First Five-Year Review Report

for

North Penn Area 1
Superfund Site

Souderton
Montgomery County, PA

2003

Prepared By:
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Date:

9/26/03

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Five Year Review
North Penn Area 1 Superfund Site

List of Acronyms

ARARs	Applicable or relevant and appropriate requirements
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	Contract Laboratory Program
COC	Contaminant of Concern
COE	U.S. Army Corps of Engineers
EPA	Environmental Protection Agency
ESD	Explanation of Significant Differences
HDPE	High Density Polyethylene
MCL	Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operations and Maintenance
OU	Operable Unit
PADEP	Pennsylvania Department of Environmental Protection
PADER	Pennsylvania Department of Environmental Resources
PCOR	Preliminary Close Out Report
PRP	Potentially Responsible Party
RA	Remedial Action
RAO	Remedial Action Objective
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Responsible Party
RPM	Remedial Project Manager
TAL	Target Analyte List
TCE	Trichloroethene
PCE	Perchloroethene
TCL	Target Compound List

Executive Summary

The remedy for the North Penn Area 1 Superfund Site in Souderton, Pennsylvania included excavation of contaminated soil at two properties to levels established in the ROD, and the installation of an extraction system in one well where high concentration of PCE were detected in the upper level of the well. The site achieved construction completion with the signing of the Preliminary Close Out Report (PCOR) on September 24, 1998. The trigger for this five-year review was the completion of the PCOR.

The assessment of this five-year review found that the remedy was constructed in accordance with the requirements of the ROD for OU1, dated September 30, 1994, as well as the changes included in two Explanation of Significant Differences (ESD) reports issued on October 29, 1997 and on September 30, 1998, respectively. After the remedy was implemented, monitoring of the groundwater has been conducted in four (4) monitoring wells downgradient from the Site. The remedy is functioning as designed; however, further investigation is needed near one monitoring well where levels of Perchloroethene (PCE) have been increasing to determine if there exists a source in the soil close to this well which maybe contributing to this increase in contamination.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name: North Penn Area

EPA ID: PAD002342475

Region: 3	**State:** PA	**City/County:** Borough of Souderton, Montgomery

SITE STATUS

NPL status: ✓ Final ☐ Deleted ☐ Other (specify)_____

Remediation Status (choose all that apply): ☐ Under Construction ✓ Operating ☐ Complete

Multiple OUs?* ✓ YES ☐ NO	**Construction completion date:** September 24, 1998

Has site been put into reuse? ☐ YES ☐ NO ✓ NA

REVIEW STATUS

Lead agency: ✓ EPA ☐ State ☐ Tribe ☐ Other Federal Agency _____

Author name: ** Maria de los A. Garcia

Author title: Remedial Project Manager	**Author Affiliation:** U.S. EPA - Region 3

Review period:*** May, 2003 - September 2003

Date(s) of site inspection: 08/26/2003

Type of review: ✓ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only ☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead ☐ Regional Discretion

Review number: ✓ 1 (first) ☐ 2 (second) ☐ 3 (third) ☐ Other(specify)_____

Triggering action:
☐ Actual RA Onsite Construction at *OU #1* ☐ Actual RA Start at *OU#* _____
✓ Construction Completion ☐ Previous Five-Year Review Report
☐ Other (specify) Informed public review would be conducted

Triggering action date: September 24, 1998

Due date (five years after triggering action date): September 24, 2003

* ("OU" refers to operable unit.)
**(Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.)

FIVE-YEAR REVIEW SUMMARY FORM, CONT'D

Issues/Recommendations and Follow-up Actions

- Monitoring well NPA1-S1, which is located next to an area where contaminated soil was removed is showing high concentrations of PCE./ **Further investigation in the vicinity of this well is needed to determine the source of the increased concentrations.**

Protectiveness Statements

- The remedial action at OU1 is protective of human health and the environment. The contaminated soil was removed to the cleanup levels outlined in the ROD, which are protective of groundwater, and any potential exposure to contaminated soil has been eliminated.

- The remedial action for OU2 is protective of human health and the environment in the short-term. Although there is no current exposure to contaminated groundwater and the groundwater extraction system is effectively capturing the site plume, fluctuating high concentrations of PCE have been detected in a site monitoring well. To confirm the long-term protectiveness of the remedy, the source of this groundwater contamination must be investigated and appropriate response actions undertaken.

- Because all the remedial actions undertaken at OU2 are not considered protective in the long-term, the site remedy is considered protective of human health and environment in the short-term. EPA expects the site to be fully protective of human health and the environment when the source of the contamination is determined and appropriate response actions are undertaken.

U.S. Environmental Protection Agency Region III
Five -Year Review Report
North Penn Area 1
Superfund Site
Borough of Souderton,
Montgomery County, Pennsylvania

I. Introduction

The purpose of five-year reviews is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and recommendations to address them.

The Environmental Protection Agency (EPA) is preparing this Five-Year Review report pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 121 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA §121states:

> *If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgement of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The Agency interpreted this requirement further in the NCP; 40 CFR §300.430(f)(4)(ii) states:

> *If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

EPA Region III, has conducted a five-year review of the remedial action implemented at the North Penn Area 1 Superfund site in the Borough of Souderton, Montgomery County, Pennsylvania. This review was conducted for the entire site by the Remedial Project Manager (RPM) from May 2003 through September 2003. This report documents the results of the review.

This is the first five-year review for the North Penn Area 1 Site. The triggering action for this policy review is the completion of the PCOR dated September 24, 1998 which documents completion of construction activities as part of the remedial action. The five-year review is required due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure.

II. Site Chronology

Table 1 lists the chronology of events for the North Penn Area 1 site.

Table 1: Chronology of Site Events

The NPWA discovers PCE contamination in well S-9; sampling is initiated	1979
EPA requests information from PRPs under CERCLA Section 104(e)	June 1986
EPA's contractor completes the Site Discovery	July 1986
EPA's contractor samples residential and other wells at the site	August 1986
The site is scored using the Hazard Ranking System	September 1986
The site is proposed for the NPL	January 1987
The site is listed on the NPL	January 1987
EPA's contractor completed RI report for the site	March 1993
EPA's contractor completed FS report for the site	June 1994
ROD for OU1(final) and OU2 (interim) signed	September 30, 1994
RD approved by EPA	September 12, 1996
ESD #1 signed. Extraction of Well S-9 is not necessary and documentation of no soil removal at the Parkside Apartments property	October 29, 1997
Start of Remedial Action	March 26, 1998

RA Onsite	June 8, 1998
Start of soil excavation activities	June 17, 1998
Final excavation of soil activities	July 7, 1998
Final activities completed related to the installation of extraction system and first round of sampling was also conducted.	July 8, 1998
EPA, USACE, and State, conduct pre-certification inspection of the completed remedial action	July 28, 1998
All punch list items identified in pre-certification inspection were completed.	August 13, 1998
ESD #2 signed. The interim action for OU2 is the final action.	September 24, 1998
Preliminary Close Out Report signed for Site construction completion.	September 24, 1998
New well was installed to replace Well S-9 which was closed by the NPWA.	October 30, 2000
Ground water monitoring	On-going

III. Background

Physical Characteristics

The North Penn Area 1 Site is located in the Borough of Souderton in Montgomery County, Pennsylvania. The site consists of three properties in close proximity to each other. The site is in an area with a gently rolling topography with low-lying ridges and hills. In the immediate area of the site the land slopes gently from the northeast to the southwest. The site is located in an area that contains a mixture of commercial and residential uses.

Land and Resource Use

The Site consists of three properties, a former dry cleaners (Gentle Cleaners), a knitting mill facility (Granite Knitting Mills), and a property with apartments (Parkside Apartments). Gentle Cleaners began operating before 1953 and operated until approximately the late 1990s. Granite Knitting Mills has operated the knitting mill since the early 1960s and is still conducting the same type of operations. The Parkside Apartments once included a dry cleaning establishment. Before that, the property was used as a beer distributor, and before that as a slaughterhouse.

The site is in an area that contains a mixture of commercial and residential uses. All residences within the immediate area use public drinking water supplies. The nearest known downgradient well currently in use as a drinking water supply is approximately ½ mile away. There is a park located approximately ½ mile just south of the site.

History of Contamination

The North Penn Area 1 site is one of 12 sites identified in the North Penn area on the basis of contamination of ground water by volatile organic compounds ("VOCs") in production wells. The contamination at the site was first noted in 1979 in North Penn Water Authority (NPWA) well S-9. The well was immediately taken out of service because PCE levels in the range of 10-13 ppb were found in the ground water. EPA documented a spill of 75 gallons of PCE occurring in the early 1970s at the Gentle Cleaners facility. PCE reportedly flowed out the rear door onto the grassed area behind the building. In addition, discharge of PCE to a sink that drained into the same grassed area may have contributed to soil contamination. At the Granite Knitting Mills facility a dry cleaning machine using PCE was maintained from 1967 to 1979. Property owners in the area reported past discharges from the facility into the alley that runs along the southeast side of the building. These discharges were described as solvents and dyes, but their point of origin along the building was not identified. Reportedly, drums containing waste oil with some solvent contamination were stored outside along the southwest side of the building prior to disposal. The Parkside Apartments once included a dry cleaning establishment. Before that, the property was used as a beer distributor, and before that as a slaughterhouse. Three underground storage tanks containing petroleum hydrocarbon fuels were once located on the property, but were allegedly removed around 1980. Area residents reported that part of the facility may have been landfilled with dirt and construction debris.

On the basis of this contamination, the site was proposed for the National Priorities List (NPL) in January 1987 and was placed on the NPL in March 1989.

Basis for Taking Action

On February 28, 1990, EPA issued general notice letters to the owners and/or operators of the five properties pursuant to Section 107 (a) of CERCLA, to inform them of their potential Superfund liability as operators or owners of the properties. On May 20, 1991, EPA again notified the owners and/or operators of these properties of their potential liability for this Site. After several discussions with them concerning the nature and extent of EPA's work to be performed, the owners or operators of the properties indicated that they were not willing and/or able to perform or finance activities at the site to prevent a release or threatened release of hazardous substances, pollutants, or contaminants from the facility. Therefore, EPA decided to perform the Remedial Investigation/Feasibility Study (RI/FS) activities with funds from the Hazardous Substance Superfund as authorized by Section 104 of CERCLA, 42 U.S.C. S 7604.

Potentially Responsible Party (PRP) searches conducted by EPA identified five facilities in the area that may have contributed to the ground water contamination. These facilities and the ground water contamination were evaluated in the Remedial Investigation/ Feasibility Study

("RI/FS"). The results of the sampling work done during the RI/FS revealed contamination at three of the five properties. These three properties are: Gentle Cleaners, Granite Knitting Mills (GKM) and Parkside Apartments. The results of the soil sampling revealed that the contamination at the three properties was primarily PCE. The results of ground water sampling showed primarily PCE and TCE. The levels of contamination detected in the wells sampled were low except for a packer test sample at the GKM which had a concentration of 330 parts per billion at the top interval.

The results of the risk assessment showed that for the potential future on-site residential use of groundwater the excess lifetime cancer risk for a child was 2E-06, while for an adult was 3E-06. Potential future on-site residential use was also calculated for groundwater infiltrating from fractures above the water level in the GKM well which had a high PCE concentration. This groundwater scenario yielded an excess lifetime cancer risk of 2E-04 for a child and 3E-04 for an adult, and a hazard index of 8 for a child and 3 for an adult. These levels are above EPA's risk management criteria for the exposure scenarios evaluated.

For soil at Gentle Cleaners, concentrations detected at the 8- to 10-foot interval showed a reasonable maximum excess lifetime cancer risk of 1E-04 for both child and adult. These concentrations were detected at 8 to 10 feet and this was only a concern if the area was disturbed. However, these levels were high enough that continued migration from soil to ground water could result in ground water concentrations that pose a threat to anyone consuming the water.

IV. Remedial Actions

Remedy Selection

The Record of Decision (ROD) for Operable Unit (OU) 1 and OU2 - interim action was signed on September 30, 1994. The selected remedy included the following major components:

- For contaminated soil (OU1) the selected remedy included the excavation of contaminated soils at each of the three properties with PCE contamination. Soils were to be excavated until the levels of PCE were below 270 ppb for the Gentle Cleaners property, 260 ppb for the Granite Knitting Mills property and 820 ppb for the Parkside Apartments.

- For contaminated ground water (OU2) the interim remedial action was extraction of the upper interval (0-28 ft) of the well at the GKM property and the entire (0-270 ft) NPWA well (S-9). The extracted water was to be combined and treated in one treatment system. An option to treatment was the direct discharge of the extracted water to a publicly owned sewage treatment plant.

The Remedial Action Objectives (RAOs) were as follows:

OU1(Contaminated soil)

- Eliminate any threat of direct contact exposure to contaminated soil.

- Minimize or eliminate contaminant migration to the groundwater to levels that ensure its beneficial reuse.

OU2 (Contaminated groundwater)

- Eliminate the high levels of contamination entering to groundwater from the GKM well.
- Eliminate exposure to contaminated groundwater.

Explanation of Significant Differences (ESD) #1

On October 29, 1997 EPA issued an Explanation of Significant Differences (ESD) for the site. The purpose of the ESD was to document EPA's decision not to pump well S-9. This decision was based on the low PCE levels detected in this well during the RI/FS (5ppb of PCE) and the remedial design (6 ppb) sampling activities, as well as, a change in the Commonwealth of Pennsylvania's remediation standards. At the time the ROD was prepared, the Commonwealth of Pennsylvania's remediation standards required that ground water be cleaned up to background levels, i.e. those levels of each contaminant that would be found in the area in the absence of a source of contamination (0 for PCE). Subsequent to the issuance of the ROD, the Commonwealth of Pennsylvania signed into law the Land Recycling and Remediation Standards Act (ACT 2 of 1995). The Commonwealth of Pennsylvania, Department of Environmental Protection identified Act 2 as an ARAR. EPA determined that Act 2 does not, under the circumstances at the Site, impose any requirements that are more stringent than the federal standards. Based on this change in Pennsylvania' remediation standards, EPA determined that Maximum Contaminant Levels (MCLs) would be used instead of the background levels. The MCLs are the maximum permissible concentrations of a chemical in drinking water as established in the Safe Drinking Water Act. EPA determined that pumping well S-9 was not necessary since contamination levels at well S-9 were low and the levels were not expected to increase because the contaminated soil was to be removed.

This ESD also documented the determination that no soil would be removed from the Parkside Apartments since PCE levels were below the remediation goal established in the ROD.

Explanation of Significant Differences (ESD) #2

A second ESD for the September 30, 1994 ROD was issued on September 24, 1998 to document EPA's decision that no further remedial action was necessary in connection with OU2 (groundwater) since the source of contamination (contaminated soil) was removed and the extraction system was sufficient to remediate the contaminated ground water. The interim action conducted during construction activities will be the final remedial action for OU2

Remedy Implementation

On February 2, 1995, EPA issued an interagency agreement (IAG) to the U.S. Army Corps of Engineers (USACE) to conduct the remedial design (RD) for the Site. EPA approved the design on September 30, 1996. As part of the remedial design, soil sampling was conducted at the three properties of concern to determine the volume of soil that would need to be removed. Levels of

contamination in soils at the Parkside Apartments property were below the remediation goals established in the ROD. Therefore, excavation of soils was not required at this property, only at the Granite Knitting Mills and the Gentle Cleaners properties. Also, as part of the remedial design activities, three new wells were installed. These new wells, in addition to well S-9, were sampled at that time. Since sampling results in all wells revealed low levels of contamination, it was determined that extracted water would be discharged to a sewage treatment plant instead of treating with an air stripper. On October 29, 1997 EPA issued an Explanation of Significant Differences (ESD) for the site. The purpose of the ESD was to document EPA's decision not to pump well S-9 and also to document the determination that no soil would be removed from the Parkside Apartments since PCE levels were below the remediation goal established in the ROD.

On March 26, 1998, EPA issued an IAG to the USACE to conduct the remedial action at the Site. USACE through the use of the Rapid Response Program hired Roy F. Weston Inc. (WESTON) to conduct the construction activities. On June 8, 1998 WESTON mobilized to the site. A total of 482 tons of contaminated soil were excavated from the entire backyard at the Gentle Cleaners property and in four (4) different areas at the Granite Knitting Mills property. The contaminated soils were transported to the Clean Earth facility in New Castle, Delaware where it was thermally treated, and then ultimately disposed of at the Salem County Municipal Landfill in New Jersey. The ground water extraction system was installed at the GKM well and it consisted of an extraction pump and conveyance piping, with direct discharge to the sanitary sewer. In addition, samples were collected from the three existing monitoring wells and well S-9. Construction activities were completed on July 13, 1998. On July 28, 1998 a pre-final inspection was conducted by EPA, PADEP, and USACE. During this visit, a list of minor punch items to be conducted was developed. Items on this list included: 1) paving an area in the parking lot at the GKM property and an area in the alley behind the GKM building, 2) fixing a portion of the fence at the GKM property next to the parking lot that was cut out for access from the trailer to the alley behind the GKM building, 3) constructing a collar around a grate located at the alley behind the GKM building to improve drainage, and 4) putting a pipe filled with concrete a corner next to a shed at one of the residents property to protect it. All of these activities were completed on August 13, 1998.

The Site achieved construction completion status when the Preliminary Close Out Report was issued on September 24, 1998 for the Site.

On October 30, 2000, a new well (NPA1-S3) was installed to replace well S-9 since the North Penn Water Authority made a decision to close it out. In order to continue monitoring activities in the vicinity of well S-9, EPA requested USACE to construct an new well in close proximity to well S-9 and with the same characteristics. Therefore, well NPA1-S3 is included in the groundwater monitoring program.

System Operation/Operation and Maintenance

The ROD established a monitoring system to be implemented in coordination with the operation of the air stripper treatment system. Since the option to directly discharge the extracted groundwater to the POTW was implemented instead of treating the groundwater via air stripping,

the ESD #1 issued by EPA on October 29, 1997 indicated that the monitoring program established in the ROD would continue to be used to monitor the levels of contaminants in the groundwater. This monitoring program required quarterly sampling for the first two years, and semi-annual sampling thereafter until the levels of contaminants of concern in these wells reached background levels (as per ESD #1 this changed to the MCL).

After the remedial action was completed, USACE started conducting the monitoring program. In 2002, EPA approved a work assignment for a contractor to continue the monitoring activities. Currently, the monitoring wells are sampled twice a year. The control panel associated with the extraction system is checked to ensure that it is working adequately when the sampling is conducted. Only once, the control panel was not working properly and the contractor was able to fix it promptly.

There were some gaps in conducting the sampling activities as outlined in the ROD. These occurred after the remedial action was completed, during the time that USACE finished conducting the monitoring activities, and when the new contractor took over. The monitoring program is currently being conducted as outlined in the ROD.

The costs of the Long Term Response (LTR) activities at the site are estimated at an average of $47,000. These costs include sampling twice a year, electrical bill for the operation of the extraction system, and the discharge cost to the local POTW.

V. Progress Since Last Five-Year Review

This was the first five-year review for the Site.

VI. Five-Year Review Process

Administrative Components

The five-year review of the North Penn Area 1 Site was led by Maria de los A. Garcia, EPA RPM for the Site. The State RPM, April Flipse was notified of the initiation of the 5-Year Review in June and both RPMs conducted a Site inspection on August 26, 2003. Also, the EPA hydrogeolist, Kathy Davies reviewed the results of the monitoring data conducted to date.

Community Involvement

An advertisement appeared in the North Penn Reporter on July 29, 2003 indicating that EPA was conducting a Five-Year Review for the Site. The advertisement provided point of contact information, and identified the location of the information repositories for the site. Another notice will be sent to the same newspaper to announce that the Five-Year Review report for the North Penn Area 1 site has been completed. Information on the results of the review and the report availability will be part of the announcement.

On August 26, 2003, the RPM conducted interviews in some of the houses that are behind the site and that are next to the areas where contaminated soil was removed. Also, an interview was conducted with the operator of the Granite Knitting Mills facility.

Document Review

The five-year review consisted of a review of relevant documents including the RI and FS reports, ROD, ESD #1 and #2, the Preliminary Closeout Report, and the monitoring data reports.

Data Review

Groundwater sampling conducted during the RI showed levels of PCE contamination in wells up to 5 ppb (3ppb in the GKM well and 5 ppb in well S-9). Sampling conducted during the remedial design and during the monitoring activities have shown levels consistent with the levels detected during the RI for these two wells. However, well NPA1-S1 installed during remedial design activities has shown higher levels of PCE. When it was first installed, the level of PCE detected in this well was 32 ppb. A sample collected soon after the remedial action was conducted showed 19,000 ppb of PCE. Subsequent sampling conducted during the monitoring activities, showed that the levels of PCE were going down to levels up to 165 ppb. However, levels of PCE started increasing again gradually to up to 6,500 ppb this Spring. Besides PCE, levels of (TCE) and 1,2-Dichloroethere (1,2-DCE) began increasing in concentration in this well to levels up to 32 ppb and 24 ppb respectively. The levels of contamination began increasing to much higher levels in the this well last year. The levels of contamination in the rest of the monitoring wells have been at about the same levels.

Since the soil removed from the Gentle Cleaners property and the Granite Knitting Mills property was removed to cleanup goals established in the ROD, an investigation of the source of this increase in contamination needs to be conducted.

Site Inspection

The site inspection occurred on August 26, 2003 and was conducted by Maria de los A. Garcia and April Flipse.

Interviews

On August 26, 2003, the RPM conducted interviews in some of the houses that are behind the site and that are next to the areas where contaminated soil was removed. Also, an interview was conducted with the operator of the Granite Knitting Mills facility. For the residents interviewed, the RPM indicated the purpose of the interview and asked if they had any concerns about the site. Some residents had no knowledge about the site and the RPM explained briefly the remedial action that was conducted. All the residents interviewed indicated that they had no concerns. The operator of the Granite Knitting Mills expressed no concerns about the site, except that he would like to know if

EPA would consider moving the control panel from its location. He indicated that in the future he may need access to the building through that area because he may have a loading dock there.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

Contaminated Soil

Yes. Soil removed from the two properties of concern were removed to levels below those established in the ROD.

Groundwater

Yes. The levels of contamination in the extraction well are in the range of 3-5 ppb for PCE which is below the cleanup level (MCL) of 5 ppb. No residents are using the groundwater for drinking purposes in the immediate area of contamination. However, high levels of contamination have been detected in one of the monitoring wells. This needs to be investigated to find out the source of this contamination.

No institutional controls have been established to prevent the use of contaminated groundwater. Residents in the immediate area of contamination rely on public water supply, and therefore, are not exposed to contaminated groundwater.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy still valid?

Changes in Standards and To Be Considereds

The standards outlined in the ROD, as modified by the subsequent ESDs are still valid. See Table 2 for the standards for both OU1 and OU2.

Changes in Exposure Pathways, Toxicity, and Other Contaminant Characteristics

The exposure assumptions and the RAOs for the Site have not changed. There have been no changes in the toxicity factors for the contaminants of concern that have resulted in changes to the MCLs and therefore in the protectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

Yes. Concentrations of PCE have increased in one of the monitoring wells at the Site and therefore, it needs to be investigated to determine the source of contamination.

VIII. Issues

Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Levels of PCE have increased in one of the monitoring wells	N	Y

IX. Recommendations and Follow-Up Actions

Issue	Recommendations/ Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness? (Y/N)	
					Current	Future
Increasing levels of PCE in one monitoring well	Conduct an investigation to determine the source of the contamination in this monitoring well	EPA		Spring 2004	N	Y

X. Protectiveness Statement

The remedial action at OU1 is protective of human health and the environment. The contaminated soil was removed to the cleanup levels outlined in the ROD, which are protective of groundwater, and any potential exposure to contaminated soil has been eliminated.

The remedial action for OU2 is protective of human health and the environment in the short-term. Although there is no current exposure to contaminated groundwater, and the groundwater extraction system is effectively capturing the site plume, fluctuating high concentrations of PCE have been detected in a site monitoring well. To confirm the long-term protectiveness of the remedy, the source of this groundwater contamination must be investigated and appropriate response actions undertaken.

Because all the remedial actions undertaken at OU2 are not considered protective in the long-term, the site remedy is considered protective of human health and environment in the short-term. EPA expects the site to be fully protective of human health and the environment when the source of the contamination is determined and appropriate response actions are undertaken.

XI. Next Review

The next five-year review for the North Penn Area 1 Superfund Site is to by completed by September 2008, five years from the completion date of this review.

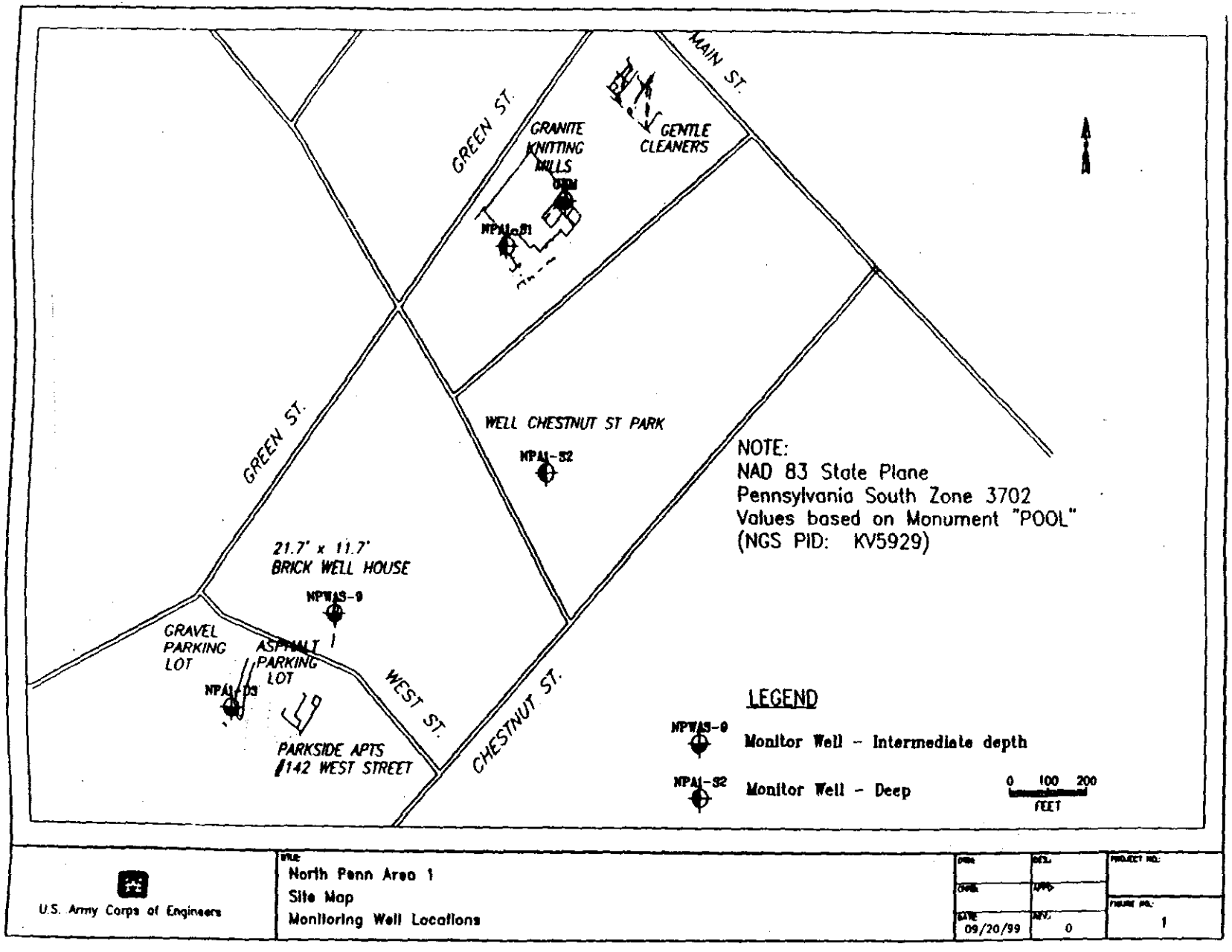

FIGURE 1: SITE MAP

AR301552

Table 2 ***Applicable or Relevant and Appropriate Requirements and To be considered for the North Penn Area 1 Superfund Site***	
Soil	***Comments***
25 PA Code Chapter 260. Establishes criteria in determining whether soils and treatment residuals are subject to RCRA hazardous waste regulations	ARAR met when remedial action was completed.
25 PA Code Chapter 262 Subpart A. Establishes criteria to determine whether soils and treatment residuals are subject to RCRA hazardous waste regulations.	ARAR met when remedial action was completed.
25 PA Code Chapter 262 Subparts B and C. Establishes requirements for a generator who treats, stores, or disposes of hazardous waste, including packaging, labeling, manifesting, and record keeping requirements.	ARAR met when remedial action was completed.
Groundwater	
Safe Drinking Water Act, 42 U.S.C. §§ et seq. a. Maximum Contaminant Levels (40 CFR §§141.11-16 and 141.50-51 (MCLs). These are enforceable standards for public water supply system.	This requirement is still applicable and extraction of groundwater will continue until the MCLs are achieved.
40CFR 403.5. Discharge must comply with local POTW pretreatment, including POTW-specific pollutants, spill prevention program requirements, and reporting and monitoring requirements.	This is still applicable. The discharge to the local POTW was approved based on the very low levels of contaminants in the groundwater.