



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report



DATE: 2/1/2012

Site Code: 738001	Site Name: Pollution Abatement Services - Main Site
City: Oswego	Town: Oswego
Region: 7	County: Oswego
Current Classification: 02	Proposed Classification: 04
Estimated Size (acres): 15.60	Disposal Area: Dump, Lagoon
Significant Threat: Previously	Site Type: EPA Lead
Priority ranking Score:	Project Manager: Payson Long

Summary of Approvals

Originator/Supervisor: Susan Edwards	11/29/2011
RHWRE: Harry Warner:	12/16/2011
BEEI of NYSDOH:	Not Required
CO Bureau Director: Michael Cruden, Director, Remedial Bureau	01/10/2012
E:	01/10/2012
Assistant Division Director: Robert W. Schick, P.E.:	

Basis for Classification Change

Hazardous waste disposal at this site was addressed by implementation of the remedy identified for the site by one or more Records of Decision. All construction of the components of the site-wide remedy was completed no later than 1990. The Final Engineering Report(s) (FER) (or its equivalent) confirms that the remedy has been constructed consistent with the requirements in the ROD(s). The FER(s) (or its equivalent) is/are in edocs. Management of contamination remaining at the site, including any required monitoring, is and has been controlled pursuant to a Site Management Plan (SMP) (or its equivalent). A copy of the SMP (or its equivalent) is in edocs. Institutional controls were required to ensure the protectiveness of the site. The required control, in the form of prohibition of wells and environmental easements are in place. A significant threat to public health and the environment no longer exists at the site. The site is properly remediated and requires site management, therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

Site Description - Last Review: 01/06/2012

Location: The PAS site, located on approximately 15 acres within the eastern city limits of the City of Oswego, New York, is bounded on the south by East Seneca Street and on the east, north, and west by wetlands formed along the stream channels of White and Wine Creeks.

Site Features: The fenced site is grass-covered. The only structure on the site is a 44,000~gallon concrete leachate collection tank which is protected by a shed.



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Current Zoning/Use(s): The PAS property is zoned for industrial use. The area between the PAS site and Lake Ontario (to the north) is mostly undeveloped and currently includes multiple land uses, including a cemetery, a wetland, commercial and residential areas. Both White and Wine Creeks are used by a wide variety of wildlife, including avian and fish species, the latter utilizing the streams for spawning. The lower reach of Wine Creek, near Lake Ontario, is used for seasonal recreational fishing.

Historic Use(s): The PAS facility, a high-temperature, liquid chemical waste, incineration facility, operated from 1970 through 1977. Throughout its operational life the facility experienced continuous operating problems, numerous air and water quality violations, and mounting public opposition. Because the incinerator never operated properly, thousands of drums containing various chemical wastes accumulated on-site and tank loads of liquid waste were stored in on-site lagoons.

Beginning in 1973, a series of incidents, including liquid waste spills and the overflow of liquid wastes from lagoons into White Creek, led to the involvement of EPA and NYSDEC at the site. Response actions taken from 1973 to 1982 by EPA, NYSDEC, and the Coast Guard resulted in an oil spill cleanup, the removal of the incineration facilities, drummed wastes, bulk liquid wastes and contaminated soils, and the closure of two on-site lagoons.

In 1981, the PAS site, which was ranked number seven on the original National Priorities List (NPL), was selected as one of the first sites in the nation to receive CERCLA Trust Fund monies for cleanup actions.

Operable Units: As per EPA: The site is divided into four operable units (OUs). OU1 is related to a removal action performed from 1973 to 1982 by EPA and NYSDEC. OU2 is related to the containment of the landfill and contaminated groundwater. OU3 addressed contamination found in the groundwater outside of the containment system. The OU4 record of decision called for No Further Action related to the site in combination with long-term monitoring of PCB contaminated sediments in the Wine and White Creeks.

Operable Unit Description/Date of the OU/US EPA OU/NYS DEC OU

Drum Removal/ 1973-1982/ 1 /01A

Consolidation and cap of landfill and treatment of Groundwater/ 1984/ 2/ 01

Treatment of Groundwater outside the containment/ 1993/3/ 03

No Further Action and Long Term Monitoring of PCB contaminated Sediments/1997/4/ 02

Site Geology and Hydrogeology: The PAS site is located in the eastern section of the Lake Ontario physiographic province. The geology consists of glacially-derived sediments ranging from till and lacustrine silt and clays to stratified sands and gravels. These sediments overlay the Oswego Sandstone. In general, two aquifer systems exist in the region. Although the bedrock and unconfined overburden aquifer systems generally exhibit regional groundwater flow north toward Lake Ontario, local groundwater flow in the vicinity of the site is northwestward toward the Wine Creek wetlands.

Several stratigraphic units have been defined at the site. A surficial fill layer of variable depth and composition covers most of the site and consists primarily of demolition debris brought onto the site before the PAS facility was in operation. This fill layer is underlain by a glacial till that varies in thickness from 15 feet



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Site Health Assessment - Last Update: 01/03/2012

Measures are in place to prevent contact with the contamination remaining in soil and groundwater.

	Start		End	
OU 00				
Periodic Review	2/14/10	TRM	3/31/10	TRM
Site Management	4/1/90	ACT	3/31/76	PLN
OU 01				
Reclass Pkg.	11/18/11	ACT	2/01/12	ACT
Remedial Action	11/1/85	ACT	9/1/87	ACT
Remedial Design	9/1/84	ACT	7/1/85	ACT
Remedial Investigation	11/1/82	ACT	1/1/84	ACT
VI Evaluation	11/8/06	ACT	12/20/11	ACT
OU 01A				
Remedial Action	6/1/82	ACT	11/1/82	ACT
OU 02				
Remedial Investigation	6/1/86	ACT	1/1/88	ANF
OU 03				
Remedial Design	7/1/94	ACT	9/1/96	ACT
Remedial Investigation	1/1/90	ACT	12/1/93	ACT

Remedy Description and Cost

Remedy Description for Operable Unit 01

The selected remedy consists of:

- (1) Limited excavation and removal of contaminated soil, subsurface tanks and drums to a RCRA approved landfill,
- (2) construction of a perimeter slurry wall,
- (3) site grading following by an impermeable cap,
- (4) ground water recovery,
- (5) leachate collection,
- (6) on-site ground water and leachate treatment,
- (7) ground water monitoring.

Total Cost \$2,117,900



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Remedy Description for Operable Unit 01A

The operable unit was for removal actions taken from 1973 to 1982 by EPA and NYSDEC. The removal actions resulted in the removal of the incineration facilities, drummed wastes, bulk liquid wastes, and contaminated soils; and, the closure of two on-site lagoons.

Total Cost



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Remedy Description for Operable Unit 02

Amended OU2 ROD calls for No Further Action and long-term monitoring of Groundwater and Sediments.

Total Cost \$2,120,000



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Description of Institutional Control

City of Oswego

13 Oneida St

703 E. SENECA ST

Deed Restriction

Block: 2

Lot: 1

Sublot:

Section: 110

Subsection: 083

S_B_L Image: 11008300020010000000

Ground Water Use Restriction

Monitoring Plan

O&M Plan

Soil Management Plan

Description of Engineering Control

City of Oswego

13 Oneida St

703 E. SENECA ST

Deed Restriction - Institutional Control Instrument

Block: 2

Lot: 1

Sublot:

Section: 110

Subsection: 083

S_B_L Image: 11008300020010000000

Cover System

Leachate Collection

Subsurface Barriers

Fencing/Access Control

Pollution Abatement Services

New York

EPA ID#: NYD000511659

EPA REGION 2 Congressional District(s): 24

Oswego

Oswego

NPL LISTING HISTORY
Proposed Date: 12/30/1982
Final Date: 9/8/1983

Site Description

The 15.5-acre Pollution Abatement Services (PAS) facility, which served as a chemical waste incineration facility from 1970 to 1977, consisted of three lagoons containing more than a million gallons of oil and mixed hydrocarbons, several aboveground and underground storage tanks containing contaminated waste oil, and more than 15,000 leaking and deteriorating drums. Throughout the operation of the facility, PAS experienced operational problems and was cited for numerous air and water quality violations by state and federal agencies. From 1973 to 1976, lagoon overflows and liquid waste spills were common, releasing wastes into the adjacent Wine Creek, which flows into Lake Ontario. In response, the U.S. Coast Guard, EPA, and the New York State Department of Environmental Conservation (NYSDEC) performed a number of emergency cleanup activities at the site. Following the closure of the facility in 1977, all hazardous wastes were removed.

Approximately 24,000 people reside within 3 miles of the site. The immediate area is sparsely populated and is zoned primarily for commercial and industrial activity. The Oswego municipal water treatment plant has a surface water intake system on Lake Ontario approximately 1 mile from the point where Wine Creek enters the lake. Municipally-supplied water has been made available to residents.

Site Responsibility: This site was addressed through federal, state, and potentially responsible parties' actions.

Threat and Contaminants

The on-site ground water is contaminated with various heavy metals and volatile organic compounds (VOCs). The on-site soil is contaminated with polychlorinated biphenyls (PCBs). Sludges are contaminated with PCBs and heavy metals. The potential exists for health risks if contaminated ground water is ingested or touched.

Cleanup Approach

This site was addressed in four stages: immediate actions and three long-term remedial phases focusing on the cleanup of surface contamination, the entire site, and off-site contamination.

Response Action Status

Immediate Actions: Over a 10-year span, numerous immediate cleanup activities to reduce the threat to the public and the environment were undertaken. In 1976, EPA constructed a dike to prevent an overflow of contaminants from entering the ground water and soil in the surrounding area. In 1977, EPA treated and discharged the contaminated water from the lagoons. A fence with a locked gate was constructed around the site in 1980 to keep unauthorized individuals from entering. That same year, EPA over packed and relocated 500 drums on-site. An additional 1,200 drums were over packed in 1981, and surface runoff controls were installed. The site was covered with a clay cap, topsoil, and vegetation.

Surface Contamination: In 1982, EPA removed the site's superstructures and approximately 10,000 drums of contaminants from the site. In 1987, 500,000 gallons of contaminated ground water were pumped from the site and sent off-site for treatment.

Entire Site: A ROD was signed on July 6, 1984. The selected remedy included the following: (1) limited excavations and removal of contaminated soil, as well as the removal of subsurface tanks and remaining drums to an EPA-approved landfill; (2) containment of the wastes through the construction of an impermeable cap, perimeter slurry wall and leachate collection; (3) on-site treatment of the leachate and contaminated ground water; and (4) ground-water monitoring. These

remedial activities were conducted by NYSDEC and, with the exception of the on-site treatment system, were completed in 1986. In September 1991, EPA and a group of PRPs entered into an interim leachate and ground-water removal administrative order on consent (AOC). This AOC requires the routine removal of leachate and ground water from within the containment system until a permanent treatment system is constructed. The extracted leachate and ground water (approximately 10,000 gallons every month) is currently transported to an EPA-approved treatment and disposal facility.

Post-Closure Investigations: Since the construction of the containment system, various post-closure investigations indicated the presence of VOCs in the ground water outside of the containment system. Under EPA supervision, the PRPs completed an RI/FS to determine the nature and extent of this ground water contamination and to identify remedial alternatives. The investigation was completed in the fall of 1993. A ROD was signed in December 1993. The selected remedy to address this contamination problem includes, among other things, enhancing the present source control system by optimizing operating parameters, bedrock ground-water extraction and treatment, and connecting downgradient residents in the Smith's Beach area, who are using residential wells, to the public water supply to ensure that potential future exposure to contaminants in the bedrock ground water does not occur. A Phase I Supplemental Pre-Remedial Design Study to evaluate the potential effectiveness of bedrock pumping to contain impacted ground water in the bedrock outside the containment system, and to determine potential impacts of bedrock ground-water pumping on the existing containment system and the creeks and wetlands was completed in 1994. It was determined that pumping of the bedrock groundwater was not necessary and perhaps not even possible without impacting the adjacent wetlands. A Phase II Supplemental Pre-Remedial Design Study, completed in September 1996, concluded that the Pollution Abatement Services site is not the source of pesticides in the surface water of Wine Creek and is not presently a source of PCB contamination in the sediments in the adjacent wetlands and Wine and White Creeks (although it was a likely source of PCB contamination before the construction of the containment facility in 1986). The Phase II Supplemental Pre-Remedial Design Study also identified two additional potential sources of PCBs in the sediments in the wetlands and creeks in the vicinity of the Pollution Abatement Services site. The findings of the Phase I and II Supplemental Pre-Remedial Design Studies were documented in a September 1996 Explanation of Significant Differences.

Since residual PCBs from the Pollution Abatement Services site may remain in the sediments in the vicinity of the site and, therefore, may act as a continuing source of contamination, a focused feasibility study was completed in August 1997. The purpose of this study was to identify and evaluate remedial alternatives to address the PCB-contaminated sediments. A ROD addressing the PCB-contaminated sediments was signed on September 30, 1997. The selected remedy requires no further remedial action; however, it does require long-term monitoring of the PCB-contaminated sediments at the site. Since no further physical construction is necessary at this site, the site qualified for inclusion on the Construction Completion List with the signing of the ROD in September 1997.

Five-year reviews are undertaken at sites to ensure that implemented remedies protect public health and the environment and that they function as intended by site decision documents. In June 1998 and December 2003, EPA issued Five-Year Review Reports, which concluded that the remedies at the site were implemented in accordance with the remedies selected in the RODs and that the remedies set forth in the RODs are fully protective of human health and the environment. The third Five-Year Review for the Site will be completed by December 2008.

Site Facts: In 1990, the PRPs signed an AOC with EPA to undertake an investigation into the nature and extent of the contamination located outside the slurry wall surrounding the site. In July 1994, the PRPs executed an AOC with EPA to perform the Supplemental Pre-Remedial Design Study. Following negotiations with the PRPs related to the continued performance of the operation and maintenance related to the containment remedy, a Consent Decree was executed with EPA. The Consent Decree was entered in U.S. District Court (approved by the Judge) on August 10, 1998. In September 1998, EPA entered into a Consent Decree with the PRPs to undertake the PCB-monitoring activities called for in the 1997 ROD. The Consent Decree was entered in U.S. District Court on February 25, 1999. The work called for in both Consent Decrees is currently underway.

Cleanup Progress

The immediate and long-term cleanup actions undertaken at the site have greatly reduced the threat to public health and the environment. These efforts include the treatment and discharge of more than one million gallons of contaminated water that were contained in on-site lagoons, the removal of more than 10,000 drums of contaminants from the site, the capping of the 15.5-acre landfill, the installation of a slurry wall, and the extraction and off-site treatment/disposal, to date, of approximately 3.4 million gallons of leachate.

Site Repositories

Oswego City Hall, West Oneida Street, Oswego, NY 13126

EPA Region 2 Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866

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