



BROWNFIELDS SITES INFORMATION REQUEST

FORMER ITHACA GUN FACTORY
LAKE STREET, ITHACA, NY 14850

Facility Id: [REDACTED]

ADDRESS CHANGE INFORMATION

Revised street: NO CHANGE
Revised zip code: NO CHANGE

Brownfield Program: Brownfield Cleanup Program

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
BROWNFIELD CLEANUP PROGRAM

CLASSIFICATION CODE: A
CLASSIFICATION CODE DESCRIPTION:
Work is underway and not yet complete.

REGION: 7

SITE CODE: [REDACTED]
DEC ID: [REDACTED]

NAME OF SITE: Former Ithaca Gun Factory
STREET ADDRESS: [REDACTED] Lake Street
CITY: Ithaca ZIP: 14850

TOWN: Ithaca (c)
COUNTY: Tompkins

ESTIMATED SIZE: 1.63 Acres

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

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:
IDENTIFIER

SOURCE

[REDACTED]

Spill No.
Agreement/Consent Order Number
ERP Site ID
VCP Site ID

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:
CURRENT OWNER(S):

NAME: IRF Development, LLC
Frost Travis
ADDRESS: 323 North Tioga Street
Ithaca, NY 14850

Owner Type: Corporate or Commercial

OWNER(S) DURING DISPOSAL:

OPERATOR(S) DURING DISPOSAL:

APPLICANT REQUESTOR(S):

NAME: IFR Development, LLC
Frost Travis
ADDRESS: 306 North Cayuga Street
Ithaca, NY 14850

DOCUMENT REPOSITORY(S):

NAME: Tompkins County Public Library
ADDRESS: 101 East Green Street
Ithaca, NY 14850

HAZARDOUS WASTE DISPOSAL PERIOD:

SITE DESCRIPTION:

Location: The Former Ithaca Gun Factory site is located at [REDACTED] Lake Street in an urban area of the City of Ithaca, Tompkins County. The site consists of two separate parcels, totaling 1.63 acres. It is situated in an area with the Ithaca Falls and Fall Creek Gorge to the north, Cornell University to the east, Lake Street and residential housing to the south, and a residential neighborhood to the west.

Site Features: The eastern parcel is vacant with no buildings present and is partially vegetated where soil is present. Areas of the eastern parcel have exposed bedrock at the ground surface. On the western parcel, one small single-story building and the former Ithaca Gun Factory boiler stack still exist. The site parcels are separated by a narrow strip of land that is part of the Ithaca Falls Overlook Environmental Restoration Program (ERP) site and owned by the City of Ithaca. The eastern and western parcels each have eight-foot high chain-link fencing along their perimeters.

The site is positioned on the side of a hill; however, the two parcels occupy terraced areas and within the boundaries for each are mostly level. Approximate elevations of the level areas on the western and eastern parcels range from 490 feet above mean sea level (ft amsl) to 528 ft amsl, respectively. Areas of steeper slopes exist on the northeast and east side of the eastern parcel and on the north side of the western parcel.

Current Zoning and Land Use: Currently the site is vacant and consists mostly of open land; it is zoned residential. The surrounding parcels are currently used for a combination of public, residential, and commercial uses. The nearest residential area is across Lake Street to the south.

Past Use of the Site: The site was originally developed for industrial use in 1813. Companies that may have operated at the site prior to the Ithaca Gun Company include the Ithaca Manufacturing Company (agricultural equipment) and the W.H. Baker & Company gun factory.

The Ithaca Gun Company operated at the site from 1885 through 1986. The main operations included manufacture of firearms and munitions. Supporting manufacturing activities and site uses included spray-painting, drying gun stocks in ovens, firing ranges, metal plating, machine shop, and forging. These uses by the Ithaca Gun Company appear to have led to contamination of both on-site and near off-site areas.

From 1995 to 1998, following discovery of lead shot in the Falls Creek gorge area, soil sampling was conducted in on-site and off-site areas. In 2000, leaking transformers and associated PCB-contaminated soils were removed from the site. From 2000 to 2002, the EPA conducted a removal assessment, limited building demolition, and soil removal activities mostly on adjacent off-site areas; however, some portions of the former Ithaca Gun Factory property were included. In 2001, an Environmental Site Assessment and a Site Investigation were completed for and funded by the site owner at that time. In 2002, this site was part of the property included within the Voluntary Cleanup Agreement for the Ithaca Gun Company Site, Site No. [REDACTED]. In 2009, most on-site buildings were demolished and removed from the site; one small uninhabitable building and the smokestack remain on the western parcel. Funding for the demolition activities were at least partially supported by the Empire State Development Restore NY program. A post-demolition site investigation was performed and included surface soil screening and sampling, and groundwater sampling.

Site Geology and Hydrogeology: The predominantly shale bedrock is exposed at the ground surface in level areas and is outcropping in many areas of the site. The bedrock in other areas is covered by soil or crushed masonry type building materials with thicknesses ranging from a few inches to approximately 15 feet.

Groundwater is encountered within the fractured bedrock. Depth to groundwater is approximately 15 to 20 feet below ground surface. The generalized direction of groundwater flow is to the west-northwest.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY
cis-1,2-Dichloroethene	UNKNOWN
polychlorinated biphenyls (PCB)	UNKNOWN
tetrachloroethene (PCE)	UNKNOWN
VINYL CHLORIDE	UNKNOWN
ETHENE, 1,2, Cis-Dichloro	UNKNOWN
TRICHLOROETHENE (TCE)	UNKNOWN
LEAD	UNKNOWN
TETRACHLOROETHYLENE (PCE)	UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: Soil was analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Groundwater was analyzed for VOCs, SVOCs, metals, PCBs, pesticides, and polyfluoroalkyl substances (PFAS). Soil vapor was analyzed for VOCs.

Soil - The primary contaminant of concern detected in soil is lead. Lead is the most prevalent contaminant in soil at the site based on frequency of occurrence and concentrations detected. Lead was detected in surface and subsurface soil of the eastern and

western parcels at concentrations exceeding the restricted residential SCO (RRSCO) of 400 parts per million (ppm) for lead in 50 percent of all soil samples. The maximum concentrations of lead reported for surface soil and subsurface soil at the site are 2,690 ppm and 21,800 ppm, respectively.

Secondary contaminants of concern in soil are PCBs. PCBs were detected in subsurface soil at concentrations exceeding the RRSCO of 1 ppm for PCBs on the western parcel. One sample exceeded the USEPA Toxic Substance Control Act (TSCA) limit of 50 ppm for PCBs and; therefore, is identified as a TSCA waste. The maximum concentration of PCBs is 62 ppm, detected in a subsurface sample within the depth interval from 6 to 8 feet below ground surface. Delineation sampling shows the occurrence of PCB contaminated soil to be limited in areal and vertical extent.

Detections of other metals and some SVOCs were found in a few isolated soil samples at concentrations slightly exceeding their respective RRSCOs. The metal constituents were arsenic, cadmium, and mercury. The SVOCs were benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo[a,h]anthracene, and indeno(1,2,3-cd)pyrene. Typically, soil samples with these constituents also exceeded the RRSCO for lead.

Lead contaminated soil as previously found in off-site areas, immediately adjacent to the site boundaries, have been addressed through USEPA removal actions and the Ithaca Falls Overlook site remedy.

Groundwater - The primary contaminants of concern in site groundwater are the VOCs, cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride. Maximum concentrations of cis-1,2-DCE, PCE, TCE, and vinyl chloride in groundwater on site were 14,000 parts per billion (ppb), 360 ppb, 9,520 ppb, and 530 ppb, respectively. The groundwater standard is 5 ppb for cis-1,2-DCE, PCE, and TCE, and 2 ppb for vinyl chloride. The highest concentrations of contaminants occur on-site within the fractured bedrock. Although the movement of groundwater is reduced vertically by a decrease in fractures with increased depth, contaminated groundwater does migrate off-site to the west. The off-site area of groundwater contamination has been investigated and continues to be monitored by the Department as part of the Former Ithaca Gun Factory - Off-site remedial program. Based on sampling results, only one site-related compound, TCE, has been detected in off-site groundwater, but at concentrations below the groundwater standard.

For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 5.8 and 5.2 parts per trillion (ppt), respectively, below the 10 ppt screening levels for groundwater for each. 1,4-dioxane was reported at concentrations of up to 0.47 parts per billion (ppb), below the screening level of 1 ppb in groundwater.

Soil Vapor - VOCs detected in soil vapor samples on-site and included in the NYSDOH soil vapor intrusion guidance include 1,1,1-trichloroethane, carbon tetrachloride, and TCE, with maximum concentrations of 31 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), 18 $\mu\text{g}/\text{m}^3$, and 18 $\mu\text{g}/\text{m}^3$, respectively. Locations for sampling of soil vapor on-site were limited due to the low thickness or absence of soil over bedrock. Due to the off-site migration of VOC contamination in groundwater, the Department's Former Ithaca Gun Factory - Off-site remedial program includes continued evaluation of soil vapor intrusion. Based on sampling results for TCE, mitigation has been conducted at eight off-site structures.

ASSESSMENT OF HEALTH PROBLEMS:

The site is completely fenced, which restricts public access. However, trespassers who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. Soil removal activities have been completed to remove contaminated soil found in offsite surface soils. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no onsite habitable structure, inhalation of site

contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its present condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any onsite development. Subslab depressurization systems (systems that ventilate/remove the air beneath the building) have been installed in offsite buildings to prevent the indoor air quality from being affected by site related contamination. The potential exists for inhalation exposures to site contamination via the soil vapor intrusion pathway in other offsite buildings.

PROJECT COMPLETIONS:

Operable Unit 01 - Remedial Program

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Investigation		02/11/2021	Actual



BROWNFIELDS SITES INFORMATION REQUEST

ITHACA GUN COMPANY SITE
121 LAKE ST, ITHACA, NY 14800

Facility Id: V00511

ADDRESS CHANGE INFORMATION

Revised street: NO CHANGE
Revised zip code: 14850

Brownfield Program: Voluntary Cleanup Program

Volunteer: FALL CREEK REDEVELOPM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
VOLUNTARY CLEANUP PROGRAM

CLASSIFICATION CODE: N
CLASSIFICATION CODE DESCRIPTION:
No further action

REGION: 7

SITE CODE: V00511
DEC ID: 57063

NAME OF SITE: Ithaca Gun Company Site
STREET ADDRESS: 121 Lake St
CITY: Ithaca ZIP: 14800

TOWN: Ithaca
COUNTY: Tompkins

ESTIMATED SIZE: 1.631 Acres

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

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:
IDENTIFIER

SOURCE

The following cross reference(s) have been deleted from the registry. Data reflects previous information.
B7-0602-11-01 Agreement/Consent Order Number
C755019 BCP Site ID
E755018 ERP Site ID

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:

CURRENT OWNER(S):

NAME: FALL CREEK REDEVELOPMENT, LLP
 MR. WALLACE DIEHL
 ADDRESS: 110 BANK DRIVE
 CHAPEL HILL, NC 27514

Owner Type: PRP - Class 2 HazSubs

OWNER(S) DURING DISPOSAL:

OPERATOR(S) DURING DISPOSAL:

APPLICANT REQUESTOR(S):

HAZARDOUS WASTE DISPOSAL PERIOD:

SITE DESCRIPTION:

The site is located in a residential area between Fall Creek to the north and Lake St. to the south. Approximately 75% of the site is occupied by buildings. The former Ithaca Gun Company started in 1888 on this site and closed in 1988. All aspects of gun manufacturing were conducted at this facility. Petroleum products that were used in the milling operations and solvents that were used to clean metal parts have been disposed at this site. Elevated levels of lead, which resulted from the test firing of guns, has been detected in site soils. A remedial site investigation was completed during 2004.

The EPA conducted a cleanup of the offsite lead contamination in 2003. A majority of the offsite was cleaned. A small portion of the onsite lead contamination was addressed.

The site has been subdivided into two parcels. The first parcel will be transferred to the City of Ithaca and developed as a City park with a public walkway and overlook area for the falls. This parcel has been assigned a new site number(E755018 Ithaca Falls Overlook) and a ERP grant has granted to the ity. The second parcel consists of the factory buildings and the remainder of the site. This parcel will remian under the VCP. The building will be demolished and the site cleaned up under the existing VCP program. The site will be re-developed into town houses by a private developer. The City of Ithaca has recieved a 2008 Restore NY grant for the project in the amount of \$2.3 million for the demolition of the building and site remediation. A demolition work plan was submitted and approved by DEC and DOH. The facility was demolished in 2009, and the majority of the demolition debris was taken off-site for proper disposal. Several stockpiles remain on-site, however, and removal of this material commenced in July 2010. There is also an approved Focused Site Investigation work Plan to investigate the area under the building footprint once the stockpiles have been removed.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE

QUANTITY

The following material(s) have been deleted from the registry. Data reflects previous information.

TYPE	QUANTITY
LEAD	UNKNOWN
VINYL CHLORIDE	UNKNOWN
BENZENE	UNKNOWN
TRICHLOROETHENE (TCE)	UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

The primary contaminants of concern are lead and VOC's. Site soils and groundwater are the primary media impacted. The USEPA has

removed substantial amounts of lead-contaminated soil on and off site. However, lead-contaminated soil remains in areas where it has potential to re-contaminate off-site areas, including waterbodies (the mill race and Fall Creek.)

Extensive screening of the existing structures was conducted to evaluate the extent of contaminants on the various building surfaces. XRF screening was initially used, however the results were inconclusive, and physical sampling and testing was employed. A few surfaces had levels of lead above the NYSDEC's Soil Cleanup Objective (SCO) of 400 parts per million (ppm) for restricted-residential property. (The site is planned to be re-developed into condominiums or luxury townhouses.) Several surfaces also had barium levels above the SCO of 400 ppm. The source of the barium appears to be barium carbonate that is used in the manufacture of brick.

ASSESSMENT OF HEALTH PROBLEMS:

The potential exists for direct contact, incidental ingestion, and inhalation of contaminated soil by trespassers even though there is a fence restricting access to the site. Exposure to contaminated groundwater is not expected since public water serves the area. The potential for exposure from soil vapor intrusion into structures on and near the site will be evaluated and addressed as necessary.

PROJECT COMPLETIONS:

Operable Unit 01 - B7-0602-11-01

PROJECT	DESCRIPTION	END DATE	STATUS
Remedial Investigation		05/20/2003	Actual



BROWNFIELDS SITES INFORMATION REQUEST

ITHACA FALLS OVERLOOK
 125 LAKE STREET, ITHACA, NY 14850

Facility Id: E755018

ADDRESS CHANGE INFORMATION

Revised street: NO CHANGE
 Revised zip code: NO CHANGE

Brownfield Program: Environmental Restoration Program

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF ENVIRONMENTAL REMEDIATION
 ENVIRONMENTAL RESTORATION PROGRAM

CLASSIFICATION CODE: C

REGION: 7

SITE CODE: E755018
 DEC ID: 391465

CLASSIFICATION CODE DESCRIPTION:

Remediation Complete (formerly D2). Sites may still require some degree of site management associated with either operation, maintenance, and monitoring or with institutional/engineering controls (IC/ECs).

NAME OF SITE: Ithaca Falls Overlook
 STREET ADDRESS: 125 Lake Street
 CITY: Ithaca

ZIP: 14850

TOWN: Ithaca (c)
 COUNTY: Tompkins

ESTIMATED SIZE: 0.948 Acre

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

INSTITUTIONAL/ENGINEERING CONTROLS:

CONTROL:	IN-PLACE DATE:
Cover System	01/12/2018
Landuse Restriction	01/12/2018
Monitoring Plan	01/12/2018
Site Management Plan	01/12/2018
IC/EC Plan	01/12/2018
Environmental Easement	01/12/2018
Ground Water Use Restriction	01/12/2018
Soil Management Plan	01/12/2018

CROSS REFERENCES:

IDENTIFIER	SOURCE
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07/15/2009
2008-00512
C304197
C755019
V00511

Agreement/Consent Order Date
County Recording Identifier
Agreement/Consent Order Number
BCP Site ID
VCP Site ID

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:

CURRENT OWNER(S):

NAME: City of Ithaca
ADDRESS: 108 East Green Street
City Hall, 4th Floor
Ithaca, NY 14850

Owner Type: Local Government

OWNER(S) DURING DISPOSAL:

OPERATOR(S) DURING DISPOSAL:

APPLICANT REQUESTOR(S):

NAME: City of Ithaca
Mike Thorne

Applicant Type: Local Government

ADDRESS: City of Ithaca
108 East Green Street
Ithaca, NY 14850

DOCUMENT REPOSITORY(S):

NAME: Tompkins County Public Library
ADDRESS: 101 East Green Street
Ithaca, NY 14850

HAZARDOUS WASTE DISPOSAL PERIOD:

SITE DESCRIPTION:

Location: The Ithaca Falls Overlook site is an approximately 0.95-acre parcel in an urban area within the City of Ithaca, Tompkins County. The site has a narrow access from Lake Street on the south and extends north to the Fall Creek gorge. Portions of the site share a property boundary with the Former Ithaca Gun Factory, Brownfield Cleanup Program (BCP) site (Site No. C755019). The off-site area of the BCP site, identified as Former Ithaca Gun Factory - Off-site (Site No. C755019A), is located to the west. Site Features: The site is composed of four different areas described separately as the: Western Accessway; Former Walkway; Raceway; and Island. The Western Accessway is a narrow north-south trending land corridor providing access from Lake Street, most of this area is steeply sloping to the west. The Former Walkway is an area that extends from the Western Accessway to the former bridge over the Raceway. The Raceway is a narrow water channel constructed in bedrock which was part of the water power canal for the former Ithaca Gun Company. The Island area is an elevated area located between the Raceway and the Fall Creek gorge. There are no existing buildings on the site. Current Zoning and Land Use: The site is currently inactive, and zoned for industrial use. The surrounding parcels are currently used for a combination of public, residential, and commercial uses. The nearest residential area is across Lake Street to the south.

Past Use of the Site: The site was part of the former Ithaca Gun Company property. The Ithaca Gun Company manufactured firearms

at this property from 1885 to 1986. Site contamination appears to be associated with this prior manufacturing activity and the disposal of related waste (e.g., lead shot). In 2002, removal actions were conducted in isolated areas of the site by the United States Environmental Protection Agency (USEPA). During the removal actions, buildings on the Island area were removed and areas of soil on the site were excavated for off-site disposal. In some excavation areas, where necessary, clean backfill and topsoil was placed and native vegetation was re-established. In addition, temporary erosion control measures were placed on the western slope of the Island area. In 2015, the USEPA performed a removal action to excavate contaminated soil along the base of the south Fall Creek gorge wall. All USEPA removal actions were completed meeting criteria for restricted-residential use (includes active recreational uses). Site Geology and Hydrogeology: The predominantly shale bedrock underlying the site is at or near the surface. Therefore, soil, where it exists, may range from only a few inches to less than a few feet thick. Greater thickness of soil appears to exist in portions of the Western Accessway and in isolated portions of the Island area. Depth to groundwater within the bedrock is typically greater than 20 feet below ground surface. Groundwater flow direction is generally to the west-northwest.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY
benzo(a)anthracene	UNKNOWN
indeno(1,2,3-CD)pyrene	UNKNOWN
benzo(b)fluoranthene	UNKNOWN
lead	UNKNOWN
benzo(a)pyrene	UNKNOWN
tetrachloroethene (PCE)	UNKNOWN
vinyl chloride	UNKNOWN
arsenic	UNKNOWN
trichloroethene (TCE)	UNKNOWN
cis-1,2-dichloroethene	UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Remediation at the site is complete. Prior to remediation, the site related primary contaminants of concern were found in soil and included heavy metals (i.e., arsenic and lead), and polycyclic aromatic hydrocarbons (PAHs), which are a subset of semi-volatile organic compounds (SVOCs). Volatile organic compound (VOC) contamination in groundwater in soil on-site appears to be the result of disposals that occurred on the adjacent remedial program site known as Former Ithaca Gun Factory, (Site No.: C755019). Remedial actions have successfully achieved soil cleanup objectives for restricted-residential use. Remaining contaminants in soil, groundwater, and soil vapor are being managed under a Site Management Plan. More information regarding the remedial investigation and remedial actions can be found in the records placed in the Site Document Repositories. Characterization of contaminants in off-site groundwater and soil vapor continue to be conducted by the Department. The off-site remedial program site is known as Former Ithaca Gun Factory - Off-site (Site No.: C704032A).

ASSESSMENT OF HEALTH PROBLEMS:

Contaminated soil has either been removed or remains beneath a cover; therefore people are not likely to contact contaminated soils. Measures are in place to control the potential for coming in contact with remaining contamination in the underlying soil, groundwater or soil vapor.

PROJECT COMPLETIONS:

PROJECT	DESCRIPTION	END DATE	STATUS
Operable Unit 01 - Remedial Program	Remedial Investigation	09/25/2017	No Further Action

Certificate of Completion

10/04/2018 Actual



BROWNFIELDS SITES INFORMATION REQUEST

FORMER ITHACA GUN FACTORY – OFF-SITE
121-125 LAKE STREET, ITHACA, NY 14850

Facility Id: C755019A

ADDRESS CHANGE INFORMATION

Revised street: NO CHANGE
Revised zip code: NO CHANGE

Brownfield Program: Brownfield Cleanup Program

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
BROWNFIELD CLEANUP PROGRAM

CLASSIFICATION CODE: A

REGION: 7

SITE CODE: C755019A
DEC ID: 481462

CLASSIFICATION CODE DESCRIPTION:

Work is underway and not yet complete.

NAME OF SITE: Former Ithaca Gun Factory - Off-Site
STREET ADDRESS: 121-125 Lake Street
CITY: Ithaca ZIP: 14850

TOWN: Ithaca (c)
COUNTY: Tompkins

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

ESTIMATED SIZE:

INSTITUTIONAL/ENGINEERING CONTROLS:

None reported

CROSS REFERENCES:

IDENTIFIER

SOURCE

1711371

Spill No.

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:

None reported

HAZARDOUS WASTE DISPOSAL PERIOD:

SITE DESCRIPTION:

The following is a description of the BCP site associated with this Off-Site: Location: The Former Ithaca Gun Factory site is located at 121-125 Lake Street in an urban area of the City of Ithaca, Tompkins County. It is situated in an area with the Ithaca Falls and Fall Creek to the north, Cornell University to the east, Lake Street to the south, and a residential neighborhood to the west. The proposed Brownfield Cleanup Program (BCP) site approximately 1.6 acres in size.

Site Features: The site consists mostly of an open undeveloped parcel. The manufacturing buildings that previously occupied most of this property were demolished in 2009. One small single-story building and the boiler stack still exist on the western portion of the site. The site property is positioned on the side of a hill; however, most of the site is terraced with significant level areas suitable for development. Elevations at the site range from approximately 490 feet above mean sea level (amsl) on the western portion of the site to 545 feet amsl in the eastern portion of the site. Current Zoning/Uses: Currently the site is vacant and consists mostly of open land; it is zoned industrial. Surrounding land uses to the east, south and west are mostly residential. Property that is contiguous along north and west portions of this site are part of Ithaca Falls Overlook, Environmental Restoration Program (ERP) site and owned by the City of Ithaca. Past Use of the Site: The site was originally developed for industrial use in 1813. Companies that may have operated at the site prior to the Ithaca Gun Company include the Ithaca Manufacturing Company (agricultural equipment) and the W.H. Baker & Company gun factory. The Ithaca Gun Company operated at the site from 1885 through 1986. The main operations included manufacture of firearms and munitions. Supporting manufacturing activities and site uses included spray-painting, drying gun stocks in ovens, firing ranges, metal plating, machine shop, and forging. Prior uses by the Ithaca Gun Company appear to have led to contamination of both on-site and near off-site areas. From 1995 to 1998, following discovery of lead shot in the Falls Creek gorge area, soil sampling was conducted in on-site and off-site areas. In 2000, leaking transformers and associated PCB-contaminated soils were removed from the site. From 2000 to 2002, the EPA conducted a removal assessment, limited building demolition, and soil removal activities mostly on adjacent off-site areas; however, some portions of the former Ithaca Gun Factory property were included. In 2001, an Environmental Site Assessment and a Site Investigation were completed for and funded by the site owner at that time. In 2002, this site was part of the property included within the Voluntary Cleanup Agreement for the Ithaca Gun Company Site, with the site identification of V00511. In 2009, the on-site buildings were demolished and removed from the site. Funding for the demolition activities were at least partially supported by the Empire State Development Restore NY program. Post-demolition site investigation activities have included surface soil screening and sampling, and groundwater sampling. Site Geology and Hydrogeology: Bedrock is exposed at the ground surface in level areas and is outcropping in many areas of the site. The bedrock in other areas is covered by soil or crushed masonry type building materials with thicknesses ranging from a few inches to approximately 15 feet. Groundwater is encountered within the fractured bedrock. Depth to groundwater is approximately 15 to 20 feet below ground surface. The generalized direction of groundwater flow is to the west-northwest.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY
----- TRICHLOROETHENE (TCE)	----- UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Information submitted with the BCP application regarding the environmental condition at the site are currently under review and will be revised as additional information becomes available.

ASSESSMENT OF HEALTH PROBLEMS:

Contaminated groundwater from the site is not used for drinking or other purposes and the area is served by a public water supply that obtains water from a different source not affected by this contamination. 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 indoor air of the building, is referred to as soil vapor intrusion. The soil vapor intrusion investigation of buildings in areas of contamination is on-going.

Sub-slab depressurization systems have been installed in some buildings to prevent soil vapor beneath the slab from entering the building and monitoring is on-going at other buildings.

PROJECT COMPLETIONS:

None reported



CERCLIS INFORMATION REQUEST

ITHACA GUN COMPANY SITE
NEXT TO 121 LAKE STREET

ITHACA, NY 14850

EPA Facility Id: NYN000204292

ADDRESS CHANGE INFORMATION

Revised street: NO CHANGE

Revised zip code: NO CHANGE

NPL Status: Not on the NPL

Non-NPL Status: Referred to Removal – NFRAP

NFRAP (No Further Remedial Action Planned) Status: **NOT DESIGNATED AS NFRAP**

USEPA COMPREHENSIVE ENVIRONMENTAL RESPONSE
COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)

SITE INFORMATION

EPA-ID: NYN000204292
Site Name: ITHACA GUN COMPANY SITE
Site Street: NEXT TO 121 LAKE STREET
Site City/State/Zip: ITHACA, NY 14850

Site-ID: 0204292

NFRAP (No Further Remedial Activity Planned) Status: **NOT DESIGNATED AS NFRAP**

USGS Hydrological Unit:
Incident Category:
Non-NPL Status: Referred to Removal - NFRAP
Federal Facility Flag: Not a Federal Facility

NPL Status Indicator: Not on the NPL
RCRA Flag:
Non-NPL Stat Date: 02/28/2002

Site Type(s):
Category: Manufacturing/Processing/Maintenance Sub-Category: Ordnance production

Contact information:
Person: JACK HARMON Title: On-Scene Coordinator (OSC) Phone: 9089066872

SITE DESCRIPTION

Site is a vacant lot located southeast of the intersection of Lake and East Falls Streets. Lead shot and slag is migrating off the former Ithaca Gun Company property onto this city owned lot. An assessment will be performed to determine removal eligibility.

OPERABLE UNIT INFORMATION

Operable Unit ID: 00

Operable Unit Name: SITEWIDE

Waste Source Media:

Wst Src Name: metals
 Action: Removal
 Low Volume:

Media: Soil
 Start Date: 01/30/2002
 High Volume:
 Compl Date: 10/29/2004

Removal Response activity:

Technology Type: Disposal
 Technology Group: OTHER
 Action: Removal

Media: Soil
 Start Date: 01/30/2002
 Compl Date: 10/29/2004

ACTION INFORMATION

Name: Discovery
 Lead: EPA Fund-Financed
 Qualifier:
 Start Date:
 Completion Date: 08/25/2000
 Fin Budget Src:
 Operable Unit ID: 00

Name: Removal Assessment
 Lead: EPA Fund-Financed
 Qualifier:
 Start Date: 09/26/2000
 Completion Date: 11/22/2000
 Fin Budget Src: Removal
 Operable Unit ID: 00

Name: Integ Removal Assmt and Combined Prelim Assmt/Site Insp
 Lead: EPA Fund-Financed
 Qualifier: NFRAP (No Futher Remedial Action Planned)
 Start Date:
 Completion Date: 02/28/2002
 Fin Budget Src: Pipeline Operations
 Operable Unit ID: 00

Name: Consent Agreement (Administrative)
 Lead: Federal Enforcement
 Qualifier:
 Start Date:
 Completion Date: 09/30/2002
 Fin Budget Src:
 Operable Unit ID: 00

Name: Consent Agreement (Administrative)
 Lead: Federal Enforcement
 Qualifier:
 Start Date:
 Completion Date: 09/30/2002
 Fin Budget Src:
 Operable Unit ID: 00

Name: Prospective Purchaser Agreement Assessment
 Lead: Federal Enforcement
 Qualifier: PPA Signed
 Start Date: 08/01/2001
 Completion Date: 09/30/2002
 Fin Budget Src:
 Operable Unit ID: 00

Name: Removal
 Lead: EPA Fund-Financed
 Qualifier: Stabilized
 Start Date: 01/30/2002
 Completion Date: 10/29/2004
 Fin Budget Src: Removal
 Operable Unit ID: 00

Name: Non-NPL PRP Search
 Lead: Federal Enforcement
 Start Date: 09/22/2000
 Completion Date: 09/24/2007
 Operable Unit ID: 00

Qualifier: Search Complete, No Viable PRPs

Fin Budget Src: Enforcement

FINANCIAL INFORMATION

Action Name: Removal Assessment	Financial ID: 0014
Financial Type: Actual Obligation	Date: 11/13/2000
Budget Source: Removal	Amount: \$22125
Action Name: Removal Assessment	Financial ID: 0014
Financial Type: Deobligation	Date: 11/13/2000
Budget Source: Removal	Amount: \$22125
Action Name: Removal Assessment	Financial ID: 0012
Financial Type: Extramural Outlay (Payment)	Date: 11/13/2000
Budget Source: Removal	Amount: \$22125
Action Name: Removal Assessment	Financial ID: 0003
Financial Type: Actual Obligation	Date: 11/15/2000
Budget Source: Removal	Amount: \$327
Action Name: Removal Assessment	Financial ID: 0002
Financial Type: Deobligation	Date: 11/15/2000
Budget Source: Removal	Amount: \$327
Action Name: Removal Assessment	Financial ID: 0002
Financial Type: Extramural Outlay (Payment)	Date: 11/15/2000
Budget Source: Removal	Amount: \$327
Action Name: Removal Assessment	Financial ID: 0002
Financial Type: Actual Obligation	Date: 12/04/2000
Budget Source: Removal	Amount: \$1050
Action Name: Removal Assessment	Financial ID: 0001
Financial Type: Deobligation	Date: 12/04/2000
Budget Source: Removal	Amount: \$1050
Action Name: Removal Assessment	Financial ID: 0001
Financial Type: Extramural Outlay (Payment)	Date: 12/04/2000
Budget Source: Removal	Amount: \$1050
Action Name: Removal Assessment	Financial ID: 0004
Financial Type: Actual Obligation	Date: 01/03/2001
Budget Source: Removal	Amount: \$5497
Action Name: Removal Assessment	Financial ID: 0003
Financial Type: Deobligation	Date: 01/03/2001
Budget Source: Removal	Amount: \$5497

Action Name: Removal Assessment	Financial ID: 0003
Financial Type: Extramural Outlay (Payment)	Date: 01/03/2001
Budget Source: Removal	Amount: \$5497
Action Name: Removal Assessment	Financial ID: 0012
Financial Type: Actual Obligation	Date: 01/05/2001
Budget Source: Removal	Amount: \$5473
Action Name: Removal Assessment	Financial ID: 0013
Financial Type: Actual Obligation	Date: 01/05/2001
Budget Source: Removal	Amount: \$7873
Action Name: Removal Assessment	Financial ID: 0012
Financial Type: Deobligation	Date: 01/05/2001
Budget Source: Removal	Amount: \$5473
Action Name: Removal Assessment	Financial ID: 0013
Financial Type: Deobligation	Date: 01/05/2001
Budget Source: Removal	Amount: \$7873
Action Name: Removal Assessment	Financial ID: 0010
Financial Type: Extramural Outlay (Payment)	Date: 01/05/2001
Budget Source: Removal	Amount: \$5473
Action Name: Removal Assessment	Financial ID: 0011
Financial Type: Extramural Outlay (Payment)	Date: 01/05/2001
Budget Source: Removal	Amount: \$7873
Action Name: Removal Assessment	Financial ID: 0005
Financial Type: Actual Obligation	Date: 02/08/2001
Budget Source: Removal	Amount: \$12094
Action Name: Removal Assessment	Financial ID: 0004
Financial Type: Deobligation	Date: 02/08/2001
Budget Source: Removal	Amount: \$12094
Action Name: Removal Assessment	Financial ID: 0004
Financial Type: Extramural Outlay (Payment)	Date: 02/08/2001
Budget Source: Removal	Amount: \$12094
Action Name: Removal Assessment	Financial ID: 0010
Financial Type: Actual Obligation	Date: 04/06/2001
Budget Source: Removal	Amount: \$4959
Action Name: Removal Assessment	Financial ID: 0001
Financial Type: Extramural Deoutlay (Credit)	Date: 04/06/2001

Budget Source: Removal	Amount: \$4959
Action Name: Removal Assessment	Financial ID: 0010
Financial Type: Deobligation	Date: 04/09/2001
Budget Source: Removal	Amount: \$4959
Action Name: Removal Assessment	Financial ID: 0001
Financial Type: Commitment	Date: 04/17/2001
Budget Source: Removal	Amount: \$1135
Action Name: Removal Assessment	Financial ID: 0011
Financial Type: Actual Obligation	Date: 04/18/2001
Budget Source: Removal	Amount: \$28542
Action Name: Removal Assessment	Financial ID: 0011
Financial Type: Deobligation	Date: 04/18/2001
Budget Source: Removal	Amount: \$28542
Action Name: Removal Assessment	Financial ID: 0002
Financial Type: Extramural Deoutlay (Credit)	Date: 04/18/2001
Budget Source: Removal	Amount: \$28542
Action Name: Removal Assessment	Financial ID: 0001
Financial Type: Decommitment	Date: 04/27/2001
Budget Source: Removal	Amount: \$1135
Action Name: Removal Assessment	Financial ID: 0001
Financial Type: Actual Obligation	Date: 04/27/2001
Budget Source: Removal	Amount: \$1135
Action Name: Removal Assessment	Financial ID: 0005
Financial Type: Deobligation	Date: 06/27/2001
Budget Source: Removal	Amount: \$1135
Action Name: Removal Assessment	Financial ID: 0005
Financial Type: Extramural Outlay (Payment)	Date: 06/27/2001
Budget Source: Removal	Amount: \$1135
Action Name: Removal Assessment	Financial ID: 0002
Financial Type: Commitment	Date: 08/23/2001
Budget Source: Removal	Amount: \$1770
Action Name: Removal Assessment	Financial ID: 0002
Financial Type: Decommitment	Date: 08/27/2001
Budget Source: Removal	Amount: \$1770
Action Name: Removal Assessment	Financial ID: 0006

Financial Type: Actual Obligation Budget Source: Removal	Date: 08/27/2001 Amount: \$1770
Action Name: Removal Assessment Financial Type: Commitment Budget Source: Removal	Financial ID: 0003 Date: 09/20/2001 Amount: \$570
Action Name: Removal Assessment Financial Type: Commitment Budget Source: Removal	Financial ID: 0004 Date: 09/20/2001 Amount: \$1435
Action Name: Removal Assessment Financial Type: Commitment Budget Source: Removal	Financial ID: 0005 Date: 09/20/2001 Amount: \$570
Action Name: Removal Assessment Financial Type: Decommitment Budget Source: Removal	Financial ID: 0003 Date: 09/20/2001 Amount: \$570
Action Name: Removal Financial Type: Commitment Budget Source: Removal	Financial ID: 0001 Date: 09/21/2001 Amount: \$1500000
Action Name: Removal Financial Type: Decommitment Budget Source: Removal	Financial ID: 0001 Date: 09/26/2001 Amount: \$1500000
Action Name: Removal Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0001 Date: 09/26/2001 Amount: \$1500000
Action Name: Removal Assessment Financial Type: Decommitment Budget Source: Removal	Financial ID: 0004 Date: 09/27/2001 Amount: \$570
Action Name: Removal Assessment Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0007 Date: 09/27/2001 Amount: \$570
Action Name: Removal Assessment Financial Type: Deobligation Budget Source: Removal	Financial ID: 0006 Date: 09/27/2001 Amount: \$570
Action Name: Removal Assessment Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0006 Date: 09/27/2001 Amount: \$570

Action Name: Removal Assessment	Financial ID: 0008
Financial Type: Deobligation	Date: 10/03/2001
Budget Source: Removal	Amount: \$1770
Action Name: Removal Assessment	Financial ID: 0008
Financial Type: Extramural Outlay (Payment)	Date: 10/03/2001
Budget Source: Removal	Amount: \$1770
Action Name: Removal Assessment	Financial ID: 0005
Financial Type: Decommitment	Date: 10/05/2001
Budget Source: Removal	Amount: \$1435
Action Name: Removal Assessment	Financial ID: 0008
Financial Type: Actual Obligation	Date: 10/05/2001
Budget Source: Removal	Amount: \$1435
Action Name: Removal Assessment	Financial ID: 0007
Financial Type: Deobligation	Date: 10/05/2001
Budget Source: Removal	Amount: \$1435
Action Name: Removal Assessment	Financial ID: 0007
Financial Type: Extramural Outlay (Payment)	Date: 10/05/2001
Budget Source: Removal	Amount: \$1435
Action Name: Removal Assessment	Financial ID: 0006
Financial Type: Commitment	Date: 12/11/2001
Budget Source: Removal	Amount: \$612
Action Name: Removal Assessment	Financial ID: 0006
Financial Type: Decommitment	Date: 12/18/2001
Budget Source: Removal	Amount: \$612
Action Name: Removal Assessment	Financial ID: 0009
Financial Type: Actual Obligation	Date: 12/18/2001
Budget Source: Removal	Amount: \$612
Action Name: Removal Assessment	Financial ID: 0009
Financial Type: Deobligation	Date: 01/18/2002
Budget Source: Removal	Amount: \$612
Action Name: Removal Assessment	Financial ID: 0009
Financial Type: Extramural Outlay (Payment)	Date: 01/18/2002
Budget Source: Removal	Amount: \$612
Action Name: Removal	Financial ID: 0003
Financial Type: Deobligation	Date: 06/20/2002
Budget Source: Removal	Amount: \$67960

Action Name: Removal	Financial ID: 0003
Financial Type: Extramural Outlay (Payment)	Date: 06/20/2002
Budget Source: Removal	Amount: \$67960
Action Name: Removal	Financial ID: 0001
Financial Type: Deobligation	Date: 07/17/2002
Budget Source: Removal	Amount: \$143195
Action Name: Removal	Financial ID: 0001
Financial Type: Extramural Outlay (Payment)	Date: 07/17/2002
Budget Source: Removal	Amount: \$143195
Action Name: Removal	Financial ID: 0002
Financial Type: Deobligation	Date: 08/15/2002
Budget Source: Removal	Amount: \$87746
Action Name: Removal	Financial ID: 0002
Financial Type: Extramural Outlay (Payment)	Date: 08/15/2002
Budget Source: Removal	Amount: \$87746
Action Name: Removal	Financial ID: 0004
Financial Type: Deobligation	Date: 09/10/2002
Budget Source: Removal	Amount: \$100836
Action Name: Removal	Financial ID: 0004
Financial Type: Extramural Outlay (Payment)	Date: 09/10/2002
Budget Source: Removal	Amount: \$100836
Action Name: Removal	Financial ID: 0002
Financial Type: Commitment	Date: 09/30/2002
Budget Source: Removal	Amount: \$1500000
Action Name: Removal	Financial ID: 0002
Financial Type: Decommitment	Date: 09/30/2002
Budget Source: Removal	Amount: \$1500000
Action Name: Removal	Financial ID: 0002
Financial Type: Actual Obligation	Date: 09/30/2002
Budget Source: Removal	Amount: \$1500000
Action Name: Removal	Financial ID: 0005
Financial Type: Deobligation	Date: 10/18/2002
Budget Source: Removal	Amount: \$209128
Action Name: Removal	Financial ID: 0005
Financial Type: Extramural Outlay (Payment)	Date: 10/18/2002

Budget Source: Removal	Amount:	\$209128
Action Name: Removal	Financial ID:	0006
Financial Type: Deobligation	Date:	11/05/2002
Budget Source: Removal	Amount:	\$154332
Action Name: Removal	Financial ID:	0006
Financial Type: Extramural Outlay (Payment)	Date:	11/05/2002
Budget Source: Removal	Amount:	\$154332
Action Name: Removal	Financial ID:	0007
Financial Type: Deobligation	Date:	12/13/2002
Budget Source: Removal	Amount:	\$259369
Action Name: Removal	Financial ID:	0007
Financial Type: Extramural Outlay (Payment)	Date:	12/13/2002
Budget Source: Removal	Amount:	\$259369
Action Name: Removal	Financial ID:	0008
Financial Type: Deobligation	Date:	01/14/2003
Budget Source: Removal	Amount:	\$268397
Action Name: Removal	Financial ID:	0008
Financial Type: Extramural Outlay (Payment)	Date:	01/14/2003
Budget Source: Removal	Amount:	\$268397
Action Name: Removal	Financial ID:	0009
Financial Type: Deobligation	Date:	02/11/2003
Budget Source: Removal	Amount:	\$203250
Action Name: Removal	Financial ID:	0009
Financial Type: Extramural Outlay (Payment)	Date:	02/11/2003
Budget Source: Removal	Amount:	\$203250
Action Name: Removal	Financial ID:	0010
Financial Type: Deobligation	Date:	02/20/2003
Budget Source: Removal	Amount:	\$11704
Action Name: Removal	Financial ID:	0010
Financial Type: Extramural Outlay (Payment)	Date:	02/20/2003
Budget Source: Removal	Amount:	\$11704
Action Name: Removal	Financial ID:	0011
Financial Type: Deobligation	Date:	07/15/2003
Budget Source: Removal	Amount:	\$5787
Action Name: Removal	Financial ID:	0012

Financial Type: Deobligation Budget Source: Removal	Date: 07/15/2003 Amount: \$68136
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0011 Date: 07/15/2003 Amount: \$5787
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0012 Date: 07/15/2003 Amount: \$68136
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0013 Date: 08/12/2003 Amount: \$176745
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0013 Date: 08/12/2003 Amount: \$176745
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0014 Date: 08/28/2003 Amount: \$200585
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0014 Date: 08/28/2003 Amount: \$200585
Action Name: Removal Assessment Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0015 Date: 09/09/2003 Amount: \$14755
Action Name: Removal Assessment Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0016 Date: 09/09/2003 Amount: \$1324
Action Name: Removal Assessment Financial Type: Deobligation Budget Source: Removal	Financial ID: 0015 Date: 09/09/2003 Amount: \$1324
Action Name: Removal Assessment Financial Type: Deobligation Budget Source: Removal	Financial ID: 0016 Date: 09/09/2003 Amount: \$14755
Action Name: Removal Assessment Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0013 Date: 09/09/2003 Amount: \$1324

Action Name: Removal Assessment Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0014 Date: 09/09/2003 Amount: \$14755
Action Name: Removal Financial Type: Commitment Budget Source: Removal	Financial ID: 0003 Date: 09/24/2003 Amount: \$100000
Action Name: Removal Financial Type: Decommitment Budget Source: Removal	Financial ID: 0003 Date: 09/27/2003 Amount: \$100000
Action Name: Removal Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0003 Date: 09/27/2003 Amount: \$100000
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0015 Date: 09/30/2003 Amount: \$373510
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0015 Date: 09/30/2003 Amount: \$373510
Action Name: Removal Assessment Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0017 Date: 10/15/2003 Amount: \$3364
Action Name: Removal Assessment Financial Type: Deobligation Budget Source: Removal	Financial ID: 0017 Date: 10/15/2003 Amount: \$3364
Action Name: Removal Assessment Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0015 Date: 10/15/2003 Amount: \$3364
Action Name: Removal Financial Type: Commitment Budget Source: Removal	Financial ID: 0006 Date: 10/27/2003 Amount: \$250000
Action Name: Removal Financial Type: Commitment Budget Source: Removal	Financial ID: 0004 Date: 10/28/2003 Amount: \$250000
Action Name: Removal Financial Type: Decommitment Budget Source: Removal	Financial ID: 0004 Date: 10/28/2003 Amount: \$250000

Action Name: Removal	Financial ID: 0006
Financial Type: Decommitment	Date: 10/28/2003
Budget Source: Removal	Amount: \$250000
Action Name: Removal	Financial ID: 0004
Financial Type: Actual Obligation	Date: 10/28/2003
Budget Source: Removal	Amount: \$250000
Action Name: Removal	Financial ID: 0016
Financial Type: Deobligation	Date: 10/29/2003
Budget Source: Removal	Amount: \$216817
Action Name: Removal	Financial ID: 0016
Financial Type: Extramural Outlay (Payment)	Date: 10/29/2003
Budget Source: Removal	Amount: \$216817
Action Name: Removal	Financial ID: 0017
Financial Type: Deobligation	Date: 12/04/2003
Budget Source: Removal	Amount: \$229068
Action Name: Removal	Financial ID: 0017
Financial Type: Extramural Outlay (Payment)	Date: 12/04/2003
Budget Source: Removal	Amount: \$229068
Action Name: Removal	Financial ID: 0005
Financial Type: Commitment	Date: 12/12/2003
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0005
Financial Type: Decommitment	Date: 12/17/2003
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0005
Financial Type: Actual Obligation	Date: 12/17/2003
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0018
Financial Type: Deobligation	Date: 01/08/2004
Budget Source: Removal	Amount: \$223434
Action Name: Removal	Financial ID: 0019
Financial Type: Deobligation	Date: 01/08/2004
Budget Source: Removal	Amount: \$93354
Action Name: Removal	Financial ID: 0018
Financial Type: Extramural Outlay (Payment)	Date: 01/08/2004

Budget Source: Removal	Amount:	\$223434
Action Name: Removal	Financial ID:	0019
Financial Type: Extramural Outlay (Payment)	Date:	01/08/2004
Budget Source: Removal	Amount:	\$93354
Action Name: Removal	Financial ID:	0020
Financial Type: Deobligation	Date:	03/18/2004
Budget Source: Removal	Amount:	\$143394
Action Name: Removal	Financial ID:	0020
Financial Type: Extramural Outlay (Payment)	Date:	03/18/2004
Budget Source: Removal	Amount:	\$143394
Action Name: Removal	Financial ID:	0021
Financial Type: Deobligation	Date:	04/05/2004
Budget Source: Removal	Amount:	\$69113
Action Name: Removal	Financial ID:	0021
Financial Type: Extramural Outlay (Payment)	Date:	04/05/2004
Budget Source: Removal	Amount:	\$69113
Action Name: Removal	Financial ID:	0007
Financial Type: Commitment	Date:	04/16/2004
Budget Source: Removal	Amount:	\$145000
Action Name: Removal	Financial ID:	0007
Financial Type: Decommitment	Date:	04/20/2004
Budget Source: Removal	Amount:	\$145000
Action Name: Removal	Financial ID:	0006
Financial Type: Actual Obligation	Date:	04/20/2004
Budget Source: Removal	Amount:	\$145000
Action Name: Removal	Financial ID:	0022
Financial Type: Deobligation	Date:	05/05/2004
Budget Source: Removal	Amount:	\$39420
Action Name: Removal	Financial ID:	0022
Financial Type: Extramural Outlay (Payment)	Date:	05/05/2004
Budget Source: Removal	Amount:	\$39420
Action Name: Removal	Financial ID:	0023
Financial Type: Deobligation	Date:	06/10/2004
Budget Source: Removal	Amount:	\$40267
Action Name: Removal	Financial ID:	0023

Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Date: 06/10/2004 Amount: \$40267
Action Name: Removal Financial Type: Commitment Budget Source: Removal	Financial ID: 0008 Date: 06/15/2004 Amount: \$500000
Action Name: Removal Financial Type: Decommitment Budget Source: Removal	Financial ID: 0008 Date: 06/21/2004 Amount: \$500000
Action Name: Removal Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0007 Date: 06/21/2004 Amount: \$500000
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0024 Date: 07/01/2004 Amount: \$6606
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0025 Date: 07/01/2004 Amount: \$49878
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0026 Date: 07/01/2004 Amount: \$6646
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0024 Date: 07/01/2004 Amount: \$6606
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0025 Date: 07/01/2004 Amount: \$49878
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0026 Date: 07/01/2004 Amount: \$6646
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0027 Date: 07/12/2004 Amount: \$91219
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0027 Date: 07/12/2004 Amount: \$91219

Action Name: Removal	Financial ID: 0028
Financial Type: Deobligation	Date: 08/12/2004
Budget Source: Removal	Amount: \$83026
Action Name: Removal	Financial ID: 0028
Financial Type: Extramural Outlay (Payment)	Date: 08/12/2004
Budget Source: Removal	Amount: \$83026
Action Name: Removal	Financial ID: 0009
Financial Type: Commitment	Date: 08/17/2004
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0009
Financial Type: Decommitment	Date: 08/19/2004
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0008
Financial Type: Actual Obligation	Date: 08/19/2004
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0029
Financial Type: Deobligation	Date: 08/30/2004
Budget Source: Removal	Amount: \$250000
Action Name: Removal	Financial ID: 0030
Financial Type: Deobligation	Date: 09/02/2004
Budget Source: Removal	Amount: \$100966
Action Name: Removal	Financial ID: 0029
Financial Type: Extramural Outlay (Payment)	Date: 09/02/2004
Budget Source: Removal	Amount: \$100966
Action Name: Removal Assessment	Financial ID: 0018
Financial Type: Actual Obligation	Date: 09/14/2004
Budget Source: Removal	Amount: \$2218
Action Name: Removal Assessment	Financial ID: 0018
Financial Type: Deobligation	Date: 09/14/2004
Budget Source: Removal	Amount: \$2218
Action Name: Removal Assessment	Financial ID: 0016
Financial Type: Extramural Outlay (Payment)	Date: 09/14/2004
Budget Source: Removal	Amount: \$2218
Action Name: Removal Assessment	Financial ID: 0019
Financial Type: Deobligation	Date: 09/16/2004
Budget Source: Removal	Amount: \$15906

Action Name: Removal Assessment	Financial ID: 0017
Financial Type: Extramural Outlay (Payment)	Date: 09/16/2004
Budget Source: Removal	Amount: \$15906
Action Name: Removal Assessment	Financial ID: 0019
Financial Type: Actual Obligation	Date: 09/22/2004
Budget Source: Removal	Amount: \$15906
Action Name: Removal Assessment	Financial ID: 0020
Financial Type: Actual Obligation	Date: 10/04/2004
Budget Source: Removal	Amount: \$2982
Action Name: Removal Assessment	Financial ID: 0020
Financial Type: Deobligation	Date: 10/04/2004
Budget Source: Removal	Amount: \$2982
Action Name: Removal Assessment	Financial ID: 0018
Financial Type: Extramural Outlay (Payment)	Date: 10/04/2004
Budget Source: Removal	Amount: \$2982
Action Name: Removal	Financial ID: 0031
Financial Type: Deobligation	Date: 10/14/2004
Budget Source: Removal	Amount: \$15994
Action Name: Removal	Financial ID: 0032
Financial Type: Deobligation	Date: 10/14/2004
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0030
Financial Type: Extramural Outlay (Payment)	Date: 10/14/2004
Budget Source: Removal	Amount: \$15994
Action Name: Removal	Financial ID: 0031
Financial Type: Extramural Outlay (Payment)	Date: 10/14/2004
Budget Source: Removal	Amount: \$150000
Action Name: Removal	Financial ID: 0033
Financial Type: Deobligation	Date: 01/05/2005
Budget Source: Removal	Amount: \$132134
Action Name: Removal	Financial ID: 0032
Financial Type: Extramural Outlay (Payment)	Date: 01/05/2005
Budget Source: Removal	Amount: \$132134
Action Name: Removal	Financial ID: 0009
Financial Type: Actual Obligation	Date: 02/24/2005

Budget Source: Removal	Amount:	\$223232
Action Name: Removal	Financial ID:	0034
Financial Type: Deobligation	Date:	02/24/2005
Budget Source: Removal	Amount:	\$223232
Action Name: Removal	Financial ID:	0033
Financial Type: Extramural Outlay (Payment)	Date:	02/24/2005
Budget Source: Removal	Amount:	\$223232
Action Name: Removal	Financial ID:	0035
Financial Type: Deobligation	Date:	03/07/2005
Budget Source: Removal	Amount:	\$10390
Action Name: Removal	Financial ID:	0034
Financial Type: Extramural Outlay (Payment)	Date:	03/07/2005
Budget Source: Removal	Amount:	\$10390
Action Name: Removal	Financial ID:	0036
Financial Type: Deobligation	Date:	04/26/2005
Budget Source: Removal	Amount:	\$5742
Action Name: Removal	Financial ID:	0035
Financial Type: Extramural Outlay (Payment)	Date:	04/26/2005
Budget Source: Removal	Amount:	\$5742
Action Name: Removal	Financial ID:	0037
Financial Type: Deobligation	Date:	05/09/2005
Budget Source: Removal	Amount:	\$900
Action Name: Removal	Financial ID:	0038
Financial Type: Deobligation	Date:	05/09/2005
Budget Source: Removal	Amount:	\$5045
Action Name: Removal	Financial ID:	0039
Financial Type: Deobligation	Date:	05/09/2005
Budget Source: Removal	Amount:	\$906
Action Name: Removal	Financial ID:	0010
Financial Type: Actual Obligation	Date:	06/10/2005
Budget Source: Removal	Amount:	\$349
Action Name: Removal	Financial ID:	0001
Financial Type: Extramural Deoutlay (Credit)	Date:	06/10/2005
Budget Source: Removal	Amount:	\$349
Action Name: Removal	Financial ID:	0040

Financial Type: Deobligation Budget Source: Removal	Date: 06/22/2005 Amount: \$349
Action Name: Removal Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0011 Date: 08/31/2006 Amount: \$550
Action Name: Removal Financial Type: Extramural Deoutlay (Credit) Budget Source: Removal	Financial ID: 0002 Date: 08/31/2006 Amount: \$550
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0041 Date: 12/11/2006 Amount: \$550
Action Name: Removal Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0012 Date: 01/30/2007 Amount: \$248
Action Name: Removal Financial Type: Extramural Deoutlay (Credit) Budget Source: Removal	Financial ID: 0003 Date: 01/30/2007 Amount: \$248
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0042 Date: 04/25/2007 Amount: \$248
Action Name: Removal Financial Type: Actual Obligation Budget Source: Removal	Financial ID: 0013 Date: 04/24/2008 Amount: \$408
Action Name: Removal Financial Type: Extramural Deoutlay (Credit) Budget Source: Removal	Financial ID: 0004 Date: 04/24/2008 Amount: \$408
Action Name: Removal Financial Type: Deobligation Budget Source: Removal	Financial ID: 0043 Date: 05/15/2008 Amount: \$408
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0036 Date: 06/18/2009 Amount: \$85500
Action Name: Removal Financial Type: Extramural Outlay (Payment) Budget Source: Removal	Financial ID: 0037 Date: 06/18/2009 Amount: \$93216

Action Name: Removal
Financial Type: Extramural Deoutlay (Credit)
Budget Source: Removal

Financial ID: 0005
Date: 06/18/2009
Amount: \$178716