



INACTIVE HAZARDOUS WASTE DISPOSAL SITE REGISTRY INFORMATION REQUEST

FORMER IBM ENDICOTT FACILITY
1701 NORTH STREET

ENDICOTT, NY 13760

Facility Id: 704014

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL SITE INFORMATION

CLASSIFICATION CODE: 02 REGION: 7
CLASSIFICATION CODE DESCRIPTION:
Significant threat to the public health or environment - action required.

SITE CODE: 704014
DEC ID: 57846

NAME OF SITE: Former IBM Endicott Facility
STREET ADDRESS: 1701 North Street
CITY: Endicott ZIP: 13760

TOWN: Union
COUNTY: Broome

ESTIMATED SIZE: 135 Acres

SITE TYPE: Dump- Structure- Lagoon- Landfill- Treatment Pond-

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:
IDENTIFIER SOURCE

INTERNATIONAL BUSINESS MACHINES Alternate Site Name
NYD002233039 RCRA EPA ID No.
NYD002233039 EPA Site ID

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:

CURRENT OWNER(S):
NAME: Huron Real Estate Associates, LLC Owner Type: Corporate or Commercial
Christopher Pelto
ADDRESS: 1701 North Street
Endicott, NY 13760

OWNER(S) DURING DISPOSAL:

NAME: IBM CORPORATION - ENDICOTT FACILITY
ADDRESS: 1701 NORTH STREET
ENDICOTT, NY 13760

OPERATOR(S) DURING DISPOSAL:

NAME: IBM Corporate Environmental Affairs
Kevin Whalen
ADDRESS: 8976 Wellington Road
Manassas, VA 20110

Operator Type: Corporate or Commercial

DOCUMENT REPOSITORY(S):

NAME: George F. Johnson Memorial Library
Reference Librarian
ADDRESS: 1001 Park Street
Endicott, NY 13760

NAME: NYSDEC
Jessica LaClair
ADDRESS: 625 Broadway
Albany, NY 12233-7017

NAME: NYSDEC - Region 7
Stephanie Webb
ADDRESS: 615 Erie Blvd. West
Syracuse, NY 13204

HAZARDOUS WASTE DISPOSAL PERIOD: from 1979 Spill to 1979 Spill

SITE DESCRIPTION:

Location: The former IBM Endicott facility is a 135-acre site located in an urban area. The central portion of the facility is near at the intersection of McKinley Avenue and the railroad corridor in the village. Portions of the facility extend westward to Robble Avenue, northward to Watson Boulevard, eastward to Harding Avenue, and southward to south of North Street. The Susquehanna River is approximately one mile south of the facility.

Site Features: The site includes numerous current and former manufacturing buildings, office buildings, and ancillary support facilities. Paved parking areas are generally located around the periphery of the site buildings. There are a few small grass areas between the sidewalks surrounding the site and the buildings and/or parking lots. An east-west railroad corridor bisects the facility and several public and private roadways intersect or transect the facility. Brixius Creek, a small tributary to the Susquehanna, passes along the eastern edge of the facility. The oldest portion of the facility (informally known as the Old Group buildings) located along the north side of North Street east of McKinley Avenue which are abandoned and not suitable for occupancy due to issues not related to the handling of hazardous substances.

Current Zoning and Land Use: The site is currently zoned for Commercial/ Industrial. The facility is currently owned by Phoenix Investors, a real estate leasing and property management company. Phoenix, similar to the previous owner Huron, leases manufacturing and office space in the facility to a variety of tenants. Occupancy and use of the facility changes from time to time as tenant needs and availability of leasable space changes. Most of the facility footprint is currently occupied or available for occupancy.

The surrounding parcels are currently used for a combination of commercial, industrial, and residential.

Past Use of the Site: The site has a history of manufacturing and research and development beginning in the early 1900s and until 2002, when IBM sold to Huron. Huron sold to Phoenix in 2021. Early industrial activity was associated primarily with shoe manufacturing by Endicott-Johnson and its predecessors in the western portion of the site. Endicott-Johnson ceased manufacturing operations in the village by about 1980. IBM and its predecessors also operated at the site beginning in the early 1900s in the Old Group buildings east of McKinley Avenue. IBM gradually expanded into areas previously occupied by Endicott-Johnson as the latter company reduced its manufacturing capacity. Mechanical business machines were manufactured by IBM and its predecessors until the 1950s. From the 1950s to the early 1980s, the facility was engaged primarily in the manufacture of mid-range, mainframe computers. In the early 1980s, operations at the facility primarily shifted to the manufacture of components (circuit cards, circuit panels, and ceramic substrates) in support of other IBM electronics manufacturing activities. The primary solvents used by IBM as part of its mainframe computer and electronic component manufacturing operations included TCE, PCE, TCA, methylene chloride, and Freon 113. The site was sold to Huron Real Estate Associates, LLC in 2002.

Following the discovery of a TCA release from an underground tank in December 1979, IBM immediately excavated and removed contaminated soils down to the water table. A Dense Non-Aqueous Phase Liquid (DNAPL) Recovery system began operating in January 1980 and continued until December 1982. A groundwater extraction and treatment system was installed and started operating in 1980. The system has been expanded and upgraded through the years and is still continuing to operate.

The Department and IBM entered into a Consent Order on August 4, 2004. This Consent Order superseded a Part 373 RCRA permit for the IBM facility.

Operable Units: The former IBM Endicott site is divided into seven operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. Boundaries of the operable units at the Endicott site are generally defined by the limits of hydraulic capture in the various components of the groundwater remediation program or by convenient geographical features.

* Operable Unit 1 (OU1), also known as the Railroad Corridor Source Area is approximately 40 acres. It is the on-site source area and incorporates the central portion of the facility from the railroad corridor northward.

* Operable Unit 2 (OU2), also known as the North Street Area, is approximately 30 acres. It is the on-site portion of the main plant area south of the railroad and generally north of North Street.

For purposes of investigation and remediation, OU1 and OU2 are considered together because they are both on-site areas separated only by the railroad.

* Operable Unit 3 (OU3), also known as the Southern Area, is the southern portion of the groundwater plume associated with the OU1 and OU2 source areas. OU3 extends approximately from Monroe Street southward to the Susquehanna River, and from just west of McKinley Avenue to just east of Arthur Avenue.

For purposes of investigation and remediation, OU3 is generally considered together with an area identified in the Consent Order as Off-Site Capture Zone A because the two areas are contiguous and together represent the off-site plume area south of the main plant area. Off-Site Capture Zone A is the northern portion of the off-site groundwater plume associated with the OU1 and OU2 on-site source areas. Off-Site Capture Zone A extends approximately from North Street southward to north of Broad Street, and from just west of Jefferson Avenue to just east of McKinley Avenue.

* Operable Unit 4 (OU4), also known as the Ideal Cleaners Area, is the source area and groundwater plume associated with the former dry-cleaning operation. Operable Unit 4 lies east of Off-Site Capture Zone A and extends southward from North Street to approximately Monroe Street. An area identified in the Consent Order as Off-Site Capture Zone B is part of OU4. Off-Site Capture Zone B is the plume area associated with the former Ideal Cleaners and extends from the source area to a line of extraction wells located along Monroe Street between Adams Avenue and the alley east of McKinley Avenue.

* Operable Unit 5 (OU5), also known as the Building 57 Area, is the source area and groundwater plume associated with Building 57/57A which is separate from and east of the main facility. OU5 includes Building 57/57A east of Hayes Avenue and north of the railroad tracks, as well as a former parking lot (known as Parking Lot 26) south of the railroad tracks.

* Operable Unit 6 (OU6) is the bedrock groundwater plume and includes all facility-related contamination in the bedrock aquifer.

* Operable Unit 7 (OU7), also known as the Northwestern Area, is the source area and groundwater plume associated with historic releases in this area. OU7 includes the portion of the former IBM facility northwest of the main facility and located west of Oak Hill Avenue and north of the railroad tracks.

Site Geology and Hydrogeology: The geology of the site is characterized by a sequence of unconsolidated glacial and post-glacial sediments overlying a buried bedrock valley. Three separate water-bearing units are defined in the vicinity of the site: the Upper Aquifer, the Lower Aquifer, and the Bedrock Aquifer. The Upper Aquifer extends beneath the site and is the water-bearing unit most impacted by site-related contamination. Natural groundwater flow in all three units is to the south, ultimately discharging to the Susquehanna River. Groundwater withdrawals for water supply or remediation purposes have altered the natural flow regime by creating artificial discharge and recharge points. Depth to groundwater at the site varies from about 10 to 40 feet below ground surface under pumping conditions.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY
TRICHLOROETHENE (TCE)	UNKNOWN
TETRACHLOROETHYLENE (PCE OR "PERC.")	UNKNOWN
TRICHLOROETHYLENE (TCE)	UNKNOWN
BENZENE	UNKNOWN
TOLUENE	UNKNOWN
XYLENE (MIXED)	UNKNOWN
FREON	UNKNOWN
cis-1,2-dichloroethene	UNKNOWN
VOLATILE ORGANICS	UNKNOWN
METHYL CHLOROFORMATE	UNKNOWN
1,1,1 TCA	UNKNOWN
TETRACHLOROETHYLENE (PCE)	UNKNOWN
1,1-dichloroethane	UNKNOWN
vinyl chloride	UNKNOWN
1,1-dichloroethene	UNKNOWN
dichloroethene (cis-1,2-)	UNKNOWN
tetrachloroethene (PCE)	UNKNOWN
1,1,1-Trichloroethane (TCA)	UNKNOWN
1,1,1-TRICHLOROETHANE	UNKNOWN
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UNKNOWN
1,1,1-TCA	UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Nature and Extent of Contamination

Operable Unit 1 (Railroad Corridor Source Area), Sub-Surface Soil:

The primary contaminant of concern in OU1 soils TCA. TCA was found at up to 48 parts per million (ppm) at depth (17 feet below ground surface) near the railroad tracks between Buildings 46 and 48. TCE was detected at 14 ppm in the same location. Groundwater data suggests that inaccessible areas (i.e., beneath buildings) may have isolated areas of soil contamination resulting from leaks from solvent/waste tanks and/or pipelines. Soil sampling was conducted for grassy areas outside of the fence and no further actions are required.

Operable Unit 1 (Railroad Corridor Source Area), Groundwater: The primary contaminants of concern in OU1 groundwater are PCE, TCE, TCA, Freon 113, and their respective breakdown products. The highest concentrations of all these are found in the immediate vicinity of the railroad. The highest concentrations from the 2018 sampling are as follows: PCE 540 ppb; TCE 520 ppb; cis-1,2-DCE (a breakdown product) 15,000 ppb; TCA 75,000 ppb; 1,1-DCA (a breakdown product) 27,000 ppb; Freon-113 190 ppb.

Operable Unit 1 (Railroad Corridor Source Area), Soil Vapor: Results of 2016 sampling in buildings located within OU1 indicated that mitigation for soil vapor intrusion was needed in two buildings, which was performed in Buildings 45/46. Post mitigation samples collected confirmed the effectiveness of the system and indoor air concentrations were either below or at background levels. Building 47 results were below the NYSDOH guidelines for TCE and no actions were required at the time.

Operable Unit 2 (North Street Area), Sub-surface Soil: The primary contaminant of concern in OU2 soils is TCA. TCA was found at up to 11,000 ppm at depth (17 feet below ground surface) in one localized area north of Building 18 in the vicinity of a former TCA underground storage tank that was removed in 1980. TCE, toluene, and Freon 113 are found in a few localized areas, but at much lower concentrations (less than 100 ppm). Groundwater data suggests that inaccessible areas (i.e., beneath Buildings 18 and 41) may have isolated areas of soil contamination resulting from leaks from solvent/waste tanks and/or pipelines. Soil sampling was conducted for grassy areas outside of the fence and no further actions are required.

Operable Unit 2 (North Street Area), Groundwater: The primary contaminants of concern in OU2 groundwater are TCE, TCA, and their respective breakdown products. Highest concentrations are found between Buildings 18 and 41. Based on the 2018 groundwater sampling the highest TCE concentration is 11,000 ppb and the highest TCA concentration is 2,200 ppb. Contaminant concentrations decline rapidly south of North Street.

Operable Unit 2 (North Street Area), Soil Vapor: Results of 2016 sampling in buildings located within OU2 indicated that mitigation for soil vapor intrusion was needed in one building, which was performed in Building 42. Post mitigation samples collected to confirm the effectiveness of the systems indicated that indoor air concentrations were either below or at background levels. The remaining buildings sampled had results below the NYSDOH guidelines for TCE and no actions were required at the time.

Operable Unit 3 (Southern Area) and Off-Site Capture Zone A, Soil: OU3 and Off-Site Capture Zone A are off-site areas. There is no site-related soil contamination in off-site areas.

Operable Unit 3 (Southern Area) and Off-Site Capture Zone A, Soil Vapor: The primary contaminant of concern in OU3 and Off-Site Capture Zone A soil vapor is TCE. Concentrations range from 33,000 µg/m³ to non-detect. Concentrations are highest near the plant (opposite Building 41 along North Street) and decline with distance to the south. Most areas are less than 350 µg/m³.

Operable Unit 3 (Southern Area) and Off-Site Capture Zone A, Groundwater: The primary contaminant of concern in OU3 and Off-Site Capture Zone A groundwater is TCE. Concentrations in most areas are below the groundwater standard of 5 ppb. A few areas have concentrations of 20-30 ppb. In a localized area immediately south of North Street across from Building 18, several wells have TCE concentrations between 1,700 ppb and 13,000 ppb.

Operable Unit 4 (Ideal Cleaners Area), Soil: Soil contamination in OU4 is not significant. The remedy for OU4 (in-situ thermal treatment) has effectively removed PCE-related contamination from soil. The highest post-treatment PCE concentration in soil was 0.125 ppm.

Operable Unit 4 (Ideal Cleaners Area), Groundwater: The primary contaminant of concern in OU4 is cis-1,2-DCE, a breakdown product of PCE. PCE has essentially been eliminated from the plume following in-situ thermal treatment of the source zone. Breakdown products are also decreasing in area and concentration. A localized area immediately south of the source zone has residual cis-1,2-DCE concentrations greater than 50 ppb, with one monitoring well showing a concentration of 66 ppb.

Operable Unit 5 (Building 57 Area), Soil: Soil excavation and in-situ thermal treatment IRMs have removed areas of significant soil contamination. The highest remaining contaminant concentrations are within the allowable limit for residential use: 11 ppm (TCA) and 7.7 ppm (TCE), both in the Parking Lot 26 area of OU5. In the Building 57/57A portion of OU5, all remaining soil contamination is below criteria for unrestricted use.

Operable Unit 5 (Building 57 Area), Groundwater: The primary contaminant of concern remaining in OU5 groundwater is Freon 113. One on-site well within the Freon source area has concentrations up to 7,000 ppb and a nearby off-site well has concentrations up to 8,700 ppb. Two other wells have concentrations up to 450 ppb. Other wells are near or below the groundwater standard for Freon 113. Other site-related contaminants (TCE, TCA, and their respective breakdown products) range in concentration from non-detect up to approximately 120 ppb.

Operable Unit 6 (Bedrock Aquifer), Groundwater: The primary contaminants of concern in OU6 groundwater (the bedrock aquifer) are TCE and its breakdown products. TCE is found at concentrations up to 1000 ppb. Breakdown products (primarily cis-1,2-DCE) are found at concentrations up to 1900 ppb.

Operable Unit 7 (Northwest Area), Soil: An area of soil contamination that pre-dated IBM's acquisition of the property was removed by IBM upon its purchase of the property in 1984. Excavated soil was contaminated with PCE, TCE, TCA, toluene, and chromium associated with Endicott-Johnson manufacturing activities. It was determined that no further actions were needed regarding soil contamination.

Operable Unit 7 (Northwest Area), Groundwater: The primary contaminants of concern in OU7 groundwater are TCE, TCA, and their breakdown products. All are relatively small in area and low in concentration. TCE is found in two small, localized areas south of Clark Street at concentrations of 12 ppb and 23 ppb. Other contaminants are generally near the groundwater standard.

ASSESSMENT OF HEALTH PROBLEMS:

Direct contact with contaminants in soil is unlikely since the majority of the site is an active industrial facility that is covered with buildings and pavement. In addition, access is restricted, further limiting the potential for contact exposures. People are not drinking the contaminated groundwater because the area is served by a public water supply that is routinely tested to ensure that it meets drinking water standards. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the overlying buildings, is referred to as soil vapor intrusion.

Soil vapor intrusion and the potential for soil vapor intrusion has been identified in both on- and off-site buildings. The on-site indoor air results indicate that either the air levels are consistent with background indoor air levels and are not of concern or that levels are below or slightly above the NYSDOH air guidelines. In the later, the possibility of health effects in workers exposed to these levels is low, but monitoring within the on-site occupied buildings is on-going. NYSDOH has recommended that reasonable and practical actions be taken to reduce indoor air concentrations within the on-site buildings to the extent that is possible. Mitigation systems (systems that ventilate/remove the air beneath the building) have been and will be installed in all buildings within the off-site defined soil vapor intrusion mitigation area to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the buildings. The responsible party will also continue to track properties within the soil vapor intrusion mitigation area to identify new or modified buildings that might require mitigation systems.

PROJECT COMPLETIONS:

OPERABLE UNIT	PROJECT	DESCRIPTION	END DATE	STATUS
Operable Unit 01 - RAILROAD CORRIDOR SOURCE AREA	Remedial Investigation		03/30/2019	Actual
	Remedial Design		09/01/2021	Actual
Operable Unit 01A - IRM Groundwater Extraction and Treatment	Remedial Design	IRM Extraction Well - EN-114T	10/24/2013	Actual
	Remedial Action	IRM Extraction Well - EN-114T	01/30/2014	Actual
Operable Unit 01B - IRM Clean Water Injection	Remedial Design	Injection Well EN-509T	11/02/2010	Actual
	Remedial Action	IRM Injection Well EN-509T	04/03/2012	Actual
Operable Unit 01C - IRM Sediment Removal	Remedial Design	IRM Storm Sewer Sediment Removal	01/12/2012	Actual
	Remedial Action	IRM Storm Sewer Sediment Removal	11/29/2012	Actual
Operable Unit 02 - NORTH STREET AREA	Remedial Investigation		03/30/2019	Actual
	Remedial Design		09/01/2021	Actual
Operable Unit 02A - IRM Groundwater Extraction and Treatment	Remedial Design	EN-284 Permanent Piping	05/30/2004	Actual
	Remedial Action	EN-284 Permanent Piping	01/27/2005	Actual
	Remedial Design	Extraction Wells T-91 and T-92	03/31/2005	Actual
	Remedial Action	Extraction Wells T-91 and T-92	04/10/2005	Actual
	Remedial Design	Extraction Wells EN-91, EN-92, and EN-284	03/30/2007	Actual
	Remedial Design	Extraction Well EN-451T/451P	04/27/2007	Actual
	Remedial Action	Extraction Wells EN-91, EN-92, and EN-284	10/10/2007	Actual
	Remedial Action	Extraction Well EN-451T/451P	07/18/2008	Actual
	Remedial Design	IRM Garfield GTF Air Stripper	09/25/2013	Actual
	Remedial Action	IRM Garfield GTF Air Stripper	11/07/2013	Actual
	Operable Unit 02B - IRM Clean Water Injection	Remedial Design	IRM Injection Well EN-525T	07/07/2010
Remedial Design		IRM Injection Well EN-509T	11/02/2010	Actual
Remedial Design		IRM Injection Well EN-530T	10/24/2011	Actual
Remedial Action		IRM Injection Well EN-509T	04/03/2012	Actual
Remedial Action		IRM Injection Well EN-530T	07/26/2012	Actual
Remedial Design		IRM Injection Well EN-532T	08/06/2013	Actual
Remedial Action		IRM Injection Well EN-532T	10/30/2013	Actual

Operable Unit 02C - IRM Sediment Removal

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM Storm Sewer Sediment Removal	01/12/2012	Actual
Remedial Action	IRM Storm Sewer Sediment Removal	11/29/2012	Actual

Operable Unit 03 - SOUTHERN AREA and OFF-SITE CAPTURE ZONE A

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design		03/31/2015	Actual
Remedial Investigation		03/31/2015	No Further Action
Remedial Action		03/31/2015	Actual

Operable Unit 03A - Groundwater Extraction and Treatment

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design		02/14/2006	Actual
Remedial Action		05/24/2006	Actual
Remedial Design	IRM Extraction Well EN-447T Upgrade	06/28/2013	Actual
Remedial Action	IRM Extraction Well EN-447T Upgrade	09/05/2013	Actual

Operable Unit 04 - IDEAL CLEANERS AREA

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Investigation		11/02/2010	No Further Action

Operable Unit 04A - IRM In-Situ Thermal Treatment

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Action	In-Situ Thermal IRM	07/20/2010	Actual

Operable Unit 05 - BUILDING 57 AREA

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Investigation		03/30/2016	Actual
Remedial Design		03/30/2016	Actual
Remedial Action		03/30/2016	Actual

Operable Unit 05A - Groundwater Extraction and Treatment

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM EWs EN-623, EN-624, and Hayes GTF Upgrades	04/28/2006	Actual
Remedial Action	IRM EWs EN-623, EN-624, and Hayes GTF Upgrades	08/31/2006	Actual
Remedial Design	IRM Extraction Well - EN-709	03/30/2011	Actual
Remedial Action	IRM Extraction Well - EN-709	06/19/2013	Actual

Operable Unit 05C - Soil Excavation

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM Soil Excavation - Lot 26	03/21/2011	Actual
Remedial Action	IRM Soil Excavation - Lot 26	05/31/2011	Actual

Operable Unit 05D - In-Situ Thermal Treatment

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM In-Situ Thermal Treatment	09/16/2011	Actual
Remedial Action	IRM In-Situ Thermal Treatment	01/31/2013	Actual

PROJECT	DESCRIPTION	END DATE	STATUS
Operable Unit 06 - BEDROCK GROUNDWATER			
Remedial Investigation		03/26/2009	Actual
Operable Unit 06A - IRM Groundwater Extraction and Treatment			
Remedial Design	EN-CAF Well Replacement	05/09/2006	Actual
Remedial Action	EN-CAF Well Replacement	10/10/2007	Actual
Operable Unit 07 - NORTHWEST AREA			
Remedial Investigation		03/30/2018	Actual
Operable Unit 07A - IRM Groundwater Extraction and Treatment			
Remedial Design	Robble Ave GTF and piping for GW treatment	09/07/2006	Actual
Remedial Action	Robble Ave GTF and piping for GW treatment	12/06/2007	Actual
Operable Unit 08 - REMAINDER OF SITE			
Site Characterization		01/04/2010	No Further Action
Operable Unit 09 - VAPOR INTRUSION ON SITE			
Site Characterization		02/01/2006	Actual
The following project completion(s) have been modified or deleted from the registry. Data reflects previous information.			
Operable Unit 02B - IRM Clean Water Injection			
Remedial Design	Extraction Wells T-91 and T-92	03/31/2005	Actual
Remedial Action	Extraction Wells T-91 and T-92	04/10/2005	Actual
Operable Unit 02C - IRM Groundwater Extraction - Wells EN-284, T-91 and T-92			
Remedial Design		03/30/2007	Actual
Remedial Action	Perm well installation EN-284, 91 & 92	10/10/2007	Actual
Operable Unit 02D - IRM Groundwater Extraction - Well EN-451			
Remedial Design	Extraction Well EN-451T & P	04/27/2007	Actual
Remedial Action	Extraction well EN-451T & P	07/18/2008	Actual
Operable Unit 02E - IRM Clean Water Injection - Well EN-525T			
Remedial Design	Injection Test Well EN-525T	07/07/2010	Actual
Operable Unit 02F - IRM Clean Water Injection - Well EN-530T			
Remedial Design	IRM Injection Well EN-530T	10/24/2011	Actual
Remedial Action	IRM Injection Well EN-530T	07/26/2012	Actual

Operable Unit 02G - IRM Clean Water Injection - Well EN-509T			
PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM Injection Well EN-509T	11/02/2010	Actual
Remedial Action	IRM Injection Well EN-509T	04/03/2012	Actual
Operable Unit 02H - IRM Sediment Removal - Storm Sewers			
PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM Storm Sewer Sediments	01/12/2012	Actual
Remedial Action	IRM Storm Sewer Sediments	11/29/2012	Actual
Operable Unit 05A - IRM Groundwater Extraction - Wells EN-623 and EN-624			
PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	GW Recovery well Enhancement Hayes Ave GTF Bldg57	04/28/2006	Actual
Remedial Action		08/31/2006	Actual
Operable Unit 05B - IRM Groundwater Extraction - Well EN-709 - Lot 26			
PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Design	IRM Extraction Well - Lot 26	03/30/2011	Actual
Remedial Action	IRM Extraction Well - Lot 26	06/19/2013	Actual

The New York State Department of Environmental Conservation has not publicly updated the following fields since 2003:

ANALYTICAL DATA AVAILABLE FOR:	Air-	Surface Water-	Groundwater-X	Soil-X	Sediment-
APPLICABLE STANDARDS EXCEEDED IN:	Groundwater-X	Drinking Water-X	Surface Water-	Air-	

GEOTECHNICAL INFORMATION:

SOIL/ROCK TYPE: Gravel.
 GROUNDWATER DEPTH: Range: 10 to 15 feet.

LEGAL ACTION:	Type: Consent Order	State-X	Federal-
STATUS:	Negotiation in Progress-	Order Signed-X	
REMEDIAL ACTION:	Proposed- Under Design-	In Progress-	Completed-X
NATURE OF ACTION:	Groundwater pump & treat system.		