

APPENDIX A

Information Sheets for Each Fund-lead P&T System

REGION 1 INFORMATION SHEETS

Baird & McGuire Superfund Site

Holbrook, MA (Region 1)
CERCLIS ID MAD001041987

Contact Information

RPM Melissa Taylor One Congress Street 11th floor Boston, MA 02114 617-918-1310 (phone) 617-918-1291 (fax) Taylor.MelissaG@epa.gov	State Regulator Dorothy Allen MADEP One Winter Street Boston, MA 02108 617-292-5795 (phone) 617-292-5530 (fax) Dorothy.Allen@state.ma.us	Contractor Don Dwight Metcalf & Eddy 30 Harvard Mill Sq. Wakefield, MA 01880 781-224-6286 (phone) 781-224-6880 (fax) Don_Dwight@metcalfeddy.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 7
Date original ROD was signed: 9/30/86	Date of construction completion: 4/1993
Date of last modification to ROD:	Date of operational and functional: 4/1994
Type of ROD: Final	Expected date of turnover to state: 4/2004
Status of P&T system: Operational	Expected date of completion: 4/2023
Primary goal of system: Containment & Restoration	Approximate downtime per year: 2 weeks
Presence of NAPLs Observed	Number of monitoring wells used: 80
Approximate annual O&M costs: \$3,500,000	Frequency of sampling: 1 times per year
Costs related to monitoring: \$200,000	Is plume migration controlled? Yes
Approximate pumping rate: 150 gpm	Progress of aquifer restoration: 20% to 80% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: moderate/severe

Contaminants of Concern:

Heavy metals
LNAPL
Pesticides
Semi-volatile organic compounds (SVOC)
Volatile organic compounds (VOCs)
Arsenic, BTEX, PAHs

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

An LNAPL collection system is currently in place at the site that collects approximately 8 gal/day of pure product. The LNAPL is then shipped off site for incineration.

A full evaluation of the groundwater pump and treat system was just completed in January 2001 and is expected to be implemented within the next calendar year. The major recommendations of this evaluation are to move an extraction well from an area of limited plume contamination to the center of the contaminant plume; and the installation of an additional extraction well to address low concentrations of VOCs and arsenic found to the north of the main plume body.

Charles George Landfill Superfund Site

Tyngsboro, MA (Region 1)
CERCLIS ID MAD003809266

Contact Information

<p>RPM Elaine Stanley One Congress Street, Suite 1100 (HBO) Boston, MA 02114-2023 617-918-1332 (phone) 617-918-1291 (fax) stanley.elainet@epa.gov</p>	<p>State Regulator David Buckley MADEP One Winter Street Boston, MA 02108 617-556-1184 (phone) 617-292-5530 (fax) buckley.david@state.ma.us</p>	<p>Contractor David O'Connor USACE North Central Residnet Office 50 McArthur Avenue, Box 689 Devens, MA 01432-4400 978-772-0148 (phone) 978-772-3104 (fax) david.o'connor@nae02.usace.army.mil</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 3/23/88 Date of last modification to ROD: 9/26/98 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Don't know Approximate annual O&M costs: \$450,000 Costs related to monitoring: \$200,000 Approximate pumping rate: 30 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 9 Date of construction completion: 9/1998 Date of operational and functional: 9/1999 Expected date of turnover to state: 9/2009 Expected date of completion: 9/2028 Approximate downtime per year: 2 weeks Number of monitoring wells used: 20 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: moderate/severe</p>
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Contaminants of Concern:

Arsenic
BTEX
Chlorobenzene
Mercury
Tetrahydrofuran
1,4-Dioxane

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

This system pumps the effluent off-site to a POTW, via the municipal sewer system under a discharge permit. Ground water and leachate are "treated" or let's say, managed by adding an iron sequestering agent (citric acid) to keep iron from precipitating out and clogging the system and weekly biocide shocking to aid in minimizing bacterial growth in the system.

Eastern Surplus Company Superfund Site

Meddybemps, ME (Region 1)
CERCLIS ID MED981073711

Contact Information

RPM Edward Hathaway 1 Congress Street, Suite 1100, mailcode: HBT Boston, MA 02114 617-918-1372 (phone) 617-918-1291 (fax) hathaway.ed@epa.gov	State Regulator Rebecca Hewett Maine DEP 17 State House Station Augusta, ME 04333-0017 207-287-8554 (phone) 207-287-7826 (fax) rebecca.l.hewett@state.me.us	Contractor Gordon Bullard TTNUS 55 Jonspin Road Wilmington, MA 01887 978-658-7899 (phone) 978-658-7870 (fax) bullardg@ttnus.com
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/28/00</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Being Installed</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Suspected</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$200,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$0</td></tr> <tr><td>Approximate pumping rate:</td><td>20 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/28/00	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Being Installed	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Suspected	Approximate annual O&M costs:	\$200,000	Costs related to monitoring:	\$0	Approximate pumping rate:	20 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated		<table style="width: 100%; border-collapse: collapse;"> <tr><td>Number of extraction wells:</td><td>12</td></tr> <tr><td>Date of construction completion:</td><td>8/2001</td></tr> <tr><td>Date of operational and functional:</td><td>10/2001</td></tr> <tr><td>Expected date of turnover to state:</td><td>9/2011</td></tr> <tr><td>Expected date of completion:</td><td>9/2007</td></tr> <tr><td>Approximate downtime per year:</td><td>2 weeks</td></tr> <tr><td>Number of monitoring wells used:</td><td>30</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td></td></tr> <tr><td>Progress of aquifer restoration:</td><td></td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/moderate</td></tr> </table>	Number of extraction wells:	12	Date of construction completion:	8/2001	Date of operational and functional:	10/2001	Expected date of turnover to state:	9/2011	Expected date of completion:	9/2007	Approximate downtime per year:	2 weeks	Number of monitoring wells used:	30	Frequency of sampling:	2 times per year	Is plume migration controlled?		Progress of aquifer restoration:		Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
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Contaminants of Concern:

Methylene Chloride
PCE

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange yes
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

There is a limited system in place as part of a NTCRA to control plume migration. The ROD requires that the system be upgraded for groundwater restoration. The design will complete in May and final construction could occur this summer.

Groveland Wells Superfund Site

Groveland, MA (Region 1)
CERCLIS ID MAD980732317

Contact Information

RPM Derrick Golden One Congress Street - Suite 1100 (HBO) Boston, MA 02114 617-918-1448 (phone) 617-918-1291 (fax) golden.derrick@epa.gov	State Regulator Janet Waldron MADEP One Winter Street Boston, MA 02108 617-556-1156 (phone) 617-556-1118 (fax) janet.waldron@state.ma.us	Contractor Cinthia Mclane Metcalf & Eddy 30 Harvard Mill Square Wakefield, MA 01880 781-224-6377 (phone) 781-245-6293 (fax) cindy_mclane@metcalfeddy.com
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/9/91</td></tr> <tr><td>Date of last modification to ROD:</td><td>11/15/96</td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Don't know</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$500,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$50,000</td></tr> <tr><td>Approximate pumping rate:</td><td>140 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/9/91	Date of last modification to ROD:	11/15/96	Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Don't know	Approximate annual O&M costs:	\$500,000	Costs related to monitoring:	\$50,000	Approximate pumping rate:	140 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient		<table style="width: 100%; border-collapse: collapse;"> <tr><td>Number of extraction wells:</td><td>10</td></tr> <tr><td>Date of construction completion:</td><td>4/2000</td></tr> <tr><td>Date of operational and functional:</td><td>5/2001</td></tr> <tr><td>Expected date of turnover to state:</td><td>4/2011</td></tr> <tr><td>Expected date of completion:</td><td>4/2031</td></tr> <tr><td>Approximate downtime per year:</td><td>1 week</td></tr> <tr><td>Number of monitoring wells used:</td><td>21</td></tr> <tr><td>Frequency of sampling:</td><td>1 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Don't know</td></tr> <tr><td>Progress of aquifer restoration:</td><td>Don't know</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	10	Date of construction completion:	4/2000	Date of operational and functional:	5/2001	Expected date of turnover to state:	4/2011	Expected date of completion:	4/2031	Approximate downtime per year:	1 week	Number of monitoring wells used:	21	Frequency of sampling:	1 times per year	Is plume migration controlled?	Don't know	Progress of aquifer restoration:	Don't know	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
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Progress of aquifer restoration:	Don't know																																													
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																													

Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation	yes
Air stripping	
Biological treatment	
UV oxidation	yes
Carbon adsorption	yes
Filtration	yes
Ion Exchange	
Reverse Osmosis	
Off-gas treatment	
other/not sure	

Comments:

Kearsarge Metallurgical Corp.

Conway, NH (Region 1)
CERCLIS ID NHD062002001

Contact Information

RPM Dick Goehlert One Congress Street Boston, MA 02114-2023 617-918-1335 (phone) 617-918-1291 (fax) goehlert.dick@epa.gov	State Regulator Paul Lincoln NHDES 6 Hazen Drive Concord, NH 03301 603-271-2911 (phone) 603-271-2456 (fax) p_andrews@des.state.nh.us	Contractor Bette Nowack Weston 1 Wall St. Manchester, NH 03101 603-656-5400 (phone)
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$	Number of extraction wells: 14
Date original ROD was signed: 9/28/90	Date of construction completion: 9/1993
Date of last modification to ROD:	Date of operational and functional: 9/1993
Type of ROD: Final	Expected date of turnover to state: 9/2003
Status of P&T system: Operational	Expected date of completion: 9/2005
Primary goal of system: Restoration	Approximate downtime per year: 4 weeks
Presence of NAPLs Suspected	Number of monitoring wells used: 30
Approximate annual O&M costs: \$250,000	Frequency of sampling: 2 times per year
Costs related to monitoring: \$30,000	Is plume migration controlled? Yes
Approximate pumping rate: 42 gpm	Progress of aquifer restoration: more than 80% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: moderate/moderate

Contaminants of Concern:

1,1,1-Trichloroethane
Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

Doug Sutton filled out this form based on a phone interview with Dick Goehlert.

The 2005 completion date is an estimate for 90% of the system. A few wells, pumping at a much lower rate will likely continue for longer

Keefe Environmental Systems

Epping, NH (Region 1)
CERCLIS ID NHD092059112

Contact Information

RPM Cheryl Sprague One Congress Street, Suite 1100 Boston, MA 02114-2023 617 918-1244 (phone) 617 918-1291 (fax) Sprague.cheryl@epa.gov	State Regulator Thomas Andrews New Hampshire Department of Environmental Services 61110 Drive Concord, NH 03301-6527 603 271-2910 (phone) 601 271-2456 (fax) Tandrews@des.state.nh.us	Contractor King Harvey Woodard and Curran 41 Hutchins Drive Portland, ME 04102 207 774-2112 (phone) 207 774-6635 (fax) hking@woodardcurren.com
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 3/21/88 Date of last modification to ROD: 6/8/90 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$200,000 Costs related to monitoring: \$5,000 Approximate pumping rate: 20 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 4 Date of construction completion: 9/1993 Date of operational and functional: 9/1994 Expected date of turnover to state: 9/2003 Expected date of completion: 9/2003 Approximate downtime per year: 2 weeks Number of monitoring wells used: 41 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: more than 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

1,2,3,4-Tetrachlorodibenzodioxin (TCDD)
 1,2-Dichloroethene
 Benzo(a)pyrene
 Trans 1,2-Dichloroethylene

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

In 1998 a vacuum enhanced extraction system (3 wells) was installed to facilitate voc removal in the hot zone.

State lead - with PRP settlement money.

Savage Well Municipal Water System

Milford, NH (Region 1)
CERCLIS ID NHD980671002

Contact Information

RPM RICHARD GOEHLERT ONE CONGRESS STREET BOSTON, MA 02114-2023 617-918-1335 (phone) 617-918-1291 (fax) GOEHLERT.DICK@EPA.GOV	State Regulator THOMAS ANDREWS NHDES 6 HAZEN DRIVE CONCORD, NH 03301 603-271-2910 (phone) 603-271-2456 (fax) t_andrews@des.state.nh.us	Contractor Joe Newton CDM Elm St Milford, NH 03055 603-249-9840 (phone) 603-249-9851 (fax) jnewton@cdm.com
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 9/27/91 Date of last modification to ROD: 12/19/96 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$500,000 Costs related to monitoring: \$30,000 Approximate pumping rate: 100 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 4 Date of construction completion: 3/1998 Date of operational and functional: 4/1999 Expected date of turnover to state: 3/2009 Expected date of completion: 3/2009 Approximate downtime per year: 4 weeks Number of monitoring wells used: 38 Frequency of sampling: 3 times per year Is plume migration controlled? No Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

1,1,1-Trichloroethane
 Chlorinated Solvents
 Cis-1,2-dichloroethene
 Trichlorethylene (TCE)/Tetrachloroelthylene (PCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

The system consists of a slurry wall with extraction and injection wells inside and outside slurry wall with a recharge gallery. There is an SVE system with air sparging and carbon regeneration by steam. I also have 17 plus wells in the hot spot which I intend to use submersible pumps to effect a better remedy. Advice on this new extraction system would be very beneficial.

I will not fill this out a third time

Silresim Chemical Corp.

Lowell, MA (Region 1)
CERCLIS ID MAD000192393

Contact Information

<p>RPM Chester Janowski 1 Congress Street, Suite 1100, HBO Boston, MA 02114-2023 617-918-1324 (phone) 617-918-1291 (fax) janowski.chet@epa.gov</p>	<p>State Regulator Janet Waldron MADEP One Winter Street, 7th Floor Boston, MA 02108 617-556-1156 (phone) 617-292-5530 (fax) janet.waldron@state.ma.us</p>	<p>Contractor John Haley Foster Wheeler Env. Corp. 133 Federal Street, 6th Floor Boston, MA 02110 617-457-8200 (phone) 617-457-8498 (fax) jhaley@fwec.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/19/91 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$1,400,000 Costs related to monitoring: \$160,000 Approximate pumping rate: 25 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient</p>	<p>Number of extraction wells: 31 Date of construction completion: 11/1995 Date of operational and functional: 9/1997 Expected date of turnover to state: 9/2007 Expected date of completion: 12/2017 Approximate downtime per year: 2 weeks Number of monitoring wells used: 47 Frequency of sampling: 2 times per year Is plume migration controlled? No Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

1,1,2,2-Tetrachloroethane
1,1-Dichloroethylene (DCE)
Acids
Benzo(b)fluoranthene
Methylphenol
Solid Propellants
Trans 1,2-Dichloroethylene
Volatile chlorinated organics

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

Operations Contractor provides semi-annual status reports of the P&T system including recommendations for P&T improvements. Improvements to the source control approach are currently being evaluated and a ROD Amendment is anticipated.

REGION 2 INFORMATION SHEETS

American Thermostat

South Cairo, NY (Region 2)
CERCLIS ID NYD002066330

Contact Information

RPM Christos Tsiamis 290 Broadway New York, NY 12233 212-637-4257 (phone) 212-637-3966 (fax) tsiamis.christos@epa.gov	State Regulator Joseph Yavonditte NYSDEC 50 Wolf Road Albany, NY 12233 518-457-9285 (phone) 518-457-7743 (fax) jayavond@gw.dec.state.ny.us	Contractor Feeney Richard Foster Wheeler Env. Corporation 1000 The American Road Morris Plains, NJ 07950 973-630-8092 (phone) 973-630-8111 (fax) RFeeney@fwenc.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 14
Date original ROD was signed: 6/29/90	Date of construction completion: 9/1998
Date of last modification to ROD:	Date of operational and functional: 9/1998
Type of ROD: Final	Expected date of turnover to state: 10/2008
Status of P&T system: Operational	Expected date of completion: 9/2028
Primary goal of system: Containment & Restoration	Approximate downtime per year: 0 weeks
Presence of NAPLs Suspected	Number of monitoring wells used: 19
Approximate annual O&M costs: \$1,175,000	Frequency of sampling: 12 times per year
Costs related to monitoring:	Is plume migration controlled? Yes
Approximate pumping rate: 70 gpm	Progress of aquifer restoration: less than 20% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/severe

Contaminants of Concern:

1,2-Dichloropropane
Trichlorobenzene
Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Based on cumulative long-term monitoring data, the system has currently been modified in order to optimize performance.

Bog Creek Farm LTRA

Howell, NJ (Region 2)
CERCLIS ID NJD063157150

Contact Information

RPM Edward Finnerty 290 Broadway New York, NY 10007 212 637 4367 (phone) 212-637-4393 (fax) Finnerty.Ed@EPA.GOV	State Regulator Craig Wallace NJDEP 401 E State St. Trenton, NJ 08625 609 984 2990 (phone) 609 633 2360 (fax) Cwallace@DEP.STATE.NJ.US	Contractor George Paprocki USACE Ft. Monmouth Eatontown, NJ 07703 732 389 3040 (phone) 732 389 1564 (fax) George.B.Paprocki@nan02.USACE.army.mil
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 6/28/89 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs Observed Approximate annual O&M costs: \$460,000 Costs related to monitoring: \$100,000 Approximate pumping rate: 30 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 33 Date of construction completion: 5/1994 Date of operational and functional: 8/1994 Expected date of turnover to state: 9/2004 Expected date of completion: 12/2024 Approximate downtime per year: 4 weeks Number of monitoring wells used: 9 Frequency of sampling: 1 times per year Is plume migration controlled? Yes Progress of aquifer restoration: 20% to 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

1,1,1-Trichloroethane
Trans 1,2-Dichloroethylene
Benzene and Toluene
2,4-Dimethylphenol
Phenol
copper, lead,zinc

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

The EPA will not meet the cleanup goal of 5ppb for benzene in the first ten years. The State's new criteria for benzene is 1ppb. This cleanup target may not be achievable, hence a 30 year remediation time (to the year 2024) was used as a default. The costs in #16 (\$100,000) include sampling 9 monitoring wells and 33 extractions wells.

Brewster Wellfield

Brewster, NY (Region 2)
CERCLIS ID 0202153

Contact Information

RPM Lisa Wong 290 Broadway New York, NY 10007 212-637-4267 (phone) 212-637-3966 (fax) wong.lisa@epa.gov	State Regulator George Momberger NYSDEC 50 Wolf Road Albany, NY 12233 518-457-0927 (phone) 518-457-8989 (fax) gfmomber@gw.dec.state.ny.us	Contractor Dawn Cermak Sevenson Env.Services, Inc Box 71A Route 518, Franklin Twsp Princeton, NJ 08540 732-297-0432 (phone) 732-297-0441 (fax) hawksister@earthlink.net
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 4
Date original ROD was signed: 9/30/86	Date of construction completion: 4/1997
Date of last modification to ROD: 12/2/96	Date of operational and functional: 9/1997
Type of ROD: Final	Expected date of turnover to state: 10/2007
Status of P&T system: Operational	Expected date of completion: 10/2007
Primary goal of system: Containment & Restoration	Approximate downtime per year:
Presence of NAPLs Suspected	Number of monitoring wells used: 16
Approximate annual O&M costs: \$400,000	Frequency of sampling: 4 times per year
Costs related to monitoring: \$244,000	Is plume migration controlled? Yes
Approximate pumping rate: 50 gpm	Progress of aquifer restoration: Don't know
Result of previous evaluation of performance/effectiveness: Not evaluated	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

1,2-Dichloroethylene (DCE)
Trichloroethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Qs #15 & 16: Breakdown of approximate annual O&M cost for long-term groundwater monitoring is of ballpark rough estimate.
Qs #25 & 26: 8 monitoring wells are monitored quarterly and 8 other monitoring wells are monitored annually (concurrent w/ one of the quarterly monitoring).

Circuitron

East Farmingdale, NY (Region 2)
CERCLIS ID NYD981184229

Contact Information

RPM Sharon Trocher 290 Broadway New York, NY 10007-1866 212-637-3965 (phone) 212-637-3966 (fax) trocher.sharon@epa.gov	State Regulator Jeffrey Trad NYSDEC 50 Wolf Road Albany, NY 12233-7010 518-457-9285 (phone) 518-457-7743 (fax) jetrad@gw.dec.state.ny.us	Contractor Shewen Bian USACE, New York District 1900 Hempstead Turnpike, Suite 16 East Meadow, NY 11554 516-794-2913 (phone) 516-794-2975 (fax)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/94 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$480,000 Costs related to monitoring: \$45,000 Approximate pumping rate: 80 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 3 Date of construction completion: 6/2000 Date of operational and functional: 5/15/2001 Expected date of turnover to state: 6/2010 Expected date of completion: 6/2003 Approximate downtime per year: 6 weeks Number of monitoring wells used: 19 Frequency of sampling: 4 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

1,1,1-Trichloroethane
 1,1-Dichloroethane
 1,1-Dichloroethylene (DCE)
 Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Doug Sutton completed this questionnaire based on a phone interview with Sharon Trocher.

1,1,1 TCA is primary contaminant of concern

The remedial action is expected to be complete before turnover to the state.

Monitoring frequency will soon decrease from quarterly to semi-annually or annually.

Claremont Polychemical Corp.

Town of Oyster Bay, NY (Region 2)
CERCLIS ID NYD002044584

Contact Information

RPM Maria Jon 290 Broadway, 20th Floor New York, NY 10007 212-637-3967 (phone) 212-637-4284 (fax) Jon.Maria@epamail.epa.gov	State Regulator Jeff Trad NYSDEC 50 Wolf Road Albany, NY 12218 518-457-9285 (phone) 518-457-7743 (fax) jetrad@gw.dec.state.ny.us	Contractor Mark Kucera U.S. Army Corps of Engineers 501 Winding Road Old Bethpage, NY 11804 516-249-8912 (phone) 516-249-8928 (fax) unknown@na.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 3
Date original ROD was signed: 9/28/90	Date of construction completion: 12/1998
Date of last modification to ROD:	Date of operational and functional: 2/2000
Type of ROD: Final	Expected date of turnover to state: 2/2010
Status of P&T system: Operational	Expected date of completion: 2/2020
Primary goal of system: Containment & Restoration	Approximate downtime per year: 2 weeks
Presence of NAPLs: Don't know	Number of monitoring wells used: 14
Approximate annual O&M costs: \$740,000	Frequency of sampling: 4 times per year
Costs related to monitoring:	Is plume migration controlled? Yes
Approximate pumping rate: 420 gpm	Progress of aquifer restoration: Don't know
Result of previous evaluation of performance/effectiveness: Not evaluated	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

1,1,1-Trichloroethane
Toluene
Xylene
PCE

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

The date in #22 is an estimate.

Combe Fill South Landfill

Chester Township, NJ (Region 2)
CERCLIS ID NJD94966611

Contact Information

<p>RPM Pamela J. Baxter 290 Broadway New York, NY 10007-1866 212-637-4416 (phone) 212-637-4393 (fax) baxter.pam@epamail.gov</p>	<p>State Regulator Paula Walshe NJDEP 401 East State St. Trenton, NJ 08625 609-633-1119 (phone) 609-292-1975 (fax) pwalshe@dep.state.nj.us</p>	<p>Contractor James Nash Chapman, Inc. 25 West Highand Avenue Atlantic Highlands, NJ 07716 732-291-7773 (phone) 732-291-7776 (fax)</p>
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System Information and Data

<p>Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 9/23/86 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$920,000 Costs related to monitoring: \$480,000 Approximate pumping rate: 121 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient</p>	<p>Number of extraction wells: 19 Date of construction completion: 6/1998 Date of operational and functional: 9/1998 Expected date of turnover to state: 9/2008 Expected date of completion: 9/2028 Approximate downtime per year: 1 week Number of monitoring wells used: 36 Frequency of sampling: 2 times per year Is plume migration controlled? No Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate</p>
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Contaminants of Concern:

1,4-Dichlorobenzene
Benzene
Carbon tetrachloride
Chlorobenzene
Chloroform
Ethylbenzene
Methylene Chloride
Toluene

Treatment Processes:

Metals precipitation yes
Air stripping
Biological treatment yes
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Combe Fill South is currently the subject of litigation.

Dover Municipal Well 4

Dover, NJ (Region 2)
CERCLIS ID NJD980654131

Contact Information

RPM Diego Garcia 290 Broadway New York, NY 10007-1866 212-637-4947 (phone) garcia.diego@epa.gov	State Regulator Mary Lou Parra NJDEP 401 East State Street Trenton, NJ 08625 609-633-3618 (phone)	Contractor Kamala Morgan USACE 601 East 12th Street Kansas City, MO 64106 818-983-3577 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/92 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Predesign Primary goal of system: Restoration Presence of NAPLs Not present Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: Result of previous evaluation of performance/effectiveness:	Number of extraction wells: Date of construction completion: Date of operational and functional: Expected date of turnover to state: Expected date of completion: Approximate downtime per year: Number of monitoring wells used: Frequency of sampling: Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Do not know if pump and treat will be used. May decide against it and may use well head treatment.

Light industrial site with many sources; trying to find sources.

No NAPL observed, but some may be down gradient and not addressed by addressor or by the state.

Garden State Cleaners/South Jersey Clothing Company

Minotola, NJ (Region 2)
CERCLIS ID NJD053280160

Contact Information

RPM Brian Quinn 290 Broadway, 19th Floor New York, NY 10007 212-637-4381 (phone) 212-637-4393 (fax) quinn.brian@epa.gov	State Regulator Akshay Parikh N.J.D.E.P. 401 E. State Street, P.O. Box 413 Trenton, NJ 08625 609-777-0693 (phone) 609-633-2360 (fax) APARIKH@dep.state.nj.us	Contractor Steven Gillespie Sevenson Env. Services, Inc. 2749 Lockport Road Niagara Falls, NY 14305 856-905-0782 (phone) 856-697-9187 (fax) sevenson@voicenet.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/26/91 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs Not present Approximate annual O&M costs: \$500,000 Costs related to monitoring: \$125,000 Approximate pumping rate: 300 gpm Result of previous evaluation of performance/effectiveness: Currently being evaluated	Number of extraction wells: 15 Date of construction completion: 3/1999 Date of operational and functional: 9/2000 Expected date of turnover to state: 10/2009 Expected date of completion: 9/2029 Approximate downtime per year: Number of monitoring wells used: 27 Frequency of sampling: 2 times per year Is plume migration controlled? No Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Trans 1,2-Dichloroethylene
 Trichloroethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

First this questionnaire only allowed one Cerclis ID to be entered, even though these are two separate sites being remediated under one ROD. The South Jersey Clothing Company. The pump and treat system has been recovering and treating groundwater with lower concentrations of TCE and PCE than expected. In addition, both TCE and PCE have been detected in the furthest downgradient sentinel wells, implying that a portion of the plume has migrated beyond the current network of extraction wells. The USACE has been tasked by the USEPA to determine if there are additional sources of contamination downgradient of the original source areas and to determine more optimal locations of groundwater extraction wells. Additionally, the Army Corp, through their contractor, will review the treatment system design in an effort to optimize the treatment process and hydraulic capacity of the system. ID is NJD980766828.

Higgins Farm

Franklin Township, NJ (Region 2)
CERCLIS ID NJD981490261

Contact Information

<p>RPM Pamela J. Baxter 290 Broadway New York, NY 10007-1866 212-637-4416 (phone) 212-637-4393 (fax) baxter.pam@epamail.gov</p>	<p>State Regulator NJDEP 401 East State St. Trenton, NJ 08625</p>	<p>Contractor Dawn Cermail Sevenson Env. Service, Inc. 71A Route 518 Princeton, NJ 08540 732-297-0432 (phone) 732-297-0441 (fax) hawksiyseter@earthlink.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/92 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$1,000,000 Costs related to monitoring: \$800,000 Approximate pumping rate: 30 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 20 Date of construction completion: 5/1998 Date of operational and functional: 1/1999 Expected date of turnover to state: 1/2009 Expected date of completion: 9/2028 Approximate downtime per year: 4 weeks Number of monitoring wells used: 34 Frequency of sampling: 3 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate</p>
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Contaminants of Concern:

Acetone
Arsenic
Chloride
Chlorobenzene
Toluene
Xylene

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration yes
Ion Exchange yes
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Site is currently the subject of litigation.
17: Designed for 100 gpm actually getting 30gpm
20: Month of O&F is an estimate
26: This represents an average. Some wells are sampled semi-annually and some quarterly
From Region 2 Hydrogeologist Rob Alvey--
Fractured rock site.
Stringent discharge permit.

Islip Municipal Landfill

Islip, NY (Region 2)
CERCLIS ID NYD980506901

Contact Information

RPM Mark Dannenberg 290 Broadway New York, NY 10007 212-637-4251 (phone) 212-637-3966 (fax) dannenberg.mark@epa.gov	State Regulator Carl Hoffman NYSDEC 50 Wolf Road Albany, NY 12233 518-457-9538 (phone) 518-457-4198 (fax) crhoffma@gw.dec.state.ny.us	Contractor Paul DiMaria Islip Resource Recovery Agency 401 Main Street Islip, NY 11751 631-224-5644 (phone) 631-224-5645 (fax) wfgraner@hotmail.com
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System Information and Data

Type of Fund-lead Site:	State-lead w/ Fund \$	Number of extraction wells:	6
Date original ROD was signed:	9/19/92	Date of construction completion:	9/1996
Date of last modification to ROD:		Date of operational and functional:	9/1997
Type of ROD:	Final	Expected date of turnover to state:	9/2006
Status of P&T system:	Operational	Expected date of completion:	1/2003
Primary goal of system:	Containment & Restoration	Approximate downtime per year:	1 week
Presence of NAPLs	Not present	Number of monitoring wells used:	24
Approximate annual O&M costs:	\$225,000	Frequency of sampling:	4 times per year
Costs related to monitoring:	\$95,000	Is plume migration controlled?	Yes
Approximate pumping rate:	300 gpm	Progress of aquifer restoration:	20% to 80% restored
Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor

Contaminants of Concern:

Volatile organic compounds (VOCs)

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Lang Property Superfund Site

Pemberton Township, NJ, NJ (Region 2)
CERCLIS ID NJD980505382

Contact Information

RPM Lawrence Granite 290 Broadway - 19th floor New York, New York, NY 10007-1866 212-637-4423 (phone) 212-637-4393 (fax) granite.larry@epamail.epa.gov	State Regulator Thomas Ferrara NJDEP 401 East State Street Trenton, NJ 08625 609-292-4095 (phone) 609-633-2360 (fax)	Contractor Thomas Roche U.S. Army Corps of Engineers 192 City Line Road Browns Mills, NJ 08015 609-893-0983 (phone) 609-893-5415 (fax) thomas.p.roche@usace.army.mil
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/29/86 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs Suspected Approximate annual O&M costs: \$700,000 Costs related to monitoring: \$60,000 Approximate pumping rate: 30 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient		Number of extraction wells: 1 Date of construction completion: 9/1995 Date of operational and functional: 10/1995 Expected date of turnover to state: 10/2005 Expected date of completion: 1/2005 Approximate downtime per year: 0 weeks Number of monitoring wells used: 8 Frequency of sampling: 4 times per year Is plume migration controlled? Yes Progress of aquifer restoration: 20% to 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

1,1-dichloroethene
1,1-dichloroethane
trichloroethene
tetrachloroethene
chromium

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

--Question 17 asked for the approximate pumping rate. The treatment system was designed to pump and treat, and formerly operated at, 150 gpm. However, we have observed a significant reduction in ground water contaminant concentrations. As a result, we are now pumping at approximately 30 gpm.

--Question 18 asked for the number of ground water extraction wells. There are three extraction wells at the Site. Two of the three have been yielding clean water; therefore, they are presently shut down to allow for a period of monitoring under non-pumping conditions. Also, please note that to supplement the contaminant removal by the three extraction wells, three shallow ground water collection trenches were installed in summer 1996.

--Question 24 asked for the treatment processes which are used at the Site. We do have a metals precipitation unit and biological treatment units at the Site. However, we stopped using them due to a reduction in contaminant concentrations.

--The Lang Property Superfund site team has always emphasized quality. Our enhancement efforts to date have expedited the remediation and resulted in cost savings. If you have any questions on the above, please feel free to call me at 212-637-4423.

Lipari Landfill site
Mantua Township, NJ (Region 2)
CERCLIS ID NJD980505416

Contact Information

RPM Ferdinand Cataneo 290 Broadway New York City, NY 10007-1866 212-637-4428 (phone) 212-637-4393 (fax) cataneo.fred@epa.gov	State Regulator Michael Burlingame NJDEP P.O. Box 413 Trenton, NJ 08625-0413 609-292-1424 (phone) 609-292-1975 (fax) mburling@dep.state.nj.us	Contractor Lee Anne Simmler URS/Radian International 743 Mullica Hill Road Glassboro, NJ 08028 856-582-6000 (phone) 856-582-6946 (fax) lee_anne_simmler@urscorp.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 25
Date original ROD was signed: 9/30/85	Date of construction completion: 12/1992
Date of last modification to ROD:	Date of operational and functional: 6/1993
Type of ROD: Final	Expected date of turnover to state: 10/2019
Status of P&T system: Operational	Expected date of completion: 12/2004
Primary goal of system: Containment & Restoration	Approximate downtime per year: 2 weeks
Presence of NAPLs Suspected	Number of monitoring wells used: 39
Approximate annual O&M costs: \$2,500,000	Frequency of sampling: 1 times per year
Costs related to monitoring: \$30,000	Is plume migration controlled? Yes
Approximate pumping rate: 125 gpm	Progress of aquifer restoration: 20% to 80% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

Benzene and Toluene
Bis(2-chloroethyl) ether
Xylene
1,2-Dichloroethane
Methylene Chloride
Phenol
Chromium
Lead
Zinc

Treatment Processes:

Metals precipitation yes
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure yes

Comments:

The system has been evaluated and improved on an annual basis since it began operating in 1993. The most significant improvement was designed in April 1999 and constructed last year. The improvement converted the system to dual phase operation, which has doubled the rate of contaminated ground water extraction while providing for soil vapor/air extraction that has increased the rate of BTEX/VOC removal from the site containment by an order of magnitude.

In June 1999, the USACE Hazardous, Toxic, and Radioactive Waste Center of Expertise conducted a workshop on Lipari Landfill site system operation, maintenance, monitoring and optimization.

Mattiace Petrochemical

Glen Cove, Nassau County, NY (Region 2)
 CERCLIS ID NYD000512459

Contact Information

<p>RPM Edward Als 290 Broadway NYC, NY 10007-1866 212-637-4272 (phone) 212-637-3966 (fax) als.ed@epa.gov</p>	<p>State Regulator Michael Mason NY State Department of Environmental Conservation Albany, NY 12233 518-457-9285 (phone) 518-457-7743 (fax) mamason@gw.dec.state.ny.us</p>	<p>Contractor Karuppenan Subburamu Foster Wheeler Env.Corp. 1000 the American Road Morris Plains, NJ 07950 973-630-8518 (phone) 973-630-8111 (fax) ksubburamu@fwenc.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 6/27/91 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$700,000 Costs related to monitoring: \$50,000 Approximate pumping rate: 10 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient</p>	<p>Number of extraction wells: 9 Date of construction completion: 8/1998 Date of operational and functional: 9/1999 Expected date of turnover to state: 3/2009 Expected date of completion: 8/2029 Approximate downtime per year: 2 weeks Number of monitoring wells used: 15 Frequency of sampling: 1 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate</p>
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Contaminants of Concern:

Aromatic VOCs
 Chlorinated Aliphatics
 Chlorinated Solvents
 Ethylbenzene

 Tetrachloroethylene, Trichloroethylene, Ethylbenzene, Toluene, Xylenes, Methylene Chloride, Dichlorobenzene, Acetone

Treatment Processes:

Metals precipitation yes
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

Q#18. Of the 9 extraction wells, 3 extract almost 9 gallons/minute. The other 6 extract betw 1-2 gallons/minute.

Q#26. Wells were sampled twice in 1st year, will be sampled annually thereafter.

Metal TEC/Aerosystems

Franklin, NJ (Region 2)
CERCLIS ID NJD002517472

Contact Information

RPM Dan Weissman 290 Broadway New York, NY 10007-1866 212-637-4384 (phone) weissman.dan.epa.gov	State Regulator Anton Navaragah NJDEP 401 East State Street Trenton, NJ 08625 609-777-0340 (phone)	Contractor
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/27/90 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Predesign Primary goal of system: Presence of NAPLs Observed Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: Result of previous evaluation of performance/effectiveness:	Number of extraction wells: Date of construction completion: Date of operational and functional: Expected date of turnover to state: Expected date of completion: Approximate downtime per year: Number of monitoring wells used: Frequency of sampling: Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes:
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Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Pump and treat is the selected remedy in the ROD. In RD contract to reconsider treatment approach at the site. If pump and treat is used at all, it would be adjunct to another remedy or would have a goal of containment.

Mohonk Road Industrial Plant Site

High Falls, NY (Region 2)
CERCLIS ID NYD986950012

Contact Information

RPM Patrick Hamblin 290 Broadway, 20th Floor New York, NY 10007-1866 212-637-3314 (phone) 212-637-3966 (fax) hamblin.patrick@epa.gov	State Regulator Michael Komoroske NYSDEC 50 Wolf Road, Room 242 Albany, NY 12233-7010 518-457-3395 (phone) 518-457-4198 (fax) mjkomoro@gw.dec.state.ny.us	Contractor Eric Hamilton EarthTech 7870 Villa Park Drive, Suite 400 Richmond, VA 23228 804-515-8300 (phone) 804-515-8414 (fax) e_hamilton@earthtech.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 3
Date original ROD was signed: 3/31/00	Date of construction completion: 5/2000
Date of last modification to ROD:	Date of operational and functional: 7/2001
Type of ROD: Final	Expected date of turnover to state: 7/2011
Status of P&T system: Operational	Expected date of completion: 7/2031
Primary goal of system: Containment & Restoration	Approximate downtime per year:
Presence of NAPLs: Not present	Number of monitoring wells used: 17
Approximate annual O&M costs:	Frequency of sampling: 2 times per year
Costs related to monitoring:	Is plume migration controlled? Don't know
Approximate pumping rate: 40 gpm	Progress of aquifer restoration: Don't know
Result of previous evaluation of performance/effectiveness: Currently being evaluated	Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate

Contaminants of Concern:

1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethylene (DCE)
Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

This groundwater extraction and treatment system was constructed by the Region 2 Removal Program in May 2000 as a Non-Time Critical Removal Action to address the 'nearfield plume', and underwent shakedown until responsibility for the system was transferred to the remedial program in February 2001. For approximately the next 5 months, the Remedial Program will be operate the system as a remedial action in order to complete shakedown activities. After this period, the system will be operated as a Long-Term Response Action (beginning July 2001). Additional groundwater extraction wells may be added to capture the 'farfield plume'.

Montgomery Township/Rocky Hill

Montgomery Township, NJ (Region 2)
CERCLIS ID NJD980654164

Contact Information

RPM Monica Mahar 290 Broadway New York, NY 10007-1866 212-637-3942 (phone) mahar.monica@epa.gov	State Regulator Larry Quinn NJDEP 401 East State Street Trenton, NJ 08625 609-633-0766 (phone) lquinn@dep.state.nj.us	Contractor Geoffrey McKenzie CDM 107-F Corporate Blvd. South Plainfield, NJ 07080 908-757-9500 (phone) mckenziegm@cdm.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 6/27/88 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Design Primary goal of system: Restoration Presence of NAPLs Don't know Approximate annual O&M costs: \$400,000 Costs related to monitoring: \$80,000 Approximate pumping rate: 250 gpm Result of previous evaluation of performance/effectiveness:		Number of extraction wells: 3 Date of construction completion: 9/2003 Date of operational and functional: 9/2003 Expected date of turnover to state: 9/2013 Expected date of completion: 9/2033 Approximate downtime per year: Number of monitoring wells used: 40 Frequency of sampling: 2 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This is actually two sites, Montgomery Township and Rocky Hill, that will share a single P&T system. In litigation with PRP.

SMS Instruments
 Deer Park, NY (Region 2)
 CERCLIS ID NYD001533165

Contact Information

RPM Mark Dannenberg 290 Broadway New York, NY 10007 212-637-4251 (phone) 212-637-3966 (fax) dannenberg.mark@epa.gov	State Regulator Joseph Yavonditte NYSDEC 50 Wolf Road Albany, NY 12233 518-457-9280 (phone) 518-457-4198 (fax) jayovond@gw.dec.state.ny.us	Contractor Paul Hagerman CDM Federal 125 Maiden Lane New York, NY 10038 212-785-9123 (phone) 212-785-6114 (fax) hagermanpr@cdm.com
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/29/89</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$400,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$130,000</td></tr> <tr><td>Approximate pumping rate:</td><td>100 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/29/89	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$400,000	Costs related to monitoring:	\$130,000	Approximate pumping rate:	100 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	<table> <tr><td>Number of extraction wells:</td><td>2</td></tr> <tr><td>Date of construction completion:</td><td>6/1994</td></tr> <tr><td>Date of operational and functional:</td><td>6/1995</td></tr> <tr><td>Expected date of turnover to state:</td><td>6/2005</td></tr> <tr><td>Expected date of completion:</td><td>3/2004</td></tr> <tr><td>Approximate downtime per year:</td><td>2 weeks</td></tr> <tr><td>Number of monitoring wells used:</td><td>18</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Yes</td></tr> <tr><td>Progress of aquifer restoration:</td><td>20% to 80% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	2	Date of construction completion:	6/1994	Date of operational and functional:	6/1995	Expected date of turnover to state:	6/2005	Expected date of completion:	3/2004	Approximate downtime per year:	2 weeks	Number of monitoring wells used:	18	Frequency of sampling:	4 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	20% to 80% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																												
Date original ROD was signed:	9/29/89																																												
Date of last modification to ROD:																																													
Type of ROD:	Final																																												
Status of P&T system:	Operational																																												
Primary goal of system:	Containment & Restoration																																												
Presence of NAPLs	Not present																																												
Approximate annual O&M costs:	\$400,000																																												
Costs related to monitoring:	\$130,000																																												
Approximate pumping rate:	100 gpm																																												
Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient																																												
Number of extraction wells:	2																																												
Date of construction completion:	6/1994																																												
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Frequency of sampling:	4 times per year																																												
Is plume migration controlled?	Yes																																												
Progress of aquifer restoration:	20% to 80% restored																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

Xylene

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Stanton Cleaners Area Groundwater Contamination Site

Great Neck, NY (Region 2)
CERCLIS ID NYD047650197

Contact Information

RPM Damian Duda 290 Broadway - 20th Floor New York, NY 10007-1866 212-637-4269 (phone) 212-637-3966 (fax) duda.damian@epa.gov	State Regulator Thomas Gibbons NYSDEC 50 Wolf Road Albany, NY 12233 518-457-3960 (phone) 518-457-4158 (fax) tlgibbon@gw.dec.state.ny.us	Contractor Thomas Williams Earth Tech 7870 Villa Park Drive - Suite 400 Richmond, VA 23228 516-482-7162 (phone) 516-466-8396 (fax) twilliams@earthtech.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 3/31/99 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Being Installed Primary goal of system: Containment & Restoration Presence of NAPLs Suspected Approximate annual O&M costs: \$270,000 Costs related to monitoring: \$120,000 Approximate pumping rate: 90 gpm Result of previous evaluation of performance/effectiveness:	Number of extraction wells: 3 Date of construction completion: 6/2001 Date of operational and functional: 9/2001 Expected date of turnover to state: 9/2011 Expected date of completion: 9/2021 Approximate downtime per year: 1 weeks Number of monitoring wells used: 30 Frequency of sampling: 4 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)
DCE, BTEX, MTBE

Treatment Processes:

Metals precipitation yes
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

An additional source control operation is currently being implemented through an ongoing soil vapor extraction system (SVE). The SVE system is expected to be in operation less than the time period estimated for the pump and treat system. Depending on the treatment efficiency of the pump and treat system, an innovative treatment technology for biological treatment may be introduced during the course of its active operation.

Syncon Resins
 Kearny, NJ (Region 2)
 CERCLIS ID NJD064263817

Contact Information

RPM Pamela J. Baxter 290 Broadway New York, NY 10007-1866 212-637-4416 (phone) 212-637-4393 (fax) baxter.pam@epamail.gov	State Regulator Jeanette Abels NJDEP 401 East State St. Trenton, NJ 08625 609-292-4873 (phone) 609-633-2360 (fax) jabels@dep.state.nj.us	Contractor John Sperber LSR Levine and Fricke P.O. Box 316 Closter, NJ 07624 201-750-6880 (phone) 201-750-6890 (fax) spurber@webstan.net
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 9/29/86 Date of last modification to ROD: 9/27/00 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$350,000 Costs related to monitoring: Approximate pumping rate: 20 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient	Number of extraction wells: 3 Date of construction completion: 4/1991 Date of operational and functional: 4/1991 Expected date of turnover to state: 4/2001 Expected date of completion: 9/2028 Approximate downtime per year: 3 weeks Number of monitoring wells used: 0 Frequency of sampling: 0 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Acetone
 Benzene
 Chlorobenzene
 Ethylbenzene
 Toluene
 Xylene

Treatment Processes:

Metals precipitation yes
 Air stripping yes
 Biological treatment yes
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

18: Wells used for water control. Also, there is a trench and three sump wells located in areas that flood locally.

21: Date of 10/93 is provided. This would mean it has already been transferred to the state. 10/93 is not a possible response given the format of the webpage. 4/2001 is provided temporarily until more information is available.

27: A slurry wall is providing the control

Vestal Water Supply Well 1-1

Vestal, NY (Region 2)
CERCLIS ID NYD980763767

Contact Information

RPM Sharon Trocher 290 Broadway New York, NY 10007-1866 212-637-3965 (phone) 212-637-3966 (fax) trocher.sharon@epa.gov	State Regulator Jeffrey Trad NYSDEC 50 Wolf Road Albany, NY 12233-7010 518-457-9285 (phone) 518-457-7743 (fax) jetrad@gw.dec.state.ny.us	Contractor Heidemarie Adenau Foster Wheeler Env. Corporation 1000 The American Road Morris Plains, NJ 07950 973-630-7197 (phone) 973-630-8025 (fax) hadenau@fwenc.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 1
Date original ROD was signed: 6/27/86	Date of construction completion: 12/1993
Date of last modification to ROD:	Date of operational and functional: 3/1995
Type of ROD: Final	Expected date of turnover to state: 3/2005
Status of P&T system: Operational	Expected date of completion: 3/2015
Primary goal of system: Containment & Restoration	Approximate downtime per year: 1 week
Presence of NAPLs: Not present	Number of monitoring wells used: 12
Approximate annual O&M costs: \$180,000	Frequency of sampling: 1 times per year
Costs related to monitoring: \$30,000	Is plume migration controlled? Yes
Approximate pumping rate: 450 gpm	Progress of aquifer restoration: less than 20% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethylene (DCE)
1,2-Dichloroethylene (DCE)
Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Vineland Chemical Co. Groundwater Treatment Plant

Vineland, NJ (Region 2)
CERCLIS ID NJD002385664

Contact Information

<p>RPM Matthew Westgate 290 Broadway 19th floor New York City, NY 10007-1866 212 637-4422 (phone) 212 637-4429 (fax) westgate.matthew@epamail.epa.gov</p>	<p>State Regulator Craig Wallace N.J. Dept. of Environmental Protection 401 East State Street CN413 Trenton, NJ 08625-0413 609 984-3727 (phone) 609 633-2360 (fax) cwallac2@dep.state.nj.us</p>	<p>Contractor Gillespie Steve Sevenson Env. Services 1405A North Mill Road Vineland, NJ 08360 856 690-1758 (phone) 856 690-1759 (fax) vineland@voicenet.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/28/89 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$4,000,000 Costs related to monitoring: \$750,000 Approximate pumping rate: 1400 gpm Result of previous evaluation of performance/effectiveness: Currently being evaluated</p>	<p>Number of extraction wells: 13 Date of construction completion: 4/2000 Date of operational and functional: 6/2000 Expected date of turnover to state: 6/2011 Expected date of completion: 6/2031 Approximate downtime per year: 0 weeks Number of monitoring wells used: 40 Frequency of sampling: 52 times per year Is plume migration controlled? Yes Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: moderate/severe</p>
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Contaminants of Concern:

Arsenic

Treatment Processes:

Metals precipitation yes
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Currently we are pumping 700 gpm. Major modifications are required to increase plant flow to maximum flow rate -1400 gpm.

We are in the process of hiring a contractor, SAIC of Harrisburg, PA, through the Philadelphia District Army Corps of Engineers, to perform a "SmartSite" Optimization Study. Kickoff meeting is scheduled for March 1 2001. If you want to study this site and perform the optimization study, call me now at 212 637-4422.

Williams Property

Swainton, Middle Township, NJ (Region 2)
 CERCLIS ID NJD980529945

Contact Information

<p>RPM Ferdinand Cataneo 290 Broadway New York City, NY 10007-1866 212-637-4428 (phone) 212-637-4393 (fax) cataneo.fred@epa.gov</p>	<p>State Regulator Steve Wohleb NJDEP P.O. Box 413 Trenton, NJ 08625-0413 609-633-3970 (phone) 609-292-1975 (fax) swohleb@dep.state.nj.us</p>	<p>Contractor Richard Talbot TurnKey Env. Services, Inc 24 South Newton Street Road, Suite 1B Newton Square, PA 19073 610-356-3790 (phone) 610-356-4780 (fax) TurnKeyEnv@aol.com</p>
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System Information and Data

<p>Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 9/29/87 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$350,000 Costs related to monitoring: Approximate pumping rate: 80 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient</p>	<p>Number of extraction wells: 2 Date of construction completion: 1/1995 Date of operational and functional: 1/1995 Expected date of turnover to state: 1/2001 Expected date of completion: 12/2002 Approximate downtime per year: 0 weeks Number of monitoring wells used: 18 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: more than 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

Bis(2-chloroethyl) ether
 Trichlorethylene (TCE)/Tetrachloroethylene (PCE)
 Acetone
 Isophorone
 Methyl ethyl ketone (MEK)
 Methyl isobutyl ketone (MIBK)
 Xylene

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment yes
 UV oxidation yes
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

At this time the plume appears to have been remediated except for low level PCE and TCE tailing. The pump and treat is expected to be shut down later this year with the system maintained in a "ready-to-run" state. Long term monitoring for possible rebound of contamination will follow. Resumption of operations would be triggered if rebound, as defined in a long-term testing plan, occurs.

Regarding Question #21, please note that the NJDEP has been running the p&t since operations began in January 1995.

REGION 3 INFORMATION SHEETS

AIW Frank/Mid-County Mustang Site, OU#1

Exton, PA (Region 3)
CERCLIS ID PAD004351003

Contact Information

<p>RPM Charlie Root 1650 Arch Street (3HS21) Philadelphia, PA 19103 215-814-3193 (phone) 215-814-3002 (fax) root.charlie@epa.gov</p>	<p>State Regulator Ragesh Patel PADEP Lee Park, Suite 6010 555 North Lane Conshohocken, PA 19428 610-832-6161 (phone) 610-832-6260 (fax) patel.ragesh@state.pa.us</p>	<p>Contractor Neil Teamerson TetraTech NUS 600 Clark Avenue, Suite 3 King of Prussia, PA 19406 610-491-9688 (phone) 610-491-9645 (fax) teamersonn@ttnus.com</p>
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/29/95</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$180,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$50,000</td></tr> <tr><td>Approximate pumping rate:</td><td>118 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/29/95	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$180,000	Costs related to monitoring:	\$50,000	Approximate pumping rate:	118 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	<table> <tr><td>Number of extraction wells:</td><td>5</td></tr> <tr><td>Date of construction completion:</td><td>11/2000</td></tr> <tr><td>Date of operational and functional:</td><td>9/2001</td></tr> <tr><td>Expected date of turnover to state:</td><td>9/2011</td></tr> <tr><td>Expected date of completion:</td><td>9/2031</td></tr> <tr><td>Approximate downtime per year:</td><td>1 week</td></tr> <tr><td>Number of monitoring wells used:</td><td>15</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Don't know</td></tr> <tr><td>Progress of aquifer restoration:</td><td>Don't know</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/moderate</td></tr> </table>	Number of extraction wells:	5	Date of construction completion:	11/2000	Date of operational and functional:	9/2001	Expected date of turnover to state:	9/2011	Expected date of completion:	9/2031	Approximate downtime per year:	1 week	Number of monitoring wells used:	15	Frequency of sampling:	4 times per year	Is plume migration controlled?	Don't know	Progress of aquifer restoration:	Don't know	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
Type of Fund-lead Site:	EPA-lead																																												
Date original ROD was signed:	9/29/95																																												
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Is plume migration controlled?	Don't know																																												
Progress of aquifer restoration:	Don't know																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate																																												

Contaminants of Concern:

1,1,2,2-Tetrachloroethane
Trans 1,2-Dichloroethylene

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

This Pump and Treat is only a few months old and there is not enough performance data to date to make any recommendations regarding optimization.

Berks Sand Pit

Huffs Church, PA (Region 3)
CERCLIS ID PAD980691794

Contact Information

RPM Bruce Rundell 1650 Arch Street Philadelphia, PA 19103-2087 215-814-3317 (phone) 215-814-3015 (fax) rundell.bruce@epa.gov	State Regulator Elise Juers PADEP 909 Elmerton Av. Harrisburg, PA 17110-8200 717-705-4852 (phone) 717-705-4830 (fax) juers.elise@a1.dep.state.pa.45	Contractor Ed Kashdan Gannett Fleming PO Box 80794 Valley Forge, PA 19484 610-650-8101 (phone) 610-650-8190 (fax) ekashdan@GFnet.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 1
Date original ROD was signed: 9/29/88	Date of construction completion: 2/1995
Date of last modification to ROD: 2/2/94	Date of operational and functional: 2/1995
Type of ROD: Final	Expected date of turnover to state: 2/2005
Status of P&T system: Operational	Expected date of completion: 2/2003
Primary goal of system: Restoration	Approximate downtime per year:
Presence of NAPLs: Not present	Number of monitoring wells used: 48
Approximate annual O&M costs: \$150,000	Frequency of sampling: 1 times per year
Costs related to monitoring: \$25,000	Is plume migration controlled? Yes
Approximate pumping rate: 90 gpm	Progress of aquifer restoration: 20% to 80% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

1,1,1-Trichloroethane
1,1-Dichloroethylene (DCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Maximum TCA and DCE concentrations in 1988 were 7,300 and 3,500 ppb, respectively. By 1999 concentrations have been reduced to 470 ppb and 78 ppb for TCA and DCE respectively. This has been accomplished by maximizing pump rate with respect to contaminant concentrations. Currently there is one area that is less responsive to the pumping system. A pilot scale fentons reagent injection study will be conducted in this area in the Spring of 2001. If successful oxidant injection will be used throughout the plume.

Butz Landfill

Monroe Township, PA (Region 3)
 CERCLIS ID PAD981034705

Contact Information

RPM Rom Roman 1650 Arch Street Philadelphia, PA 19103-2087 215-814-3212 (phone) 215-814-3015 (fax) roman.romuald@epa.gov	State Regulator PADEP Paul Panek PADEP 4530 Bath Pike Bethlehem, PA 18017 610-861-2070 (phone) 610-861-2072 (fax) panek.paul@dep.state.pa.us	Contractor Charles Huval Koester Environmental Services 14649 Highway 41 N Evansville, IN 47725 812-483-4516 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 6/30/92 Date of last modification to ROD: 8/27/99 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$250,000 Costs related to monitoring: \$125,000 Approximate pumping rate: 90 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 3 Date of construction completion: 4/2001 Date of operational and functional: 4/2001 Expected date of turnover to state: 4/2011 Expected date of completion: 4/2031 Approximate downtime per year: 0 weeks Number of monitoring wells used: 17 Frequency of sampling: 4 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Diesel fuel
 Trichlorobenzene
 Vinyl Chloride

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

Doug Sutton completed this questionnaire based on phone interviews with Rom Roman (RPM) and Bruce Rundell (hydrogeologist).

At the time of this survey, the site was to begin operation within a couple of weeks. Thus, many of the responses are estimates including costs, flow rates, and expected date of completion.

Croydon TCE
 Bristol Township, PA (Region 3)
 CERCLIS ID PAD981035009

Contact Information

RPM Cesar Lee 1650 Arch St Philadelphia, PA 19103 215-814-3205 (phone) 215-814-3205 (fax) lee.cesar@epa.gov	State Regulator Ewald Dave PADEP Lee Park, Suite 6010 Conshohocken, PA 19428 610-832-6200 (phone) 610-832-5950 (fax) Ewald.David@dep.state.pa.us	Contractor Harish Mital Tetra Tech, Inc. Plaza 273, 56 West Main Street Christiana, DE 19702 302-738-7551 (phone) 302-454-5988 (fax) harish.mital@tetratech.com
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>6/29/90</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Suspected</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$200,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$100,000</td></tr> <tr><td>Approximate pumping rate:</td><td>25 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	6/29/90	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Suspected	Approximate annual O&M costs:	\$200,000	Costs related to monitoring:	\$100,000	Approximate pumping rate:	25 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	<table> <tr><td>Number of extraction wells:</td><td>6</td></tr> <tr><td>Date of construction completion:</td><td>3/1995</td></tr> <tr><td>Date of operational and functional:</td><td>3/1995</td></tr> <tr><td>Expected date of turnover to state:</td><td>3/2005</td></tr> <tr><td>Expected date of completion:</td><td>3/2025</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>7</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Yes</td></tr> <tr><td>Progress of aquifer restoration:</td><td>less than 20% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	6	Date of construction completion:	3/1995	Date of operational and functional:	3/1995	Expected date of turnover to state:	3/2005	Expected date of completion:	3/2025	Approximate downtime per year:		Number of monitoring wells used:	7	Frequency of sampling:	4 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	less than 20% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																												
Date original ROD was signed:	6/29/90																																												
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Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient																																												
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Date of construction completion:	3/1995																																												
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Expected date of turnover to state:	3/2005																																												
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Approximate downtime per year:																																													
Number of monitoring wells used:	7																																												
Frequency of sampling:	4 times per year																																												
Is plume migration controlled?	Yes																																												
Progress of aquifer restoration:	less than 20% restored																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

1,1,2-Trichloroethane
 1,1-Dichloroethylene (DCE)
 Trichloroethylene (TCE)/Tetrachloroethylene (PCE)
 Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

CryoChem

Earl Township, PA (Region 3)
 CERCLIS ID PAD002360444

Contact Information

<p>RPM Joseph McDowell 1650 Arch Street Phila, PA 19103 215-814-3192 (phone) 215-814-3002 (fax) mcdowell.joseph@epa.gov</p>	<p>State Regulator Rich Morgan PADEP 909 Elmerton Ave Harrisburg, PA 17110 610-916-0122 (phone) 610-916-0100 (fax) MORGAN.RICHARD@DEP.STATE.PA.US</p>	<p>Contractor Don Koch ETA 9115 Guilford Road Suite 100 Columbia, MD 21046 410-461-9920 (phone) 410-750-8565 (fax) dkoch@md.ccjm.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/91 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Don't know Approximate annual O&M costs: \$125,000 Costs related to monitoring: \$40,000 Approximate pumping rate: 60 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient</p>	<p>Number of extraction wells: 9 Date of construction completion: 2/1998 Date of operational and functional: 6/1998 Expected date of turnover to state: 6/2008 Expected date of completion: 6/2010 Approximate downtime per year: 1 week Number of monitoring wells used: 4 Frequency of sampling: 1 times per year Is plume migration controlled? Yes Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate</p>
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Contaminants of Concern:

1,1,1-Trichloroethane
 1,1-Dichloroethane
 1,1-Dichloroethylene (DCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Greenwood Chemical Site

Greenwood, VA (Region 3)
CERCLIS ID VAD003125374

Contact Information

RPM Philip Rotstein 1650 Arch Street Philadelphia, PA 19103 215-814-3232 (phone) 215-814-3002 (fax) rotstein.phil@epa.gov	State Regulator Berry Wright Department of Environmental Quality 629 E. Main Street Richmond, VA 23219 804-698-4012 (phone) 804-698-4234 (fax) bfwright@deq.state.va.us	Contractor Jeff Waters CH2M Hill 1700 Market Street, Suite 1600 Philadelphia, PA 19103 215-563-4220 (phone) 215-563-3828 (fax) jwaters@ch2m.com
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>12/30/90</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Interim</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Don't know</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$400,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$50,000</td></tr> <tr><td>Approximate pumping rate:</td><td>45 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	12/30/90	Date of last modification to ROD:		Type of ROD:	Interim	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Don't know	Approximate annual O&M costs:	\$400,000	Costs related to monitoring:	\$50,000	Approximate pumping rate:	45 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated		<table style="width: 100%; border-collapse: collapse;"> <tr><td>Number of extraction wells:</td><td>5</td></tr> <tr><td>Date of construction completion:</td><td>11/2000</td></tr> <tr><td>Date of operational and functional:</td><td>11/2001</td></tr> <tr><td>Expected date of turnover to state:</td><td>11/2011</td></tr> <tr><td>Expected date of completion:</td><td>11/2020</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>34</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Not a goal</td></tr> <tr><td>Progress of aquifer restoration:</td><td>Don't know</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	5	Date of construction completion:	11/2000	Date of operational and functional:	11/2001	Expected date of turnover to state:	11/2011	Expected date of completion:	11/2020	Approximate downtime per year:		Number of monitoring wells used:	34	Frequency of sampling:	4 times per year	Is plume migration controlled?	Not a goal	Progress of aquifer restoration:	Don't know	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
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Progress of aquifer restoration:	Don't know																																													
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																													

Contaminants of Concern:

1,1-Dichloroethane
Acetone
Arsenic
Benzene and Toluene
Naphthalene, Acetic Acid, 1,2-Dichloroethane, SVOC TICs,
Dibutyl phthalate, 2,4,6,-Trichlorophenol

Treatment Processes:

Metals precipitation	yes
Air stripping	
Biological treatment	
UV oxidation	yes
Carbon adsorption	yes
Filtration	yes
Ion Exchange	
Reverse Osmosis	
Off-gas treatment	yes
other/not sure	

Comments:

Initial startup and testing of the pump and treat system began in November 2000. The system became fully operational in March 2001. Actual operational costs (O&M) not known at this time.

Havertown PCP OU2
 Havertown, PA (Region 3)
 CERCLIS ID PAD002338010

Contact Information

RPM Gregory Ham 1650 Arch Street (3HS21) Philadelphia, PA 19103-2029 215-814-3194 (phone) 215-814-3002 (fax) ham.greg@epa.gov	State Regulator April Flipse PADEP 555 North Lane, Suite 6010 Conshohocken, PA 19428 610-832-5937 (phone) 610-832-6143 (fax) Flipse.April@dep.state.pa.us	Contractor Lori Stoll URS Corporation 200 Orchard Ridge Drive, Suite 101 Gaithersburg, MD 20878-1978 301-258-9780 (phone) 301-869-2043 (fax) lori_stoll@urscorp.com
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/30/91</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Interim</td></tr> <tr><td>Status of P&T system:</td><td>Being Installed</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Observed</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$1,000,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$283,300</td></tr> <tr><td>Approximate pumping rate:</td><td>45 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/30/91	Date of last modification to ROD:		Type of ROD:	Interim	Status of P&T system:	Being Installed	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Observed	Approximate annual O&M costs:	\$1,000,000	Costs related to monitoring:	\$283,300	Approximate pumping rate:	45 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated	<table> <tr><td>Number of extraction wells:</td><td>4</td></tr> <tr><td>Date of construction completion:</td><td>5/2001</td></tr> <tr><td>Date of operational and functional:</td><td>4/2002</td></tr> <tr><td>Expected date of turnover to state:</td><td>4/2012</td></tr> <tr><td>Expected date of completion:</td><td>4/2033</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>15</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td></td></tr> <tr><td>Progress of aquifer restoration:</td><td></td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/moderate</td></tr> </table>	Number of extraction wells:	4	Date of construction completion:	5/2001	Date of operational and functional:	4/2002	Expected date of turnover to state:	4/2012	Expected date of completion:	4/2033	Approximate downtime per year:		Number of monitoring wells used:	15	Frequency of sampling:	2 times per year	Is plume migration controlled?		Progress of aquifer restoration:		Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
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Date original ROD was signed:	9/30/91																																												
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Result of previous evaluation of performance/effectiveness:	Not evaluated																																												
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Approximate downtime per year:																																													
Number of monitoring wells used:	15																																												
Frequency of sampling:	2 times per year																																												
Is plume migration controlled?																																													
Progress of aquifer restoration:																																													
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate																																												

Contaminants of Concern:

Benzene and Toluene
 Dioxin (TCDD equivalents)
 Pentachlorophenol (PCP)
 Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation yes
 Air stripping
 Biological treatment
 UV oxidation yes
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This system includes a 200 foot long collection trench and four oil/water extraction wells. There is free product (PCP/oil) being recovered from most of the wells.

Hellertown Manufacturing

Bethlehem, PA (Region 3)
CERCLIS ID PAD002390748

Contact Information

RPM Cesar Lee 1650 Arch Street Philadelphia, PA 19103 215-814-3205 (phone) 215-814-3205 (fax) lee.cesar@epa.gov	State Regulator Meg Mustard PADEP 4530 Bath Pike Bethlehem, PA 18017 610-861-2076 (phone) 610-861-2072 (fax) boyer.margaret@dep.state.pa.us	Contractor Jim Romig CDM Federal Corporation 993 Old Eagle School Road, Suite 408 Wayne, PA 19087 610-293-0450 (phone) 610-293-1920 (fax) romigjm@cdm.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/3/91 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$350,000 Costs related to monitoring: \$150,000 Approximate pumping rate: 50 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient	Number of extraction wells: 1 Date of construction completion: 9/1996 Date of operational and functional: 3/1996 Expected date of turnover to state: 9/2006 Expected date of completion: 9/2026 Approximate downtime per year: 0 weeks Number of monitoring wells used: 12 Frequency of sampling: 4 times per year Is plume migration controlled? Yes Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Benzene
Cis-1,2-dichloroethene
TCE and Vinyl chloride
Trans 1,2-Dichloroethylene
Trichloroethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Doug Sutton filled this out based on hand written notes of Cesar Lee.

North Penn Area 1

Souderton, Montgomery County, PA (Region 3)
 CERCLIS ID PAD096834494

Contact Information

RPM Maria de los A. Garcia 1650 Arch Street Philadelphia, PA 19103 215-814-3199 (phone) 215-814-3002 (fax) garcia.maria@epa.gov	State Regulator April Flipse Pennsylvania Department of Env. Protection Lee Park, Suite 6010 555 North Lane Conshohocken, PA 19428 610-832-5937 (phone) 610-832-6143 (fax)	Contractor Policarpio Mijares U.S. Army Corps of Engineers P.O. Box 1715 Baltimore, PA 21203 410-962-2782 (phone) 410-962-2318 (fax)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/94 Date of last modification to ROD: 9/24/98 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$100,000 Costs related to monitoring: \$25,000 Approximate pumping rate: 2 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 1 Date of construction completion: 7/1998 Date of operational and functional: 9/1998 Expected date of turnover to state: 9/2008 Expected date of completion: 9/2018 Approximate downtime per year: 0 weeks Number of monitoring wells used: 4 Frequency of sampling: 2 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

1,1,1-Trichloroethane
 1,1-Dichloroethane
 1,1-Dichloroethylene (DCE)
 Cis-1,2-dichloroethene
 Trans 1,2-Dichloroethylene
 Trichloroethylene (TCE)/Tetrachloroethylene (PCE)
 Volatile organic compounds (VOCs)

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

The system in this site consists of an extraction system that discharges to a local wastewater treatment facility. There is no conventional treatment system at the site.

North Penn Area 6
 Lansdale, PA (Region 3)
 CERCLIS ID PAD980926976

Contact Information

RPM Gregory Ham 1650 Arch Street (3HS21) Philadelphia, PA 19103-2029 215-814-3194 (phone) 215-814-3002 (fax) ham.greg@epa.gov	State Regulator Robert Zang Pennsylvania Dept. of Env. Protection 555 North Lane, Suite 6010 Conshohocken, PA 19428 610-832-6152 (phone) 610-832-6259 (fax) Zang.Robert@state.pa.us	Contractor Ray Lees It Corporation 1220 Ward Avenue, Suite 300 West Chester, PA 19380-3409 610-241-5000 (phone) 610-241-5050 (fax) rlees@theitgroup.com
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>8/10/00</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Design</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Suspected</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$592,900</td></tr> <tr><td>Costs related to monitoring:</td><td>\$216,000</td></tr> <tr><td>Approximate pumping rate:</td><td>300 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	8/10/00	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Design	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Suspected	Approximate annual O&M costs:	\$592,900	Costs related to monitoring:	\$216,000	Approximate pumping rate:	300 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated	<table> <tr><td>Number of extraction wells:</td><td>10</td></tr> <tr><td>Date of construction completion:</td><td>9/2002</td></tr> <tr><td>Date of operational and functional:</td><td>6/2003</td></tr> <tr><td>Expected date of turnover to state:</td><td>6/2013</td></tr> <tr><td>Expected date of completion:</td><td>6/2033</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>30</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td></td></tr> <tr><td>Progress of aquifer restoration:</td><td></td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/moderate</td></tr> </table>	Number of extraction wells:	10	Date of construction completion:	9/2002	Date of operational and functional:	6/2003	Expected date of turnover to state:	6/2013	Expected date of completion:	6/2033	Approximate downtime per year:		Number of monitoring wells used:	30	Frequency of sampling:	4 times per year	Is plume migration controlled?		Progress of aquifer restoration:		Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
Type of Fund-lead Site:	EPA-lead																																												
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Contaminants of Concern:

Carbon tetrachloride
 TCE and Vinyl chloride
 Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation yes
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

This site consists of a groundwater plume covering an area approximately 3 square miles, with multiple identified sources. It will be done as a mixed work site (some wells installed and operated by EPA, some by PRPs). The first two wells are being done under a non-time critical removal action, the remainder as a remedial action.

Raymark

Hatboro, PA (Region 3)
CERCLIS ID 0300894

Contact Information

<p>RPM Deanna Moultrie 1650 Arch Street Philadelphia, PA 19103 215-814-5125 (phone) 215-814-3002 (fax) moultrie.deanna@epa.gov</p>	<p>State Regulator David Minsker PADEP Lee Park Suite 6010 555 North Lane Conshohocken, PA 19428 610-832-6193 (phone) 610-832-6143 (fax) Minsker.David@dep.state.pa.us</p>	<p>Contractor Andy Hopton CDM Federal Programs 993 Old Eagle School Road Wayne, PA 19083 610-293-0450 (phone) 610-293-1920 (fax) HoptonAP@cdm.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/28/90 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$155,711 Costs related to monitoring: \$140,000 Approximate pumping rate: 62 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 2 Date of construction completion: 1/1994 Date of operational and functional: 6/1995 Expected date of turnover to state: 1/2004 Expected date of completion: 1/2014 Approximate downtime per year: 2 weeks Number of monitoring wells used: 0 Frequency of sampling: 0 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

Carbozol
Trichlorobenzene

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

Originally, the time frame for aquifer restoration was 20 years from system startup but we are currently re-evaluating the effectiveness of the remedy and that time frame may change.

Saunders Supply Company

Chuckatuck, VA (Region 3)
CERCLIS ID VAD003117389

Contact Information

<p>RPM Andrew Palestini 1650 Arch Street Philadelphia, PA 19103 215-814-3233 (phone) 215-814-3002 (fax) palestini.andy@epa.gov</p>	<p>State Regulator Thomas Modena Virginia Department of Env. Quality 629 East Main Street Richmond, VA 23219 804-698-4183 (phone) 804-698-4500 (fax) tdmodena@deq.state.va.us</p>	<p>Contractor Marc Gutterman U.S. Army Corps of Engineers 803 Front Street Norfolk, VA 23510 757-441-7669 (phone) 757-441-7478 (fax) Marc.D.Gutterman@nao02.usace.army.mil</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/27/96 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs Suspected Approximate annual O&M costs: \$80,000 Costs related to monitoring: \$25,000 Approximate pumping rate: 2 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 4 Date of construction completion: 4/1998 Date of operational and functional: 5/1999 Expected date of turnover to state: 5/2009 Expected date of completion: 4/2008 Approximate downtime per year: 2 weeks Number of monitoring wells used: 10 Frequency of sampling: 4 times per year Is plume migration controlled? Yes Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/severe</p>
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Contaminants of Concern:

Arsenic
Pentachlorophenol (PCP)

Treatment Processes:

Metals precipitation yes
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

To clarify #19 above: The system was constructed by Removal because the plume was getting close to a drinking reservoir.

To clarify #30: The treatment plant is located on the PRP's property but the recovery wells and monitoring wells are located on the adjoining property. We placed piping and power in the utilities conduit trench for another recovery well. We have access to these wells and the conduit trench through an access agreement between the PRP and the owner of the adjoining property. However, any work outside of this area could be very difficult to implement because it would probably require another access agreement.

REGION 4 INFORMATION SHEETS

ABC Cleaners
 Jacksonville, NC (Region 4)
 CERCLIS ID NCD024644494

Contact Information

RPM Luis Flores 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8807 (phone) flores.luis@epa.gov	State Regulator Nile Testerman NCDENR 401 Oberlin Road Raleigh, NC 27605 919-733-2801 (phone) 919-733-4811 (fax) nile.testerman@ncmail.net	Contractor
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 1/26/93 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs Not present Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: Result of previous evaluation of performance/effectiveness:		Number of extraction wells: Date of construction completion: Date of operational and functional: Expected date of turnover to state: Expected date of completion: Approximate downtime per year: Number of monitoring wells used: Frequency of sampling: Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes:
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Contaminants of Concern:

1,1-Dichloroethylene (DCE)
 Trichloroethylene (TCE)/Tetrachloroethylene (PCE)
 vinyl chloride

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Douglas Sutton completed this form based on a phone interview with Luis Flores.
 The site has been shut down for approximately 1 year.
 The EPA and the previous site contractor are currently in litigation and additional site details could not be discussed.

American Creosote Works (DNAPL)

Pensacola, FL (Region 4)
CERCLIS ID

Contact Information

RPM Mark Fite 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8927 (phone) fite.mark@epa.gov	State Regulator John Sykes FDEP 850-488-019 (phone) 850-488-0190 (fax)	Contractor Joe Findley USACE, Mobile District Mobile, AL 334-694-4012 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 2/3/94 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs Observed Approximate annual O&M costs: \$300,000 Costs related to monitoring: Approximate pumping rate: 0.1 gpm Result of previous evaluation of performance/effectiveness: Not evaluated		Number of extraction wells: 8 Date of construction completion: 9/1998 Date of operational and functional: 9/1998 Expected date of turnover to state: 5/2003 Expected date of completion: 5/2003 Approximate downtime per year: 4 weeks Number of monitoring wells used: 4 Frequency of sampling: 2 times per year Is plume migration controlled? No Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Acenaphthene
 Benzene
 Dibenzofuran
 Fluoranthene
 Naphthalene
 Pentachlorophenol (PCP)
 carcinogenic PAHs

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

Doug Sutton completed this form based on an interview with Mark Fite.

This system is a DNAPL recovery system that will be decommissioned in 2003. Therefore, the site will not be transferred to the state. A Fund-lead P&T solute recovery system will be installed in 2004.

Optimization is currently underway with USACE.

American Creosote Works (solute)

Pensacola, FL (Region 4)
CERCLIS ID

Contact Information

RPM Mark Fite 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8927 (phone) fite.mark@epa.gov	State Regulator John Sykes FDEP 850-488-0190 (phone)	Contractor Joe Findley USACE, Mobile District Mobile, AL 334-694-4012 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 2/3/94 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Predesign Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$452,000 Costs related to monitoring: Approximate pumping rate: 105 gpm Result of previous evaluation of performance/effectiveness: Not evaluated		Number of extraction wells: 3 Date of construction completion: 9/2004 Date of operational and functional: 9/2004 Expected date of turnover to state: 9/2014 Expected date of completion: 9/2009 Approximate downtime per year: 0 weeks Number of monitoring wells used: 10 Frequency of sampling: 2 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Acenaphthene
 Benzene
 Dibenzofuran
 Fluoranthene
 Naphthalene
 Pentachlorophenol (PCP)
 carcinogenic PAHs

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment yes
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Douglas Sutton completed this form based on a phone interview with Mark Fite.

This system is planned to address dissolved groundwater contamination in 2004 after the associated DNAPL recovery system is decommissioned.

Data provided here are estimates taken from the ROD.

Benfield Industries
 Hazelwood, NC (Region 4)
 CERCLIS ID NCD981026479

Contact Information

RPM Jon Bornholm 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8820 (phone) bornholm.jon@epa.gov	State Regulator Nile Testerman NCDENR 401 Oberlin Road Raleigh, NC 27605 919-733-2801 (phone) 919-733-4811 (fax) nile.testerman@ncmail.net	Contractor Chris Leggett CMC Newport, TN 423-625-0557 (phone)
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>7/31/92</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$30,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$10,000</td></tr> <tr><td>Approximate pumping rate:</td><td>16 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	7/31/92	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$30,000	Costs related to monitoring:	\$10,000	Approximate pumping rate:	16 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated	<table> <tr><td>Number of extraction wells:</td><td>2</td></tr> <tr><td>Date of construction completion:</td><td>4/2001</td></tr> <tr><td>Date of operational and functional:</td><td>5/2001</td></tr> <tr><td>Expected date of turnover to state:</td><td>5/2011</td></tr> <tr><td>Expected date of completion:</td><td>5/2021</td></tr> <tr><td>Approximate downtime per year:</td><td>0 weeks</td></tr> <tr><td>Number of monitoring wells used:</td><td>8</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Don't know</td></tr> <tr><td>Progress of aquifer restoration:</td><td>less than 20% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	2	Date of construction completion:	4/2001	Date of operational and functional:	5/2001	Expected date of turnover to state:	5/2011	Expected date of completion:	5/2021	Approximate downtime per year:	0 weeks	Number of monitoring wells used:	8	Frequency of sampling:	4 times per year	Is plume migration controlled?	Don't know	Progress of aquifer restoration:	less than 20% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																												
Date original ROD was signed:	7/31/92																																												
Date of last modification to ROD:																																													
Type of ROD:	Final																																												
Status of P&T system:	Operational																																												
Primary goal of system:	Containment & Restoration																																												
Presence of NAPLs	Not present																																												
Approximate annual O&M costs:	\$30,000																																												
Costs related to monitoring:	\$10,000																																												
Approximate pumping rate:	16 gpm																																												
Result of previous evaluation of performance/effectiveness:	Not evaluated																																												
Number of extraction wells:	2																																												
Date of construction completion:	4/2001																																												
Date of operational and functional:	5/2001																																												
Expected date of turnover to state:	5/2011																																												
Expected date of completion:	5/2021																																												
Approximate downtime per year:	0 weeks																																												
Number of monitoring wells used:	8																																												
Frequency of sampling:	4 times per year																																												
Is plume migration controlled?	Don't know																																												
Progress of aquifer restoration:	less than 20% restored																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

Creosote and petroleum hydrocarbons

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

This form was completed by Douglas Sutton based on a phone interview with Jon Bornholm.

Monitoring frequency is expected to drop from quarterly to annually.

Cape Fear Wood Preserving

Fayetteville, NC (Region 4)
CERCLIS ID NCD003188828

Contact Information

<p>RPM Jon Bornholm 61 Forsyth Street, SW Atlanta, GA 30303-3104 404-562-8820 (phone) 404-562-8788 (fax) bornholm.jon@epa.gov</p>	<p>State Regulator Nile Testerman NCDENR 401 Oberlin Road Raleigh, NC 27605 919-733-2901 (phone) 919-733-4811 (fax) nile.testerman@ncmail.net</p>	<p>Contractor Ed Hicks Black & Veatch 1145 Sanctuary Parkway, Suite 475 Alpharetta, GA 30004 770-521-8141 (phone) 770-751-8322 (fax) hicksec@bc.com</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 6/30/89 Date of last modification to ROD: 3/23/01 Type of ROD: Final Status of P&T system: Design/Not Installed Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$40,000 Costs related to monitoring: \$30,000 Approximate pumping rate: 43 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 7 Date of construction completion: 9/2001 Date of operational and functional: 9/2002 Expected date of turnover to state: 10/2011 Expected date of completion: 12/2009 Approximate downtime per year: Number of monitoring wells used: 25 Frequency of sampling: 4 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

Benzene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Coleman Evans Wood Preserving

Whitehouse, FL (Region 4)
CERCLIS ID FLD991279894

Contact Information

RPM Randall Chaffins 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8929 (phone) chaffins.randall@epa.gov	State Regulator John Sykes FDEP 850-413-0066 (phone)	Contractor Todd Trulock USACE, Jacksonville District Jacksonville, FL 904-232-1110 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/25/86 Date of last modification to ROD: 9/25/97 Type of ROD: Interim Status of P&T system: Predesign Primary goal of system: Restoration Presence of NAPLs Observed Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: Date of construction completion: Date of operational and functional: Expected date of turnover to state: Expected date of completion: Approximate downtime per year: Number of monitoring wells used: Frequency of sampling: Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes:
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Contaminants of Concern:

Dioxin
Pentachlorophenol (PCP)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

This form was completed by Douglas Sutton based on a phone interview with Randall Chaffins.

There are three RODs for this OU. The first is dated 1986 and the last is dated 1997.

As the system is in the pre-design stage, no information is available about system operations.

Elmore Waste Disposal

Greer, SC (Region 4)
CERCLIS ID SCD980839542

Contact Information

RPM Ralph Howard 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8829 (phone) howard.ralph@epa.gov	State Regulator Lucas Berresford SCDHEC 21 Bull Street Columbia, SC 29201	Contractor Ed Hicks Black and Veatch Atlanta, GA 770-751-7517 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 9
Date original ROD was signed: 4/26/93	Date of construction completion: 9/1998
Date of last modification to ROD:	Date of operational and functional: 9/1998
Type of ROD: Final	Expected date of turnover to state: 9/2008
Status of P&T system: Operational	Expected date of completion: 9/2018
Primary goal of system: Containment & Restoration	Approximate downtime per year: 0 weeks
Presence of NAPLs: Don't know	Number of monitoring wells used: 17
Approximate annual O&M costs: \$180,000	Frequency of sampling: 4 times per year
Costs related to monitoring: \$18,000	Is plume migration controlled? Don't know
Approximate pumping rate: 30 gpm	Progress of aquifer restoration: Don't know
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)
Volatile organic compounds (VOCs)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

This form was completed by Douglas Sutton based on information gathered during the demonstration project and the RSE visit in 2000.

Treatment processes include GAC and discharge to the POTW.

FCX Statesville
 Statesville, NC (Region 4)
 CERCLIS ID NCD095458527

Contact Information

RPM Ken Mallory 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8802 (phone) mallory.ken@epa.gov	State Regulator Nile Testerman NCDENR 401 Oberlin Road Raleigh, NC 27605 919-733-2801 (phone) 919-733-4811 (fax) nile.testerman@ncmail.net	Contractor Ralph McKeen Roy F. Weston Atlanta, GA 770-263-5438 (phone)
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/27/93</td></tr> <tr><td>Date of last modification to ROD:</td><td>9/30/96</td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Don't know</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$150,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$40,000</td></tr> <tr><td>Approximate pumping rate:</td><td>20 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/27/93	Date of last modification to ROD:	9/30/96	Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Don't know	Approximate annual O&M costs:	\$150,000	Costs related to monitoring:	\$40,000	Approximate pumping rate:	20 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	<table> <tr><td>Number of extraction wells:</td><td>10</td></tr> <tr><td>Date of construction completion:</td><td></td></tr> <tr><td>Date of operational and functional:</td><td>5/1998</td></tr> <tr><td>Expected date of turnover to state:</td><td>5/2008</td></tr> <tr><td>Expected date of completion:</td><td>5/2008</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>18</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Don't know</td></tr> <tr><td>Progress of aquifer restoration:</td><td>less than 20% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	10	Date of construction completion:		Date of operational and functional:	5/1998	Expected date of turnover to state:	5/2008	Expected date of completion:	5/2008	Approximate downtime per year:		Number of monitoring wells used:	18	Frequency of sampling:	4 times per year	Is plume migration controlled?	Don't know	Progress of aquifer restoration:	less than 20% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																												
Date original ROD was signed:	9/27/93																																												
Date of last modification to ROD:	9/30/96																																												
Type of ROD:	Final																																												
Status of P&T system:	Operational																																												
Primary goal of system:	Containment & Restoration																																												
Presence of NAPLs	Don't know																																												
Approximate annual O&M costs:	\$150,000																																												
Costs related to monitoring:	\$40,000																																												
Approximate pumping rate:	20 gpm																																												
Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient																																												
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Date of construction completion:																																													
Date of operational and functional:	5/1998																																												
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Approximate downtime per year:																																													
Number of monitoring wells used:	18																																												
Frequency of sampling:	4 times per year																																												
Is plume migration controlled?	Don't know																																												
Progress of aquifer restoration:	less than 20% restored																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

Pesticides
 Volatile organic compounds (VOCs)
 PCE

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project. Data on the extraction, treatment, and monitoring systems were obtained from the report resulting from the RSE conducted in 2000.

Miami Drum
Hialeah, FL (Region 4)
CERCLIS ID FLD076027820

Contact Information

RPM Jim McGuire 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8911 (phone) mcguire.jim@epa.gov	State Regulator	Contractor
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$		Number of extraction wells: 40
Date original ROD was signed: 1/0/00		Date of construction completion: 9/1992
Date of last modification to ROD:		Date of operational and functional: 9/1992
Type of ROD: Final		Expected date of turnover to state: 9/2002
Status of P&T system: Operational		Expected date of completion:
Primary goal of system: Water supply		Approximate downtime per year:
Presence of NAPLs: Not present		Number of monitoring wells used:
Approximate annual O&M costs: \$1,000,000		Frequency of sampling:
Costs related to monitoring:		Is plume migration controlled?
Approximate pumping rate: 104000 gpm		Progress of aquifer restoration:
Result of previous evaluation of performance/effectiveness:		Difficulty (due to social/political factors) of implementing minor/major changes:

Contaminants of Concern:

Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Douglas Sutton completed this form based on a phone interview with Jim McGuire.

No current RPM is appointed to this site. Jim McGuire is the point of contact.

EPA Region 4 provides \$1,000,000 per year to Dade County to operate 40 air strippers that have been installed to remediate aquifer and to treat water extracted from public well fields and used for water supply.

The total number of wells is not known but this number is likely similar to number of airstrippers (40).

Palmetto Wood
 Lexington, SC (Region 4)
 CERCLIS ID SCD003362217

Contact Information

RPM Al Cherry 61 Forsyth Street, SW Atlanta, GA 30303-8960 404-562-8807 (phone) cherry.al@epa.gov	State Regulator Keisha Long SCDH 21 Bull Street Columbia, SC 29201 803-896-4073 (phone)	Contractor Tim Eggert CDM 2030 Powers Ferry Road, Suite 325 Atlanta, GA 30339 678-202-8912 (phone) 770-951-8910 (fax) eggertj@cdm.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/87 Date of last modification to ROD: 8/4/93 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$300,000 Costs related to monitoring: \$25,000 Approximate pumping rate: 130 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 10 Date of construction completion: 5/1997 Date of operational and functional: 1/1998 Expected date of turnover to state: 5/2008 Expected date of completion: 5/2008 Approximate downtime per year: 4 weeks Number of monitoring wells used: 8 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: 20% to 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Chromium

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

This form was completed by Doug Sutton based on a phone interview with Al Cherry and Tim Eggert.

11 of 17 original wells have met clean-up standards

expected time to remediation completion is an estimate

treatment processes include pH adjustment and discharge to the POTW

REGION 5 INFORMATION SHEETS

Arrowhead Refinery

Hermantown, MN (Region 5)
CERCLIS ID MND980823975

Contact Information

RPM Darryl Owens 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-7089 (phone) owens.darryl@epa.gov	State Regulator Maureen Johnson MPCA 520 Lafayette Road St. Paul, MN 55155-4194 651-296-7353 (phone) maureen.johnson@pca.state.mn.us	Contractor Gary Schroehner Delta Environmental 2770 Cleveland Ave Roseville, MN 55113-1127 651-639-9449 (phone)
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Type of Fund-lead Site:</td> <td>State-lead w/ Fund \$</td> </tr> <tr> <td>Date original ROD was signed:</td> <td>9/30/86</td> </tr> <tr> <td>Date of last modification to ROD:</td> <td>2/9/94</td> </tr> <tr> <td>Type of ROD:</td> <td>Final</td> </tr> <tr> <td>Status of P&T system:</td> <td>Operational</td> </tr> <tr> <td>Primary goal of system:</td> <td>Containment & Restoration</td> </tr> <tr> <td>Presence of NAPLs</td> <td>Not present</td> </tr> <tr> <td>Approximate annual O&M costs:</td> <td>\$70,000</td> </tr> <tr> <td>Costs related to monitoring:</td> <td>\$10,000</td> </tr> <tr> <td>Approximate pumping rate:</td> <td>25 gpm</td> </tr> <tr> <td>Result of previous evaluation of performance/effectiveness:</td> <td>Evaluated and found sufficient</td> </tr> </table>	Type of Fund-lead Site:	State-lead w/ Fund \$	Date original ROD was signed:	9/30/86	Date of last modification to ROD:	2/9/94	Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$70,000	Costs related to monitoring:	\$10,000	Approximate pumping rate:	25 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Number of extraction wells:</td> <td>0</td> </tr> <tr> <td>Date of construction completion:</td> <td>6/1993</td> </tr> <tr> <td>Date of operational and functional:</td> <td>7/1993</td> </tr> <tr> <td>Expected date of turnover to state:</td> <td>7/2003</td> </tr> <tr> <td>Expected date of completion:</td> <td>4/2004</td> </tr> <tr> <td>Approximate downtime per year:</td> <td>0 weeks</td> </tr> <tr> <td>Number of monitoring wells used:</td> <td>18</td> </tr> <tr> <td>Frequency of sampling:</td> <td>2 times per year</td> </tr> <tr> <td>Is plume migration controlled?</td> <td>Yes</td> </tr> <tr> <td>Progress of aquifer restoration:</td> <td>more than 80% restored</td> </tr> <tr> <td>Difficulty (due to social/political factors) of implementing minor/major changes:</td> <td>minor/moderate</td> </tr> </table>	Number of extraction wells:	0	Date of construction completion:	6/1993	Date of operational and functional:	7/1993	Expected date of turnover to state:	7/2003	Expected date of completion:	4/2004	Approximate downtime per year:	0 weeks	Number of monitoring wells used:	18	Frequency of sampling:	2 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	more than 80% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
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Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate																																													

Contaminants of Concern:

VOCs, PNAs, VC
Pentachlorophenol (PCP)

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and on phone interviews with Darryl Owens and Maureen Johnson in 5/2001.

There are no extraction wells, but there is over 700 feet of trenches at a depth of 25 feet.

Better Brite Plating Co. Chrome and Zinc Shops

Depere, WI (Region 5)
CERCLIS ID WIT560010118

Contact Information

RPM John Peterson 77 West Jackson Boulevard Chicago, IL 60604-3507 312-353-1264 (phone) peterson.john@epa.gov	State Regulator Keld Lauredsen WDNR 1125 Military Ave. Box 10448 Green Bay, WI 54307 920-492-5921 (phone) 920-492-5913 (fax) lauredsenk@dnr.state.wi.us	Contractor
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 9/24/96 Date of last modification to ROD: Type of ROD: Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$36,000 Costs related to monitoring: \$10,000 Approximate pumping rate: 0 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 0 Date of construction completion: 8/2000 Date of operational and functional: 4/1993 Expected date of turnover to state: 6/2006 Expected date of completion: 4/2030 Approximate downtime per year: 0 weeks Number of monitoring wells used: 14 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/severe
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Contaminants of Concern:

Chromium

Treatment Processes:

Metals precipitation yes
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and on phone interviews with John Peterson and Keld Lauredsen.

This site consists of two different contaminant areas. The P&T system operated in the chrome shop from 1993 to 1999 and was moved to the zinc shop in 2000.

DNR provides the oversight; therefore, a contractor contact was not given.

The site has no extraction wells but has two trenches.

Douglass Road
Mishawaka, IN (Region 5)
CERCLIS ID IND980607881

Contact Information

RPM Dion Novak 77 West Jackson Blvd. Chicago, IL 60604-3507 312-886-4737 (phone) Novak.Dion@epa.gov	State Regulator Kevin Herron 317-234-0354 (phone)	Contractor Dan Plomb CH2MHILL 135 S. 84th Street Suite 325 Milwaukee, WI 53214 414-272-2426 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 5/3/96 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Installed Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$120,000 Costs related to monitoring: \$60,000 Approximate pumping rate: 1000 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 5 Date of construction completion: 9/2000 Date of operational and functional: 7/2001 Expected date of turnover to state: 9/2010 Expected date of completion: 10/2030 Approximate downtime per year: 2 weeks Number of monitoring wells used: 36 Frequency of sampling: 2 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Arsenic
TCE and Vinyl chloride
Tetrahydrofuran
Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

Site is currently operating at approximately 60%.

Duell and Gardner
 Dalton Township, MI (Region 5)
 CERCLIS ID MID980504716

Contact Information

RPM Kyle Rogers 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-1995 (phone) rogers.kyle@epa.gov	State Regulator Walelign Wagaw MDEQ P.O. Box 30426 Lansing, MI 48909 517-373-9896 (phone)	Contractor Tim Gouger USACE, Rapid Response 12565 West Center Road Omaha, NE 68144-3869 402-293-2514 (phone) 402-291-8177 (fax) Timothy.P.Gouger@nwo02.usace.army.mil
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/93 Date of last modification to ROD: 5/31/01 Type of ROD: Interim Status of P&T system: Installed Primary goal of system: Restoration Presence of NAPLs: Not present Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: 80 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 2 Date of construction completion: 7/2001 Date of operational and functional: 7/2001 Expected date of turnover to state: 7/2011 Expected date of completion: 7/2007 Approximate downtime per year: 0 weeks Number of monitoring wells used: 25 Frequency of sampling: 2 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Anthracene
 Carbozol
 Chloromethane
 N-N dimethylanaline, Gentin Violet

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and on a phone interview with Kyle Rogers in 5/2001.

One well is currently installed and pumping. Another well will be installed in July 2001 marking the beginning of O&F.

Eau Claire Municipal Wel Field

Eau Claire, WI (Region 5)
CERCLIS ID WID980820054

Contact Information

RPM Sheri Bianchin 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-4745 (phone) bianchin.sheri@epa.gov	State Regulator	Contractor
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 3/31/88 Date of last modification to ROD: 8/1/90 Type of ROD: Status of P&T system: Operational Primary goal of system: Presence of NAPLs Don't know Approximate annual O&M costs: \$175,000 Costs related to monitoring: Approximate pumping rate: 4500 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 14 Date of construction completion: 6/1987 Date of operational and functional: 3/1991 Expected date of turnover to state: Expected date of completion: Approximate downtime per year: Number of monitoring wells used: Frequency of sampling: Is plume migration controlled? Don't know Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: severe/severe
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Contaminants of Concern:

Trans 1,2-Dichloroethylene
Vernolate

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information obtained from

1) www.epa.gov/R5Super/npl/wisconsin/WID980820054.htm

and

2) Information Paper #61: Contaminated Land and Brownfields Cleanup Programs
State of Wisconsin Legislative Bureau, 1/2001

The EPA RPM was not available for comment.

Reference on stated that as of 6/30/00 the EPA had spent \$5.9M dollars on the site and Wisconsin had spent \$175K on the site. If the state assumes approximately 10% of the O&M costs and the site ran for approximately 9 years (up to 6/30/00) then this translates to an approximate O&M cost of \$175K. This approximation is entered as the approximate O&M cost for item 15.

System goals appear to be both restoration and water supply.

La Salle Electrical Utilities

La Salle, IL (Region 5)
CERCLIS ID ILD980794333

Contact Information

RPM Steve Padovani 77 West Jackson Boulevard Chicago, IL 60604-3507 312-353-6755 (phone) padovani.steven@epa.gov	State Regulator Rich Lang IEPA P.O. Box 1515 La Salle, IL 61301 815-223-6836 (phone) epa4137@epa.state.il.us	Contractor Neil Brown Ecology and Environment 33 N. Deerborne St. Chicago, IL 60602 312-578-9243 (phone)
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 8/29/86 Date of last modification to ROD: 3/30/88 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$230,000 Costs related to monitoring: \$50,000 Approximate pumping rate: 20 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 0 Date of construction completion: 2/1998 Date of operational and functional: 3/1994 Expected date of turnover to state: 3/2004 Expected date of completion: 3/2005 Approximate downtime per year: 2 weeks Number of monitoring wells used: 25 Frequency of sampling: 4 times per year Is plume migration controlled? Yes Progress of aquifer restoration: 20% to 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Transuranic wastes
PCB, TCA

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

This form was completed by Douglas Sutton based information collected during the demonstration project in 4/2000 and on a phone interview with Steve Padovani in 4/2001.

There are no extraction wells, but there are 4 trenches.

Treatment processes include treatment with liquid and vapor phase carbon and discharge to the POTW.

Long Prairie Groundwater Contamination

Long Prairie, MN (Region 5)
CERCLIS ID MND980904072

Contact Information

RPM Sheila Sullivan 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-5251 (phone) sullivan.sheila@epa.gov	State Regulator Mariam Horneff MPCA 520 Lafayette Road St. Paul, MN 55155-4194 651-296-7228 (phone)	Contractor Bill Bangsund Barr Engineering 612-832-2738 (phone)
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System Information and Data

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Contaminants of Concern:

Dichloroethylene
 Trichloroethylene (TCE)/Tetrachloroethylene (PCE)
 VC

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and on phone interviews with Sheila Sullivan and Mariam Horneff in 5/2001.

MacGillis and Gibbs/Bell Lumber & Pole

New Brighton, MN (Region 5)
CERCLIS ID MND006192694

Contact Information

RPM Darryl Owens 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-7089 (phone) owens.darryl@epa.gov	State Regulator Nile Fellows MPCA 520 Lafayette Road St. Paul, MN 55155-4194 651-296-6300 (phone)	Contractor Larry Campbell Black and Veatch Chicago, IL
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/30/91 Date of last modification to ROD: 9/22/94 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs Observed Approximate annual O&M costs: \$300,000 Costs related to monitoring: Approximate pumping rate: 60 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 14 Date of construction completion: 10/1999 Date of operational and functional: 10/1999 Expected date of turnover to state: 10/2009 Expected date of completion: 10/2029 Approximate downtime per year: Number of monitoring wells used: 30 Frequency of sampling: 2 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/severe
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Contaminants of Concern:

Chromium
 Pentachlorophenol (PCP)
 carcinogenic PAHs

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment yes
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2001.

Data regarding the extraction, treatment, and monitoring systems was updated using information from the report generated from the RSE conducted in 2000.

Oconomowoc Electroplating

Ashippun, WI (Region 5)
CERCLIS ID WID006100275

Contact Information

RPM Steve Padovani 77 West Jackson Boulevard Chicago, IL 60604-3507 312-353-6755 (phone) padovani.steven@epa.gov	State Regulator Paul Kozol WDNR 3911 Fish Hatchery Road Fitchburg, WI 53711 608-275-3301 (phone) 608-275-3338 (fax) kozolp@dnr.state.wi.us	Contractor Craig Evans USACE, St. Paul District 190 Fifth Street East St. Paul, MN 55101-1638 651-290-5594 (phone) 651-290-5800 (fax) Craig.O.Evans@mvp02.usace.army.mil
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Contaminants of Concern:

Cadmium
Cyanide
Volatile organic compounds (VOCs)

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000.

Data regarding the extraction, treatment, and monitoring systems were updated based on the report generated from the RSE conducted in 2000.

Onalaska Municipal Landfill

Onalaska, WI (Region 5)
CERCLIS ID WID980821656

Contact Information

RPM Timothy Prendiville 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-5122 (phone) prendiville.timothy@epa.gov	State Regulator Dave Carper WDNR 3550 Mormon Coulee Road La Crosse, WI 54601 608-785-9973 (phone) 608-785-9990 (fax) carped@dnr.state.wi.us	Contractor Jim Fisher CH2MHill Milwaukee, WI 414-272-1052 (phone) jfisher1@ch2m.com
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>8/14/90</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$200,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$80,000</td></tr> <tr><td>Approximate pumping rate:</td><td>560 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	8/14/90	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$200,000	Costs related to monitoring:	\$80,000	Approximate pumping rate:	560 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient		<table style="width: 100%; border-collapse: collapse;"> <tr><td>Number of extraction wells:</td><td>5</td></tr> <tr><td>Date of construction completion:</td><td>7/1994</td></tr> <tr><td>Date of operational and functional:</td><td>8/1995</td></tr> <tr><td>Expected date of turnover to state:</td><td>6/2004</td></tr> <tr><td>Expected date of completion:</td><td>7/2002</td></tr> <tr><td>Approximate downtime per year:</td><td>1 week</td></tr> <tr><td>Number of monitoring wells used:</td><td>10</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Yes</td></tr> <tr><td>Progress of aquifer restoration:</td><td>more than 80% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	5	Date of construction completion:	7/1994	Date of operational and functional:	8/1995	Expected date of turnover to state:	6/2004	Expected date of completion:	7/2002	Approximate downtime per year:	1 week	Number of monitoring wells used:	10	Frequency of sampling:	2 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	more than 80% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																													
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Progress of aquifer restoration:	more than 80% restored																																													
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																													

Contaminants of Concern:

Benzo(a)pyrene
 Trans 1,2-Dichloroethylene
 Volatile chlorinated organics

Treatment Processes:

Metals precipitation yes
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and a phone interview with Timothy Prendiville in 5/2001.

Ott/Story/Cordova Chem Co.

Dalton Township, MI (Region 5)
CERCLIS ID MID060174240

Contact Information

<p>RPM John Fagiolo 77 West Jackson Blvd. Chicago, IL 60604-3507 312-886-0800 (phone) fagiolo.john@epa.gov</p>	<p>State Regulator Lisa Summerfield Michigan Dept. of Env.Quality P.O. Box 30426 Lansing, MI 48909 517-335-3388 (phone) summerfl@state.mi.us</p>	<p>Contractor Brain Bouwhuis USACE-Detroit District PO Box 629 Grand Haven, MI 49417 231-766-2007 (phone) 231-766-3287 (fax) Brian.j.Bouwhuis@usace.army.mil</p>
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System Information and Data

<p>Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/29/89 Date of last modification to ROD: 9/29/90 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$2,400,000 Costs related to monitoring: \$250,000 Approximate pumping rate: 700 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 10 Date of construction completion: 2/1996 Date of operational and functional: 2/1996 Expected date of turnover to state: 8/2010 Expected date of completion: 8/2030 Approximate downtime per year: 4 weeks Number of monitoring wells used: 30 Frequency of sampling: 4 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: 20% to 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

1,2-Dichloroethane
1,2-Dichloroethylene (DCE)
Organophosphorus pesticides (4,4'-DDT, lindane)
Vapona
vinyl chloride

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment yes
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

This form was completed by Douglas Sutton based on a phone interview with John Fagiolo.

The subcontractor for this site is Carl Jager at Fishbeck Topmpson (231-766-9227).

With regard to the gpm, the actual gpm is 700, while the peak is 1200.

Another extraction well will be installed shortly.

Peerless Plating

Muskegon Township, MI (Region 5)
CERCLIS ID MID006031348

Contact Information

RPM Mike Ribordy 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-4592 (phone) ribordy.mike@epa.gov	State Regulator	Contractor Mike Johnson Tetra Tech 312-856-8796 (phone)
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System Information and Data

Type of Fund-lead Site:		Number of extraction wells:	6
Date original ROD was signed:	9/21/92	Date of construction completion:	11/2000
Date of last modification to ROD:		Date of operational and functional:	
Type of ROD:	Final	Expected date of turnover to state:	
Status of P&T system:	Installed	Expected date of completion:	
Primary goal of system:	Restoration	Approximate downtime per year:	
Presence of NAPLs	Don't know	Number of monitoring wells used:	6
Approximate annual O&M costs:	\$400,000	Frequency of sampling:	4 times per year
Costs related to monitoring:		Is plume migration controlled?	
Approximate pumping rate:	165 gpm	Progress of aquifer restoration:	
Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor

Contaminants of Concern:

Cadmium
Trichloroethylene (TCE)

Treatment Processes:

Metals precipitation yes
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment yes
other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and

www.epa.gov/R5Super/npl/michigan/MID006031348.htm

The RPM was not successfully contacted.

U.S. Aviox

Howard Township, MI (Region 5)
CERCLIS ID MID980794556

Contact Information

RPM Ken Glatz 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-1434 (phone) glatz.ken@epa.gov	State Regulator Judy Gapp MDEQ P.O. Box 30426 Lansing, MI 48909 517-335-3391 (phone) 517-335-4887 (fax) gappj@state.mi.us	Contractor Jack Brunner Tetra Tech 312-856-8788 (phone)
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System Information and Data

Type of Fund-lead Site: State-lead w/ Fund \$	Number of extraction wells: 6
Date original ROD was signed: 9/7/88	Date of construction completion: 9/1993
Date of last modification to ROD:	Date of operational and functional: 9/1993
Type of ROD: Final	Expected date of turnover to state: 9/2003
Status of P&T system: Operational	Expected date of completion: 9/2003
Primary goal of system: Restoration	Approximate downtime per year: 1 week
Presence of NAPLs: Not present	Number of monitoring wells used: 30
Approximate annual O&M costs: \$300,000	Frequency of sampling: 4 times per year
Costs related to monitoring:	Is plume migration controlled? No
Approximate pumping rate: 170 gpm	Progress of aquifer restoration: 20% to 80% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
diethylether

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and on phone interviews with Ken Glatz and Judy Gapp.

Verona Well Field
 Battle Creek, MI (Region 5)
 CERCLIS ID MID980793806

Contact Information

RPM Richard Boice 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-4740 (phone) boice.richard@epa.gov	State Regulator Beth O'Brien MDEQ P.O. Box 30426 Lansing, MI 48909 517-335-3908 (phone) obrienea@state.mi.us	Contractor
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>8/12/85</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$225,000</td></tr> <tr><td>Costs related to monitoring:</td><td></td></tr> <tr><td>Approximate pumping rate:</td><td>250 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	8/12/85	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$225,000	Costs related to monitoring:		Approximate pumping rate:	250 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated	<table> <tr><td>Number of extraction wells:</td><td>6</td></tr> <tr><td>Date of construction completion:</td><td>6/1996</td></tr> <tr><td>Date of operational and functional:</td><td>6/1996</td></tr> <tr><td>Expected date of turnover to state:</td><td>6/2006</td></tr> <tr><td>Expected date of completion:</td><td>Indefinite</td></tr> <tr><td>Approximate downtime per year:</td><td>2 weeks</td></tr> <tr><td>Number of monitoring wells used:</td><td>10</td></tr> <tr><td>Frequency of sampling:</td><td>1 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Yes</td></tr> <tr><td>Progress of aquifer restoration:</td><td>more than 80% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/moderate</td></tr> </table>	Number of extraction wells:	6	Date of construction completion:	6/1996	Date of operational and functional:	6/1996	Expected date of turnover to state:	6/2006	Expected date of completion:	Indefinite	Approximate downtime per year:	2 weeks	Number of monitoring wells used:	10	Frequency of sampling:	1 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	more than 80% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
Type of Fund-lead Site:	EPA-lead																																												
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Date of construction completion:	6/1996																																												
Date of operational and functional:	6/1996																																												
Expected date of turnover to state:	6/2006																																												
Expected date of completion:	Indefinite																																												
Approximate downtime per year:	2 weeks																																												
Number of monitoring wells used:	10																																												
Frequency of sampling:	1 times per year																																												
Is plume migration controlled?	Yes																																												
Progress of aquifer restoration:	more than 80% restored																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate																																												

Contaminants of Concern:

1,2-Dichloropropane
 Tin
 Trans 1,2-Dichloroethylene
 Volatile chlorinated organics

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment yes
 other/not sure

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project in 4/2000 and on phone interviews with Richard Boice and Beth O'Brien.

At times, NAPL is pulled in from offsite.

Wash King Laundry

Pleasant Plains Township, MI (Region 5)
CERCLIS ID MID980701247

Contact Information

RPM Russell Hart 77 West Jackson Boulevard Chicago, IL 60604-3507 312-886-4844 (phone) hart.russell@epa.gov	State Regulator Sally Beebe MDEQ-ERD P.O. Box 30426 Lansing, MI 48909 517-373-4110 (phone) 517-335-4887 (fax) beebes@state.mi.us	Contractor Malcolm Pirnie 517-337-0111 (phone)
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Type of Fund-lead Site:</td> <td>State-lead w/ Fund \$</td> </tr> <tr> <td>Date original ROD was signed:</td> <td>3/31/93</td> </tr> <tr> <td>Date of last modification to ROD:</td> <td>7/31/96</td> </tr> <tr> <td>Type of ROD:</td> <td>Final</td> </tr> <tr> <td>Status of P&T system:</td> <td>Operational</td> </tr> <tr> <td>Primary goal of system:</td> <td>Restoration</td> </tr> <tr> <td>Presence of NAPLs</td> <td>Don't know</td> </tr> <tr> <td>Approximate annual O&M costs:</td> <td>\$75,000</td> </tr> <tr> <td>Costs related to monitoring:</td> <td>\$15,000</td> </tr> <tr> <td>Approximate pumping rate:</td> <td>250 gpm</td> </tr> <tr> <td>Result of previous evaluation of performance/effectiveness:</td> <td>Not evaluated</td> </tr> </table>	Type of Fund-lead Site:	State-lead w/ Fund \$	Date original ROD was signed:	3/31/93	Date of last modification to ROD:	7/31/96	Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Restoration	Presence of NAPLs	Don't know	Approximate annual O&M costs:	\$75,000	Costs related to monitoring:	\$15,000	Approximate pumping rate:	250 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 45%;">Number of extraction wells:</td> <td>5</td> </tr> <tr> <td>Date of construction completion:</td> <td>4/2001</td> </tr> <tr> <td>Date of operational and functional:</td> <td>4/2001</td> </tr> <tr> <td>Expected date of turnover to state:</td> <td>4/2011</td> </tr> <tr> <td>Expected date of completion:</td> <td>4/2021</td> </tr> <tr> <td>Approximate downtime per year:</td> <td>0 weeks</td> </tr> <tr> <td>Number of monitoring wells used:</td> <td>23</td> </tr> <tr> <td>Frequency of sampling:</td> <td>2 times per year</td> </tr> <tr> <td>Is plume migration controlled?</td> <td>Don't know</td> </tr> <tr> <td>Progress of aquifer restoration:</td> <td>less than 20% restored</td> </tr> <tr> <td>Difficulty (due to social/political factors) of implementing minor/major changes:</td> <td>minor/moderate</td> </tr> </table>	Number of extraction wells:	5	Date of construction completion:	4/2001	Date of operational and functional:	4/2001	Expected date of turnover to state:	4/2011	Expected date of completion:	4/2021	Approximate downtime per year:	0 weeks	Number of monitoring wells used:	23	Frequency of sampling:	2 times per year	Is plume migration controlled?	Don't know	Progress of aquifer restoration:	less than 20% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
Type of Fund-lead Site:	State-lead w/ Fund \$																																													
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Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate																																													

Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation	
Air stripping	yes
Biological treatment	
UV oxidation	
Carbon adsorption	
Filtration	
Ion Exchange	
Reverse Osmosis	
Off-gas treatment	yes
other/not sure	

Comments:

This form was completed by Douglas Sutton based on information collected during the demonstration project and a phone interview with Russell Hart.

There are 8 monitoring wells sampled quarterly and 14 monitoring wells sampled annually for a total of 46 samples per year. The 23 wells and semi-annual sampling were input to suggest 46 samples per year.

REGION 6 INFORMATION SHEETS

American Creosote Works

Winnfield, LA (Region 6)
CERCLIS ID LAD000239814

Contact Information

RPM Stacey Bennett 1445 Ross Avenue Dallas, TX 75202-2733 214-665-6729 (phone) 214-665-6660 (fax) bennett.stacey@epa.gov	State Regulator Janaye Danage Louisiana Dept. of Env. Quality P.O. Box 82178 Baton Rouge, LA 70884-2178 225-765-0475 (phone) 225-765-0484 (fax) janaye_d@deq.state.la.us	Contractor Bill Faught CH2MHill 7600 W. Tidwell, Suite 400 Houston, TX 77040-5719 713-462-0161 (phone) 713-462-0165 (fax) bfaught@ch2m.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 4/28/93 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment Presence of NAPLs: Observed Approximate annual O&M costs: \$360,000 Costs related to monitoring: \$360,000 Approximate pumping rate: 5 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient		Number of extraction wells: 18 Date of construction completion: 2/1997 Date of operational and functional: 2/1997 Expected date of turnover to state: 2/2027 Expected date of completion: 2/2027 Approximate downtime per year: 1 week Number of monitoring wells used: 18 Frequency of sampling: 4 times per year Is plume migration controlled? Yes Progress of aquifer restoration: Not a goal Difficulty (due to social/political factors) of implementing minor/major changes: minor/severe
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Contaminants of Concern:

Chlorinated polyaromatic hydrocarbons (CPAHs)
Creosote and petroleum hydrocarbons

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment yes
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

The ROD states that the in-situ bioremediation and groundwater p&T as a long-term remedial action for this site. According to the ROD and the State Superfund Contract(SSC), the EPA will finance 90% of the in-situ bioremediation system and the GW pump and treat system until the ROD performance criteria are met. The SSC states that, "there are no technically-separable construction/operational functions associated specifically with groundwater pump and treat since this will occur incidentally with in-situ soil treatment. Therefore, the time limitation (10 years) stated in 40 CFR Section 300.435(f)(3) concerning the treatment of groundwater is not applicable." This is the reason why I did not put a date in which the pump and treatment system was deemed functional and operational, because this is not applicable for this site. What the ROD is saying in plain English is that the in-situ bioremediation treatment is the primary treatment. Until we reach the goals of the in-situ bioremediation, it will be impossible to determine whether groundwater goals are being met. The success of the groundwater P& T is actually predicated on the successful completion of the in-situ bioremediation treatment.

Also, note that the State (LDEQ) does not assume O& M, according to the ROD, until in-situ bioremediation is completed, which is 20 years from construction. After that time, the

A five-year review was completed in August 2000. We are currently in the process of taking additional sampling parameters and making adjustments to the plant to determine if

If you need more information, call me at (214)665-6729. Stacey Bennett, RPM Region 6

Bayou Bonfouca
 Slidell, LA (Region 6)
 CERCLIS ID LAD980745632

Contact Information

RPM Katrina Coltrain 1445 Ross Avenue Dallas, TX 75202 214-665-8143 (phone) 214-665-6660 (fax) coltrain.katrina@epa.gov	State Regulator Rich Johnson Louisiana Dept.of Env.Quality P.O. Box 82282 Baton Rouge, LA 70884-2282 225-765-0487 (phone) 225-765-0435 (fax) rich_j@deq.state.la.us	Contractor Lee Guillory USACE-New Orleans District P.O. Box 60267 New Orleans, LA 70160-0267 504-862-2934 (phone) 504-862-2896 (fax) lee.a.guillory@mvn02.usace.army.mil
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 3/31/87 Date of last modification to ROD: 7/20/95 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$402,000 Costs related to monitoring: Approximate pumping rate: 22.5 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Number of extraction wells: 44 Date of construction completion: 7/2000 Date of operational and functional: 3/2001 Expected date of turnover to state: 7/2003 Expected date of completion: 7/2021 Approximate downtime per year: 0 weeks Number of monitoring wells used: 11 Frequency of sampling: 12 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Benzo(a)anthracene
 Benzo(a)pyrene
 Benzo(b)fluoranthene
 Benzo(k)fluoranthene
 Indeno(1,2,3-cd)pyrene
 Chrysene

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments to Bayou Bonfouca:

Note to questions:

#9--An ESD was signed on February 5, 1990 which made adjustments to the ROD. The ROD amendment only stated that the incinerator at Bonfouca would be used to treat soils from Southern Ship Superfund site.

#13 and 14-- The cost is estimated between 360K to 444K per year and is all attributable to LTRA.

#15--There are three arrays on site with 44 individual wells. Individually the wells pump at 1/4gpm. Each array is estimated at 5-10gpm. The pumping rate is dependent on the drawdown and is adjusted to maintain a -4fmsl.

#17--Array 2 was completed in 1991 and brought on line that same year. Based on the ESD and subsequent reports, new wells were constructed and completed in 2000.

#18--The EPA, along with LDEQ, will meet to determine O&F March 2001.

#20--The aquifer is not currently used and will unlikely be used in the future as a drinking water source due to insufficient yield. The ESD states that a risk based 10-4 to 10-6 level will be used or whatever is technologically feasible. The main objective of the system is to contain migration and prevent recontamination of the bayou.

#21--There is not planned down time for the system. The system is set up with bypass measures when maintenance is needed. The system is only shut down when there is a

#22--Treatment involves an oil/water separator, sand filter, oleophilic filter, granular activated carbon, and post aeration.

#24--The monitoring wells are monitored daily to ensure that the -4fmsl drawdown is maintained. These wells are surveyed once a month to monitor subsidence. The system is

#27 and #28--reports on the effectiveness of the system was done and resulted in the upgrades to the system and the installation of additional wells which was completed in 200

Cimarron Mining
 Carizozo, NM (Region 6)
 CERCLIS ID NMD980749378

Contact Information

RPM Petra Sanchez 1445 Ross Ave. Suite 1200 6SF-LT Dallas, TX 75202-2733 214-665-6686 (phone) 214-665-6660 (fax) sanchez.petra@epa.gov	State Regulator David Henry New Mexico Env. Department PO Box 26110 1190 St. Francis Drive Santa Fe, NM 87505 214-827-0037 (phone) 214-827-2965 (fax) david_henry@nmev.state.nm.us	Contractor Brian D. Jordan USACE 4101 Jefferson Plaza NE Albuquerque, NM 87109 505-342-3472 (phone) 505-342-3208 (fax) brian.D.Joran@spao2.usace.army.mil
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/21/90 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$1,000,000 Costs related to monitoring: \$60,000 Approximate pumping rate: 1 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient	Number of extraction wells: 3 Date of construction completion: 4/1991 Date of operational and functional: 12/1991 Expected date of turnover to state: 10/2004 Expected date of completion: Indefinite Approximate downtime per year: 4 weeks Number of monitoring wells used: 3 Frequency of sampling: 4 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: moderate/severe
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Contaminants of Concern:

Nitrate

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

Geneva Industries
Houston, TX (Region 6)
CERCLIS ID TXD980748453

Contact Information

RPM Ruben Moya 1445 Ross Ave., Suite 1200 Dallas, TX 75202 214-665-2755 (phone) 214-665-6660 (fax) moya.ruben@epa.gov	State Regulator James Sher TNRCC P.O.Box 13087 Austin, TX 78711-3087 512-239-2444 (phone) 512-239-2450 (fax) JSher@tnrcc.state.tx.us	Contractor Sanjay Ramabhadran Lockwood, Andrews & Newman Inc. 1500 Citywest Houston, TX 77042 713-266-6900 (phone) 713-266-8971 (fax) sanjay@lan-inc.com
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System Information and Data

Type of Fund-lead Site:	State-lead w/ Fund \$	Number of extraction wells:	13
Date original ROD was signed:	9/18/86	Date of construction completion:	4/1993
Date of last modification to ROD:		Date of operational and functional:	7/1993
Type of ROD:	Final	Expected date of turnover to state:	1/2004
Status of P&T system:	Operational	Expected date of completion:	1/2004
Primary goal of system:	Containment & Restoration	Approximate downtime per year:	52 weeks
Presence of NAPLs	Not present	Number of monitoring wells used:	13
Approximate annual O&M costs:	\$240,000	Frequency of sampling:	2 times per year
Costs related to monitoring:	\$240,000	Is plume migration controlled?	Yes
Approximate pumping rate:	5 gpm	Progress of aquifer restoration:	Don't know
Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate

Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)
PCB, Benzene, Toluene, Chlorobenzene

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

NOTE

The Geneva Superfund Site has remained "shutdown" due to contractual problems between contractor and sub-contractor. The amount of time site has been shutdown is now approximately 1 year.

City of Perryton Well #2

Perryton, TX (Region 6)
CERCLIS ID TX0001399435

Contact Information

RPM Vincent Malott 1445 Ross Avenue Dallas, TX 75202 214-665-8313 (phone) 214-665-6660 (fax) malott.vincent@epa.gov	State Regulator Diane Poteet TNRCC P.O. Box 13087 Austin, TX 78711 512-239-2502 (phone) 512-239-2450 (fax) dpoteet@tnrcc.state.tx.us	Contractor Peter van Noort CH2M Hill 5339 Alpha Road, Suite 300 Dallas, TX 75240 972-980-2170 (phone) 972-385-0846 (fax) pvannoor@ch2m.com
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System Information and Data

Type of Fund-lead Site:	EPA-lead	Number of extraction wells:	1
Date original ROD was signed:	9/29/99	Date of construction completion:	8/2001
Date of last modification to ROD:		Date of operational and functional:	8/2003
Type of ROD:	Interim	Expected date of turnover to state:	8/2013
Status of P&T system:	Design	Expected date of completion:	8/2023
Primary goal of system:	Containment	Approximate downtime per year:	
Presence of NAPLs	Not present	Number of monitoring wells used:	10
Approximate annual O&M costs:	\$37,000	Frequency of sampling:	2 times per year
Costs related to monitoring:		Is plume migration controlled?	
Approximate pumping rate:	150 gpm	Progress of aquifer restoration:	
Result of previous evaluation of performance/effectiveness:	Not evaluated	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor

Contaminants of Concern:

Carbon tetrachloride
Chloroform

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

The interim remedy for this site consists of operating a municipal well (currently inactive) together with an air stripper to begin mass removal with limited hydraulic control of the contaminant plume. The treated water will be supplied to the city water supply system. The final remedy for this site has yet to be selected pending completion of the RI/FS reports and a final site-wide ROD scheduled for FY2001. A ground water monitoring schedule will also be selected pending the final site-wide remedy. There are no indications of a DNAPL based on the site data. The O&F date was set at 2 years past the construction date in case additional remedial measures are selected in the final ROD.

Midland Products
 Ola, AR (Region 6)
 CERCLIS ID ARD98074566

Contact Information

RPM Carlos Sanchez 1445 Ross Avenue Dallas, TX 75202 214-665-8507 (phone) 214-665-6660 (fax) sanchez.carlos@epa.gov	State Regulator Clark McWilliams Arkansas Dept. of Env. Quality P.O. Box 8913 Little Rock, AR 72219 501-682-0850 (phone) 501-682-0565 (fax) clarkm@adeq.state.ar.us	Contractor Russell Perry IT Corp. 13111 NW Highway, Suite 310 Houston, TX 77040-6392 713-996-4400 (phone) 713-939-9546 (fax) rperry@theitgroup.com
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>State-lead w/ Fund \$</td></tr> <tr><td>Date original ROD was signed:</td><td>3/24/88</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Suspected</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$180,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$60,000</td></tr> <tr><td>Approximate pumping rate:</td><td>3 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	State-lead w/ Fund \$	Date original ROD was signed:	3/24/88	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Restoration	Presence of NAPLs	Suspected	Approximate annual O&M costs:	\$180,000	Costs related to monitoring:	\$60,000	Approximate pumping rate:	3 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	<table> <tr><td>Number of extraction wells:</td><td>8</td></tr> <tr><td>Date of construction completion:</td><td>11/1993</td></tr> <tr><td>Date of operational and functional:</td><td>1/1994</td></tr> <tr><td>Expected date of turnover to state:</td><td>1/2004</td></tr> <tr><td>Expected date of completion:</td><td>1/2034</td></tr> <tr><td>Approximate downtime per year:</td><td>1 week</td></tr> <tr><td>Number of monitoring wells used:</td><td>20</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Yes</td></tr> <tr><td>Progress of aquifer restoration:</td><td>less than 20% restored</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	8	Date of construction completion:	11/1993	Date of operational and functional:	1/1994	Expected date of turnover to state:	1/2004	Expected date of completion:	1/2034	Approximate downtime per year:	1 week	Number of monitoring wells used:	20	Frequency of sampling:	2 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	less than 20% restored	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	State-lead w/ Fund \$																																												
Date original ROD was signed:	3/24/88																																												
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Type of ROD:	Final																																												
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Progress of aquifer restoration:	less than 20% restored																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

Anthracene
 Fluoranthene
 Naphthalene
 Pentachlorophenol (PCP)

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

North Cavalcade Superfund Site

Houston, TX (Region 6)
CERCLIS ID TXD980873343

Contact Information

<p>RPM Camille Hueni U.S. EPA Region 6, 1445 Ross Ave., 12th Floor, Dallas, TX 75202-7233 214-665-2231 (phone) 214-665-6660 (fax) hueni.camille@epa.gov</p>	<p>State Regulator Uche Ikemba TNRCC P.O. Box 13087; Mail Code 143 Austin, TX 78711-3087 512-239-2595 (phone) 512-239-2449 (fax) uikemba@tnrcc.state.tx.us</p>	<p>Contractor Frank Frey Foster Wheeler Env. Corporation 1001 S. Dairy Ashford Street, Ste. 210 Houston, TX 77077 281-597-4821 (phone) 281-596-0308 (fax) ffrey@fwenc.com</p>
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System Information and Data

<p>Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 6/28/88 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Installed Primary goal of system: Restoration Presence of NAPLs Observed Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: 19 gpm Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: 19 Date of construction completion: 3/2001 Date of operational and functional: 12/2005 Expected date of turnover to state: 12/2005 Expected date of completion: 12/2010 Approximate downtime per year: 52 weeks Number of monitoring wells used: 20 Frequency of sampling: 0 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

Acenaphthene
Acenaphthylene
Anthracene
Arsenic
Benzene and Toluene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
BTEX
Chrysene
Creosote and petroleum hydrocarbons
Dibenzofuran
DNAPL

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

The ground water treatment system has been out of operation since 1995 due to difficulties with DNAPL recovery. Prior to the system shut-down, the system treated 11,500,000 gallons of contaminated groundwater, and recovered 7,000 gallons of DNAPL.

The treatment system is undergoing modification and is expected to be complete and operational by March, 2001, at which time ground water monitoring will begin again (for this reason, information may have been entered as \$0.00). Once the system goes on-line, the pump & treat system will be further evaluated for remedial objectives.

Answers to questions 20-23 are unknown at this point; information was entered to allow form submittal.

Odessa Chromium #1

Odessa, TX (Region 6)
 CERCLIS ID TXD980867279

Contact Information

<p>RPM Ernest Franke 1445 Ross Avenue Dallas, TX 75202 214-665-8521 (phone) 214-665-6660 (fax) franke,ernest@epamail.epa.gov</p>	<p>State Regulator Uche Ikemba Texas Natural Resource Commission 12100 Park Circle Bldg. D , P.O. Box 13087 Austin, TX 78711 512-239-2595 (phone) 512-239-2449 (fax) uikemba@tnrcc.state.tx.us</p>	<p>Contractor William Brown Pacific Western Technologies, Ltd. 575 Oak Ridge Turnpike, Suite B-4 Oak Ridge, TN 37830 865-483-0554 (phone) 865-483-8838 (fax) pwtitd@usit.net</p>
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System Information and Data

<p>Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 3/18/88 Date of last modification to ROD: 11/23/99 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Restoration Presence of NAPLs: Not present Approximate annual O&M costs: \$500,000 Costs related to monitoring: \$8,000 Approximate pumping rate: 60 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient</p>	<p>Number of extraction wells: 6 Date of construction completion: 11/1993 Date of operational and functional: 12/2001 Expected date of turnover to state: 12/2001 Expected date of completion: 12/2001 Approximate downtime per year: 15 weeks Number of monitoring wells used: 7 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: more than 80% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

Chromium

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure yes

Comments:

In-Situ Ferrous Sulfate treatment added by an ESD to the ROD had enhanced remedial efforts

Sprague Road Ground Water Plume

Odessa, TX (Region 6)
CERCLIS ID TX0001407444

Contact Information

RPM Vincent Malott 1445 Ross Avenue Dallas, TX 75202 214-665-8313 (phone) 214-665-6660 (fax) malott.vincent@epa.gov	State Regulator Diane Poteet TNRCC P.O. Box 13087 Austin, TX 78711 512-239-2502 (phone) 512-239-2450 (fax) dpoteet@tnrcc.state.tx.us	Contractor Cristina Radu Tetra Tech EMI 6121 Indian School Road NE, Suite 205 Albuquerque, TX 87110 505-881-3188 (phone) 505-881-3283 (fax) raduc@ttemi.com
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>9/29/00</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Design</td></tr> <tr><td>Primary goal of system:</td><td>Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$1,200,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$80,000</td></tr> <tr><td>Approximate pumping rate:</td><td>200 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	9/29/00	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Design	Primary goal of system:	Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$1,200,000	Costs related to monitoring:	\$80,000	Approximate pumping rate:	200 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated		<table style="width: 100%; border-collapse: collapse;"> <tr><td>Number of extraction wells:</td><td>22</td></tr> <tr><td>Date of construction completion:</td><td>9/2002</td></tr> <tr><td>Date of operational and functional:</td><td>9/2003</td></tr> <tr><td>Expected date of turnover to state:</td><td>9/2013</td></tr> <tr><td>Expected date of completion:</td><td>9/2028</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>50</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td></td></tr> <tr><td>Progress of aquifer restoration:</td><td></td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	22	Date of construction completion:	9/2002	Date of operational and functional:	9/2003	Expected date of turnover to state:	9/2013	Expected date of completion:	9/2028	Approximate downtime per year:		Number of monitoring wells used:	50	Frequency of sampling:	4 times per year	Is plume migration controlled?		Progress of aquifer restoration:		Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																													
Date original ROD was signed:	9/29/00																																													
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Is plume migration controlled?																																														
Progress of aquifer restoration:																																														
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																													

Contaminants of Concern:

Chromium

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange yes
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

This site consists of three separate chromium contaminant plumes originating from three different facilities. The plume size and chromium concentrations are different between all three plumes. Since the contaminant is a metal there is no DNAPL or LNAPL.

REGION 7 INFORMATION SHEETS

Ace Services
 Colby, KS (Region 7)
 CERCLIS ID KSD046746731

Contact Information

RPM Bob Stewart 901 N. 5th St Kansas City, KS 66101 913-551-7654 (phone) 913-551-9654 (fax) stewart.roberrt@epa.gov	State Regulator Cynthia Randall Kansas Dept of Health and Environment Forbes Field, Bldg 20 Topeka, KS 66620 785-291-3245 (phone) 785-296-4823 (fax) CRandal@kdhe.state.ks.us	Contractor Gary Felkner Black & Veatch Special Projects Corp 8400 Ward Parkway Kansas City, MO 64114 913-458-6583 (phone) 913-458-9391 (fax) felknerg@bv.com
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>5/5/99</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Design</td></tr> <tr><td>Primary goal of system:</td><td>Containment & Restoration</td></tr> <tr><td>Presence of NAPLs</td><td>Not present</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$500,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$50,000</td></tr> <tr><td>Approximate pumping rate:</td><td>800 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	5/5/99	Date of last modification to ROD:		Type of ROD:	Final	Status of P&T system:	Design	Primary goal of system:	Containment & Restoration	Presence of NAPLs	Not present	Approximate annual O&M costs:	\$500,000	Costs related to monitoring:	\$50,000	Approximate pumping rate:	800 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated	<table> <tr><td>Number of extraction wells:</td><td>12</td></tr> <tr><td>Date of construction completion:</td><td>9/2002</td></tr> <tr><td>Date of operational and functional:</td><td>9/2003</td></tr> <tr><td>Expected date of turnover to state:</td><td>9/2013</td></tr> <tr><td>Expected date of completion:</td><td>9/2015</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>62</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td></td></tr> <tr><td>Progress of aquifer restoration:</td><td></td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	12	Date of construction completion:	9/2002	Date of operational and functional:	9/2003	Expected date of turnover to state:	9/2013	Expected date of completion:	9/2015	Approximate downtime per year:		Number of monitoring wells used:	62	Frequency of sampling:	2 times per year	Is plume migration controlled?		Progress of aquifer restoration:		Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	EPA-lead																																												
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Progress of aquifer restoration:																																													
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

Chromium

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange yes
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Cleburn Street Well Site/OU2

Grand Island, NE (Region 7)
 CERCLIS ID NED981499312

Contact Information

RPM Mary Peterson 901 North 5th Street Kansas City, KS 66101 913-551-7882 (phone) 913-551-7063 (fax) peterson.mary@epa.gov	State Regulator Ralph Martin Nebraska Dept. of Env. Quality 1200 N Street, Suite 400 The Atrium Lincoln, NE 68509-8922 402-471-3120 (phone) 402-471-2909 (fax) ralph.martin@ndeq.state.ne.us	Contractor David Sanders Black and Veatch Special Projects Corp. 6601 College Boulevard Overland Park, KS 66211 913-458-6605 (phone) 913-458-0000 (fax) SandersHD@bv.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 6/7/96 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs Suspected Approximate annual O&M costs: \$100,000 Costs related to monitoring: \$25,000 Approximate pumping rate: 90 gpm Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: 3 Date of construction completion: 9/1998 Date of operational and functional: 10/1999 Expected date of turnover to state: 12/2009 Expected date of completion: 12/2019 Approximate downtime per year: 1 week Number of monitoring wells used: 8 Frequency of sampling: 4 times per year Is plume migration controlled? Don't know Progress of aquifer restoration: Don't know Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
 Air stripping yes
 Biological treatment
 UV oxidation
 Carbon adsorption
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

In order to evaluate the effectiveness of containment, the contractor has been tasked to perform pumping tests. These tests are currently planned to take place during the next quarterly sampling event which is scheduled for April 2001.

It is pertinent to note that significant progress is being made toward aquifer restoration. However, that progress has not been quantified to date.

Valley Park TCE Site - OU2

Valley Park, MO (Region 7)
CERCLIS ID MOD98096834

Contact Information

<p>RPM Steve Auchterlonie 901 N. 5th St. Kansas City, KS 66101 913-551-7778 (phone) 913-551-7437 (fax) auchterlonie.steve@epa.gov</p>	<p>State Regulator Dave Mosby MDNR - Superfund Unit P.O. Box 176 Jefferson City, MO 65102-0176 573-751-1288 (phone) 573-751-7869 (fax) nrmosbd@mail.dnr.state.mo.us</p>	<p>Contractor</p>
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System Information and Data

<p>Type of Fund-lead Site: State-lead w/ Fund \$ Date original ROD was signed: 8/15/01 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Predesign Primary goal of system: Containment & Restoration Presence of NAPLs Suspected Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: Result of previous evaluation of performance/effectiveness: Not evaluated</p>	<p>Number of extraction wells: Date of construction completion: 1/2005 Date of operational and functional: 1/2006 Expected date of turnover to state: 1/2006 Expected date of completion: 1/2016 Approximate downtime per year: Number of monitoring wells used: Frequency of sampling: Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor</p>
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Contaminants of Concern:

1,1,1-Trichloroethane
Trichloroethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

This project is only now completing the ROD in FY2001. Negotiations and consent decree lodging and entry will carry through 2002. Design is planned for 2003 and construction through mid 2005.

Part of the construction may be implemented by the responsible parties, but we are planning for the main system to be fund-lead with MDNR using federal funds via a cooperative agreement.

REGION 9 INFORMATION SHEETS

Modesto Superfund Site

Modesto, CA (Region 9)
CERCLIS ID CAD981997752

Contact Information

RPM David Seter 75 Hawthorne Street San Francisco, CA 94105 415-744-2212 (phone) seter.david@epa.gov	State Regulator Emanuel Mensah State of California, DTSC 916-255-3704 (phone)	Contractor Chris Lichens Ecology and Environment 415-981-2811 (phone)
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 1
Date original ROD was signed: 9/26/97	Date of construction completion: 7/2000
Date of last modification to ROD:	Date of operational and functional: 5/2002
Type of ROD: Interim	Expected date of turnover to state: 5/2012
Status of P&T system: Installed	Expected date of completion: 5/2022
Primary goal of system: Containment	Approximate downtime per year:
Presence of NAPLs Don't know	Number of monitoring wells used: 10
Approximate annual O&M costs: \$300,000	Frequency of sampling: 4 times per year
Costs related to monitoring: \$25,000	Is plume migration controlled? #N/A
Approximate pumping rate: 50 gpm	Progress of aquifer restoration: #N/A
Result of previous evaluation of performance/effectiveness: Not evaluated	Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor

Contaminants of Concern:

perchloroethylene

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

The answers to items 20-23 are estimates.

Muscoy
 San Bernadino, CA (Region 9)
 CERCLIS ID CA1234

Contact Information

RPM Kim Hoang 75 Hawthorne Street San Francisco, CA 94105 415-744-2370 (phone) (fax) hoang.kim@epa.gov	State Regulator Yasser Aref CalEPA Dept. of Toxic Substances Control 5796 Corporate Avenue Cypress, CA 90630 714-484-5349 (phone)	Contractor Dwayne Duetcher URS
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System Information and Data

<table style="width: 100%; border-collapse: collapse;"> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>3/24/95</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Interim</td></tr> <tr><td>Status of P&T system:</td><td>Installed</td></tr> <tr><td>Primary goal of system:</td><td>Containment</td></tr> <tr><td>Presence of NAPLs</td><td>Don't know</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$1,100,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$100,000</td></tr> <tr><td>Approximate pumping rate:</td><td>9000 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	3/24/95	Date of last modification to ROD:		Type of ROD:	Interim	Status of P&T system:	Installed	Primary goal of system:	Containment	Presence of NAPLs	Don't know	Approximate annual O&M costs:	\$1,100,000	Costs related to monitoring:	\$100,000	Approximate pumping rate:	9000 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated		<table style="width: 100%; border-collapse: collapse;"> <tr><td>Number of extraction wells:</td><td>5</td></tr> <tr><td>Date of construction completion:</td><td>10/2003</td></tr> <tr><td>Date of operational and functional:</td><td>10/2004</td></tr> <tr><td>Expected date of turnover to state:</td><td>10/2014</td></tr> <tr><td>Expected date of completion:</td><td>10/2024</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>15</td></tr> <tr><td>Frequency of sampling:</td><td>4 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td></td></tr> <tr><td>Progress of aquifer restoration:</td><td></td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/severe</td></tr> </table>	Number of extraction wells:	5	Date of construction completion:	10/2003	Date of operational and functional:	10/2004	Expected date of turnover to state:	10/2014	Expected date of completion:	10/2024	Approximate downtime per year:		Number of monitoring wells used:	15	Frequency of sampling:	4 times per year	Is plume migration controlled?		Progress of aquifer restoration:		Difficulty (due to social/political factors) of implementing minor/major changes:	minor/severe
Type of Fund-lead Site:	EPA-lead																																													
Date original ROD was signed:	3/24/95																																													
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Is plume migration controlled?																																														
Progress of aquifer restoration:																																														
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/severe																																													

Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Doug Sutton filled out this questionnaire based on notes he took during a conversation with Kim Hoang.

James Bye from the San Bernadino Water Department is familiar with the site and should be noted along with the state regulator and contractor

Newmark

San Bernadino, CA (Region 9)
 CERCLIS ID CAD981434517

Contact Information

RPM Kim Hoang 75 Hawthorne Street San Francisco, CA 94105 415-744-2370 (phone) (fax) hoang.kim@epa.gov	State Regulator Yasser Aref CalEPA Dept Toxic Substances Control 5796 Corporate Ave. Cypress, CA 90630 714-484-5349 (phone)	Contractor Dwayne Duetcher URS
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>EPA-lead</td></tr> <tr><td>Date original ROD was signed:</td><td>8/4/93</td></tr> <tr><td>Date of last modification to ROD:</td><td></td></tr> <tr><td>Type of ROD:</td><td>Interim</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment</td></tr> <tr><td>Presence of NAPLs</td><td>Don't know</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$900,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$100,000</td></tr> <tr><td>Approximate pumping rate:</td><td>12000 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Not evaluated</td></tr> </table>	Type of Fund-lead Site:	EPA-lead	Date original ROD was signed:	8/4/93	Date of last modification to ROD:		Type of ROD:	Interim	Status of P&T system:	Operational	Primary goal of system:	Containment	Presence of NAPLs	Don't know	Approximate annual O&M costs:	\$900,000	Costs related to monitoring:	\$100,000	Approximate pumping rate:	12000 gpm	Result of previous evaluation of performance/effectiveness:	Not evaluated	<table> <tr><td>Number of extraction wells:</td><td>8</td></tr> <tr><td>Date of construction completion:</td><td>10/1998</td></tr> <tr><td>Date of operational and functional:</td><td>10/1998</td></tr> <tr><td>Expected date of turnover to state:</td><td>10/2008</td></tr> <tr><td>Expected date of completion:</td><td>10/2028</td></tr> <tr><td>Approximate downtime per year:</td><td></td></tr> <tr><td>Number of monitoring wells used:</td><td>15</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>Yes</td></tr> <tr><td>Progress of aquifer restoration:</td><td>Don't know</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/moderate</td></tr> </table>	Number of extraction wells:	8	Date of construction completion:	10/1998	Date of operational and functional:	10/1998	Expected date of turnover to state:	10/2008	Expected date of completion:	10/2028	Approximate downtime per year:		Number of monitoring wells used:	15	Frequency of sampling:	2 times per year	Is plume migration controlled?	Yes	Progress of aquifer restoration:	Don't know	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate
Type of Fund-lead Site:	EPA-lead																																												
Date original ROD was signed:	8/4/93																																												
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Frequency of sampling:	2 times per year																																												
Is plume migration controlled?	Yes																																												
Progress of aquifer restoration:	Don't know																																												
Difficulty (due to social/political factors) of implementing minor/major changes:	minor/moderate																																												

Contaminants of Concern:

Trichlorethylene (TCE)/Tetrachloroethylene (PCE)

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

Doug Sutton completed this questionnaire based on notes taken during a conversation with Kim Hoang.

A settlement in the near future may change the lead on this project.

Selma Treating Co.
Selma, CA (Region 9)
CERCLIS ID CAD29452141

Contact Information

RPM Michelle Lau 75 Hawthorne Street San Francisco, CA 94105 415-744-2227 (phone) 415-744-2180 (fax) lau.michelle@epa.gov	State Regulator Chris Sherman DPES 10151 Croyden Way, Suite 3 Sacramento, CA 95827 916-255-3706 (phone) 916-255-3697 (fax)	Contractor John Kirschbaum USACE, Omaha District 12565 West Center Road Omaha, NE 68144-3869 402-293-2525 (phone) 402-221-7838 (fax)
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 6
Date original ROD was signed: 9/24/88	Date of construction completion: 9/1998
Date of last modification to ROD: 6/30/01	Date of operational and functional: 10/1998
Type of ROD: Final	Expected date of turnover to state: 10/2008
Status of P&T system: Operational	Expected date of completion: 10/2008
Primary goal of system: Containment & Restoration	Approximate downtime per year: 0 weeks
Presence of NAPLs: Not present	Number of monitoring wells used: 20
Approximate annual O&M costs: \$300,000	Frequency of sampling: 4 times per year
Costs related to monitoring: \$35,000	Is plume migration controlled? Yes
Approximate pumping rate: 150 gpm	Progress of aquifer restoration: less than 20% restored
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: minor/severe

Contaminants of Concern:

Chromium

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration yes
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Doug Sutton completed this questionnaire based on a phone interview with Michelle Lau, the RPM for the site.

Regarding items 27 and 29, a recent 5-year review found that the plume was controlled in the shallow aquifer but that additional monitoring is required to determine if it is controlled in the intermediate and deep aquifers.

The entry in item 22 is an estimate.

REGION 10 INFORMATION SHEETS

Boomsnub/Airco / Site-Wide Ground Water OU

Hazel Dell, WA (Region 10)
CERCLIS ID WAD009624453

Contact Information

RPM Debra Yamamoto 1200 Sixth Avenue - ECL-113 Seattle, WA 98101 206-553-7216 (phone) 206-553-0124 (fax) yamamoto.debbie@epa.gov	State Regulator Dan Alexanian Dept.of Ecology - SWRO P.O. Box 47775 Olympia, WA 98504 360-407-6249 (phone) 360-407-6305 (fax) dale461@ecy.wa.gov	Contractor Jerry DeMuro URS, Inc. 1500 Century Square, 1501 4th Ave, Suite 1500 Seattle, WA 98101 206-674-1800 (phone) 206-674-1801 (fax) Jerry_DeMuro@urscop.com
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System Information and Data

Type of Fund-lead Site: EPA-lead	Number of extraction wells: 22
Date original ROD was signed: 2/3/00	Date of construction completion: 10/2000
Date of last modification to ROD:	Date of operational and functional: 12/2001
Type of ROD: Final	Expected date of turnover to state: 12/2011
Status of P&T system: Operational	Expected date of completion: 10/2030
Primary goal of system: Containment & Restoration	Approximate downtime per year: 3 weeks
Presence of NAPLs Suspected	Number of monitoring wells used: 80
Approximate annual O&M costs: \$1,000,000	Frequency of sampling: 2 times per year
Costs related to monitoring: \$204,000	Is plume migration controlled? Yes
Approximate pumping rate: 135 gpm	Progress of aquifer restoration: Don't know
Result of previous evaluation of performance/effectiveness: Evaluated and found sufficient	Difficulty (due to social/political factors) of implementing minor/major changes: moderate/severe

Contaminants of Concern:

1,1,1-Trichloroethane
1,1-Dichloroethylene (DCE)
1,2-Dichloroethane
Trichlorethylene (TCE)/Tetrachloroelthylene (PCE)
Hexavalent Chromium
Total Chromium

Treatment Processes:

Metals precipitation
Air stripping yes
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration
Ion Exchange yes
Reverse Osmosis
Off-gas treatment
other/not sure

Comments:

Question #20) the O&F is not yet complete, construction of a sewer line will take place this year. When that is complete extraction rates will increase up to 240 GPM. The date of O&F is not known at this time.

Question #21) The State will take over 10 years from the above date.

Question #26) Ground water long term monitoring takes place twice a year. The extraction wells are sampled quarterly and special ground water sampling may take place monthly, e.g. sampling at the toe of the plume.

Bunker Hill Superfund Site

Kellogg, ID (Region 10)
CERCLIS ID IDD048340921

Contact Information

RPM Carmella Grandinetti 1200 Sixth Avenue Seattle, WA 98101 206-553-8696 (phone) 206-553-0124 (fax) grandinetti.cami@epa.gov	State Regulator Nick Zilka Idaho Dept. of Env. Quality 1005 W. McKinley Avenue Kellogg, ID 83837 208-783-5781 (phone) 208-783-4561 (fax) nzilka@nidlink.com	Contractor
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/1/92 Date of last modification to ROD: Type of ROD: Final Status of P&T system: Predesign Primary goal of system: Restoration Presence of NAPLs: Not present Approximate annual O&M costs: Costs related to monitoring: Approximate pumping rate: Result of previous evaluation of performance/effectiveness: Not evaluated	Number of extraction wells: Date of construction completion: 12/2010 Date of operational and functional: 12/2020 Expected date of turnover to state: 12/2030 Expected date of completion: 12/2050 Approximate downtime per year: Number of monitoring wells used: 58 Frequency of sampling: 4 times per year Is plume migration controlled? Progress of aquifer restoration: Difficulty (due to social/political factors) of implementing minor/major changes: minor/minor
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Contaminants of Concern:

Asbestos
Creosote
Lindane
Merphos
RDX (cyclonite)
Selenium
Volatile organic compounds (VOCs)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption
Filtration
Ion Exchange
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

Question #19) Date in the survey is not true, gave date to complete survey. See below for explanation.

Question #20) Date in the survey is not true, gave date to complete survey. See below for explanation.

Question #21) Date in the survey is not true, gave date to complete survey. See below for explanation.

Question #22) Date in the survey is not true, gave date to complete survey. See below for explanation.

Explanation:

The 1992 Record of Decision for the Bunker Hill non-populated areas included ground water Pump&treat as well as surface water controls and treatment. However, none of the ground or surface water quality activities have been implemented to date. The site was divided into 2 phases in 1995 when EPA and the Idaho Dept. of Env. Quality signed a State Superfund Contract. Phase 1, which includes source control measures is currently being implemented. Based on the impact that phase 1 source control measures have on site surface water and ground water, Phase 2 water quality activities (including an active pump and treat system) may or may not be necessary. A decision regarding the need for and extent of water quality remedial activities will be made in the future based on the results of ongoing surface water and ground water quality monitoring.

Commencement Bay, South Tacoma Channel, Well 12A

Tacoma, WA (Region 10)
CERCLIS ID 981773849

Contact Information

RPM Kevin Rochlin ECL-112, 1200 6th Avenue Seattle, WA 98101 206-553-2106 (phone) 206-553-0124 (fax) rochlin.kevin@epa.gov	State Regulator	Contractor Tom Abbott URS 2401 4th Avenue, Suite 1000 Seattle, WA 98121 206-674-1800 (phone) 206-674-1801 (fax) abbot.thomas@urs.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 1/1/85 Date of last modification to ROD: 1/1/87 Type of ROD: Final Status of P&T system: Operational Primary goal of system: Containment & Restoration Presence of NAPLs: Observed Approximate annual O&M costs: \$300,000 Costs related to monitoring: \$25,000 Approximate pumping rate: 150 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient	Number of extraction wells: 5 Date of construction completion: 6/1988 Date of operational and functional: 5/1988 Expected date of turnover to state: 1/2004 Expected date of completion: 1/2011 Approximate downtime per year: 3 weeks Number of monitoring wells used: 20 Frequency of sampling: 2 times per year Is plume migration controlled? Yes Progress of aquifer restoration: less than 20% restored Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

1,1,2,2-Tetrachloroethane
 1,2-Dichloroethene
 Cis-1,2-dichloroethene
 TCE and Vinyl chloride
 Trans 1,2-Dichloroethylene

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment
 UV oxidation
 Carbon adsorption yes
 Filtration
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

McCormick & Baxter Creosoting Co.

Portland, OR (Region 10)
CERCLIS ID OR009020603

Contact Information

<p>RPM Alan Goodman 811 SW 6th Avenue, 3rd Floor Portland, OR 97204 503-326-3685 (phone) 503-326-3399 (fax) goodman.al@epa.gov</p>	<p>State Regulator William Dana Oregon Dept. Env. Quality 811 SW 6th Avenue Portland, OR 97204 503-229-6530 (phone) 503-229-5830 (fax) Dana.William.H@DEQ.State.OR.US</p>	<p>Contractor John Montgomery Ecology and Environment 333 SW Fifth Portland, OR 97204 503-248-5600 (phone) 503-248-5577 (fax) JMontgomery@ene.com</p>
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System Information and Data

<table> <tr><td>Type of Fund-lead Site:</td><td>State-lead w/ Fund \$</td></tr> <tr><td>Date original ROD was signed:</td><td>3/1/96</td></tr> <tr><td>Date of last modification to ROD:</td><td>3/1/98</td></tr> <tr><td>Type of ROD:</td><td>Final</td></tr> <tr><td>Status of P&T system:</td><td>Operational</td></tr> <tr><td>Primary goal of system:</td><td>Containment</td></tr> <tr><td>Presence of NAPLs</td><td>Observed</td></tr> <tr><td>Approximate annual O&M costs:</td><td>\$250,000</td></tr> <tr><td>Costs related to monitoring:</td><td>\$40,000</td></tr> <tr><td>Approximate pumping rate:</td><td>3 gpm</td></tr> <tr><td>Result of previous evaluation of performance/effectiveness:</td><td>Evaluated and found sufficient</td></tr> </table>	Type of Fund-lead Site:	State-lead w/ Fund \$	Date original ROD was signed:	3/1/96	Date of last modification to ROD:	3/1/98	Type of ROD:	Final	Status of P&T system:	Operational	Primary goal of system:	Containment	Presence of NAPLs	Observed	Approximate annual O&M costs:	\$250,000	Costs related to monitoring:	\$40,000	Approximate pumping rate:	3 gpm	Result of previous evaluation of performance/effectiveness:	Evaluated and found sufficient	<table> <tr><td>Number of extraction wells:</td><td>6</td></tr> <tr><td>Date of construction completion:</td><td>3/1996</td></tr> <tr><td>Date of operational and functional:</td><td>3/1996</td></tr> <tr><td>Expected date of turnover to state:</td><td>3/2006</td></tr> <tr><td>Expected date of completion:</td><td>Indefinite</td></tr> <tr><td>Approximate downtime per year:</td><td>5 weeks</td></tr> <tr><td>Number of monitoring wells used:</td><td>25</td></tr> <tr><td>Frequency of sampling:</td><td>2 times per year</td></tr> <tr><td>Is plume migration controlled?</td><td>No</td></tr> <tr><td>Progress of aquifer restoration:</td><td>Not a goal</td></tr> <tr><td>Difficulty (due to social/political factors) of implementing minor/major changes:</td><td>minor/minor</td></tr> </table>	Number of extraction wells:	6	Date of construction completion:	3/1996	Date of operational and functional:	3/1996	Expected date of turnover to state:	3/2006	Expected date of completion:	Indefinite	Approximate downtime per year:	5 weeks	Number of monitoring wells used:	25	Frequency of sampling:	2 times per year	Is plume migration controlled?	No	Progress of aquifer restoration:	Not a goal	Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor
Type of Fund-lead Site:	State-lead w/ Fund \$																																												
Date original ROD was signed:	3/1/96																																												
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Difficulty (due to social/political factors) of implementing minor/major changes:	minor/minor																																												

Contaminants of Concern:

Arsenic
Chlorinated polyaromatic hydrocarbons (CPAHs)
Creosote/Pentachlorophenol (PCP)
Pentachlorophenol (PCP)

Treatment Processes:

Metals precipitation
Air stripping
Biological treatment
UV oxidation
Carbon adsorption yes
Filtration yes
Ion Exchange yes
Reverse Osmosis
Off-gas treatment
other/not sure yes

Comments:

The site RPM says that a barrier system is being design to prevent the PAHs and PCP from discharging to the river. The barrier design will be completed this year or next. The site treatment processes also include NAPL/water separation and dissolved air flotation (DAF).

Wyckoff/Eagle Harbor Superfund Site

Bainbridge Island, WA (Region 10)
CERCLIS ID WAD009248295

Contact Information

RPM Hanh Gold 1200 Sixth Avenue, ECL-115 Seattle, WA 98101 206-553-0171 (phone) 206-553-0124 (fax) gold.hanh@epa.gov	State Regulator Guy Barrett State of Washington Dept.of Ecology P.O. Box 47600 Olympia, WA 98504-7600 360-407-7244 (phone) 360-407-7154 (fax) gbar461@ecy.wa.gov	Contractor Ken Scheffler CH2M HILL P.O. Box 91500 Bellevue, WA 98009-2050 425-453-5000 (phone) 425-462-5957 (fax) kscheffl@ch2m.com
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System Information and Data

Type of Fund-lead Site: EPA-lead Date original ROD was signed: 9/29/94 Date of last modification to ROD: Type of ROD: Interim Status of P&T system: Operational Primary goal of system: Containment Presence of NAPLs: Observed Approximate annual O&M costs: \$500,000 Costs related to monitoring: \$20,000 Approximate pumping rate: 80 gpm Result of previous evaluation of performance/effectiveness: Evaluated and found not sufficient	Number of extraction wells: 8 Date of construction completion: 2/1990 Date of operational and functional: 2/1990 Expected date of turnover to state: 1/2024 Expected date of completion: Indefinite Approximate downtime per year: Number of monitoring wells used: 20 Frequency of sampling: 1 times per year Is plume migration controlled? Yes Progress of aquifer restoration: Not a goal Difficulty (due to social/political factors) of implementing minor/major changes: minor/moderate
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Contaminants of Concern:

Benzo(a)anthracene
 Benzo(a)pyrene
 Benzo(b)fluoranthene
 Benzo(g,h,i)perylene
 Pentachlorophenol (PCP)
 Polynuclear Aromatic Hydrocarbons

Treatment Processes:

Metals precipitation
 Air stripping
 Biological treatment yes
 UV oxidation
 Carbon adsorption yes
 Filtration yes
 Ion Exchange
 Reverse Osmosis
 Off-gas treatment
 other/not sure

Comments:

The P&T system was constructed by the PRPs as part of an administrative order. When EPA took over operations of the system in 1993, it was in a severe state of disrepair. In the 1994 interim ROD, EPA determined that the system is not effective at hydraulic containment of L- and DNAPL, and a new pump & treat system and barrier wall was deemed appropriate (i.e., containment remedy). This remedy was never implemented, however, in February 2000, EPA signed a final ROD selecting thermal remediation, or steam injection, as the remedy for soil and groundwater. Steam injection remediation will begin with an onsite pilot study. The current pump & treat system will be used to treat extracted contaminants during the operation of this pilot study. Construction of the pilot system will begin summer 2001 and operation is anticipated to begin early 2002. If the pilot study is successful at meeting performance objectives, EPA will expand the system for full-scale cleanup. Therefore, optimization analysis is not applicable or appropriate for this pump & treat system. It should be noted that a sheet pile wall has been constructed around this site to significantly reduce migration of contaminants to Eagle Harbor and Puget Sound.