GENERAL SITE INFORMATION, CHARACTERISTICS, AND STATUS

Project Name	***BAY ROAD POND***	***ProjectID:*** 02-21
Last Updated:	04/10/01	

City:	Queensbury
County:	Warren
State:	NY
Country:	USA
Bodies of Water:	Bay Road Pond (Eisenhart Pond)
US EPA Region:	II
Status (Active, Complete, or Monitoring Only):	Complete
Date On NPL:	NA
ROD/ESD Date:	NA
Operable Unit:	NA
Areas of Concern (length or acres):	Slightly > 1 acre pond (26,000 sq. ft.)
Other Characteristics of Water Body:	Includes the inlet and outlet channels
Contaminants of Concern:	PCBs
Source of Contamination:	Historical discharge from a nearby GE plant.
Contaminated Area Physical Characteristics:	Depositional sediments were targeted based on preliminary investigations. Sediments were delineated based on containing greater than or less than 50 ppm PCBs in both the pond and the inlet and outlet channels.
Type of Regulatory Action:	Final
Overall Status Summary:	GE agreed to perform the Bay Road Pond Restoration Project work in accordance with the NYSDEC-approved August 1999 Work Plan and the provisions of an October 25, 1999 Consent Order between GE and the NYSDEC. The project was performed between March 1 and October 15, 2000 and included the following primary components: • Procurement of a USACE permit for work "within the waters of the United States;" • Site preparation, including placement of perimeter fencing and erosion control measures, construction of access and staging areas, and dewatering of the pond; • Setup and use of a bypass pumping system to collect water in the inlet channel for discharge downstream of the removal area so that removal activities could be performed "in the dry;" • Setup and operation of an on-site water treatment system to treat water collected or encountered during the removal, including pond decant water, groundwater filtration, direct precipitation, dewatering liquids, and equipment cleaning fluids; • Removal of pond- and channel-bottom materials to the proposed horizontal and vertical limits; • Placement of a geotextile liner and approximately 6 inches of fill throughout the bottom of the pond following removal of the pond-bottom materials;

- Construction of an approximately 400-square foot island in the pond for wildlife use and aesthetic enhancement; erosion of the soil fill material or undermining of the existing stone foundation beneath Fort Amherst Road; and

- Restoration of residential properties affected by the performance of the work.

In total, approximately 3,210 cy of material were removed and transported from the site to appropriately permitted disposal facilities. Of this, 3,598 tons were non-TSCA materials, and 1,812 tons were TSCA materials that were both disposed of off-site. These quantities included the depositional materials removed from the pond and channel, stabilizing agent, liner, sand from the bermed water treatment system staging area, and spent carbon from the water treatment system.

Preliminary investigations delineated between areas with greater than or less than 50 ppm PCBs. The maximum pre-excavation PCB concentration was 3,300 ppm. Overall, PCBs were detected in 14 of 46 samples analyzed, and 13 of the 14 detections were from depositional material. As a result, the Work Plan targeted depositional layers only, except for one location with 5.3 ppm PCB at the 2 foot depth interval which was excavated from the underlying native material.

Post-removal samples collected by the NYSDEC following remedy implementation indicated PCB concentrations below 1 ppm, with a maximum concentration of 1.67 ppm reported for one sample analyzed by immunoassay. In addition, the NYSDEC's May 2000 Halfway Creek Report presented the results of fish tissue and sediment sampling performed at and downstream of the site, concluding that no additional fish advisory or remedial measures were required.

GE restored the pond with geotextile and 6" of sand on average, as well as installing gabions, rip rap, and retaining walls where specified. Residential properties were returned to at least their original conditions.

Remedial Action Planned:	☑
Risk Assessment:	☐
Remedial Action Implemented:	☑
Status of Dredging	☐
PRPs:	☑
Contacts:	☑
References:	☑
Modeling:	☐
Fishing Advisory:	☐

Key Conditions: commercial landfill, property access issues, solidification/stabilization

REMEDIAL ACTION PLANNED

Project Name	***BAY ROAD POND***	***ProjectID:*** 02-21
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Target Sediment Cleanup Standards (TSCS):	Removal to native material.
How TSCS Established:	Preliminary sampling investigations were used to determine the extent of contamination both horizontally and vertically.
Target Bank and Floodplain Cleanup Levels (if applicable):	NA
Other Target:	NA
Environmental Sample Data References:	
• ***Sediment:***	Reference A-615
• ***Water:***	
• ***Fish:***	NYSDEC Halfway Creek Report, May 2000
Estimated Target Volume:	In-situ total = 2,350 cy; 700 cy TSCA material, and 1,650 cy non-TSCA.
Planned Disposal Method:	At off-site permitted disposal facilities.
Estimated Calendar Time to Implement Remedy:	January - February 2000
Estimated Time to Implement Remedy:	8 weeks
Estimated Cost to Implement Remedy:	About $1 million
Stated Remedial Action Objectives (and Source):	To remove depositional materials that contained PCBs and restore and enhance the function and aesthetics of the pond.
Measures of Success to be Used:	Post-remedial sampling and fish tissue analysis.
Planned Monitoring and Restoration:	No monitoring past the post-removal sampling confirmation. Restoration to include: relining the pond bottom with geotextile and 6" of clean soil fill for the propagation of the benthic community; the installation of a wildlife island in the pond and a stone retaining wall; grading of staging areas and residential property affected by remedial operations, including revegetation to the same as or better condition prior to remediation. Also, rip rap along the affected inlet and outlet channels to reduce erosion.
Agency Position on Sediment Removal (and Source):	Based on probing activities performed in August 1998, and the additional characterization studies performed in February and July of 1999, revised estimates of the thickness and in-situ volume of depositional Pond bottom material were developed. The associated analytical data were used to establish the delineation of TSCA versus non-TSCA materials, and the estimated volume associated with each. The thickness measurements/observations were used to estimate sediment thickness isopleths throughout the Pond. In interpreting the data, preference was given to the visual observations made during the July/August 1999 investigations. In addition, at locations where PCB analytical data was available but information regarding the thickness of depositional material was not, the removal depth was specified to be equal to or greater than the depth at which PCBs were detected.

REMEDIAL ACTION IMPLEMENTED

Project Name:	***BAY ROAD POND***	***ProjectID:*** 02-21
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Physical Target:	Depositional sediments within the Pond, 136 linear feet of the inlet channel, and 476 linear feet of the outlet channel.
Goals:	Visual removal of all depositional sediments to native material within the pond and channels of inflow and outflow, as well as restoration of the pond to specified aesthetic levels. Obtain a level of 1 ppm PCBs in sediments.
Primary Contractor:	Sevenson Environmental Services, Inc.
Other Contractors:	Adirondack Environmental Services, Inc.; Waste Stream Technology, Inc.; Girrard Landscape Maintenance Corp.; and Waste Management, Inc..
Generic Remediation Method:	Dry excavation
Equipment:	Conventional vacuum truck, earth-moving equipment and haulers.
Material Handling:	Diversion of water from the pond sources with dams and pumps; drainage and sumping to “in the dry” conditions. Vacuum pump sediments and removal to dewatering staging area; on-site treatment of wastewater and downstream discharge following sampling; transport of TSCA- and non-TSCA materials to off-site permitted facilities; restoration and enhancement of pond, channels, and residential properties impacted by remediation.
Volume Removed:	Total: 3,210 cy; 3,598 tons non-TSCA and 1,812 cy TSCA; includes materials removed from the pond and channel, stabilizing agent, liner, sand from the bermed water treatment system staging area, and spent carbon from the water treatment system.
Calendar Time:	March 1 to October 15, 2000.
Time To Implement:	7 1/2 months
Total Cost:	About $1.3 million
Dredging Cost:	Unknown
Disposal of Sediment:	Off-site at permitted facilities.
Volume of Water:	1,319,664 gallons. Monitoring indicated that the discharge standards were achieved throughout the project.
Method of Water Treatment:	Treatment system consisted of one influent settling tank (Modutank), dual particulate filters, 1,000 pounds of Biomin organoclay for removal of free or emulsified oils, two 10,000-pound activated carbon vessels, a cartridge filter downstream of the carbon units, two Modutanks for effluent storage, and associated piping, pumps, and controls. This system was constructed within a lined berm that provided secondary containment around the water treatment area. Treated water was discharged to the Bay Road Pond outlet channel downstream of the pond.
Water Discharge Limit:	pH = 6 to 9 pH units; oil & grease = < 15 mg/L; total suspended solids = < 10 mg/L; and PCBs as Aroclor 1016, 1221, 1232, 1242, 1248, 1254, and 1260 = < 0.3 ug/L
Air Monitoring During Remediation:	Portable, direct reading instruments recorded VOCs, hydrogen sulfide, lower explosive limits, oxygen, and, total particulates. Concentrations at the perimeter of the site did not exceed action levels for any parameter at any time during the project.
Water Monitoring During Remediation:	No instream monitoring performed.

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Outcome:

Restoration of Bay Road Pond resulted in the removal of about 3,210 cy of pond-bottom and inlet and outlet channel material that was disposed of at offsite permitted facilities. Of this, 3,598 tons were disposed of as non- TSCA and 1,812 tons as TSCA. Post-removal samples collected by the NYSDEC indicated that average residual pond-bottom PCB concentrations were below 1 ppm, with a maximum concentration of 1.67 ppm reported for one sample analyzed by immunoassay. The project also included restoration and enhancements of the pond, channels, and residential properties impacted by the remediation. Residential properties were returned to at least their original conditions.

Restoration and Post-Monitoring:

Post-removal sampling verified compliance with the agencies through NYSDEC's confirmation sampling and analysis. PCB concentrations were generally below 1 ppm, with a maximum concentration of 1.67 ppm reported for one immunoassay sample. Fish tissue analyses concluded that no additional fish advisory or remedial measures were required.

Site-Specific Difficulties:

- Total volume of excavation was above the estimated removal quantity specified in the Work Plan. The additional volume was generally associated with over-excavation to ensure removal of depositional materials, additional material removal required for construction of dewatering sumps, a greater-than-anticipated thickness of depositional material in the vicinity of the inlet channel, and additional removal necessary to install gabions to stabilize portions of the shoreline banks.

- The Work Plan called for the construction of a retaining wall along the south and east shores. This was abandoned due to large trees which would have had to be removed, and the close vicinity of Amherst Road.

- Sloughing of steeply excavated sidewalls occurred in certain shoreline areas. Gabions were installed to support these shorelines during excavation.

Following certain rain events, higher than normal suspended solids in the effluent tank water resulted in frequent replacement of the particulate filters located between the influent tank and the carbon units. A flocculent was introduced to reduce these occurrences.

Monitoring Data References:

- ***Sediment*** Reference - A-616
- ***Water:***
- ***Fish:*** NYSDEC Halfway Creek Report, May 2000

POTENTIALLY RESPONSIBLE PARTIES

Project Name ***BAY ROAD POND*** ***ProjectID:*** 02-21

PRP Name: **PRP INFORMATION NOT RELEASED** ***PRPID:***

Street Address:

City:

State:

KEY CONTACTS

Project Name ***BAY ROAD POND*** ***ProjectID:*** 02-21

Last Name: **KEY CONTACT INFORMATION NOT RELEASED** ***Contact ID:***

First Name:

Title:

Company:

Address:

City:

State:

Postal Code:

Work Phone # : ***Other Phone #:***

Fax # :

Email Address:

Project Name ***BAY ROAD POND*** ***ProjectID:*** 02-21

ReferenceID: 614

Reference Type:	A
Title:	***Order on Consent***
Location:	BBL
Category:	Legal
Prepared by/Author:	Deborah Christian
Preparer/Author Address:	New York State Department of Environmental Conservation
Prepared For:	NYSDEC
Date Published:	October 1999
Key Words and Phrases:	

ReferenceID: 615

Reference Type:	A
Title:	***Restoration Work Plan, Bay Road Pond, Queensbury, NY***
Location:	BBL
Category:	Remedial Action Plan/Work Plan
Prepared by/Author:	Blasland, Bouck & Lee, Inc.
Preparer/Author Address:	6723 Towpath Road P.O. Box 66 Syracuse, NY 13214
Prepared For:	General Electric and the NYSDEC
Date Published:	August 1999
Key Words and Phrases:	

ReferenceID: 616

Reference Type:	A
Title:	***Bay Road Pond Restoration Completion Report***
Location:	BBL
Category:	Close-Out Report
Prepared by/Author:	Blasland, Bouck & Lee, Inc.
Preparer/Author Address:	6723 Towpath Road P.O. Box 66 Syracuse, NY 13214
Prepared For:	General Electric and the NYSDEC
Date Published:	December 2000
Key Words and Phrases:	

Project Name ***BAY ROAD POND*** ***ProjectID:*** 02-21

ReferenceID: 952

Reference Type:	B
Title:	***e-mail re: Griffin Island and Bay Road Pond***
Location:	AEM
Category:	Site Update
Prepared by/Author:	Blasland, Bouck & Lee, Inc.
Preparer/Author Address:	
Prepared For:	AEM, Inc.
Date Published:	August 14, 2000
Key Words and Phrases:	