see 206 on the left-hand side of the map is to
15 give you some perspective of where this is, and
16 the residences that are closest to the trench area
17 on the site boundaries.

18 So, EPA kind of went about this site
19 by first doing the source area removal, which is
20 what's normally done in this type of cleanup, and
21 next we moved to the investigation phase, where we
22 found as much information as we could, and next we
23 looked at the site and broke it up into three
24 different areas, which would be the vapor
25 intrusion, the site wide contamination, and the

Proceedings

groundwater and the residential contamination.

This is just a cross-section to give you a view of the geological setting, and you can see that it's a complex site because of the fractured bedrock, and the fact that the trenches were on the top of the ridge, and, so, the contamination enters the groundwater through the fractures on top of the ridge and kind of goes through the fractures in the groundwater and continues towards the residential area. This is kind of just a way to sum up the issues.

Right now impacted residences have POET systems on them, and impacted residences with vapor intrusion issues have mitigation systems.

So, EPA broke up the site into two operable units, and normally the sites are broken up into operable units based on either geographic regions or specific site problems so we can address them one at a time.

And in this case Operable Unit 1, which the FFS is on, is the contaminated residential drinking water.

So, the first step in moving towards a remedy is to do a risk assessment, and in this

Proceedings

case, because it's a human health issue with the residential drinking water, we did a human health risk assessment, and in that risk assessment we found elevated levels of contaminants in the drinking water that were above federal and state standards. The human health assessment pretty much states that the contamination in the groundwater poses an unacceptable risk to current uses.

And, again, the POETS are mitigating the current risk through treatment.

The ecological risks at the site are being pushed to OU2, where a more formal ecological risk assessment will be performed as part of the RFS, or the site-wide groundwater contamination.

Okay. So, the remedial action objective is a specific clean-up goal put together for each site, and it ensures the protection of human health and the environment, and it's kind of a wordy statement, but it goes through our general goals for the site, and it's put in the proposed plan as well as the 'Record of Decision.'

So, to summarize the three

Proceedings

alternatives that were brought through from the FFS to the proposed plan, the first one is the No Action, which is a baseline alternative that is put into every Superfund alternative list, and it's just there because it's always there, and it always gets ruled out in the different criteria we use to look at the different alternatives.

And, so, the second alternative is the removal of contaminants via treatment, which would be the continuation of the POETS and maintenance of those for impacted residents, and also included in Alternative 2 would be the monitoring of private wells in the nearby area.

Alternative 3 is the connection to an existing water supply, and that would include installation at the water main and connections to impacted residents. Also included in this are upgrades to the existing system, as well as the monitoring of nearby homes, which is also in Alternative 2.

So, for Alternative 2, the advantages would be that it's less costly, it would be implemented almost immediately, because the POETS are already existing for existing homes,

1 Proceedings

2 and in the disadvantages there is long-term O&M
3 costs, and it's not considered a permanent option.

4 Alternative 3 is the water supply
5 connection. Advantages being that it's a
6 permanent source of safe drinking water and it's
7 considered more reliable and permanent than the
8 POETS. The disadvantage would be the upfront
9 construction costs and the disruption to the
10 neighborhood and the areas.

11 Next I just want to look at the nine
12 criteria that EPA uses to go through the different
13 alternatives and kind of our thought process in
14 deciding which alternative is the best.

15 So, the first two are just EPA
16 standards. No remedy would be chosen if they
17 didn't meet both of these, and the first one is
18 overall protection of human health and the
19 environment, and the second one is compliance of
20 federal and state regulations and guidances.

21 The next five are balancing
22 criteria. They go over the effectiveness and the
23 different lengths of time as well as costs and
24 implement-ability.

25 And then the last two are state

Proceedings

acceptance and community acceptance. The first of which we already have; the state has already agreed to our proposed remedy.

For the additional FFS considerations, we found out the fact that the POET installations would be maintenance and annual carbon change-outs, and for the water supply connection we included in the proposed plan and the FFS an estimate of the water main and connections that would be needed as well as upgrades to the system, and both of these options are included in the monitoring of nearby residents.

So, if you read the proposed plan, you know that the preferred alternative is the alternate water supply connection. Main considerations for this was that it's considered a long-term remedy, it's reliable, and it's a better choice, according to EPA, versus the POETS, and then the proposed plan uses the East Brookwood Estates water supply for cost estimation purposes.

So, next steps would be to evaluate the public comments after the comment period ends on July 13th, we will then respond to all comments

1 Proceedings

2 that come in, and we will put them in a
3 responsiveness summary, which is just a response
4 to each of the comments that come in, into the
5 'Record of Decision.'.

6 After that we go into remedial
7 design phase, where we design the whole remedy,
8 and then after the design phase we have to go for
9 funding, and once we get the funding we can move
10 into the construction phase and implementation of
11 the remedy.

12 Concurrently we're working on the
13 RFS, which is going to address the vapor intrusive
14 and the site-wide groundwater contamination.

15 That's all I have.

16 MS. SEPPI: Very good. Thank
17 you. So, just a show of hands. A lot
18 of people have questions. I want to
19 make sure we have plenty of time.

20 Just to remind you, if you
21 would, just state your name and spell
22 it each time you have a question, for
23 Gina, so that she doesn't have to
24 interrupt and ask you. Why don't you
25 come up here.

MR. ROMBERLE: My name is

MS. ROSENBLATT: So, the

MR. ROMBERLE: No, I mean if

we stay with the second alternative.

MR. ROMBERLE: Okay. Now, the

third alternative, are we hooking up
before the filters or after the filter

1 Proceedings

2 system?

3 MS. ROSENBLATT: So, it will
4 be hooked into a public or private
5 system where that water is coming from
6 another area. So, it wouldn't be
7 attached to your well at all.

8 MR. ROMBERLE: Okay. I'm
9 happy. Thank you.

10 MS. SEPPI: Next question.

11 MR. DOLTE: Joe Dolte,
12 D-O-L-T-E. So, you've selected three?

13 MS. ROSENBLATT: Yes.

14 MR. DOLTE: There's an 8.9
15 million dollar cost for three, and has
16 that funding already been approved?

17 MS. ROSENBLATT: No.

18 MR. DOLTE: So then
19 alternative two can't be eliminated
20 since you don't have funding for
21 three, is that correct?

22 MS. ROSENBLATT: So, the way
23 that the funding works is that we
24 would have already chosen the remedy
25 at that point, and correct me if I'm

Proceedings

1
2 wrong, but the cost of the remedy is
3 not always going to be the biggest
4 factor in deciding whether or not we
5 get funding. It's going to be the
6 granting of the remedy of the issue at
7 the site. So, there's a whole process
8 in which we go to the priority panel,
9 which is within headquarters, and we
10 have to layout the -- there is a lot
11 of information given to them. It's
12 not really based on the cost of the
13 remedy.

14 MS. SEPPI: Another thing you
15 need to know too, is that we can't get
16 the money, the 8.9 million now. There
17 is a process that goes along with the
18 funding, and until we have the design
19 and we can go to this priority panel
20 and say, this is what we want to do,
21 and this is how much it costs, you
22 know, it's not like upfront money.

23 MR. DOLTE: I understand that
24 but that's why I'm questioning
25 whether, even though you say you've

1 Proceedings

2 selected the plan, that option two is
3 still not on the table.

4 MR. GARCIA: Let me say this,
5 Joe, even for Alternative 2, that also
6 involves getting funding. We would
7 still have to do the design, and then
8 go to the priority panel and present
9 our design and request the money. So,
10 either process, either alternative
11 still involves requesting funding.

12 MR. DOLTE: Maybe the question
13 should be different then. What is the
14 likelihood of getting funding for one
15 of the projects?

16 MR. GARCIA: Well, certainly
17 we know a typical design, like
18 something like Alternative 3, which is
19 essentially a waterline, takes about
20 eighteen months, that's usually around
21 the time frame. At that point that's
22 when we would present it, you know,
23 and it's two years away. We're not
24 really sure where we would be at that
25 point, you know, we have funded other

1 Proceedings

2 projects this year, and will continue
3 to fund projects as we go forward.
4 So, it's difficult for us to say at
5 this point right now what will happen
6 in two years, but at this point, right
7 now we feel confident, but it's hard
8 to say. We'll certainly be considered
9 for funding.

10 MR. DOLTE: So, let's say in
11 two years from now funding isn't
12 available or whatever, we would
13 continue with the current system until
14 such funding is available?

15 MR. GARCIA: Yes, you would.

16 MR. DOLTE: And that POET
17 system would continue to be funded by
18 the state or would it switch over to
19 the federal government? I know that
20 was one of the points as well.

21 MS. ROSENBLATT: The state
22 will continue to fund it.

23 MR. GARCIA: We've had
24 discussions with the state and they
25 will continue to maintain those

1 Proceedings

2 systems until the water system is
3 done.

4 MR. DOLTE: That's a pretty
5 long time for, let's say for those
6 people who, in his case, he bought the
7 home after the fact, he's off the
8 system because that was a later ruling
9 that was made, you know, there are
10 several houses that are in that
11 situation. I'm speaking on their
12 behalf because I'm up here.

13 MS. SEPPI: The state is not
14 going to pick up homes that are not
15 part of the system now.

16 MR. DOLTE: Okay. Thank you.

17 MS. SEPPI: Thank you, Joe.

18 Next question.

19 MS. GRIFF: Donna Griff,
20 G-R-I-F-F. So, piggybacking off that
21 question, we have a remedy that's
22 going to take two years for you to
23 engineer and find out, you know, what
24 you're going to do next. Then you
25 gotta get the funding. Then you gotta

1 Proceedings

2 build it. So, it could be five, six
3 years before we have public water to
4 our house, right?

5 MR. GARCIA: Possibly.

6 MS. GRIFF: I didn't plan on
7 living in my house that long. If I
8 sell tomorrow, the person who buys the
9 house, falls off the system and has to
10 pay for their own system while you all
11 wait and do all your engineering and
12 everything to get the permanent
13 solution in place?

14 MS. SEPPI: Bottom line, yes.

15 MS. GRIFF: Is there any way
16 to petition the government? Because
17 you already have a solution in place
18 that works. Why can't the
19 government -- EPA pick that up? You
20 have a solution, and then while you're
21 waiting to put the permanent solution
22 in -- I mean what can we do for the
23 residents to make that happen?
24 Because it's really sad what has
25 happened to him. It's really sad

what's going to happen to the next owner of my house if I sell in the next couple of years. There are people in the neighborhood that can't sell their homes because of the situation, and we have people who are going to be moving shortly or want to move, and can't, because their house is worth nothing. So, I mean is there any way, we, as residents, who are affected, can make it so that there is this solution right now to pay for the public system to keep them up?

19 MS. GRIFF: It's just sad that
20 we have a solution to fix everybody
21 and we can't make everybody whole.

23 MS. GRIFF: And then my next
24 question would be: I've heard, since
25 we talked about the eighteen homes,

1 Proceedings

2 I've heard recently that other homes
3 have been tested that might have
4 contamination. Are there any new
5 homes that are affected? Because we
6 heard that in our neighborhood that
7 there were.

8 MS. ROSENBLATT: There was one
9 home that recently was found to have
10 contamination, and that was just
11 because they originally had not been
12 tested when we initially went out and
13 did the residential sampling. We had
14 a method in our continuation of
15 testing and so --

16 MS. GRIFF: How many homes are
17 affected?

18 MS. ROSENBLATT: Just one
19 extra.

20 MS. GRIFF: So, it's nineteen?

21 MS. ROSENBLATT: It is
22 nineteen.

23 MS. GRIFF: And are you
24 waiting for results? Is there anyone
25 else waiting for results?

1 Proceedings

2 MS. ROSENBLATT: No.

3 MS. GRIFF: Okay.

4 MR. GARCIA: And that's
5 another comment that we should make,
6 if anyone, you know, wants to -- is
7 interested in having their home
8 tested, please let us know.

9 MS. GRIFF: Would it be at
10 their cost or the state's cost?

11 MR. GARCIA: Well, we would
12 certainly have to see where the house
13 is located. If it's within an area
14 that we think warrants it --

15 MS. SEPPI: We're not going to
16 go a half a mile away.

17 MS. ROSENBLATT: And another
18 thing to say, is that during design
19 there would definitely be a more wide
20 spread testing, and any homes that
21 were found to be impacted would be
22 included in the remedy, not just the
23 eighteen, and that's stated in the
24 proposal.

25 MS. GRIFF: I have one last

1 Proceedings

2 question. You talked about using East
3 Brookwood water as your solution,
4 right? They have their own well
5 problems, correct?

6 MS. ROSENBLATT: Yes.

7 MS. GRIFF: So, you're saying
8 you're just using that for cost
9 purposes, but are there other water
10 system alternatives?

11 MS. ROSENBLATT: Yes, there
12 are. There are public and private
13 systems that are considered and will
14 be continued to be considered.

15 MS. GRIFF: Because I hesitate
16 to join into a water system that
17 already has contaminated water, not
18 just TCE, but another contamination.
19 Here we are with a water company
20 that's run by volunteers, or whatever,
21 so, we are going from contamination of
22 one kind to contamination of another
23 kind. So, I'm hoping the state or the
24 EPA would --

25 MS. ROSENBLATT: Upgrades will

1 Proceedings

2 be done to any system that would be
3 connected.

4 MR. GARCIA: We certainly
5 would ensure that whatever water
6 you're getting is safe.

7 MS. GRIFF: And tested for the
8 future?

9 MR. GARCIA: Well, they would
10 have to --

11 MS. GRIFF: Once we're hooked
12 up you say it's good, you leave, will
13 you continue to monitor that?

14 MR. GARCIA: They would have
15 to abide by certain regulations and
16 rules of New Jersey. So, we would
17 certainly monitor that.

18 MS. GRIFF: And you'll
19 continue for how long, to watch for
20 the TCE to possibly move?

21 MR. GARCIA: Well, the TCE is
22 part of the -- the overall groundwater
23 is part of the next phase of the work.

24 MS. GRIFF: How long will that
25 go on after the remedy?

1 Proceedings

2 MS. ROSENBLATT: So, the OU2
3 is happening right now. So, we were
4 hoping to come up with a remedy by
5 next year.

6 MR. GARCIA: Hoping about this
7 time next year.

8 MS. GRIFF: And that would be
9 the cleanup?

10 MR. GARCIA: That would be the
11 cleanup of the actual groundwater in
12 the area.

13 MS. GRIFF: Okay. Thank you.

14
15 MS. MORAN: Jeannie Moran,
16 M-O-R-A-N. When are you going to make
17 public the water company that you
18 chose so that people who are affected
19 in that company, as well as the people
20 that want to make the choice know what
21 they're getting hooked into?

22 MS. ROSENBLATT: So, the water
23 company would be decided on during the
24 design phase, which we'll be, you
25 know, looking into that.

1 Proceedings

2 MR. GARCIA: Let me just say
3 this, Jeannie, because we have a CAG,
4 we're going to meet on a somewhat
5 regular basis as we gather more
6 information, as we talk to the
7 different water companies in the area
8 and we have a better understanding
9 which would be best, we will share
10 that information. Certainly as we
11 know more we'll let you guys know
12 more.

13 MS. MORAN: It's really hard
14 for anybody to comment realistically
15 without knowing what water company it
16 is. As Donna said, you know, we're
17 planning on selling to SUEZ. She
18 might feel really differently, and I'm
19 not speaking for you, but you might
20 feel differently about a big
21 international water company and
22 hooking in. And I don't know, you
23 know, versus, you know, us, the
24 volunteers, in our association, I'm
25 part of the Eastbrook Estates property

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owner's association since 1964, and I'm also on the CAG, and I have been since the beginning, and we did discuss the fact -- you're saying you have alternative companies, but we know two of them have rejected you. Can you comment as to whether those companies have, in deed -- that would be Stanhope Municipal and BMRPOA, were both approached and said "no." And I don't where else you would hook into that wouldn't be triple the amount of money that the 8. -- I think it was 7 in the report, 7.9 or --

MR. GARCIA: 8.7.

MS. MORAN: 8.7. So, can you comment about these companies that you say you're still approaching and researching, when we kind of know that these companies have been approached. I've spoken with them.

MR. GARCIA: I'll be happy to address that. So, the discussions we had initially with the water companies

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1 that you're referring to was kind of a
2 big picture discussion. Once we
3 complete this record, and once we get
4 the 'Record of Decision' signed, when
5 we go forward with this remedy, that's
6 when we're going to sit down and
7 really have the more formal
8 discussions with them. And at that
9 point, like I said, during the
10 community outreaches that we have, we
11 will present, to the CAG, more
12 information, in a formal matter, about
13 what we know and what they told us.
14 Those two particular companies, yes,
15 they did tell us, verbally, that they
16 were not interested. But, again, it
17 was in a very kind of large overview
18 of what we were thinking about. We're
19 hoping that we can approach them
20 again, possibly, and then have a more
21 thorough discussion about, you know,
22 what we're thinking, what we can do,
23 and what they can do. Fortunately
24 right now, because of the stage we're
25

1 Proceedings

2 in right now, we don't have a means
3 right now to really sit down and
4 engineer something. We only had an
5 ability, at this point, right now, to
6 have a general discussion about
7 things. So, that's why I think maybe
8 there is a little confusion. I
9 understand that, you know, there was
10 some discussions with them, and we're
11 not denying that, but once we get into
12 the design is when we're really going
13 to get into the meat of it. It's
14 really when we'll start to talk about
15 things in more detail and really get
16 into what we plan to do. Like I said,
17 we'll be happy to share that
18 information as we understand it.

19 MS. MORAN: But we are
20 commenting now.

21 MR. GARCIA: Right. Sure.
22 You're commenting on the record.

23 MS. MORAN: But we're
24 commenting on-the-blind because I
25 think it's very important to know what

Proceedings

1
2 water company it is for those people
3 who might chose to say I want to stay
4 with my POET. I would rather, you
5 know, go into the water company, and
6 if we're not going to have another
7 comment session, and this is our only
8 time to do it, it seems like, you
9 know, not very constructive for those
10 people, especially who might want to
11 hook into a company and they don't
12 even know which one it is. I mean I
13 don't know how you make a decision. I
14 mean if I was in their position I
15 wouldn't know what to do. I mean the
16 POETS are a band-aid. They aren't
17 really an answer.

18 MS. ROSENBLATT: Well, we can
19 ensure that the water system that the
20 homes are hooked up will supply clean
21 drinking water for them, and, so,
22 we're not going to hook the people up
23 to a water supply that wouldn't be up
24 to standards and all of the water
25 suppliers have to follow DEP/EPA

1 Proceedings

2 guidelines.

3 MS. MORAN: So, actually if
4 they choose the Alternative 3, it's
5 whatever waterline you choose, it's
6 kind of, you know, at that point, you
7 know, their impact is -- you're the
8 ones making the decision, and they're
9 impacted.

10 MS. SEPPI: It's premature at
11 this time. We don't really have a
12 definite water company that we're
13 going to use.

14 MR. GARCIA: And we have the
15 CAG. So, they will be part of the
16 discussions. We're not going away,
17 you know, this is just the start. We
18 think we have a good plan. We think
19 that we have a permanent solution, and
20 this is the way that we think is the
21 best option. Once we're done with
22 this, is when we're really going to
23 get into those discussions and talk
24 about, you know, the options that we
25 may or may not have.

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1
2 MS. MORAN: But the cost they
3 used, using our system, and we're the
4 closest, now we have a lot of things
5 that you need to work on, that might
6 not exist with Stanhope. But
7 certainly the BMRPOA across the
8 highway would be a huge amount of
9 money to go underneath the road and
10 everything. I mean the cost might
11 triple.

12 MR. GARCIA: That's happened
13 before. It's not unusual for costs to
14 increase.

15 MS. MORAN: And I also have a
16 question: Suppose they use our water
17 system, and a lot of people want to
18 hook up, and then our firm capacity
19 shows that we can't support it, and
20 you need another well. In our East
21 Brookwood section we have no available
22 land. It would have to be probably up
23 in the upper section, is that correct?
24 I mean as far as I know.

25 MR. GARCIA: Right. We're not

1 Proceedings
2 at that point right now.

3 MS. ROSENBLATT: We can't
4 answer those questions yet.

5 MR. GARCIA: But I will say
6 this, anything that needs to be done
7 to ensure that the people who have to
8 be hooked up are hooked up, would be
9 borne by EPA. So, if another well had
10 to be put in, we will deal with that.

11 MS. MORAN: And what would be
12 the concerns if the well was up there
13 and the contamination was up there,
14 and that well became affected, and
15 then affected the whole East Brookwood
16 water company's water, as a result
17 digging a well up there and find that
18 that well suddenly became contaminated
19 with TCEs, and then we would all
20 collectively be in the association,
21 and all of us might have this, you
22 know, the same circumstance they have,
23 we would have.

24 MR. GARCIA: Well, I will say
25 this, that any well -- if for argument

1 Proceedings

2 sake we had to install another well
3 somewhere, that would be one of the
4 factors we look at. We would only be
5 installing a well in an area that we
6 could ensure that that water was safe.

7 MS. MORAN: So, in other words
8 you would know if it was safe in the
9 beginning, but you said that all wells
10 are tested all the time, would be
11 tested for TCEs. What if they showed
12 up? What would you do?

13 MR. GARCIA: Then we'd address
14 that.

15 MS. MORAN: You would have to
16 dig another well --

17 MR. GARCIA: Again, ma'am --

18 MS. SEPPI: You have such good
19 questions. They really are.

20 MR. GARCIA: These are great
21 questions.

22 MS. SEPPI: We don't have the
23 answers yet until we get into the
24 design.

25 MR. GARCIA: They are great

1 Proceedings

2 questions and when we get into the CAG
3 meeting we can talk about some more
4 details when we gather more
5 information.

6 MS. MORAN: Well, I mean the
7 people with the TCEs are affected, but
8 whatever water company you choose is
9 also going to impact them. So, I
10 think those people, even though they
11 aren't a member of the CAG, once you
12 decide on a company, should certainly
13 be invited to sit in on the CAG
14 meetings.

15 MS. SEPPI: That's a very good
16 point too. We have, for the people
17 who don't know, a community advisory
18 group here. It's made up of about
19 twenty people. We meet quarterly for
20 the most part. Those meetings are
21 open to the public. So, if anybody
22 who signed in and left me their email,
23 when we have those CAG meetings,
24 you'll be notified. It doesn't
25 necessarily mean you're a sitting

1 Proceedings

2 member of the CAG, but, you know, you
3 can certainly sit up there and listen
4 to the presentation, and make any
5 comments you would have. So, that's
6 why I said, it's important, you know,
7 to have your email so we can reach out
8 to you as this moves on. So, I think
9 the further we move on and get into
10 the design, you know, we'll be having
11 meetings pretty regularly.

12 MS. MORAN: Do you have any
13 projections when you'll know the
14 company? A guesstimate maybe?

15 MS. ROSENBLATT: No.

16 MR. GARCIA: At this point our
17 concentration is to get this
18 completed.

19 MS. SEPPI: Get the 'Record of
20 Decision --

21 MS. MORAN: That will be
22 September, right?

23 MR. GARCIA: We're hoping.

24 MS. SEPPI: We're hoping.
25 That's the goal.

1 Proceedings

2 MS. MORAN: You're not too far
3 away from that, but beyond that you
4 don't have any kind of idea?

5 MR. GARCIA: Well, we still
6 have to do the design. So, we'll be
7 focused on the design. And any
8 information, like I said, we gather,
9 certainly will be presented at the CAG
10 meeting. But it's, you know, steps
11 that we have to follow to get to that
12 point.

13 MS. MORAN: Okay. Thank you.

14 MR. OLSON: Scott Olson. I've
15 got a couple of questions on how we're
16 going to clean up, and when Christian
17 was still here, at one point he
18 mentioned a bio-method, to inject some
19 kind of molecular structure that
20 literally eats the volatile chemicals,
21 some kind of chemical reaction.

22 MS. ROSENBLATT: I would say
23 unless it has to do with this remedy,
24 we're going to say that we're going to
25 push that off until we come up with

1 Proceedings

2 the OU2.

3 MR. OLSON: That's what I was
4 going to ask. The OU2, and the same
5 thing with the pump and filters?

6 MS. ROSENBLATT: Yeah, so this
7 would all be part of the OU2 remedy to
8 actually address the contamination and
9 do a cleanup.

10 MR. OLSON: That would be a
11 final step?

12 MS. ROSENBLATT: Yeah.

13 MS. SEPPI: That would be a
14 final alternative more to that portion
15 of the site.

16 MR. OLSON: And the other
17 question I had on that, is, you got
18 new contaminants or a new home that's
19 contaminated, and you've pretty much
20 got a decision made as to what is
21 going to happen. I'm assuming this
22 home is going to get a POET system put
23 on it very quickly.

24 MS. ROSENBLATT: It already
25 has.

1 Proceedings

2 MR. OLSON: Okay. So, in a
3 perfect world, you got your decision,
4 you have installed a new POET on it
5 because someone has a contaminated
6 home. It's \$2,000, roughly, a year,
7 to put POETS on homes or to maintain
8 them?

9 MS. ROSENBLATT: Mm-mm. Yes.

10 MR. OLSON: Could we find the
11 \$4,000.00 somewhere to put a POET on
12 his home? I mean you got a decision,
13 you've got a solution, temporary or
14 permanent, either way it's going to
15 get a POET, you know. It should be,
16 at this point, where no one should be
17 having to do it themselves.

18 MS. SEPPI: He has a POET.

19 MR. OLSON: Yeah, but he's
20 maintaining it.

21 MS. SEPPI: That's the bad
22 thing. But he does have a POET.

23 MR. OLSON: That just doesn't
24 seem fair to me. So, I would like to
25 put that on the record that I would

1 Proceedings

2 suggest that that be part of the
3 clean-up as you start now.

4 MR. GARCIA: Scott, just two
5 things; one is that the POET that was
6 just recently installed on that home
7 was installed through the Spill Fund.

8 MR. OLSON: At what point
9 then, I guess would be appropriate, at
10 what point does the EPA take over that
11 part of the funding?

12 MR. GARCIA: We don't maintain
13 those systems.

14 MR. OLSON: So, you rely on
15 the DEP to make it all the way through
16 until the pipes are finished?

17 MR. GARCIA: Yes.

18 MR. OLSON: I would still
19 suggest that at a certain point you
20 actually consider doing something for
21 these people. It's so little money.
22 It's so little money. These are
23 people that, you know, it's their
24 home.

25 MS. SEPPI: We understand. We

1 Proceedings

2 do. Thank you.

3 MR. COLLINSON: My name is
4 Chess Collinson, C-O-L-L-I-N-S-O-N.
5 Just to further to his point, we were
6 one of the original homes in the
7 neighborhood, 79 Brookwood, that
8 actually was found to have
9 contamination. When we bought our
10 home it wasn't brought to our light by
11 the attorney at the time. So, we kind
12 of got raw-ended by the attorney. We
13 missed the window by one month and we
14 had to pay for our system and we
15 maintain our own system. So, I guess
16 my question goes back to: When you
17 guys did your search on the cleanup,
18 all the sites, have you gone far
19 enough out? Do we see any kind of
20 actual level dropping at this point?
21 I mean have you checked all these
22 areas? I see the floodwaters coming
23 down through the woods. So, if you're
24 not going back, all the way out by the
25 high school, you haven't searched far

1 Proceedings

2 enough. You may even find further
3 homes contaminated on the other end of
4 Sparta Stanhope Road.

5 MS. ROSENBLATT: We are still
6 in R1/FS. So, there is investigation
7 going on and there's new wells being
8 put out there to investigate to the
9 full extent, to fully develop that.

10 MR. COLLINSON: Okay.

11 MS. SEPPI: If they find a
12 well that has TCEs, they don't stop
13 there. Then they move out until they
14 find something that's clean.

15 MR. GARCIA: They keep going.

16 MR. COLLINSON: Thank you.

17 MS. GRIFF: Donna Griff. I
18 want to ask a question. So, the new
19 home that was discovered, you put a
20 POET system in, who is maintaining
21 that?

22 MS. SEPPI: The Spill Fund.

23 MS. GRIFF: That is not right.
24 They may have been newly discovered,
25 but why does that house get to be

1 Proceedings

2 maintained and the houses like his is
3 not? I don't understand that. I want
4 that on the record. Because it's an
5 important point that we have these
6 homes that are contaminated by the
7 same contamination that all of our
8 houses are, and they are being treated
9 differently. It is not fair.

10 MR. BAKEMAN: It's a legal
11 decision that was made. I mean, you
12 know, the state decided to go with
13 that decision.

14 MS. QURKOT: Stephanie Qurkot,
15 Q-U-R-K-O-T. I have two questions.
16 When can a map be made available on
17 where the delineations have been
18 conducted so far? It might already be
19 online. I couldn't find it. And, 2,
20 has the NAPL been conducted in the
21 bedrock?

22 MR. GARCIA: I will mention,
23 in terms of, we do not present maps
24 that show the homes.

25 MS. QURKOT: I'm a former

1 Proceedings
2 resident of the area.

3 MS. MISHKIN: So, during some
4 earlier investigation we did find some
5 products in the groundwater. Yeah,
6 so, NAPL, Non Aqueous Phased Liquid,
7 and so we tested for that
8 specifically. And we didn't have very
9 high concentrations of TCEs so it
10 wasn't very clear what that was, but
11 it's probably not very mobile in that
12 area where the, you know, the original
13 dumping took place.

14 MS. QURKOT: What about the
15 bedrock?

16 MS. MISHKIN: So, in the
17 bedrock we found product, but not very
18 high concentrations.

19 MS. SEPPI: Would that map be
20 helpful?

21 MS. ROSENBLATT: It has all of
22 the information from the previous
23 investigation.

24 MR. GARCIA: Well, that will
25 give you more information about the

1 Proceedings

2 contamination, the results, the
3 figures, maps. That was the one done
4 in 2013 and as we gain more
5 information we'll certainly make it
6 available.

7 MS. SEPPI: Leave your email.

8 Thank you.

9 MS. QURKOT: Thank you.

10 MS. SEPPI: Mary.

11 MS. SCHNEIDER: Mary

12 Schneider, S-C-H-N-E-I-D-E-R. Anne,
13 you and I had briefly spoke about it,
14 and I just want to go on record, if
15 you decide to put the water system in
16 there, and those with the POET
17 systems, some of them decide not to
18 hook up to the water, will the POET
19 system continue to be maintained by
20 the state or federal government?

21 MS. ROSENBLATT: No.

22 MS. SCHNEIDER: So, we have no
23 choice?

24 MR. GARCIA: Well, no, you
25 have a choice you can certainly

1 Proceedings

2 maintain it yourself.

3 MS. ROSENBLATT: But this is
4 what's being proposed by the EPA, and
5 the state concurs, they are all
6 acknowledging that's the proposed
7 remedy.

8 MS. SCHNEIDER: Thank you.

9 MS. SEPPI: Good question
10 Mary.

11 MS. SCHNEIDER: Thanks.

12 MS. MORAN: Jeannie Moran
13 again. If the water supply company
14 you choose says, no, what would you
15 do? What's your action then?

16 MS. ROSENBLATT: In design
17 phase we're going to be finding the
18 ultimate supplier.

19 MR. GARCIA: To answer your
20 question though, I think we'll keep
21 trying. We're not going to let it go.
22 We'll make this work somehow.
23 Whatever it is, we'll make it work.

24 MS. MORAN: So, if they said,
25 no, you wouldn't push it then, you

1 Proceedings

2 would have a second choice and a third
3 choice?

4 MR. GARCIA: We're not really
5 sure of what is going to happen. We
6 haven't spoken in that detail to them.
7 So, it's a tough question to answer
8 what the response will be. Generally,
9 you know, when we get those responses
10 from the companies, we speak to --
11 that's when we make those decisions.
12 We don't really know yet. We have to
13 speak to the people more formally.

14 MS. MORAN: Okay, but if they
15 said, no, I know it's a hypothetical,
16 but I think it's important for those
17 who live in the area, and how the
18 supplies you're considering, if they
19 have voting power they might vote it
20 down as an association, or as in town,
21 the council will vote it down
22 unanimously, or whatever, what would
23 you do if that occurred?

24 MR. GARCIA: Are you referring
25 to one specific water company or in

1 Proceedings

2 general?

3 MS. MORAN: No. Any one you
4 chose. Like some of us have voting
5 rights. Like Stanhope is a municipal
6 government so the council would make
7 that decision. So, I was bringing
8 that up in terms of if they vote "no"
9 are you going to impose this on them?

10 MR. GARCIA: We can't impose
11 anything. We can't force anybody, but
12 we can certainly, you know, reach out
13 to as many people as we can to have
14 those discussions, and hopefully in
15 the future, when it's advisable, we
16 will explain what we found out, what
17 those answers were.

18 MS. MORAN: Okay, but there's
19 nothing like emanate domain that you
20 would force yourself on a company and
21 say they need it because it's such a
22 critical situation?

23 MR. GARCIA: EPA doesn't do
24 that.

25 MS. MORAN: Okay.

1 Proceedings

2 MS. ROSENBLATT: Thank you.

3 MS. SEPPI: Anybody else have
4 any questions?

5 MR. BOUCHER: Darrin Boucher,
6 B-O-U-C-H-E-R. So, the POETS that the
7 state, real quick, for a rental
8 property if you were to move, let's
9 say some people want to move out early
10 in those couple of years until, let's
11 say the final solution is made, the
12 water is piped in, the POET system is
13 still maintained, if it's not your
14 primary residence is it still going to
15 be maintained by the state?

16 MR. GARCIA: That's a question
17 for Mark.

18 MR. HERZBERG: I think the
19 only trigger is the change of
20 ownership.

21 MR. BOUCHER: Okay. So, it
22 doesn't have to be your primary
23 residence?

24 MS. SEPPI: It stays with the
25 house. Whoever lived there would be

1 Proceedings

2 maintaining it.

3 MR. BOUCHER: Thank you.

4 UNANNOUNCED SPEAKER: And just
5 to touch on the question to why, my
6 understanding, is, I mean this is
7 something that went through the
8 attorneys that deal with these kind of
9 questions, is that the damage is done
10 to an existing homeowner, and funds
11 were made available to try to
12 compensate for those damages. At a
13 time when a property transfers, that
14 that issue, along with multiple
15 issues, is reflected in the purchase
16 of the house, the purchase price, and
17 that is not any kind of damage to a
18 future homeowner. You know, I think
19 that was the largest piece of why the
20 change was made, popular or unpopular.

21 MS. SEPPI: Any other
22 questions?

23 MR. MUELLER: Ray Mueller,
24 M-U-E-L-L-E-R. Did you say that there
25 will be a final step in this project

1 Proceedings

2 that will address the contaminants in
3 the groundwater itself?

4 MS. ROSENBLATT: Yes.

5 MR. GARCIA: That's the next
6 phase.

7 MS. ROSENBLATT: Site wide.

8 MR. MUELLER: Is it possible
9 that that step would take care of the
10 contaminated well water in the homes?

11 MS. ROSENBLATT: Yeah. So,
12 the reason why we tried to fast track
13 this remedy for the residential
14 drinking water is because through our
15 investigation that we've done we found
16 that it's a very complex fractured
17 bedrock and we don't think that it's
18 going to be a quick remedy for the
19 overall site groundwater. So, we
20 thought it would be prudent to try to
21 fix this problem and then continue to
22 work on that problem.

23 MS. SEPPI: That can take
24 years and years to do something like
25 that. You pump it out, treat it, put

1 Proceedings

2 it back.

3 MR. MUELLER: Thank you.

4 MS. SEPPI: That's a good
5 question.

6 MS. COLEMAN: Ann Marie
7 Coleman, C-O-L-E-M-A-N. I was just
8 curious, if Eastbrook were to be
9 picked, and we were to agree, we have
10 never had a vote on it, but if we were
11 to agree, do the people understand
12 that they pay \$95 a month right now,
13 and that when Suez buys us they are
14 going to meter roll the homes? So,
15 that's something that they should
16 know.

17 MS. ROSENBLATT: Okay.

18 MS. SEPPI: Thank you.

19 MS. ROSENBLATT: I think the
20 full details on how an agreement of
21 any sort with the water supply
22 company, would be figured out more
23 fully in design phase. And, you know,
24 there would be a lot of communication
25 and talks with the CAG and the

1 Proceedings

2 supplier at that time to figure all
3 that out.

4 MR. GARCIA: Anything else?

5 MS. SEPPI: Anything else.

6 MS. SCHNEIDER: Mary
7 Schneider. I do want to offer
8 compliments to the EPA and DEP. I
9 have been part of this since 2005 when
10 it first started. And, as you know, I
11 do a lot of research on environmental
12 things that happen in the community.
13 It took Chester thirty years to get
14 public water pumped in and I think we
15 are moving along pretty quick. So, I
16 want to thank you.

17 MS. SEPPI: I worked on that
18 site. Yeah, that was a long time.
19 Thank you for your kind words. We
20 don't get that very often. So, we
21 appreciate it.

22 Scott, you have a question?

23 MR. OLSON: Yes, I just want
24 to echo on what Mary said. Everybody
25 from Christian at the start, Diego and

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2 Anne, all you people who work in
3 geology, and the CDC, it's been a
4 pleasure actually working with you.
5 You've always been responsive, the
6 town has been here as an assistant,
7 and I'm glad to have helped get the
8 room scheduled, find land you can test
9 on. I think it's been a really
10 cooperative and collaborative effort.
11 Thank you guys. Even Mark.

12 MS. SEPPI: You know that was
13 on my little page, I wanted to thank
14 you and Doris both for being so
15 cooperative, and it makes such a
16 difference to work with the town and a
17 group of people who are cooperative.
18 I know a lot of times we are telling
19 you things you don't want to hear,
20 but, you know, we have always been
21 able to be civil and talk to each
22 other, and that's something else that
23 we appreciate on our end, very much.

24 MR. GARCIA: Absolutely.

25 MS. GRIFF: Donna Griff. I

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1
2 get angry about the process. It's not
3 the people. So, all of us are
4 frustrated and angry about what
5 happened to the Collinson's and what
6 happened to our neighbors, and what we
7 have had to go through for the past,
8 you know, eleven years. A lot of us,
9 not all of us, some are young, but
10 some of us are older and thinking of
11 retiring and moving on, and thinking,
12 what are we going to do with these
13 houses. So, the fact that you're
14 moving quickly, can't move fast enough
15 for some of us, right, but I do
16 appreciate the people. You have been
17 outstanding in communicating with us.
18 So, hopefully that -- I know that will
19 continue, but I want to say that it's
20 been rough on us, you know, because we
21 have to wait for the next stage of our
22 lives based on what's happening with
23 the remedies.

24 MS. SEPPI: And that works two
25 ways. We get freighted with our

1 Proceedings

2 process. You know, we think we have
3 such great ideas and ways to move
4 forward and move more quickly, bring
5 it back, oh, you know, that's against
6 the regulations, we really can't do
7 that. So, yeah.

8 MS. GRIFF: So, the anger is
9 not directed at you. It's directed at
10 the stuff that's happened.

11 MS. SEPPI: Question?

12 MS. PARRISH: My name is
13 Marilynne P-A-R-R-I-S-H. I live at 5
14 Ross Road. I purchased our home in
15 2005, and I believe I was one of the
16 first purchases, at that time, when
17 the problem arose. I have been
18 responsible for the POET system in our
19 home. What happens from here? I mean
20 I have been responsible for it now
21 going forward. I haven't gotten any
22 help. I paid for my own testing. I
23 paid for the POET. The whole bit.
24 What happens here with the water now
25 that we are going to be hooked up and

1 Proceedings

2 taken care of?

3 MR. GARCIA: Certainly once we
4 hook you up then you won't have to
5 operate that POET, and you would just
6 get a water bill every month. I mean
7 there is a lot of steps we have to do
8 to get there.

9 MS. PARRISH: At this point in
10 the process we'll be brought in?

11 MR. GARCIA: If you're one of
12 the homes that was impacted,
13 certainly.

14 MS. PARRISH: Yeah. Up until
15 now we have been on our own.

16 MS. SEPPI: But the bad news
17 is, in the meantime you're still going
18 to have to maintain the POET.

19 MS. PARRISH: Which isn't fair
20 because when purchased the home they
21 didn't tell us that. They told us
22 that the state was going to take over
23 otherwise I never would have bought
24 the home.

25 MS. SEPPI: You're not the

1 Proceedings

2 only one.

3 MR. OLSON: Add her to my
4 list. There's five now.

5 MS. SEPPI: There's five now?

6 MR. OLSON: Yes.

7 MS. PARRISH: I remember going
8 off on them when I first found out.
9 I'm an oncologist. I spend my days
10 with cancer patients. This is not
11 what you want. And I do have concerns
12 about the hookup to the well in East
13 Brookwood. What are our choices, how
14 are our choices going to be made as a
15 community, and what businesses and
16 services we bring in, how that's going
17 to impact that well, the
18 responsibility of a pure water supply,
19 and what you're recommendations will
20 be.

21 MS. ROSENBLATT: Did you sign
22 in?

23 MR. GARCIA: I would like to
24 have you involved at the CAG meeting.

25 MS. PARRISH: I appreciate it.

1 Proceedings

2 I was working evenings for the last,
3 God knows how many years.

4 MR. GARCIA: If you need an
5 update or something, or, you know, you
6 can't make one, reach out to Anne.

7 MS. PARRISH: You know me now,
8 and thank you.

9 MS. SEPPI: Any other
10 questions?

11 MR. MORAN: Jack Moran,
12 M-O-R-A-N. I have a question that has
13 to do with East Brookwood Water
14 Company, proposed site supplier. I
15 think you should have named all the
16 water companies under consideration,
17 whether -- you know, I understand you
18 haven't made a final choice yet, I
19 know that, but there's only a finite
20 number of companies in the area that
21 supply water. I think it's just --
22 rather than keep it like it's a
23 secret, make it open, everyone who is
24 under consideration, so that people
25 can properly comment. There isn't

just -- I guess all water companies are going to supply potable water up to standards, that's the law, but at what cost? And in what kind of arrangement? The municipal water supply is private, or in a corporate setting, and there is also other considerations involved here. East Brookwood was considering selling. Part of the purchase price involves the fact that they'll have to give us a certain amount of money because they have to remedy some of our wells and treat the problem. Well, if you're going to come in and pay for it, then we should be compensated because the homeowner's pay \$95 a month, and they have been paying for that asset of that water supply, and they should know if you're willing to pay them up front or make the cost, that if you're going to, you know, compensate Suez for part of that, then we should know that before we make an informed vote.

Proceedings

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2 It shouldn't be secret to us that
3 there is negotiations with Suez
4 through EPA, and if we pay for it, you
5 know, through Suez, then you don't
6 have to do that remedy for the
7 nitrites. So, EPA could be saving
8 money. Suez comes in, remedies the
9 nitrite problems before the EPA makes
10 their decision. So, you're saving
11 money one way. Suez is saving money.
12 We're saying they can't provide us
13 with a certain price because they have
14 to remediate the nitrates, but we
15 should know, you know, before we sell.
16 We need to have this information, and
17 not have it kept from us. There is a
18 transparency issue. I mean, you know,
19 that this hasn't really been discussed
20 openly with the members of East
21 Brookwood. And you know that, and you
22 know that you're considering East
23 Brookwood. I just think it's fair
24 that you, at least provide all the
25 water companies. Not just East

Proceedings

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2 Brookwood, that they're under
3 consideration. Because this doesn't
4 just impact the people that you're
5 supplying, you know, it's the people
6 whose system would have to be
7 maintained in memorium. Now, it isn't
8 just you, I know you're paying the
9 initial costs. But we have to bear
10 all the maintenance costs that go
11 forward. You know, if there's
12 problems, if we have nitrite problems,
13 we have all these other issues, could
14 be supply issues. After you made the
15 investment and walk away, it's borne
16 on -- all those costs get borne on the
17 remaining people in that system. So,
18 there is a lot to think about. I just
19 think eyes wide open when it comes to
20 making a decision.

21 MS. SEPPI: And you make very
22 good points.

23 MR. MORAN: And it's not a
24 small amount of money. I mean the
25 nitrates, correct me if I'm wrong,

1 Proceedings

2 it's hundreds of thousands possibly.

3 MS. SEPPI: I don't know.

4 MS. ROSENBLATT: So, I would
5 say going forward, you know, East
6 Brookwood is welcome to attend the CAG
7 meetings, and you have been to at
8 least some of the CAG tag meetings,
9 and we have always told you what our
10 thoughts were, and kind of where we
11 are in the process, and I think that
12 will continue, if not more so going
13 forward.

14 MR. MORAN: It's an
15 alternative water supplier. We don't
16 know who is under consideration, and
17 that was my point.

18 MS. ROSENBLATT: Right. Okay.
19 Thank you.

20 MS. SEPPI: Thank you. Any
21 other questions? Comments? We thank
22 you very much for coming. We
23 appreciate all your comments. We will
24 add the other names to our list and
25 we'll notify everyone.

1
2 MS. ROSENBLATT: Please sign
3 in if you have not already given your
4 contact information, or if you want
5 information about CAG meetings, times,
6 or want to be on that list, let us
7 please know. Also, don't forgot the
8 comment period extends to the 13th,
9 but we'll close for now.

10 (Whereupon, at 8:10 o'clock
11 p.m., the hearing was concluded.)
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C E R T I F I C A T E

I, GINA MARIE VERDEROSA-LAMM, a Certified Shorthand Reporter and Notary Public, certify that the foregoing is a true and accurate transcript of the proceedings, on the date and place hereinbefore set forth.

I FURTHER CERTIFY that I am neither attorney, nor counsel for, nor related to or employed by, any of the parties to the action in which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed in this action, nor am I financially interested in this case.

GINA MARIE VERDEROSA-LAMM, C.S.R.
LICENSE NO. XI2043

Attachment D
Written Comments

Rosenblatt, Anne

From: John Moran [REDACTED]
Sent: Thursday, July 13, 2017 8:19 AM
To: Rosenblatt, Anne
Cc: Garcia, Diego
Subject: Mansfield Trail Dump Superfund site comments on proposed plan

Follow Up Flag: Follow up
Flag Status: Flagged

Anne,

Here are my comments and questions. If you need anything clarified please do not hesitate to contact me.

Please do not combine your answers to my questions with others who are commenting or revise/rephrase them.

Jack Moran
EPA / CAG Member

When you make any changes to the permanent alternate water supplier's system will you be using EPA standards or NJDEP standards?

For instance maximum contaminant levels can be different between the EPA and NJDEP. Water systems must comply with NJDEP standards and regulations

In NJ. The EPA stated they would pay to have a permanent alternate water supply provided to these 19 homes. Will the EPA be paying for everything that is necessary to meet NJDEP standards?

Will you be contacting the 19 homes in order to determine if they are willing to connect to an alternate permanent water supply before you proceed with the design phase?

How can you plan to build a water system before finding out how many people intend to connect to it?

Are you going to proceed even if only a few homes decide to connect? Are you contacting other surrounding homes (beyond the 19 that are contaminated)

in that area to determine their willingness to connect? Will you require that written commitments be provided in order to connect to the system?

If so will these commitments be required of both the 19 contaminated homes as well as any surrounding homes wishing/needing to connect?

Doesn't the design of the water system modifications depend on how many homes intend to connect to the system?

How do you expect the public to intelligently comment on your choice of a "permanent alternate water supplier" when you do not name the water company you intend to use? There is a significant difference in the cost of the water between the many local water systems under consideration. Some have meters while others do not. Others are run by a municipality while others are run by a volunteer homeowner association board. Some systems are newer while others are older and will require costly capital improvements. How are the present users of the nearby water systems able to comment if they do not know they are being considered as the alternate water source and may have to incur the burden of future maintenance for these 19 homes which may raise their rates and negatively impact the quality and supply/pressure of their water?

One water system is considering selling their system and the sale price may be impacted by the fact that the EPA may be willing to pay for capital improvements to supply these 19 homes which if true would allow the water company to increase the sale price of their water system .

Have you determined what the effect of decommissioning the 19 private wells might cause on the flow of contaminated TCE water within the aquifer? Could this cause other wells to become contaminated as those 19 wells will no longer be pulling water from the aquifer and cause the flow of ground water to change?

Did the East Brookwood Estates Property Owners Association board state that they are willing to work with the EPA to supply these 19 contaminated homes with water?

Rosenblatt, Anne

From: Jeanne Moran [REDACTED]
Sent: Wednesday, July 12, 2017 8:26 AM
To: Rosenblatt, Anne
Cc: Garcia, Diego
Subject: Mansfield Trail Dump Superfund site comment period written submission

Follow Up Flag: Follow up
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Anne/Diego,

Here is my comment period submission:

I have been a CAG member since the Mansfield Trail Dump site was added to the EPA Superfund National Priorities List. My primary objective was to represent the members of the East Brookwood Estates Property Owners Association of which I have been a member since 1964. I was Vice President of EBEOA for the majority of my involvement on the CAG. I cannot carry out my role as a CAG member to promote community awareness regarding the site without cooperation from the EPA. You, Pat and Diego are those sources.

The press release does not reveal the FACT that the EBEOA is named in the FFS and is a permanent alternate water supply being considered in the proposal plan according to the EPA info in the link. In my opinion the uncertain statements are the EPA's unwillingness to provide a factual proposal as to naming a designated water supply. The public cannot realistically comment or ask meaningful questions about the proposed plan if you don't name the water supply. EBEOA is preparing to sell our water association, if the sale occurs, we will not be voting since we will no longer be the owners. Suez is offering a price for our association based on the amount of expenditures they project are needed for capital improvements. These expenditures would be effected if the EPA provides the financing for these capital improvements. This EPA proposal could affect the selling price that we are negotiating with Suez and the amount that EBEOA members may be receiving as a distribution of funds after all expenses of the dissolution are paid.

In my opinion any viable water system being considered should have been named in the press release so consumers in those systems were aware this could impact them and they had an opportunity to comment at the meeting or within the comment period.

I feel that our water company's name is being withheld until we sell, since our board is only interested if we sell. If we vote to sell, the EPA will announce that SUEZ water is the permanent alternate water supply for the proposed plan. If you stated in your press release

during the comment period that the water supply was EBEPOA the members would have had the opportunity to react and weigh in with a vote. Our board has chosen to control the options by not sharing their game plan and not allowing the members to participate in this decision. Myself, as well as, our board and you and Diego have no idea how this will play out for us in the future. For most of us in the EBEPOA our homes are our biggest investment, in my opinion your lack of transparency along with our under represented board has put our future health and water supply in jeopardy. I believe given the opportunity many of our members would vote NO if they thought that our water supply would be connected with the stigma of the TCE contaminated homes. I also believe that the only reason the EPA would reconsider the two other water companies that initially said no to the proposed plan, would be if EBEPOA doesn't sell to Suez.

How will the EPA proceed if the 19 TCE contaminated homeowners split their decision regarding connecting into a waterline?

Will you proceed with the proposed plan with less than a majority number of the TCE homes agreeing to connect?

I spoke with George Zachos, EPA Public Liaison for Region 2, who was unaware of a written protocol for naming the water supply in the design phase of the proposed plan.

Although he was unfamiliar with the site and the project managers he contacted Anne. Mr. Zachos said that a water supply cannot be named until a contract is signed.

I never heard Anne or Diego state that was the case. Please provide me with where this info is available for the public to review.

Respectfully submitted,

Jeanne Moran

EPA/CAG Member

Past VP/EBEPOA, Inc.

Rosenblatt, Anne

From: pogue [REDACTED]
Sent: Monday, July 10, 2017 6:39 PM
To: Rosenblatt, Anne
Subject: Mansfield Trail Dump Site water supply recipients

Follow Up Flag: Follow up
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As a member of the East Brookwood Estates Property Owners Association, I feel it's premature to identify our water supply as the answer to the problem affecting the 18 affected homes above us that have contaminated water. Our water company members have not voted to accept this solution. In fact, when I spoke to our Water Association President, Mr. Jim McCole, he advised me that he never said to the EPA that he was in favor of this alternative.

We currently have a contamination problem of our own as you well know. We currently cannot accept responsibility for future problems that may arise associated with the contamination of the 18 homes in question. If we are purchased by Suez in the near future, they may be open to this solution because they have the resources needed to address future problems – we do not.

At present, your choice of EBEPOA as your answer to getting rid of your responsibility in dealing with the POET systems in the 18 Homes affected by landfill contamination is definitely not acceptable to our members.

We are aware that the other water companies you have contacted have said they are not interested. We also are not interested.

Rosenblatt, Anne

From: Mary Schneider [REDACTED]
Sent: Thursday, June 22, 2017 8:27 AM
To: Seppi, Pat; Rosenblatt, Anne; [REDACTED]
[REDACTED]Christa.Fontecchio@doh.state.nj.us; dflynn@byramtwp.org;
Garcia, Diego; [REDACTED]
[REDACTED]
[REDACTED]LaBlanc, Elizabeth; [REDACTED]
[REDACTED]mark.herzberg@dep.state.nj.us; [REDACTED]
[REDACTED]
solson@byramtwp.org; somia.aluwalia@doh.state.nj.us; [REDACTED]
Subject: Re: Mansfield news release
Follow Up Flag: Follow up
Flag Status: Flagged

Hi Pat,

I think we were taken back by the announcement prior to a CAG meeting to discuss the decision of the EPA. Many of us were under the impression that we would meet prior to public announcement or at least an email with a little more substance other than a decision was made and that you were going public.

I have a number of questions.

- 1 - Who is the water company?
- 2 - Timeframe of installation?
- 3 - If we go with the water company, will the poet systems be removed by the state?
- 4 - If the homeowner decides not to go with the water company, will the state continue to maintain the POET system?
- 5 - If the homeowner decides not go to with the water company but 5 - 10 years later decides to hook up, what is the cost from the street to the home?
- 6 - Our homes are large -- will there be enough water supply to accommodate our usage?

Thank you.

Regards,

Mary

From: Seppi, Pat <Seppi.Pat@epa.gov>
Sent: Tuesday, June 13, 2017 11:08 AM
To: Rosenblatt, Anne; [REDACTED]
Christa.Fontecchio@doh.state.nj.us; dflynn@byramtwp.org; Garcia, Diego; [REDACTED]

[REDACTED]
[REDACTED] LaBlanc, Elizabeth;

mark.herzberg@dep.state.nj.us;

Seppi, Pat;

[REDACTED] singh; solson@byramtwp.org; somia.aluwalia@doh.state.nj.us; [REDACTED]

Subject: Mansfield news release

Hi Everyone,

I wanted to make sure you saw this release before it made it to the newspaper. Please note that the public meeting for the proposed plan is scheduled for Tuesday, June 27 at the Municipal Bldg. You are welcome to comment on the plan at that time or at any time within the comment period. There should be a public notice in the newspaper today. There's a link in the press release if you want to read the entire proposed plan. Feel free to share this information with anyone you think might be interested. Don't hesitate to contact me with any questions.

Thanks!

Pat