FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE CROTON WATER TREATMENT PLANT AT THE EASTVIEW SITE

5.13. HAZARDOUS MATERIALS

5.13.1. Introduction

This section evaluates whether the construction and operation of the proposed Croton Water Treatment Plant (Croton project) project could lead to increased exposure of people or the environment to hazardous materials. This section identifies and assesses the potential presence of hazardous materials on the Eastview Site or those used off-site at neighboring facilities, which could migrate and ultimately affect the water treatment plant site. The methodology used to prepare this analysis is presented in Section 4.13, Data Collection and Impact Methodologies, Hazardous Materials.

5.13.2. Baseline Conditions

5.13.2.1. Existing Conditions

Possible hazardous material issues relating to the water treatment plant site and a one-mile study area have been addressed in this section. They include activities that may have occurred at the site and caused the release of hazardous materials or wastes to the environment thereby creating residues that may be exposed during the construction of the proposed project. The analysis also include activities that may have occurred on properties near the Eastview Site and potentially caused the release of hazardous materials or wastes to the environment, which could have subsequently migrated towards the site creating residues (e.g., groundwater) that may be exposed. Petroleum-related materials that are introduced to off-site facilities (e.g., fuels, lubricants) are also included as well as hazardous materials introduced during the operation of the proposed project (e.g., water treatment processing chemicals).

Hazardous materials and chemicals in the vicinity of the Eastview Site were identified using four methods described in the Data Collection and Impact Methodologies. First, the property history of the Eastview Site and the study area were reviewed using available historical mapping material. Second, a records search was conducted with Federal, State and Local agencies to identify hazardous materials issues over a broad study area that included the Eastview Site and properties within at least one mile of the Eastview Site. Third, the project site was visually inspected. Fourth, an environmental quality study was conducted to determine the potential for soil and/or groundwater contamination.

5.13.2.1.1. Property History

Sanborn Maps. To assess existing conditions on and near the Eastview Site, Sanborn maps were obtained from Sanborn Mapping and Geological Information Service. The Sanborn maps are used by the insurance industry to list properties for emergency or claims purposes. As a result, the maps identify properties (e.g., company name, generic title such as filling station, etc.), but generally do not provide detail on the nature of operations that were performed at that location. Nonetheless, since these maps go back as far as the late 1800s for older, more established communities, they were useful for identifying potential hazardous material sites, particularly prior to the era of current environmental regulations (i.e., pre-1970).

1942. The 1942 map identifies the Eastview Site as being owned by the City of New York. An unidentified structure (most likely a residential structure based on its size) was identified on the northern section of the site. An access road was mapped extending easterly from Hammond House Road to the Westchester County Penitentiary and Work House (now part of the Westchester County Correctional Complex), which were identified adjacent to the site's eastern boundary. The New Saw Mill River Road (now known as Saw Mill River Road or Route 9A) and vacant, undeveloped land were identified west of the site. The Grasslands Hospital (now known as the Westchester Medical Center) and a garage (apparently automobile storage) were identified approximately 600 ft and 800 ft northeast of the site, respectively. A sewage disposal facility and the Mount Pleasant Dairy Farm were identified approximately 800 ft and 1,200 ft northwest of the site, respectively. The remainder of the site appeared similar to existing conditions (see Section 5.2, Land Use, Zoning, and Public Policy, for a detailed description of the existing conditions of the Eastview Site and surrounding area). Based on the information contained on the Sanborn map, there is no indication that activities on or adjacent to the Eastview Site may have resulted in the release of hazardous materials to the environment.

Aerial Photographs. Aerial photographs from 1940, 1953, 1961, 1965, 1974, 1980, 1989, and two photographs taken during the 1990's were reviewed. Details from these photographs are described below:

1940. The Eastview Site appeared similar to existing conditions, consisting primarily of undeveloped land. A disturbance in the landscape, possibly resulting from construction activities, was noted west of the site. The Westchester County Penitentiary and Grasslands Hospital were present east and north of the site, respectively. The remainder of the surrounding area appeared to be undeveloped.

1953. The 1953 photograph shows the project site as predominately cleared land, which appears to be farmed. Some wooded areas and scattered trees are also present across the site. The Hammond House is apparent at the intersection of Route 100C and Hammond House Road, and a second house is present along Hammond House Road, north of Hammond House. Delaware Aqueduct Shaft No. 19 and the associated access road are visible in the eastern portion of the property. Undeveloped land is present on the Greenburgh parcel and to the north and west of the north parcel. Residential buildings appear to be present to the west and south of the Greenburgh parcel. The Westchester Penitentiary is present to the east of the site, with access roads leading from the penitentiary to the subject site. Wooded land is present to the east, adjacent to the north parcel, with commercial development located further to the east.

1961. The Eastview Site appears similar to the 1940 photograph. "Aqueduct Road" and "Shaft House 19" were noted on the eastern portion of the site. The disturbance noted in the 1940 photograph, west of the site, was not evident in this photograph; the area appeared to be undeveloped grasslands. The New York State Highway Department was located northeast of the site. Adjacent areas north of the site appeared to consist of undeveloped land.

1965. The 1965 photograph indicates a Con Edison transformer/substation constructed in the northeastern corner of the Greenburgh parcel near Route 100C, a large commercial building

constructed northwest of the north parcel along Saw Mill River Road, and several of the existing Cross Westchester Executive Park buildings constructed south-adjacent to the Greenburgh parcel.

1974. The 1974 photograph appears similar to the 1965 photograph, with the small house along Hammond House Road obscured by trees or no longer present. Additional buildings were constructed within the Cross Westchester Executive Park, and several large buildings are present on the northern side of the north parcel.

1980. The Eastview Site appeared similar to existing conditions, consisting primarily of undeveloped land. The Hammond House and Hammond House Road appeared similar to existing conditions. The photograph provided by the Westchester County Planning Department identified the site on the aerial photograph as being owned by the City of New York and leased to Westchester County. The Westchester County Department of Laboratories and Research and an unpaved parking lot, presently located immediately north of the site, did not appear in this more recent photograph. The Westchester County Medical Center located to the northeast, the Westchester County Correctional Complex located directly to the east, and the Bee-Line Bus Facility located to the west of the site appeared similar to existing conditions, as did the remainder of the surrounding area.

1989. The site appears very similar to existing conditions in the 1989 aerial photograph, with the Westchester County Laboratories and Research building (County Laboratory) present to the north of the north parcel, and the Westchester County Fire Training Center present to the west of the north parcel. The Sprain Brook Parkway is present to the east of the property, and increased residential development is apparent to the east of the parkway.

1990s. An aerial photograph prepared by GlobeXplorer™ (believed to have been taken in the early 1990's) depicts the Eastview Site as very similar to existing conditions. All of the features identified in the 1980 photograph are present, including the Westchester County Department of Laboratories and Research facility along the north side of the Eastview Site.

1997-1998. As part of the New York State Statewide Digital Orthoimagery Program, the aerial photograph also depicts the Eastview Site as undeveloped land and does not suggest the presence of any new facilities that could potentially be significant sources of environmental contamination.

Based on images presented on the aerial photographs, numerous properties surrounding the site have been developed over the past thirty years some of which may have stored and used hazardous materials. In particular, petroleum hydrocarbon fuels (e.g., diesel, fuel oil, gasoline) commonly used at commercial or institutional facilities in this area may be susceptible to environmental release when stored in bulk containers such as underground or above ground tanks.

Historic Topographic Maps. A 1938 topographic map shows the Eastview Site as undeveloped land except for the historic Hammond House and the second house located on the western side of Hammond House Road. Hammond House Road extends to the south of Route

100C and runs along the western perimeter of the southern parcel. Westchester Medical Center is identified northeast of the property and the Westchester Penitentiary and the Catskill Aqueduct are identified to the east. The Catskill Aqueduct is depicted traversing the eastern property line of the southern parcel. The Loeb Memorial Home is depicted to the west of the southern parcel, and residential development is depicted to the south.

A 1967 topographic map shows Shaft No. 19 and its access road to the east of the water treatment plant site. The County Laboratory building is depicted to the north of the site, along Hammond House Road. Hammond House Road is depicted traversing the property, with a portion unpaved. In addition, an unpaved road is shown connecting the Penitentiary property to Hammond House Road across the middle of the north parcel. The house located along the western side of Hammond House road is still shown on the map. There are no structures identified on the southern parcel.

A topographic map for 1979 indicates that the subject site remained relatively unchanged from 1967; however, several new buildings are present north, west, and south of the water treatment plant site. The 1994 map appears similar to the 1979 map, except the structure previously shown west of Hammond House Road is no longer present, indicating that it had been demolished. A 1994 map shows properties to the east of the site shaded red, indicating the area was densely populated. Individual structures are not identified, except for the Westchester Medical Center to the northeast.

Tax Records. According to the Town of Mount Pleasant Tax Assessor's office, the Eastview Site is defined as Section 116-20, Block 1, Lot 2. The Hammond House, located in the southwestern section of the Eastview Site along Grasslands Road (Route 100C), is defined as Section 116-20, Block 1, Lot 1. The Tax Assessor's field property card for the site was not available for review. However, according to the Town of Mount Pleasant Tax Assessor, the City of New York has owned the 153-acre property in Mount Pleasant and Greenburgh for over 50 years. According to the field property card for the Hammond House, the land that the structure is situated on has been owned by the City of New York, but the Hammond House itself has been owned by a private resident since June 1997.

Summary. Review of the historic maps, aerial photographs, and tax records indicate that the project site has been owned by the City of New York since at least 1942, with a private residence (Hammond House) and a smaller house present on the north parcel since at least 1938 (with the smaller house demolished before 1994). The Eastview Site has remained largely undeveloped throughout the documented history, containing only the Hammond House, small structures associated with access and sampling of the Catskill and Delaware Aqueducts, a Con Edison substation and transmission lines, and associated access roads. An aerial photograph from 1953 indicates that undeveloped portions of the site may have been farmed.

Westchester County Medical Center has been located northeast of the site, and the Westchester Penitentiary has been located east of the site, since at least 1938. The areas to the north, west, and south of the site remained predominantly undeveloped until at least 1953. After 1953, Westchester County facilities were constructed to the north and west of the site, and the Cross Westchester Executive Park was constructed to the south.

Based the historic uses indicated by this review, numerous properties surrounding the Eastview Site have been developed over the past thirty years, some of which could have stored and used hazardous materials. In particular, petroleum hydrocarbon fuels (e.g., diesel, fuel oil, gasoline), commonly used at commercial or institutional facilities, could have been stored in bulk containers such as underground or above ground tanks, making them susceptible to environmental release. The review did not indicate on-site manufacturing or industrial activities that would have resulted in release of hazardous materials; however, it is possible that pesticides and herbicides were used at the site since it appears to have been historically farmed.

5.13.2.1.2. Records Search

The records search focused on an area radiating one mile from the water treatment plant site, and involved contacting the United States Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC), and the Emergency Response Unit of the NYCDEP in both 2000 and 2002. These searches were conducted to evaluate past and present activities involving hazardous materials on the site and its environs, as described in Section 4.13, Data Collection and Impact Methodologies, Hazardous Materials.

The purpose of these environmental database reviews was to identify incident locations or facilities where hazardous materials may be present and are either known to have been released to the environment (e.g., spills, tank leaks) or may be sources of future releases. Because the water treatment plant site is located in a relatively rural and suburban setting, the search of environmental databases was designed to identify sites up to one-mile from the center of the site.

Over 400 environmentally regulated sites were identified within one mile of the water treatment plant site. A majority of these sites are located in areas which are hydraulically down gradient from the site particularly including areas south of Grasslands Road (Route 100C) and west of Route 9A (Saw Mill River Road). Hazardous material releases from sources in these down gradient areas would not be anticipated to migrate in the environment in a direction that could cause a potentially significant adverse impact to current or future activities at the site.

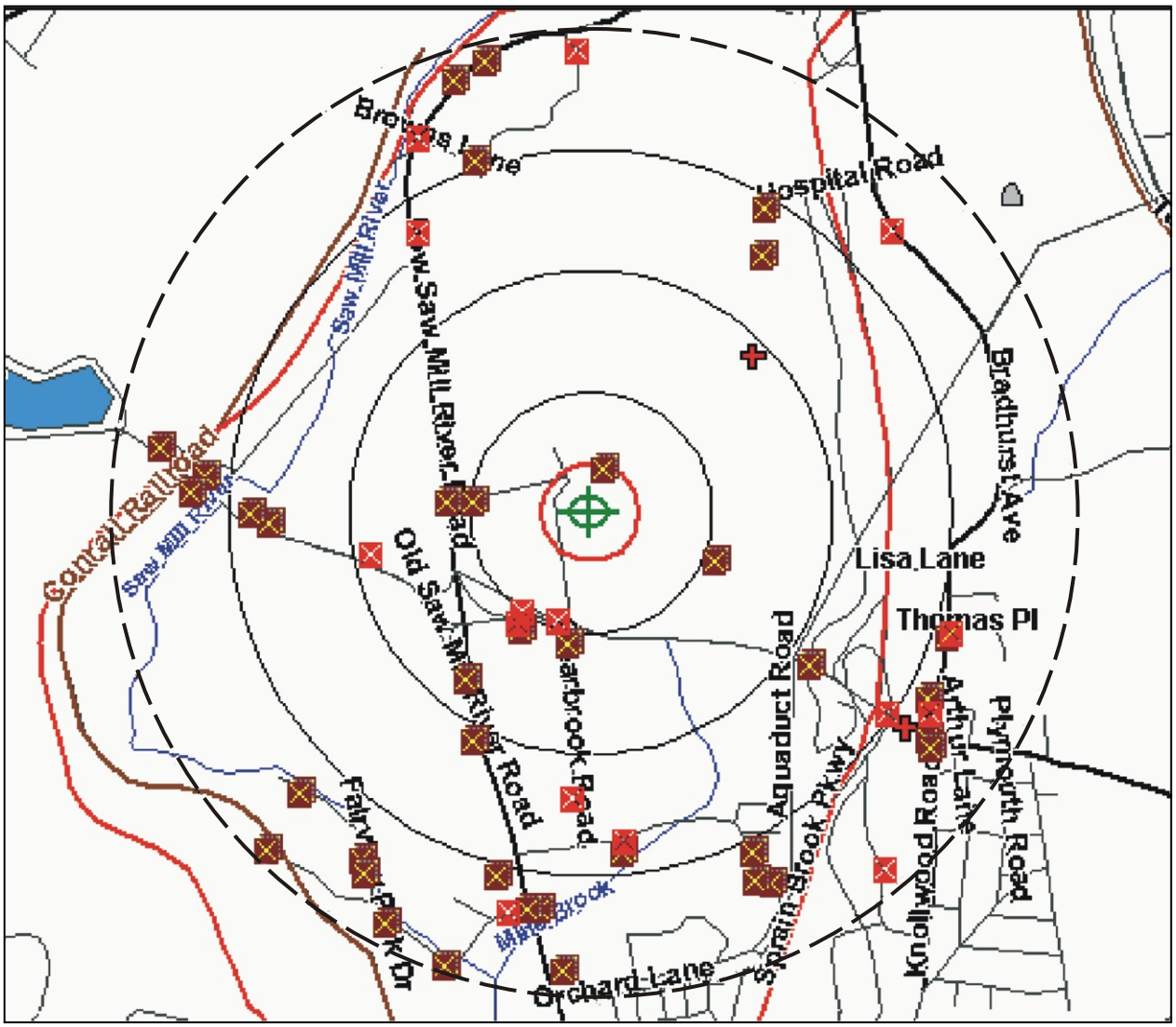
Some sites, particularly those impacted by spills or tank leaks to the west and northeast of the water treatment plant site, may contain hazardous materials that could migrate vertically through the soil to the groundwater and be transported toward the site. Most of these spill sites have been remediated and the regulatory documentation files have been closed accordingly. For the sites that are still active or for sites where residues of past releases remain in the environment, construction activities involving groundwater pumping (i.e., dewatering) may create hydraulic gradients essentially drawing residual contaminants toward the site. In addition, at least one site northeast (i.e., up gradient) of the site is permitted to discharge wastewater from a septic system and boiler blow-down to a Saw Mill River that migrate via surface water flow in the vicinity of the site.

A summary of the number of sites identified from the review by regulatory program (i.e., database type) is presented in Table 5.13-1. The results are divided into two groups: (1) sites where hazardous material releases are known or suspected to have occurred, and (2) sites where

hazardous materials or wastes were handled and could potentially have been released to the environment. The number of environmentally regulated sites is sorted by distance and direction from the site. Sites that had incomplete or incorrect addresses and whose locations could not be specifically plotted (i.e., geocoded) are listed in the unknown distance column. Figure 5.13-1 illustrates the distribution of sites where hazardous material releases (e.g., spills, leaks) are known or suspected to have occurred in relation to the site. Figure 5.13-2 depicts other environmentally regulated sites where hazardous materials have been used or stored but for which there are no records of known or suspected releases.

TABLE 5.13-1. SUMMARY OF THE NUMBER OF ENVIRONMENTALLY REGULATED SITES WITHIN ONE-MILE OF THE EASTVIEW SITE

Database	Distance from the Water Treatment Plant Site (mile)						TOTAL
	On-site	<1/8	1/8-1/4	1/4-1/2	>1/2	Un-known	
Sites Where Known or Suspected Releases to the Environment Have Occurred							
NPL (Superfund) Sites	0	0	0	0	0	0	0
Spills (from leaking tanks) - After 1990	0(0)	6(2)	8(3)	13(1)	167(24)	6(0)	200(30)
- 1980 through 1989	0(0)	0(0)	2(2)	5(4)	13(5)	0	20(11)
RCRA Corrective Action Sites	0	0	0	0	1	0	1
NYSDEC Sites (hazardous waste)	0	0	0	0	0	0	0
Emergency Response Sites (ERNS)	0	0	0	0	9	4	13
Toxic Release Inventory Sites (TRIS)	0	0	0	0	6	0	6
Release Sites (air/water)	0	0	0	1	4	0	5
Sites Where Hazardous Materials or Wastes Have Been Stored (Potential Environmental Release Sites)							
RCRA: TSD & Generators	0	0	1	7	30	1	39
No Longer Regulated	0	2	1	7	35	2	47
Regulated USTs & ASTs	0	0	1	4	29	0	34
NYSDEC Sites	0	0	0	0	0	0	0
CERCLIS Sites	0	0	0	0	0	0	0
Solid Waste Landfills	0	0	0	0	0	0	0
FINDS Sites: NCBS	0	0	0	1	2	0	3
PCS	0	0	0	0	1	0	1
Nuclear Permits	0	0	0	0	3	0	3



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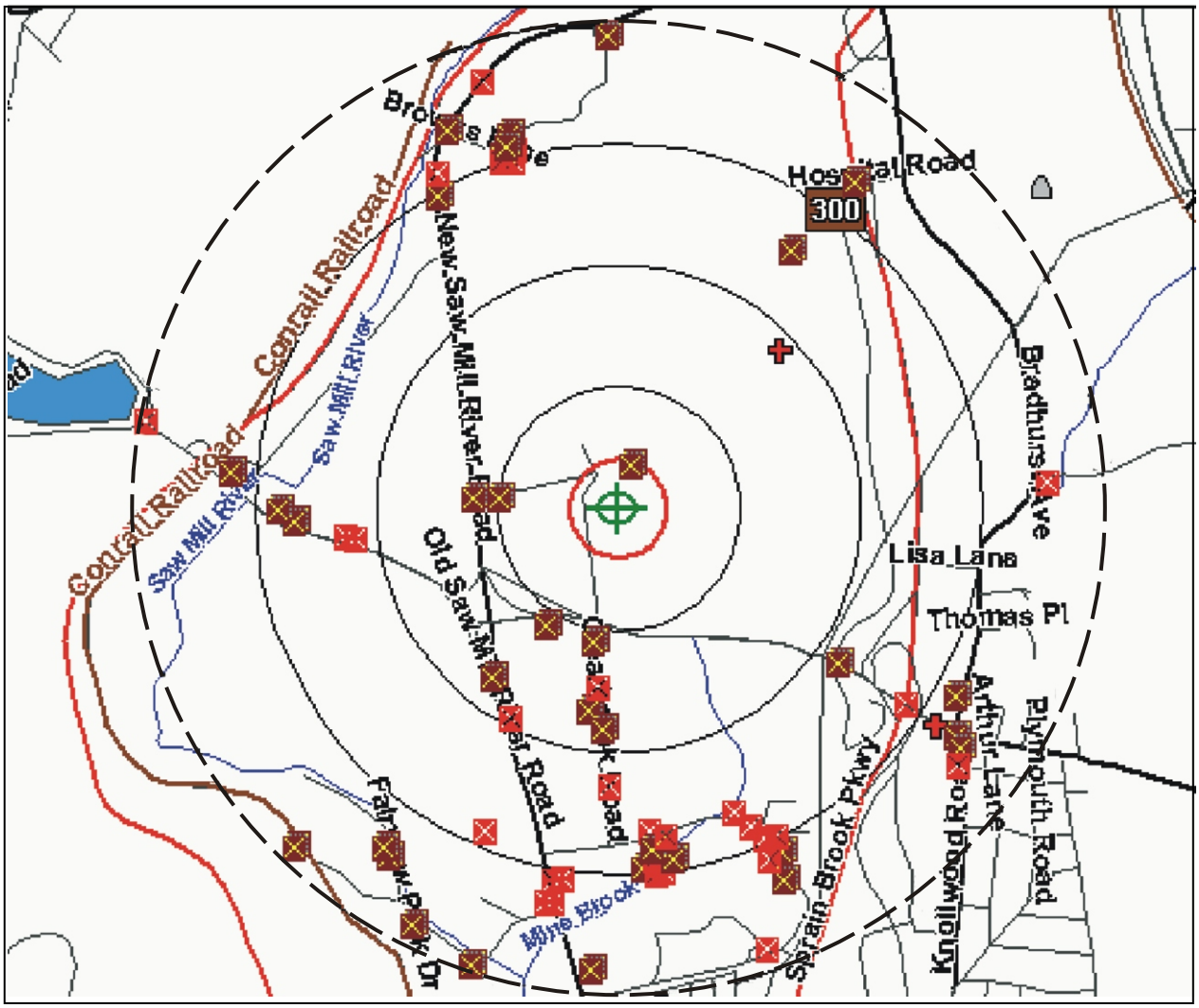
Sites of Known or Suspected Hazardous Material Releases Eastview Site

Croton Water Treatment Plant

Figure 5.13-1



Not To Scale

Legend

- Eastview Site
- Single Site
- Multiple Sites
- 1 Mile Radius Study Area
- Each Ring Equals 1/4 Mile Increment

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Environmentally Regulated Sites
Eastview Site

Croton Water Treatment Plant

Figure 5.13-2

The information contained in these databases originates from a wide variety of sources such as permits, inspections, and incident reports. As a result, if a site is listed in multiple databases there may be variations in the site's name or address. The data presented represents the information as it was derived from the original database sources without significant alteration or correction. Slight modifications have been performed to the addresses for sites that are listed on multiple databases so that the resulting geo-coding would derive consistent distances from the water treatment plant site.

The following identifies individual sites in proximity to the water treatment plant site by the applicable environmental regulatory programs (e.g., spills, tanks, Resource Conservation and Recovery Act [RCRA] hazardous waste). The site/incident reports that were reviewed to identify the listed sites are provided in Appendix E. The site/incident identification number (ID#) listed in the following corresponds to the site detail report search identification numbers in the Appendix.

Sites Where Known or Suspected Releases to the Environment Have Occurred.

National Priority List (Superfund) Sites. A search was conducted of the National Priority List (NPL), also known as the Superfund list, to identify uncontrolled or abandoned hazardous waste sites in areas that are targeted for possible long-term action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The subject properties do not appear on the current NPL, also known as the USEPA Superfund list of controlled hazardous waste sites. There are no Superfund sites within one-mile of the water treatment plant site.

Regulated Underground and Aboveground Storage Tanks. The New York database of spills identifies incidents that have resulted in the release of hazardous materials. The database includes both tank test failures (i.e., tanks that failed tightness testing) and known tank failures (i.e., leaking tanks in the ground or tanks noted to be leaking upon removal). The list of tank test failures includes tanks that are located only below ground (underground storage tanks), whereas the list of tank failures includes both tanks that are either below or above ground. The database also lists spills that have occurred during the transportation of chemicals. The spill statistics identify incidents that occurred after 1990 and spills that occurred between 1980 and 1989.

Table 5.13-2 identifies environmentally regulated sites within one-mile of the water treatment plant site where hazardous material spills or releases and leaks from storage tanks are known or suspected to have occurred. A majority of the spills reported in the 1990s (90%) occurred beyond one-quarter mile from the site. Based on an evaluation of the 220 reported spill incidents, Table 5.13-3 summarizes the characteristics of selected significant spills or releases that could have potentially affected the environment (e.g., soil, groundwater) surrounding each spill site.

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
Spills Occuring in 1990 and After						
130	County Fire Trng Center	Dana Road	Valhalla NY 10532	0.09 NE	9614602/Closed	N/A
206	Fire Training Center	Dana Rd	Valhalla NY 10595	0.09 NE	0013575/Active	N/A
207	Fire Training Center	Dana Rd	Valhalla NY 10532	0.09 NE	9703747/Closed	N/A
208	Fire Training Tower	Dana Ave	Valhalla NY 10532	0.09 NE	9703699/Closed	**347**
264	WC Dept.of Labs & Research	Dana Road	Valhalla NY 10532	0.09 NE	9006650/Closed	N/A
395	Fire Training Center	4 Dana Rd	Valhalla NY 10595	0.09 NE	0104974/Active	**409**
215	Grasslands/Clearbrook Rd	Grasslands/Clearbrook Rd	Elmsford NY 10523	0.23 SW	9805688/Closed	N/A
234	NYS Armory	Dana Rd	Valhalla NY 10595	0.24 NW	9602401/Active	**361**
236	NYS DOT Facility	Old Saw Mill River Rd	Valhalla NY 10595	0.24 NW	9610430/Closed	**362**
238	Oms 8	2 Dana Rd	Valhalla NY 10532	0.24 NW	9801082/Closed	N/A
243	Police Academy Entrance	Dana Road	Valhalla NY 10532	0.24 NW	9409801/Closed	N/A
277		Dana Road	Valhalla NY 10532	0.24 NW	9701003/Active	N/A
405	NYS DOT Facility	Old Sawmill River Rd	Valhalla NY 10591	0.24 NW	9902186/Active	**363**
218	Grasslands Road btwn	9A and Mspringbrook Pkwy	Valhalla NY 10523	0.25 SW	0002952/Closed	N/A
246	Residence	80 Grasslands Rd	Elmsford NY 10523	0.27 SW	9509345/Closed	N/A
258	Valhalla Corr.Facil.Field	Rt. 100 Grasslands Road	Valhalla NY 10595	0.28 SE	9111418/Active	N/A
263	W.C. Correction Car	Grasslands Road	Valhalla NY 10595	0.28 SE	9113249/Closed	N/A
110	Bourassa Transport	100 Clearbrook Dr	Elmsford NY 10523	0.28 SW	9614216/Closed	N/A
131	Dinner Theater	100 Grasslands Road	W Plains NY 10523	0.28 SW	9210051/Closed	N/A
222	Ifo NYS DOT Garage	Danna Rd & Saw Mill River	Mt Pleasant NY 10532	0.30 NW	9701336/Closed	N/A
235	NYS DOT	Sawmill River Rd/Dana Rd	Valhalla NY 10595	0.30 NW	9510294/Closed	N/A
255	Transformer	Dana Rd / Rt 9A	Elmsford NY 10532	0.30 NW	9603693/Closed	N/A
257	Unit Substation	Danna Rd/Sawmill River Rd	Mt Pleasant NY 10532	0.30 NW	9614964/Closed	N/A
260	Vault 9905	Route 9A & Dana Rd	Mt Pleasant NY 10532	0.30 NW	9909896/Closed	N/A
220	High Light Auto Service	Rt 9A / 100c	Elmsford NY 10523	0.43 SW	9610063/Closed	N/A
221	Highlight Auto Service	Rt9A+100c	Elmsford NY 10523	0.43 SW	9700041/Closed	**353**
223	Landmark At Eastview	777/763 Old Saw Mill Rive	Mt Pleasant NY 10532	0.46 SW	0013148/Closed	N/A
129	Contaminated Soil	Woods Rd Central Heat Pla	Valhalla NY 10523	0.55 SE	9705812/Closed	N/A
211	Grasslands Reservation	Grassland Road	Valhalla NY 10595	0.55 SE	9504126/Closed	**348**

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
266	Westchester Co DPW	Valhalla Campus	Valhalla NY 10523	0.55 SE	9912815/Closed	N/A
267	Westchester Co DPW	Grassland Rd	Valhalla NY 10523	0.55 SE	9912820/Closed	N/A
214	Grassland Medical Center	Grasslands Rd	Valhalla NY 10532	0.64 NE	9101364/Closed	N/A
217	Grasslands Reservation	Rear of Medical Center	Valhalla NY 10532	0.64 NE	9101642/Closed	**349**
226	N.Y. Medical College	Grassland Compound Street	Valhalla NY 10532	0.64 NE	9402021/Closed	**357**
229	NY Medical College	Dana Rd	Valhalla NY 10532	0.64 NE	9901612/Closed	**360**
230	NY Medical College	Cottage Road	Valhalla NY 10532	0.64 NE	9407997/Closed	**359**
231	NY Medical College	Grasslands Reservation	Valhalla NY 10532	0.64 NE	9501715/Closed	N/A
232	NY Medical College	Grasslands Rd	Valhalla NY 10532	0.64 NE	9706308/Closed	N/A
233	NY Medical College	Grasslands Complex	Valhalla NY 10532	0.64 NE	9612928/Active	**358**
244	Psychiatric Institute	Woods Rd-Grasslands Med Ctr	Valhalla NY 10532	0.64 NE	9703187/Closed	**366**
262	Vosburg Pavillion	Westchester Medical Center	Valhalla NY 10532	0.64 NE	9903304/Active	N/A
265	West. County Medical Cntr	95 Woods Rd	Valhalla NY 10532	0.64 NE	0101890/Active	N/A
269	Westchester Co Medical Coll	Medical College	Valhalla NY 10532	0.64 NE	9611845/Closed	N/A
270	Westchester Co Medical Ct	Rt.100	Valhalla NY 10532	0.64 NE	9814086/Active	**369**
271	Westchester County Medical	Route 100	Valhalla NY 10532	0.64 NE	9811862/Closed	N/A
272	Westchester County Medical	New York Medical College	Valhalla NY 10532	0.64 NE	9813996/Closed	**370**
273	Westchester Medical Center.	Valhalla Campus	Valhalla NY 10532	0.64 NE	0108484/Active	N/A
274	Westchester Medical Center.	Hammond House Road	Valhalla NY 10532	0.64 NE	9515541/Closed	N/A
276	Woodfield Cottage	Hammond House Rd	Valhalla NY 10532	0.64 NE	0108110/Active	N/A
398	Westchester Medical Center	Macy Pavilion	Valhalla NY 10595	0.64 NE	0106662/Closed	N/A
132	Driveway - Dyke S Lumber	8 Sawmill River	Hawthorne NY 10532	0.68 NW	0102220/Closed	N/A
259	Vault 519	20 Westchester Plaza	Elmsford NY 10523	0.69 SE	0109264/Active	N/A
111	BRS Computing	7 Westchester Plaza	Elmsford NY 10523	0.71 SE	9005173/Closed	N/A
279		7 Westchester Plaza	Elmsford NY 10523	0.71 SE	9613003/Closed	**374**
212	Grassland Housing Apt.	Old Farm Road	Valhalla NY 10595	0.72 NE	9101795/Closed	N/A
213	Grassland Housing Facility	Bet. Bldg. 101 & 400	Valhalla NY 10595	0.72 NE	9101520/Closed	N/A
403	Ifo Alumni House	Sunshine Cottage Rd	Valhalla NY 10532	0.72 NE	9808038/Active	**412**
396	Nb Exit To Eastview	Sprian Brook Parkway	Valhalla NY	0.75 SE	9802016/Closed	N/A
107	B-9 Skyline Dr	B-9 Skyline Dr	Hawthorne NY 10532	0.76 NW	9700636/Closed	N/A

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
104	399 Executive Blvd	399 Executive Blvd	Elmsford NY 10523	0.78 SE	9806117/Active	N/A
219	Hawthorne Country Day Sch	5 Bradhurst Ave	Hawthorne NY 10595	0.78 SE	0109020/Active	**350**
241	Pole 58	Bradhust Ave/Thomas Pl	Mt Pleasant NY 10595	0.79 SE	9901315/Closed	N/A
103	315 Old Sawmill River Rd	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9611880/Closed	N/A
122	Con Edison	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9516689/Closed	**344**
123	Con Edison	315 Old Sawmill Road	Elmsford NY 10523	0.80 NW	9600665/Closed	N/A
124	Con Edison	315 Old Sawmill River Road	Elmsford NY 10523	0.80 NW	9614873/Closed	N/A
125	Con Edison	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9613205/Closed	N/A
126	Con Edison	315 Old Sawmill River Rd	Valhalla NY 10532	0.80 NW	9909918/Closed	N/A
127	Con Edison Eastview Service	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9609693/Closed	N/A
128	Con Edison	Old Saw Mill River Road	Elmsford NY 10523	0.80 NW	9500701/Closed	N/A
133	Eastview Service Center	Rd - 315 Old Saw Mill River	Elmsford NY 10532	0.80 NW	9913383/Closed	N/A
134	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9610714/Closed	N/A
135	Eastview Service Center	Old Saw Mill River Road	Greenburgh NY 10523	0.80 NW	9707908/Closed	N/A
136	Eastview Service Center	Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9700312/Closed	N/A
137	Eastview Service Center	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9611928/Closed	N/A
138	Eastview Service Center	315 Sawmill River Road	Eastview NY 10532	0.80 NW	9808727/Closed	N/A
139	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9604734/Closed	N/A
140	Eastview Service Center	Old Sawmill River Rd	Greenburgh NY 10523	0.80 NW	9814997/Closed	N/A
141	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9611497/Closed	N/A
142	Eastview Service Station	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9604521/Closed	N/A
143	Eastview Sub Station	Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9614050/Closed	N/A
145	Eastview Svc Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612929/Closed	N/A
146	Eastview Svc Center	315 Saw Mill River Rd	Eastview NY 10523	0.80 NW	9902245/Active	N/A
147	Eastview Svc Center	Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9613611/Closed	N/A
148	Eastview Svc Center	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9601832/Closed	N/A
149	Eastview Service	315 Old Saw Mill Road	Elmsford NY 10523	0.80 NW	9611545/Closed	N/A
150	Eastview Service	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612657/Closed	N/A
151	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612888/Closed	N/A
153	Eastview Service Center	Old Sawmill River Road	Elmsford NY 10523	0.80 NW	9501092/Closed	N/A

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
154	Eastview Service Center	Old Sawmill River Road	Elmsford NY 10523	0.80 NW	9612470/Closed	N/A
155	Eastview Service Center	315 Old Saw River Road	Elmsford NY 10523	0.80 NW	9007555/Closed	N/A
156	Eastview Service Center	315 Old Sawmill River Prkwy	Elmsford NY 10523	0.80 NW	9703135/Closed	N/A
157	Eastview Service Center	315 Sawmill River Rd	Elmsford NY 10523	0.80 NW	9611615/Closed	N/A
158	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612409/Closed	N/A
159	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612151/Closed	N/A
160	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9607855/Closed	N/A
161	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9606435/Closed	N/A
162	Eastview Service Center	Old Sawview Road	Elmsford NY 10523	0.80 NW	9516337/Closed	N/A
163	Eastview Service Center	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9605487/Closed	N/A
164	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9602143/Closed	N/A
165	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612005/Closed	N/A
166	Eastview Service Center	305 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9704169/Closed	N/A
167	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9609839/Closed	N/A
168	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9609395/Closed	N/A
169	Eastview Service Center	Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9612287/Closed	N/A
170	Eastview Service Center	Old Sawmill Rd	Greenburgh NY 10523	0.80 NW	9708230/Closed	N/A
171	Eastview Service Center	Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9611696/Closed	N/A
172	Eastview Service Center	Sawmill River Road	Elmsford NY 10523	0.80 NW	9611631/Closed	N/A
173	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9610310/Closed	N/A
174	Eastview Service Center	315 Old Sawmill River Rd	Valhalla NY 10523	0.80 NW	9911439/Closed	N/A
175	Eastview Service Center	315 Old Sawmill River Rd	Valhalla NY 10523	0.80 NW	9712861/Active	N/A
176	Eastview Service Center	315 Old Sawmill River Rd	Valhalla NY 10523	0.80 NW	9711255/Closed	N/A
177	Eastview Service Center	Old Saw Mill River Road	Greenburgh NY 10523	0.80 NW	9900172/Closed	N/A
178	Eastview Service Center	315 Saw Mill River Road	Eastview NY 10532	0.80 NW	9810869/Closed	N/A
179	Eastview Service Center	315 Saw Mill River Rd	Eastview NY 10532	0.80 NW	9809922/Closed	N/A
180	Eastview Service Center	Old Saw Mill River Road	Greenburgh NY 10523	0.80 NW	9808300/Closed	N/A
181	Eastview Service Center	Old Saw Mill River Road	Greenburgh NY 10532	0.80 NW	9802072/Closed	N/A
182	Eastview Service Center	Saw Mill River Rd	Greenburgh NY 10532	0.80 NW	9711110/Closed	N/A
183	Eastview Service Center	Old Sawmill River Rd	Greenburgh NY 10523	0.80 NW	9813947/Closed	N/A

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
184	Eastview Service Center	Old Sawmill River Rd	Greenburgh NY 10523	0.80 NW	9813950/Closed	N/A
185	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9610285/Closed	N/A
186	Eastview Service Center	315 Sawmill River Rd	Elmsford NY 10523	0.80 NW	9610086/Closed	N/A
187	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9609728/Closed	N/A
188	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9609442/Closed	N/A
189	Eastview Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9703048/Closed	N/A
190	Eastview Service Center	315 Old Sawmill River Road	Elmsford NY 10523	0.80 NW	9614409/Closed	N/A
191	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612660/Closed	N/A
192	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612232/Closed	N/A
193	Eastview Service Center	Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9612096/Closed	N/A
194	Eastview Sub Station	Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	9614060/Closed	N/A
197	Eastview Substation	Old Sawmill River Rd	Greenburgh NY 10523	0.80 NW	9707567/Closed	N/A
199	Eastview Substation	Old Sawmill River Rd	Greenburgh NY 10523	0.80 NW	9812600/Closed	N/A
200	Eastview Substation	Old Saw Mill River Rd	Greenburgh NY 10523	0.80 NW	9807440/Closed	N/A
201	Eastview Substation	Old Sawmill River Rd	Greenburgh NY 10532	0.80 NW	9710048/Closed	N/A
202	Eastview Substation	Old Saw Mill River Road	Elmsford NY 10523	0.80 NW	9502834/Closed	N/A
203	Eastview Turnout Center	315 Old Sawmill River Rd	Valhalla NY 10523	0.80 NW	0101950/Closed	N/A
237	Old Sawmill River Rd	Ifo 315	Valhalla NY 10523	0.80 NW	0101951/Closed	N/A
252	Rye Service Center	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	9610434/Closed	N/A
281		Eastview Service Center	Elmsford NY 10523	0.80 NW	9612522/Closed	N/A
393	Eastview Service Center	Old Saw Mill River Rd	Valhalla NY 10595	0.80 NW	0104392/Closed	N/A
394	Eastview Service Center	315saw Mill River Road	Valhalla NY 10595	0.80 NW	0105546/Closed	N/A
109	Blythedale Hospital	Rt 100 & Bradhurst Av	Valhalla NY 10595	0.80 SE	9708579/Closed	**342**
392	Corner of Brad and Hurst	Above Ground Tank	Valhalla NY 10595	0.82 SE	0102793/Closed	N/A
144	Eastview Substation	310 Old Sawmill River Rd	Valhalla NY 10523	0.83 NW	0008255/Closed	N/A
152	Eastview Service Center	310 Sawmill River Rd	Eastview NY 10523	0.83 NW	9900917/Active	N/A
195	Eastview Substation	310 Old Sawmill River Rd	Valhalla NY 10523	0.83 NW	9811346/Closed	N/A
196	Eastview Substation	310 Old Sawmill River Rd	Eastview NY 10523	0.83 NW	9903876/Closed	N/A
198	Eastview Substation	310 Old Sawmill River Rd	Eastview NY 10523	0.83 NW	9905775/Closed	N/A
245	Pump House Eastview Sub	310 Old Sawmill River Rd	Valhalla NY 10523	0.83 NW	0000377/Closed	N/A

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
106	Academy Auto Parts	380 N.Sawmill River Road	Elmsford NY 10523	0.83 SW	9304412/Closed	N/A
253	Saw Mill River Road	380 Sawmill River Road	Elmsford NY 10523	0.83 SW	9411235/Closed	N/A
216	Grasslands Rd / Rt 100	Grasslands Rd / Rt 100	Mt Pleasant NY 10523	0.84 SE	0100694/Closed	N/A
227	Near Chelsea St Rt Side	Grasslands Rd / Knollwood	Greenburgh NY 10523	0.84 SE	9701938/Closed	N/A
228	Norwood & Grasslands Rd.	Grasslands Rd.	W Plains NY 10603	0.84 SE	9103224/Closed	N/A
249	Robinson Oil Office	500 Executive Blvd.	Elmsford NY 10523	0.84 SE	9008017/Closed	N/A
250	Robison Fuel Oil	500 Executive Blvd.	Elmsford NY 10523	0.84 SE	9306354/Closed	N/A
251	Robison Oil Co.	500 Executive Blvd.	Elmsford NY 10523	0.84 SE	9107670/Closed	N/A
286		Bradhurst/ Rt141/ Rt100C	Mt Pleasant NY 10523	0.84 SE	0100682/Closed	N/A
108	Bet.Con Ed & Fairview Park	Rt. 9A Southbound	W Plains NY 10523	0.84 SW	9104391/Closed	N/A
278		Rt9A/Fairview Park	Elmsford NY 10523	0.84 SW	0104630/Closed	N/A
400	NY Tel Co.	Sawmill River Road	Elmsford NY 10523	0.84 SW	9213544/Active	**411**
105	9110 Vs	Browns Lane off of Rt 9A	Mt Pleasant NY 10532	0.85 NW	9909404/Closed	N/A
280		15 Fairview Park Dr	Elmsford NY 10523	0.85 SW	0104629/Closed	N/A
268	Westchester Co Health	19 Bradhurst	Hawthorne NY 10532	0.86 NE	9703601/Closed	N/A
209	Franco Rinaldi Co.	525 Executive Blvd.	Elmsford NY 10523	0.86 SE	9012410/Closed	N/A
210	Getty Serv Station 58025	Grassland Ave & Knollwood	W Plains NY 10603	0.86 SE	9812453/Closed	N/A
261	Vie De France Bakery	525 Executive Blvd.	Elmsford NY 10523	0.86 SE	9203460/Closed	N/A
113	Coca - Cola	111 Fairview Park Dr	Elmsford NY 10523	0.86 SW	9710080/Closed	N/A
114	Coca Cola	115 Fairview Park Drive	Elmsford NY 10523	0.86 SW	9808313/Active	N/A
115	Coca Cola	115 Fairview Av	Elmsford NY 10523	0.86 SW	0013552/Closed	N/A
116	Coca Cola	115 Fairview Ave	Elmsford NY 10523	0.86 SW	0013425/Closed	N/A
117	Coca Cola	111 Fairview Park Drive	Elmsford NY 10523	0.86 SW	0109457/Active	N/A
118	Coca Cola Bottling Co	115 Fairview Park Dr	Elmsford NY 10523	0.86 SW	9808808/Closed	N/A
119	Coca Cola Bottling Co.	Rt. 119	Elmsford NY 10523	0.86 SW	9103478/Closed	N/A
120	Coca Cola Plant	115 Fairview Park Dr	Elmsford NY 10523	0.86 SW	0011367/Closed	N/A
121	Coca Cola Plant	111 Fairview Park Dr	Elmsford NY 10523	0.86 SW	9813817/Closed	N/A
247	Ridgewood Power	111 Fairview Park Dr	Elmsford NY 10523	0.88 SW	9900679/Closed	N/A
285		111 Fairview Park Drive	Elmsford NY 10523	0.88 SW	9711123/Closed	N/A
275	Westchester Putnam Boy Sch	41 Sawmill River Rd	Hawthorne NY 10532	0.94 NW	0008350/Closed	**371**

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
256	Transformer 5452	3 Skyline Drive	Mt Pleasant NY 10532	0.95 NW	0001123/Closed	N/A
112	Carry-Out Terminal	109 Fairview Park Drive	Elmsford NY 10523	0.95 SW	9310038/Closed	N/A
204	Factory Bldg	109 Fairview Park Drive	Elmsford NY 10523	0.95 SW	9803664/Closed	**346**
224	Michael & Sons	300 Sawmill River Rd	Elmsford NY 10523	0.95 SW	0106286/Active	**354**
239	Perk Up Co.	109 Fairview Park Drive	Elmsford NY 10523	0.95 SW	9314790/Closed	**365**
240	Perk-Up	109 Fairview Park Drive	Elmsford NY 10523	0.95 SW	9707621/Closed	N/A
248	Roadway Packaging Ser.	109 Fairview Park Dr.	Elmsford NY 10523	0.95 SW	9008901/Closed	**368**
254	Tank Failure	109 Fairview Park Dr	Elmsford NY 10523	0.95 SW	9803671/Closed	N/A
282		109 Fairview Park Dr	Elmsford NY 10523	0.95 SW	9803654/Closed	**373**
283		109 Fairview Park	Elmsford NY 10523	0.95 SW	9803655/Closed	**375**
284		109 Fairview Park Dr	Elmsford NY 10523	0.95 SW	9803656/Closed	**372**
225	Milsson Nurseries	48 Saw Mill River Rd	Hawthorne NY 10532	0.96 NW	9911690/Active	**355**
242	Pole W8	11 Taylor Rd	Greenburgh NY 10523	0.96 SE	0103984/Closed	N/A
205	Federal Express	501 Fairview Park Drive	Elmsford NY 10591	0.97 SW	9306041/Closed	N/A
102	103 Fairview Park Dr	103 Fairview Park Dr	Elmsford NY 10523	0.99 SW	9612099/Closed	N/A
397	Pole W3	Franklin Ave	Mt Pleasant NY 10595	NON GC	9803843/Closed	N/A
399	Elmsford Pump House	Elmsford Pump House	Elmsford NY 10523	NON GC	9806098/Active	N/A
401	Pole # 15	Sawmill River Rd	Elmsford NY 10523	NON GC	9913290/Closed	N/A
402	Pole 3	North Payne St	Elmsford NY 10523	NON GC	9805775/Active	N/A
404	Pole W-2	Grasslands Rd	Mt Pleasant NY 10532	NON GC	9704657/Closed	N/A
406	On Road	Knollwood Road	W Plains NY 10603	NON GC	9300177/Closed	N/A
Spills Occurring 1980 Through 1990						
288	Armory	State Armory	Valhalla NY 10595	0.24 NW	8605705/Closed	**341**
299	S. Westchester Residence	Dana Rd.	Valhalla NY 10595	0.24 NW	8705471/Closed	**367**
293	Heritage Corp.	100 Grassland Road	Elmsford NY 10523	0.28 SW	8804286/Closed	**351**
294	Heritage Corp.	100 Grass Land Road	Elmsford NY 10523	0.28 SW	8804316/Closed	**352**
287	American Health Foundation	One Dana Road	Valhalla NY 10532	0.30 NW	8806433/Closed	**340**
305		Danard & Rt.9	Valhalla NY 10595	0.30 NW	8600147/Closed	N/A
292	Exxon	Rte 9 & 100c	Elmsford NY 10523	0.43 SW	8608030/Closed	**345**
297	N Y Tel	545 Saw Mill River Rd	Elmsford NY 10523	0.53 SW	8606521/Closed	**356**

TABLE 5.13-2. HAZARDOUS MATERIALS SPILL SITES (REPORTED SPILLS INCLUDING LEAKING STORAGE TANKS)

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status	Leaking Tank ID #
303	Westchester Medical Center	Valhalla Rt 100a	W Plains NY 10532	0.64 NE	8805868/Closed	N/A
300	Union Carbide	Old Sawmill River Rd	Tarrytown NY 10591	0.70 SW	8702252/Closed	N/A
301	Union Carbide	Terry Town Tech Center	Tarrytown NY 10591	0.70 SW	8802096/Closed	N/A
302	West DPW	Union Carbide	Tarrytown NY 10591	0.70 SW	8702253/Closed	N/A
407	Keren Development	Saw Mill River Rd.	Elmsford NY 10523	0.78 SW	8905030/Closed	**410**
291	Con Ed	Rte 9A at Elmsford	Elmsford NY 10532	0.80 NW	8701044/Closed	N/A
289	Burke Heat	Intersection 100a & 100b	W Plains NY 10603	0.84 SE	8807885/Closed	N/A
295	Marr Labs	500 Executive Bldg	Elmsford NY 10523	0.84 SE	8606989/Closed	N/A
290	Coca Cola	889 Fairview Park Drive	Elmsford NY 10523	0.84 SW	8706950/Closed	**343**
304		889 Fairview Park Drive	Elmsford NY 10523	0.84 SW	8706945/Closed	**376**
298	NYSDOT	Eastview	Elmsford NY 10591	0.90 NW	8805692/Closed	**364**
296	Masters	Rte 9A	Elmsford NY 10523	0.95 SW	8700812/Closed	N/A

TABLE 5.13-3. SUMMARY OF SIGNIFICANT SPILL INCIDENTS

Site ID#	Site Name	Distance/ Direction	Material Spilled	Cause of Spill	Comments
234	NYS ARMORY	0.24 NW	Gasoline Diesel	Tank Failure	Tanks removed; 570 tons of contaminated soil excavated (1996)
236	NYS DOT	0.24 NW	Gasoline	Tank Failure	Tanks removed; significant contaminated soil excavated; groundwater contamination (1996)
277	NYS DOT	0.24 NW	Gasoline Diesel	Equipment Failure	Tanks removed; 1,766.4 tons of contaminated soil excavated (1997)
258	Valhalla Correctional Facility	0.28 SE	Waste Oil	Unknown	Contaminated soil discovered during construction; soil removed (1992)

TABLE 5.13-3. SUMMARY OF SIGNIFICANT SPILL INCIDENTS

Site ID#	Site Name	Distance/ Direction	Material Spilled	Cause of Spill	Comments
223	Landmark at Eastview	0.46 SW	#6 Fuel Oil	Equipment Failure	Spill was approximately 1,700 gal/day for days (102,000 gals released); spill enter sewers and captured at Yonkers WWTP (2001)

RCRA Corrective Action Sites. These sites are catalogued in a system that tracks specific RCRA events that have occurred at a facility (e.g., facility assessment, stabilization), as well as corrective action program priority (high/medium/low).

One RCRA Corrective Action site is located within one-mile of the water treatment plant site (Table 5.13-4). The facility at this location is considered a known or suspected release site because of RCRA corrective action measures that have been implemented since the mid 1980s.

NYSDEC Inactive Hazardous Waste Disposal Sites. NYSDEC's list of Inactive Hazardous Waste Disposal Sites identifies sites that have had known environmental releases. According to the NYSDEC, there are no inactive hazardous waste disposal sites within a one-mile radius of the water treatment plant site.

Emergency Response Notification System Sites (ERNS). This is the USEPA's spills database showing all USEPA response action to emergency spill incidents. The ERNS sites are presented by impacted media (i.e., land, water, air).

There have been 13 emergency response incidents in proximity to the water treatment plant site that have involved the release of hazardous materials to the environment (Table 5.13-4). Nine of the incidents occurred within one-mile of the site; the other four incidents occurred at locations that could not be specifically located, but may be in proximity to the site.

Toxic Release Inventory Sites (TRIS). The Toxics Release Inventory was established for Emergency Planning and Community Right-to-Know Act, Section 313 submissions. TRIS contains information reported to USEPA and/or NYSDEC by a variety of industries on their annual estimated releases of certain chemicals to the environment. Data include the maximum amount stored on-site; the estimated quantity emitted into the air, discharged into bodies of water, injected underground, or released onto land; methods used in waste treatment and their efficiency; and the transfer of chemicals off-site.

Table 5.13-4 identifies three unique facilities (multiple listings for two of the facilities) within one-mile of the water treatment plant site that are required to report toxic release inventory data to USEPA on a regular basis. Toxic inventory data generally includes information characterizing gaseous or particulate air emissions.

Accidental and Permitted Release Sites. There have been five reported incidents of accidental or permitted releases of substances to the environment within one-mile of the water treatment plant site (Table 5.13-4). The accidental incidents involved the release of oil or diesel fuel and were remediated shortly after detection. The permitted release involves a facility (site detail report ID # 306) that discharges wastewater from a septic system and boiler blow-down to a tributary to the Saw Mill River.

TABLE 5.13-4. RCRA CORRECTIVE ACTION, EMERGENCY RESPONSE NOTIFICATION SYSTEM, AND TRIS SITES

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status
RCRA Corrective Action Sites					
2	IBM Corp - Eastview Research	Old Saw Mill Rd at 100C	Tarrytown NY 10591	0.67 SW	NYD0653877/TSD
Emergency Response Notification System (ERNS) Sites					
85	Con Edison	Eastview Service Ctr Old Saw Mill	Elmsford NY 10523	0.80 NW	485083/Fixed Facility
86	Con Edison	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	491883/Unknown (EPA)
87	Con Edison	315 Old Sawmill River Rd	Valhalla NY 10523	0.80 NW	564710/Gas Sta
88	Con Edison	315 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	521009/Vehcl Fuel
387	Con Edison	Grasslands Road	Mt Pleasant NY 10595	0.80 NW	545507/Fixed Facility
90	Safety Kleen	380 Sawmill River Rd	Elmsford NY 10523	0.83 SW	415009/Highway Related
84	10 Gal Grasslands Rd/Rt 100	10 Gal At N White Plains Yard	Mt Pleasant NY 10523	0.84 SE	NRC-563306/Mobile
91		115 Fairview Park Dr.	Elmsford NY 10523	0.86 SW	NRC-554057/Mobile
89	Federal Express	501 Fairview Park Dr.	Elmsford NY 10591	0.97 SW	337648/Highway Related
388	On The Corner Of Bradhurst		Valhalla NY 10595	NON GC	NRC-569372/Storage Tnk
389	Coombs Freight Line		Elmsford NY 10523	NON GC	349644/Highway Related
390	Coombs Truck Line		Elmsford NY 10523	NON GC	349643/Highway Related
391	Con Edison	Pole 7 on Hawthorne Ave	W Plains NY 10603	NON GC	541930/Fixed Facility
Toxic Release Inventory Sites (TRIS)					
101	Starad Inc.	275 Clearbrook Rd.	Elmsford NY 10523	0.59 SW	10523strdn275cl/Open
96	American Bank Note	399 Executive Blvd.	Elmsford NY 10523	0.78 SE	NYD987029089/Open
97	American Bank Note	399 Executive Blvd.	Elmsford NY 10523	0.78 SE	10523mrcnb399ex/Open
98	Coca-Cola Bottling Co.	111 Fairview Park Dr.	Elmsford NY 10523	0.86 SW	NY0001910686/Open
99	Coca-Cola Bottling Co.	555 Fairview Park Dr.	Elmsford NY 10523	0.86 SW	NYd986889863/Opened
100	Coca-Cola Bottling Co.	111 Fairview Park Dr.	Elmsford NY 10523	0.86 SW	10523ccclb555fa/Open
Accidental And Permitted Hazardous Material Release Sites					
413		Dana Road	Valhalla NY 10595	0.24 NW	NRC-561129/Fixed
306	Westchester Co. Medical Ctr		Mt Pleasant NY 10532	0.64 NE	3-0095664/Nsigind
380	Con Edison	315 Old Sawmill River Rd	Elmsford NY 10532	0.80 NW	521009/Highway Related
381	Con Edison	315 Old Sawmill River Rd	Valhalla NY 10523	0.80 NW	564710/Fixed Facility
382	Rte 9A And Fairview		Elmsford NY 10523	0.84 SW	NRC-574882/Mobile

Sites Where Hazardous Materials or Wastes Have Been Used or Stored.

RCRA Regulated Sites. The USEPA's list of all registered hazardous waste generators. They are classified as TSD (treatment, storage, disposal), LGN (large quantity), SGN (small quantity), VGN (very small quantity), and NLR (no longer regulated) generator facilities. Compliance Monitoring and Enforcement List (CMEL) and RCRA Administrative Action Tracking System (RAATS) information are also included.

There is one RCRA regulated TSD facility within one-mile of the water treatment plant site (Table 5.13-5) and 38 RCRA hazardous waste generators (including one site which could not be geocoded). In addition, there are 47 sites (including two non geocoded) within one-mile of the site that are no longer RCRA regulated (NLR). Unless identified in other databases, these TSD, hazardous waste generators, and NLR facilities represent sites where hazardous wastes are (or have been) handled but there is no indication that these substances have been released to the environment.

USEPA CERCLIS List. In addition to the NPL, the USEPA maintains a list of known or suspected uncontrolled or abandoned hazardous waste sites that have either been investigated, or are under investigation for potential releases of hazardous substances. The subject properties do not appear on the CERCLIS list of properties that is either currently under investigation or planned for future investigation, according to current available USEPA information. There are no CERCLIS sites within a one-mile radius of the water treatment plant site.

NYSDEC Sites. The RCRA information system tracks large-quantity hazardous waste generators, small-quantity generators, and facilities that treat, store, or dispose of hazardous wastes. There are no NYSDEC hazardous material or waste disposal sites within one-mile of the water treatment plant site.

Resource Conversation and Recovery Information System (RCRIS). The USEPA's list of all registered hazardous waste generators. They are classified as TSD (treatment, storage, disposal), LGN (large quantity), SGN (small quantity), VGN (very small quantity), and NLR (no longer regulated) generator facilities. Compliance Monitoring and Enforcement List (CMEL) and RCRA Administrative Action Tracking System (RAATS) information are also included.

Regulated Underground and Aboveground Storage Tanks. Registered under ground and above ground storage tanks. This is NYSDEC's list of registered underground and above ground bulk (i.e., >1,100 gallons) storage tanks that includes petroleum and chemical bulk storage tanks but excludes unregistered fuel oil tanks used in residential applications (<1,100 gallons).

There are 34 petroleum bulk storage (PBS) and chemical bulk storage (CBS) tanks within one-mile of the water treatment plant site (Table 5.13-6). A majority of the tanks (88 percent) contain petroleum related products such as fuel oil, diesel fuel, and gasoline. The chemical bulk storage tanks are used to contain sodium hydroxide, ferric sulfate, and aluminum sulfate. Unless identified in other databases, these regulated tanks represent sites where hazardous materials are (or have been) handled but there is no indication that these substances have been released to the environment.

TABLE 5.13-5. CURRENT AND FORMER RCRA REGULATED FACILITIES

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status
RCRA Permitted Facilities (generators)					
25	NYS Div Military Naval Affairs	Dana Rd	Valhalla NY 10532	0.24 NW	NYD981561384/SGN
27	Pharmaceutical Discovery Lab 4	100 Grasslands Rd	Elmsford NY 10523	0.28 SW	NYD986991024/TR
29	Reckson Associates	100 Grassland Rd - Bldg A	Elmsford NY 10523	0.28 SW	NYR000071787/SGN
5	American Health Foundation	1 Dana Rd	Valhalla NY 10532	0.30 NW	NYD078722279/SGN
32	T R M Copy Centers	150 Clearbrook Rd	Elmsford NY 10523	0.37 SW	NYD982737983/VGN
17	Hypress Inc	175 Clearbrook Rd	Elmsford NY 10523	0.42 SW	NYD982539140/SGN
19	I R Industries	200 Clearbrook Rd	Elmsford NY 10523	0.46 SW	NYD986943371/SGN
20	Kellenberger	200 Clearbrook Rd	Elmsford NY 10523	0.46 SW	NYR000038737/SGN
24	NYCDEP - Eastview Complex	Rte 100c & Taylor Rd	Valhalla NY 10523	0.55 SE	NYR000094151/VGN
38	Westchester County of DPW	Grasslands & Woods Rd	Valhalla NY 10523	0.55 SE	NYD024621872/VGN
22	Malcolm Pirnie Inc Lab	707 Old Sawmill River Rd	Tarrytown NY 10591	0.55 SW	NYD986967081/VGN
7	Ciba Specialty Chemicals	711 Old Saw Mill River Rd	Tarrytown NY 10591	0.56 SW	NYD986898690/VGN
23	New York Medical College	Basic Science Bldg Room 415	Valhalla NY 10532	0.64 NE	NYD981142292/LGN
37	Westchester Co. Medical Ctr	Grasslands Rd Rm 2f01	Valhalla NY 10532	0.64 NE	NYD010966935/LGN
39	Westchester Co. Valhalla Campus	Grasslands Reservation Svc Rd	Valhalla NY 10532	0.64 NE	NYR000032144/SGN
1	IBM Corp - Eastview Research	Old Saw Mill Rd At 100c	Tarrytown NY 10591	0.67 SW	NYD980653877/TSD
21	Keren Developments Inc	Saw Mill River Rd 100c	Eastview NY 10591	0.70 SW	NYD153500624/SGN
15	Executive Printing	8 Westchester Plz 2nd Door	Elmsford NY 10523	0.71 SE	NYD987037892/SGN
16	Federal Express Ctxa	404 Fieldcrest Dr	Elmsford NY 10523	0.72 SW	NYR000064808/SGN
14	EvoNYx	6 Skyline Dr	Hawthorne NY 10532	0.74 NW	NYR000055046/SGN
18	I F R of NY & Ct Inc	16 Saw Mill River Rd	Hawthorne NY 10532	0.74 NW	NY0000072603/SGN
30	Reveo Inc	3 Westchester Plz	Elmsford NY 10523	0.74 SE	NYR000108241/VGN
34	Thin Film Concepts Inc	1 Westchester Plz	Elmsford NY 10523	0.75 SE	NYR000006122/VGN
10	Compar Inc	9 Skyline Dr	Hawthorne NY 10532	0.76 NW	NYD098893688/SGN
13	E M Industries	7 Skyline Dr	Hawthorne NY 10532	0.76 NW	NYR000088344/VGN
3	Aegis Electronic Systems	10 Skyline Dr	Hawthorne NY 10532	0.77 NW	NYD982179921/SGN
4	American Bank Note	399 Executive Blvd	Elmsford NY 10523	0.78 SE	NYD987029089/SGN
11	Con Edison - Eastview Service Center	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	NYD000705939/LGN
12	Con Edison - Eastview Substation	310 Old Sawmill River Rd	Elmsford NY 10523	0.80 NW	NYR000020677/VGN
33	Tellabs Operations Inc	15 Skyline Dr	Hawthorne NY 10532	0.80 NW	NYD986999464/VGN

TABLE 5.13-5. CURRENT AND FORMER RCRA REGULATED FACILITIES

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status
26	NYSDOT Bin 1070500	Hospital Rd/Sprain Brook	Mt Pleasant NY 10595	0.83 NE	NYR000058040/SGN
31	Safety-Kleen Ne Inc	Rte 100 & Grassland Rd	Valhalla NY 10595	0.84 SE	NYR000071860/LGN
35	Three D Industrial Maintenance	3 Browns Lane - 1st Floor	Hawthorne NY 10532	0.85 NW	NYR000014787/TR
36	Tri-State Enviro. Services	3 Browns Lane	Hawthorne NY 10532	0.85 NW	NYR000007179/TR
8	Coca Cola Bottling Co	115 Fairview Park Dr	Elmsford NY 10523	0.86 SW	NYD986889863/SGN
9	Coca Cola Bottling Co of NY	111 Fairview Park Dr	Elmsford NY 10523	0.86 SW	NYR000026260/VGN
28	Ray Leonardo & Sons Inc	466 Lakeview Ave	Valhalla NY 10595	0.89 NE	NY0000385468/SGN
6	Bran & Luebbe Analyzing Tech	103 Fairview Park Dr	Elmsford NY 10523	0.99 SW	NYD986958361/VGN
383	NYSDOT Bin 7700490	N County Trailway Over	Elmsford NY 10523	NON GC	NYR000061184/SGN
Former RCRA Permitted Facilities (No Longer Regulated)					
82	Westchester Co. Fire Control	Dana Rd	Valhalla NY 10532	0.09 NE	NYD980791156/NLR
83	Westchester Co. - Dept Of Lab	Dana Rd 1/4 Mi E Of 9a	Valhalla NY 10532	0.09 NE	NYR000007971/NLR
78	SUNY Purchase W. Sch. Ptnrshp	Bay #1 Dana Rd	Valhalla NY 10532	0.24 NW	NYD982729220/NLR
44	American Cyanamid Venture Chem	100 Grasslands Rd	Elmsford NY 10523	0.28 SW	NYD000632554/NLR
50	Electro-Alloys Corp	100 Grasslands Rd	W Plains NY 10523	0.28 SW	NYD982274805/NLR
64	Malcolm Pirnie Inc	100 Grasslands Rd	Elmsford NY 10523	0.28 SW	NYD982729923/NLR
80	University Pathology Pc	100 Grasslands Rd-Rm 45 & 46	Elmsford NY 10523	0.28 SW	NY0000188334/NLR
71	NYSDOT	Saw Mill River Rd	Valhalla NY 10532	0.30 NW	NYD982187825/NLR
55	Formfactor Inc	175 Clearbrook Rd - Sect B	Elmsford NY 10523	0.42 SW	NYR000003392/NLR
61	Leejon Ltd Dba Sir Speedy #8546	11 Clearbrook Dr	Elmsford NY 10523	0.42 SW	NYR000009845/NLR
42	Amerada Hess	Woods Rd At Westchester DPW	Valhalla NY 10523	0.55 SE	NYD986928067/NLR
40	A F P Imaging Corp	250 Clearbrook Rd	Elmsford NY 10523	0.57 SW	NY0000063198/NLR
58	IBM Corp - Medical Lab	77 Executive Blvd	Elmsford NY 10523	0.67 SE	NYD099471534/NLR
41	A M B I Inc	771 Old Saw Mill River Rd	Tarrytown NY 10591	0.67 SW	NYR000002154/NLR
57	IBM Corp - Eastview Research	Old Saw Mill Rd At 100c	Tarrytown NY 10591	0.67 SW	NYD980653877/NLR
54	First Brands Corp R & D Lab	Old Saw Mill River Rd	Tarrytown NY 10523	0.70 SW	NYD981559107/NLR
66	Monk Dubied Americas Inc	8 Westchester Plz E Corner	Elmsford NY 10523	0.71 SE	NYD986953180/NLR
67	N C R Info. Imaging Systems	300 Executive Blvd	Elmsford NY 10523	0.71 SE	NYD986885796/NLR
69	N M B Corp	7 Westchester Plz	Elmsford NY 10523	0.71 SE	NYD980663462/NLR
77	Self Powered Lighting Ltd	8 Westchester Plaza	Elmsford NY 10523	0.71 SE	NYD069305787/NLR
72	NYSDOT Bin 1070450	Rte 100c Over Sprain	Elmsford NY 10523	0.72 SE	NYD987011947/NLR

TABLE 5.13-5. CURRENT AND FORMER RCRA REGULATED FACILITIES

ID #	Site	Address		Distance (miles)	Regulatory ID/ Status
46	Clinical Technologies Assoc.	5 Westchester Plz	Elmsford NY 10523	0.73 SE	NYD986889996/NLR
59	Landis & Gyr Inc	4 Westchester Plz	Elmsford NY 10523	0.73 SE	NYD050440049/NLR
62	Lifecodes Corp	Old Saw Mill River Rd	Valhalla NY 10523	0.73 SE	NYD982534877/NLR
63	Lifecodes Corp	4 Westchester Plz	Elmsford NY 10523	0.73 SE	NYD981086887/NLR
60	Laurel Printing Inc	3 Westchester Plz	Elmsford NY 10523	0.74 SE	NYD001479070/NLR
74	Optical Information Systems Inc	350 Executive Blvd	Elmsford NY 10523	0.74 SE	NYD085493435/NLR
76	Printers Lithographing Co Inc	3 Westchester Plz	Elmsford NY 10523	0.74 SE	NYD001479138/NLR
49	E M Industries	5 Skyline Dr	Hawthorne NY 10532	0.75 NW	NYD981877053/NLR
47	Columbia Business Machine	2 Westchester Plz	Elmsford NY 10523	0.75 SE	NYD056346224/NLR
75	Printers Litho, Inc.	375 Executive Blvd	Elmsford NY 10523	0.75 SE	NYD981493901/NLR
70	New York Telephone Co	410 Saw Mill River Rd	Elmsford NY 10523	0.77 SW	NYD987030210/NLR
79	Tetko Inc	420 Saw Mill River Rd	Elmsford NY 10523	0.77 SW	NYD002104131/NLR
51	Emisphere Technologies Inc	11 Skyline Dr Ste 13800	Hawthorne NY 10532	0.78 NW	NYD987033156/NLR
68	N M B Corp	11 Skyline Dr	Hawthorne NY 10532	0.78 NW	NYD986898146/NLR
81	Vernon Graphics Inc	400 Executive Blvd	Elmsford NY 10523	0.78 SE	NYD061344651/NLR
48	Con Edison - 2 Penn Plaza	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	NYD981489263/NLR
52	Emisphere Technologies Inc	15 Skyline Dr	Hawthorne NY 10532	0.80 NW	NYD986999464/NLR
73	NYSDOT Bin 1070500	Hospital Rd Over Sprain	Hawthorne NY 10595	0.83 NE	NYD987011962/NLR
43	American Bank Note Holographics	500 Executive Blvd	Elmsford NY 10523	0.84 SE	NYD982744872/NLR
65	Max Finkelstein Inc	200 Fairview Park Dr	Elmsford NY 10523	0.85 SW	NYD008133233/NLR
56	Getty Service Station	1169 Knollwood Ave	W Plains NY 10523	0.86 SE	NYD986913143/NLR
386	NYSDOT Bin 5500842	Saw Mill Pkwy Over	Mt Pleasant NY 10570	0.91 NW	NYD987019296/NLR
45	Boces	Rte 9A	Elmsford NY 10523	0.96 SE	NYD981562135/NLR
53	Federal Express Corp	501 Fairview Pk Dr	Elmsford NY 10591	0.97 SW	NYD986904795/NLR
384	NYSDOT Project D252983	Bronx River Pkwy Sta 134	Valhalla NY 10595	NON GC	NYD986972271/NLR
385	NYSDOT Bin 5501670	Ardsley Rd County Rd 78 Over	Greenburgh NY 10523	NON GC	NYD987019395/NLR

TABLE 5.13-6. UNDERGROUND AND ABOVEGROUND STORAGE TANKS

ID #	Site	Address		Distance (miles)	Regulatory Id/ Status
330	NYS Armory	Dana Road	Valhalla NY 10532	0.24 NW	PBS3-463655/Active PBS
322	Hertiage Corporation Park	100 Grasslands Rd	Elmsford NY 10523	0.28 SW	PBS3-177601/Admin Closed
308	American Health Foundation	1 Dana Road	Valhalla NY 10532	0.30 NW	PBS3-600244/Active PBS
323	Highlight Auto Service	Route 9a & 100c	Elmsford NY 10523	0.43 SW	PBS3-170631/Active PBS
332	Ramada Inn	540 Sawmill River Road	Elmsford NY 10523	0.49 SW	PBS3-489557/Unregulated
329	NYNEX	545 Saw Mill River Road	White Plains NY 10603	0.53 SW	PBS3-184462/Active PBS
313	DPW Westchester Co.	Grasslands Reservation	Valhalla NY 10595	0.55 SE	PBS3-177555/Active PBS
319	Facility & Serv-Westchester	Grasslands Reservation	Valhalla NY 10595	0.55 SE	PBS3-185825/Active PBS
328	New York Medical College	Grasslands Complex	Valhalla NY 10532	0.64 NE	PBS3-016365/Active PBS
339	Westchester Co. Medical Ctr	Ruth Tatlor Psychiatric	Valhalla NY 10532	0.64 NE	PBS3-185876/Active PBS
334	Robert Martin Co. NY	101 Executive Blvd	Elmsford NY 10523	0.67 SE	PBS3-078867/Active PBS
325	Keren Developments, Inc.	Sawmill River Rd.	Tarrytown NY 10591	0.70 SW	CBS3-000166/Inactive
312	Dollar Day Dock Data	7 Westchester Plaza	Elmsford NY 10523	0.71 SE	PBS3-078506/Active PBS
324	International Furniture Rent	16 Saw Mill River Road	Hawthorne NY 10532	0.74 NW	PBS3-600681/Active PBS
307	22 Saw Mill River Rd Bldg	22 Saw Mill River Rd	Hawthorne NY 10532	0.78 NW	PBS3-105074/Active PBS
333	Robert Martin Comp NY	399 Executive Boulevard	Elmsford NY 10523	0.78 SE	PBS3-600545/Unregulated
314	Eastview Central Substation	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	PBS3-459151/Unregulated
316	Eastview Service Center	315 Old Saw Mill River Rd	Elmsford NY 10523	0.80 NW	PBS3-459089/Active PBS
309	Blythedale Childrens Hosp	Bradhurst Avenue	Valhalla NY 10595	0.80 SE	PBS3-026379/Active PBS
327	Macmillan Realty	395 Saw Mill River Rd	Elmsford NY 10523	0.82 SW	PBS3-175110/Unregulated
408	NYSDOT	Saw Mill River Rd	Eastview NY	0.82 SW	PBS3-409480/Active PBS
335	Singer Holding	500 Executive Blvd.	Elmsford NY 10523	0.84 SE	PBS3-601222/Active
338	Three D Industrial Maint.	3 Browns Lane	Hawthorne NY 10532	0.85 NW	PBS3-412341/Active PBS
321	Getty #58025	Knollwood & Grasslands	White Plains NY 10607	0.86 SE	PBS3-137693/Active PBS
310	Coca Cola Bottling Co.	111 Fairview Park Drive	Elmsford NY 10523	0.86 SW	CBS3-000141/Active Facility
311	Coca Cola Bottling Co.	111-115 Fairview Park Drive	Elmsford NY 10523	0.86 SW	CBS3-000376/Active Facility
337	The Coca Cola Bottling Co	111 Fairview Park Dr	Elmsford NY 10523	0.86 SW	PBS3-034169/Active PBS
336	The Coca Cola Bottling Co	115 Fairview Park Dr	Elmsford NY 10523	0.86 SW	PBS3-034150/Active PBS
317	Eastview Service Station Inc	1160 Knollwood Road	White Plains NY 10603	0.88 SE	PBS3-139165/Active PBS
318	Edward E Klein Assoc	40 Saw Mill River Rd	Hawthorne NY 10532	0.92 NW	PBS3-168165/Unregulated

TABLE 5.13-6. UNDERGROUND AND ABOVEGROUND STORAGE TANKS

ID #	Site	Address		Distance (miles)	Regulatory Id/ Status
326	M.V. Floresta	109 Fairview Park	Elmsford NY 10523	0.95 SW	PBS3-600218/Active PBS
331	Olivieri Construction Corp.	300 Saw Mill River Rd.	Elmsford NY 10523	0.95 SW	PBS3-441562/Active PBS
320	Federal Express Corporation	501 Fairview Park Drive	Elmsford NY 10591	0.97 SW	PBS3-506885/Active PBS
315	Eastview Pump Stat/Shaft 10	Neperan Road	Tarrytown NY 10591	0.99 NW	CBS3-000039/Active

NYSDEC Inactive Hazardous Waste Disposal Sites. There are no NYSDEC hazardous material or waste disposal sites within one- mile of the water treatment plant site.

Solid Waste Landfills. This database includes a listing of landfills, incinerators, transfer stations, recycling centers, and other sites that manage solid waste. There are no solid waste (i.e., municipal) landfill sites within one-mile of the water treatment plant site.

USEPA's Facility Index System (FINDS) Database Sites. This is the USEPA database of all programs (e.g., air, water, hazardous waste) and identification numbers for a given facility. The FINDS database includes the National Compliance Data Base System (NCDB) that tracks regional compliance and enforcement activity and the Permit Compliance System (PCS) that is a computerized database of water discharge permits.

The review of environmentally regulated sites identified four sites (Table 5.13-7) that were not addressed by any of the environmental regulatory programs listed above. Three of these sites were listed on the National Compliance Data Base System (NCDB) that tracks regional compliance and enforcement activity and manages the Pesticides and Toxic Substances Compliance and Enforcement program at a national level. One facility was listed on the Permit Compliance System that provides information on companies that have been issued permits to discharge wastewater into rivers.

Nuclear Permitted Sites. These are facilities that are permitted to handle radioactive materials. Table 5.13-7 identifies two unique facilities (one facility has multiple listings) that are permitted to handle nuclear materials.

TABLE 5.13-7. SITES LISTED IN USEPA'S FINDS DATABASE AND NUCLEAR PERMIT SITES

ID #	Site	Address		Distance (Miles)	Regulatory ID/Status
Sites Listed On USEPA's FINDS Database (Excluding Sites Listed For Regulatory Programs Already Identified)					
95	Velco Enterprises	100 Clearbrook Rd	Elmsford NY 10523	0.28 SW	NYD986997153/National Compliance Database
93	Ciba Geigy Corp	7 Skyline Dr	Hawthorne NY 10532	0.76 NW	NYD986975969/National Compliance Database
92	Cadillac Wire Corp	200 Fairview Park Dr	Elmsford NY 10523	0.85 SW	NYD000877449/Permit Compliance System
94	Dynax Corp	103 Fairview Park Dr	Elmsford NY 10523	0.99 SW	NY0000283044/National Compliance Database
Nuclear Permits					
377	EEV, Inc.	4 Westchester Plaza	Elmsford NY 10523	0.68 SE	0499-1630/Active
378	Transnuclear, Inc.	Four Skyline Drive	Hawthorne NY 10532	0.97 NW	0499-5111/Active
379	Transnuclear, Inc.	Four Skyline Drive	Hawthorne NY 10532	0.97 NW	0499-5112/Active

5.13.2.1.3. On-Site Reconnaissance

Visual. The water treatment plant site at the Eastview Site generally consists of undeveloped land. The Mine Brook flows north to south toward a forested wetland system on the south-central portion of the site. The site slopes from east to west, from an elevation of approximately 380 to 320 ft Mean Sea Level (MSL). Based on the topography, much of the on-site groundwater is anticipated to flow into Mine Brook, which flows south southwesterly into the Saw Mill River. Many factors, including underground utilities and other subsurface openings or obstructions, and current and past pumping of groundwater, among others, however, can affect localized groundwater flow at the site and in the vicinity. Additional details concerning the groundwater conditions of the Eastview Site are presented in Section 5.15, Water Resources.

As previously indicated, the NYCDEP Eastview Site is divided into two sections separated by Grasslands Road/Route 100C. The northern or Mount Pleasant parcel is primarily undeveloped with the exception of Shaft No. 19 of the Delaware Aqueduct, the Shaft No. 19 Sampling Building, the Hammond House, and various access roads. The Delaware Aqueduct lies beneath the southeastern portion of this portion and conveys water from the Kensico Reservoir in Valhalla to the Hillview Reservoir in Yonkers. Shaft No. 19 of the Delaware Aqueduct is an approximately 200 by 100 foot structure, situated predominantly below grade, located on the southeastern portion of the north parcel. The Shaft includes an uptake shaft, downtake shaft, forebay area, forebay connection channels, and bulkhead channels for possible future connections to a treatment plant. The Shaft No. 19 Sampling Building consists of a one-story brick building located adjacent to Shaft No. 19, where water samples are obtained from the Delaware Aqueduct. The Hammond House is a 2-story, privately-owned, dwelling. According to the Town of Mount Pleasant Building and Engineering Department, potable water is provided to Hammond House by an on-site well, and the house utilizes a subsurface septic system.

The southern or Greenburgh parcel of the Eastview Site is primarily undeveloped except for: a Con Edison-owned substation located in the northeastern portion the parcel along Route 100C; the Catskill Aqueduct Connection Chamber (CCC), a small concrete-block pump house, and a larger brick laboratory building, all located along the eastern boundary of the parcel; and overhead electrical transmission lines that run above the Catskill Aqueduct. The existing CCC is an underground structure comprised of several extensions off the main Aqueduct, with the entrance covered by a concrete slab at grade. A small concrete-block pump house is located next to the CCC, and a brick laboratory building is present several hundred feet to the north. The laboratory building is used to conduct water quality analyses of water samples collected from the Delaware and Catskill Aqueducts.

Polychlorinated biphenyls (PCBs) are sometimes associated with structures or mechanical equipment that may be present within the ancillary Shaft No. 19 and the existing CCC structures such as the CCC pump house, the laboratory building, and the Shaft No. 19 sampling building. In addition, mercury is sometimes used in water chemistry laboratory equipment and analytical methods, some of which may have been used in the CCC laboratory building. According to New York City Department of Environmental Protection (NYCDEP) personnel, the septic system associated with the CCC laboratory building has been found to contain mercury.

Based on visual observations, there was no indication (e.g., staining, distressed vegetation, waste debris) that hazardous materials have impacted surficial soils on the water treatment plant site. Mine Brook as well as the local groundwater may provide pathways for the transport of hazardous materials from off-site sources to the site.

Environmental Quality.

Soil. A total of fifty-seven test borings were drilled in 1999 throughout the water treatment plant site and the adjoining NYCDEP property both north and south of Grasslands Road. For a map showing sampling locations refer to Appendix E. The subsurface investigation was intended to provide visual classification of the soils and the rocks sampled in the borings and subsurface materials for geotechnical testing. Seven additional test borings were drilled in 2001.

The test-boring program was specifically designed to provide geotechnical data including stratigraphic classification, Standard Penetration Testing, Rock Quality Designation, depth to groundwater, rock coring, and grain size. Observations documented on the test boring logs did not suggest the presence of hazardous materials (i.e., contaminants) in the soil at any locations or depths.

Between September 30 and October 24, 2003, 23 soil borings (B-101 through B-123) were advanced to evaluate the subsurface soil and bedrock conditions as part of the site geotechnical evaluation for the Catskill/Delaware UV Facility (UV Facility) which is adjacent and east of the water treatment plant site. The borings ranged in depth from 30 to 100 feet below ground surface (bgs). During drilling, split spoon samples were field screened for contamination to a depth of 30 feet bgs using direct observation (visual and olfactory) and ambient air sampling above the sample using an organic vapor meter (OVM).

Field observations during drilling activities provided no indication of potential contamination. Soil samples were collected from the interval just above the water table (approximately 5 to 10 ft below grade) at five boring locations (B-101, B-113, B-118, B-121, and B-123) to confirm these field observations. Four of the samples (from borings B-101, B-113, B-118, and B-123) were collected on the northern (Mount Pleasant) parcel at points approximately coinciding with anticipated corners of the proposed UV Facility building. One of the soil samples (from boring B-121) was collected on the southern (Greenburgh) parcel.

Soil samples were analyzed for volatile organic compounds (VOCs) by USEPA Method 8260, semi-volatile organic compounds (SVOCs) by USEPA Method 8270, metals by USEPA Method 7000 series, and pesticides and PCBs by USEPA Method 8080.

Analytical results from the soil samples are summarized in Table 5.13-8. VOCs, PCBs and pesticides were not detected in any of the five soil samples collected at the site. One SVOC, bis (2-ethylhexyl) phthalate, was detected in two samples (from B-113 and B-118), but at concentrations well below the Recommended Soil Cleanup Objective (RSCO) listed in *New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) #4046*. Phthalates, at the low concentrations reported, are

TABLE 5.13-8. SOIL SAMPLE ANALYSIS FOR THE EASTVIEW SITE

PARAMETER	**B101-6** Soil	**B123-10** Soil	**B113-6** Soil	**B118-5** Soil	**B121-5** Soil	**FB** Aqueous	**NYSDEC TAGM Criteria**[1]	**Eastern USA Back-ground**[2]
Sample Depth	6.0'	10.0'	6.0'	5.0'	5.0'	---		
Sample Date	11/11/2003	11/11/2003	11/11/2003	11/11/2003	11/11/2003	11/11/2003		
Volatiles (ppm)	None detected							
Semivolatiles - BNA (ppm)								
bis(2-Ethylhexyl)phthalate	ND (0.106)	ND(0.114)	0.295	0.674	ND (0.106)	ND(0.00037)	50	NA
TOTAL TIC's:	ND	ND	ND	0.498*	ND	ND	NA	NA
PCB's (ppm)	None detected							
Pesticides (ppm)	None detected							
Metals (ppm)								
Aluminum	11,200	23,700	13,000	16,400	12,500	ND (1.00)	SB	33,000
Arsenic	2.36	ND (1.24)	2.39	2.54	2.97	ND (0.100)	7.5 or SB	3-12[3]
Barium	106	253	70.4	84.0	67.0	ND (1.00)	300 or SB	15-600
Beryllium	ND (0.563)	0.877	ND (0.565)	ND (0.577)	ND (0.555)	ND (0.050)	0.16 or SB	0-1.75
Cadmium	0.354	0.426	ND (0.283)	ND (0.289)	ND (0.278)	ND(0.025)	1 or SB	0.1-1
Calcium	2,160	4,690	2,580	2,730	1,460	ND (5.00)	SB	130-35,000
Chromium	16.0	**50.8**	20.9	24.3	16.0	ND (0.200)	10 or SB	1.5-40[3]
Cobalt	8.17	18.2	8.00	8.83	8.64	ND (0.200)	30 or SB	2.5-60[3]
Copper	20.6	33.0	24.1	26.4	19.6	ND (0.200)	25 or SB	1-50
Iron	18,600	41,100	20,400	23,000	21,200	ND (2.50)	2000 or SB	2,000-550,000
Lead	6.60	10.7	6.40	8.69	7.77	ND (0.050)	SB[4]	[4]
Magnesium	3,750	**8,930**	4,580	**6,490**	4,070	ND (5.00)	SB	100-5,000
Manganese	776	662	477	509	608	ND (0.500)	SB	50-5,000
Nickel	17.8	**35.9**	17.1	18.7	17.5	ND (0.100)	13 or SB	0.5-25
Potassium	1,840	8,610	1,870	3,120	1,470	ND (5.00)	SB	8,500-43,000[3]
Sodium	171	294	174	196	ND (111)	ND (10.0)	SB	6,000-8,000
Thallium	0.128	0.310	0.129	0.203	ND (0.111)	ND (0.01)	SB	N/A

TABLE 5.13-8. SOIL SAMPLE ANALYSIS FOR THE EASTVIEW SITE

PARAMETER	**B101-6** Soil	**B123-10** Soil	**B113-6** Soil	**B118-5** Soil	**B121-5** Soil	**FB** Aqueous		
Vanadium	22.0	69.4	26.8	32.4	21.4	ND (0.200)	150 or SB	1-300
Zinc	43.0	**93.7**	49.2	**64.2**	47.6	ND (0.200)	20 or SB	9-50

Notes: This summary table lists only those compounds detected in at least one sample.
- Antimony, Mercury, Selenium and Silver were not detected in any samples above the method detection limit
FB – Field Blank
ppb - parts per billion
ppm - parts per million
ND (0.200) - This compound was not detected above the method detection limit (0.200).
NA - Not applicable.
SB - Site Background.
* - The Tentatively Identified Compound (TIC) was an unknown hydrocarbon.
[1] - Recommended Soil Cleanup Objective as defined in NYSDEC Technical and Administrative Guidance Memorandum #4046 Determination of Soil Cleanup Objectives and Cleanup Levels, January 24, 1994.
[2]- Source: NYSDEC Technical and Administrative Guidance Memorandum #4046, Table 4.
[3] - New York State background.
[4] - Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

commonly indicative of laboratory cross-contamination and/or artifacts of drilling activities. Therefore, the bis (2-ethylhexyl) phthalate detected in the two soil samples from the site is likely not attributable to on-site operations and does not represent an environmental concern.

Zinc, chromium, magnesium, and/or nickel were detected in two soil samples (from B-123 and B-118) at concentrations exceeding Eastern United States background concentrations listed in *NYSDEC TAGM #4046* (according to the TAGM, background concentrations can be used in lieu of established RSCOs for site assessment purposes). These metals are common to the geology of the area, and the detected concentrations are considered to be within normal ranges for the geology found at the site. Therefore, the detected metals are not anticipated to be a result of on-site operations and do not represent an environmental concern.

Groundwater. Groundwater samples were collected from on-site monitoring wells in May 2001. Three of the on-site wells were analyzed for metals (USEPA Method 7000 series), VOCs (USEPA Method 624), and pesticides (USEPA Method 608). Metals analyses were repeated for the three wells in August 2001. For a map showing sampling locations refer to Appendix E. Results from the 2001 groundwater sampling are summarized in Table 5.13-9 and indicated that all VOC and pesticide concentrations were below laboratory detection limits. Metals were detected in all of the groundwater samples, however, detected concentrations were below applicable Ambient Water Quality Standards and Guidance Values (AWQS/GVs) listed in *NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1.*

TABLE 5.13-9. SUMMARY OF GROUNDWATER WATER QUALITY RESULTS (2001)

Parameter (mg/L)	Well B-62	Well B-62	Well B-63
Chromium	BDL	(0.019)	BDL
Copper	BDL	(0.02)	BDL
Nickel	BDL	(0.02)	BDL
Zinc	0.02 (0.03)	0.02 (0.04)	0.02 (0.02)
Metals (other)	(BDL)	(BDL)	(BDL)
Volatile Organic Compounds	(BDL)	(BDL)	(BDL)
Pesticides	(BDL)	(BDL)	(BDL)
Hardness (as CaCO3)	49	130	100

Notes: Data in parentheses from May 2001 samples
BDL = below detection limits

In January 2004, additional groundwater samples were collected from newly installed observation wells B-102-OW, B-105-OW, B-116-OW, and B-122-OW, and existing monitoring well B-60 to further characterize groundwater conditions east of the water treatment plant site and in the vicinity of the UV Facility project. Wells B-102-OW, B-105-OW and B-116-OW, completed in bedrock. Wells B-122-OW, completed in the unconsolidated overburden, was sampled to investigate shallow groundwater. Well B-60, also completed in the unconsolidated overburden, was sampled to provide additional information about groundwater in the northern portion of the site. Groundwater samples were analyzed for VOCs by USEPA Method 624,

SVOCs by USEPA Method 625, metals by USEPA Method 7000 series, and pesticides and PCBs by USEPA Method 608.

Analytical results from the 2004 groundwater sampling are summarized in Table 5.13-10. The SVOCs bis (2-ethylhexyl) phthalate, di-n-butyl phthalate, and/or acenaphthene were detected in four samples, but at concentrations below the applicable NYSDEC AWQS/GVs. Therefore, the detected concentrations do not represent an environmental concern.

TABLE 5.13-10. GROUNDWATER SAMPLING ANALYSIS FOR THE EASTVIEW SITE (2004)

Sample Name & Date	B-102-OW 1/19/04	B-116-OW 1/19/04	B-105-OW 1/19/04	B-122-OW 1/19/04	B-60 1/19/04	FB 1/19/04	NYSDEC Water Quality Standards*
Volatiles (ppb)	**None Detected**						
Semivolatiles - BNA (ppb)							
bis(2-Ethylhexyl)phthalate	3.6	3.1	4	3.6	ND	ND	5
Di-n-butyl phthalate	ND	1.1	5.7	6.9	ND	ND	50
Acenaphthene	ND	ND	10	ND	ND	ND	20
PCB's (ppb)	**None detected**						
Pesticides (ppb)	**None detected**						
Metals (ppb)							
Aluminum	608	2170	201	3370	13400	ND	NA
Arsenic	ND	ND	ND	ND	ND	ND	25
Barium	ND	ND	ND	ND	250	ND	100
Beryllium	ND	ND	ND	ND	ND	ND	3
Cadmium	ND	ND	ND	ND	ND	ND	5
Calcium	95600	53600	21300	30100	64900	ND	NA
Chromium	ND	ND	ND	ND	ND	ND	50
Cobalt	ND	ND	ND	ND	ND	ND	NA
Copper	ND	ND	ND	ND	ND	ND	200
Iron	**2400**	**3000**	**697**	**11200**	**8080**	ND	300
Lead	5	7.5	ND	6.6	14.2	ND	25
Magnesium	**42400**	26000	17000	11200	24900	ND	35000
Manganese	**1340**	**1640**	29.6	**1100**	**1600**	ND	300
Nickel	ND	ND	ND	ND	ND	ND	100
Potassium	5650	ND	5050	4440	9080	ND	NA
Sodium	11400	10500	10300	6940	**58100**	1130	20000
Thallium	ND	ND	ND	ND	ND	ND	0.5
Vanadium	ND	ND	ND	ND	ND	ND	NA
Zinc	34.8	23.1	ND	54.3	53.4	ND	2000

Notes: This summary table lists only those compounds detected in at least one sample.
- Antimony, Mercury, Selenium and Silver were not detected in any samples above the method detection limit
FB – Field Blank
ppb- parts per billion
ppm - parts per million
* NYSDEC TOGS 1.1.1 (June 1998): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (for Class GA groundwater)
NA - Not Available

Metals, including iron, magnesium and manganese, were detected in groundwater at concentrations exceeding the NYSDEC AWQS/GVs. Iron levels exceeded the NYSDEC class GA groundwater AWQS of 300 parts per billion (ppb) in all groundwater samples analyzed, with concentrations ranging from 697 ppb to 11,200 ppb. Manganese levels exceeded the GA groundwater AWQS of 300 ppb in four of the five wells sampled, with concentrations ranging from 1,100 ppb to 1,640 ppb. Magnesium was detected above the GA groundwater GV of 35,000 ppb in well B-102-OW only, at a concentration of 42,400 ppb. The groundwater samples were not filtered prior to analysis, and field notes indicated that groundwater exhibited high turbidity during well development. Therefore, it is possible that the detected concentrations are partly associated with sediment in the groundwater and do not represent true groundwater conditions. In addition, considering that the detected metals are naturally occurring at the site, their presence in groundwater does not represent an environmental concern.

Sodium was detected in well B-60 at a concentration of 58,100 ppb, exceeding the GA groundwater AWQS of 20,000. However, the sodium level observed in B-60 is considered an anomalous result; concentrations detected in the other wells sampled were at significantly lower concentrations. It is suspected that the concentrations observed in B-60 are attributable to use of a sodium bentonite seal in the construction of this well in 2001. As such, the sodium levels would be isolated to this well location.

There is no evidence that suggests the observed groundwater concentrations are the result of contamination from either on-site or off-site activities. The review of baseline conditions at the property did not identify previous on-site or off-site (see Section 5.13.2) uses of the site for manufacturing, landfilling, or other commercial purposes that could have resulted in metals or organics affecting groundwater at the project site.

Surface Water. Mine Brook is a small stream on the south central portion of the Eastview Site and is classified by NYSDEC as a Class D stream, indicating its best use is for fishing, and that its water quality shall be suitable for fish survival and primary and secondary contact recreation. The stream and its tributaries were sampled at six locations in October 2000. The samples were analyzed for parameters typically used to gauge water quality including pH, 5-day biological oxygen demand (BOD_5), fecal coliform bacteria, oil and grease, turbidity, nitrate-nitrogen (NO_3), total phosphorus, total suspended solids (TSS), and total dissolved solids (TDS). The results are summarized in Table 5.13-11.

TABLE 5.13-11. SURFACE WATER QUALITY SAMPLING RESULTS

Parameter	Units	Sampling Point					
		WQ1	WQ2	WQ3	WQ4	WQ5	WQ6
Temperature	Celsius	18.8	17.7	13.7	12.9	14.1	15.1
PH	units	7.40	7.50	7.70	7.50	7.60	7.60
Dissolved Oxygen (DO)	mg/l	7.8	6.3	8.7	10.0	8.9	10.4
DO Saturation	percent	84.0	65.0	84.1	94.3	86.5	103.3
BOD_5	mg/l	3	<4	3	<4	<4	<4
Fecal Coliform Bacteria	no./100ml	**6,800**	**670**	**1,110**	**350**	**620**	**210**
Nitrate-Nitrogen	mg/l	1.60	2.10	1.60	1.20	1.00	1.00

TABLE 5.13-11. SURFACE WATER QUALITY SAMPLING RESULTS

Parameter	Units	Sampling Point					
		WQ1	WQ2	WQ3	WQ4	WQ5	WQ6
Total Phosphorus	mg/l	0.16	0.29	0.10	0.08	0.05	0.06
Oil & Grease	mg/l	<1.6	<1.5	<1.5	<1.6	<1.6	<1.5
TDS	mg/l	615	576	533	546	296	348
TSS	mg/l	<3.0	34	<3.0	<3.0	3.2	3.6
Turbidity	NTU	2.8	0.5	0.9	2.6	0.9	1.1
NSF Water Quality Index	0-100	56.9	56.4	60.2	63.7	65.5	68.9

Note: mg/l=milligram per liter; NTU=Nephelometric Turbidity Units

The results indicate that several parameters exceed concentrations that are considered indicative of good water quality. Most significantly, concentrations of fecal coliform bacteria and total dissolved solids indicate that water quality is impaired. Other parameters were not significantly degraded, although nitrate and BOD_5 levels were also found to be somewhat depressed below the preferred conditions in a freshwater stream.

The origin of the elevated fecal coliform counts cannot be pinpointed by the samples that were collected. However, the highest counts were found in the most upstream (northern) samples adjacent to the water treatment plant site and the lowest counts were found downstream. This trend may indicate that a loading source for fecal coliform bacteria is located off-site to the north. Total dissolved solids (TDS) concentrations also exhibited a decline (improvement) toward the downstream portion of the study area. Conclusions that may be drawn from these data are that Mine Brook's water quality upgradient of the site is degraded but the wetlands and vegetation adjacent to the site provide a mechanism that improves the water quality.

Test boring observations coupled with groundwater data suggest that hazardous materials have not impacted soils on the water treatment plant site. This is further supported by the fact that the entire 153-acre property was purchased by the City of New York was more than 50 years ago and has remained largely undeveloped. As a result, there is minimal potential that the soils on the site have been contaminated with hazardous materials.

Metals probably from naturally occurring sources (e.g., geologic materials) have minimally impacted groundwater on the Eastview Site. Typical anthropogenic groundwater contaminants (e.g., organic compounds, pesticides) have not been detected in the groundwater at the site lending greater support to the conclusion that the detected metals are from naturally occurring sources. This is further supported by observations derived from test borings suggesting the overlying soils are relatively clean and do not contain contaminants that could leach from the soil and percolate into the groundwater.

Surface water in Mine Brook and adjacent tributaries has been impacted by contaminants. Fecal coliform bacteria, total dissolved solids, nitrogen, and phosphorus are likely to have originated from off-site (i.e., upgradient) anthropogenic sources and runoff. Wetland areas near the water

treatment plant site appear to have an assimilative capacity and reduce the levels of nutrient contaminants.

Overall, there do not appear to be any serious soil or groundwater hazardous materials issues on or adjacent to the site that could impact human health or the environment during the construction or operation phases of the proposed project. It is likely that surface stormwater management practices implemented for the proposed project would improve water quality in Mine Brook although the off-site sources of contamination would remain unchanged.

Hazards Materials Associated With Structures on the Eastview Site. Several NYCDEP structures exist on the Eastview Site to the east of the proposed water treatment plant location. These structures may be disturbed by the proposed construction activity. Asbestos and lead paint surveys of Shaft No. 19, the Shaft No. 19 sampling building, the CCC laboratory building, and the CCC pump house, were conducted on March 18 and 25, 2004. The asbestos survey identified asbestos containing material (ACM) in the exterior window caulking and the exterior door caulking at the CCC laboratory building and exterior window caulking at the CCC pump house. The lead paint survey identified several painted components in the Shaft No. 19 water sampling building, the CCC laboratory building, and the CCC pump house, with detected lead concentrations up to 0.455, 6.324, and 4.812 milligrams per square centimeter (mg/cm^2), respectively.

It should be noted that the asbestos survey was conducted only in accessible areas of the on-site buildings; walls and ceilings were not disturbed, and roofing materials were not sampled because the integrity of the roof would have been compromised. Additional asbestos materials may exist in areas not accessible during the survey, including: underground piping insulation or materials; vapor barriers that could be present below ground or between layers of walls; electrical wiring and insulation; power supply transformers; and roofing materials. It should also be noted that the interior of the Shaft No. 19 structure was not accessed during the surveys, and therefore, materials inside of this structure were not sampled for asbestos or lead paint. If any of the areas not surveyed on March 18 and March 25, 2004 will be involved in the proposed construction activity, the areas would be surveyed and remediated as necessary.

5.13.2.1.4. Off-Site Reconnaissance

The New York Medical College substation is located immediately southeast of the Eastview Site, near Grasslands Road/Route 100C. A natural gas pipeline owned by Consolidated Edison Company of New York (Con Edison) and an underground cable owned by the MCI telecommunications company are located along the edge of Grasslands Road/Route 100C.

South and east of the Eastview Site is the Catskill Aqueduct, which lies beneath additional land owned by NYCDEP. Three high voltage towers carrying electrical transmission lines are located above the alignments of the Catskill and Delaware Aqueducts. In addition, a small, fenced building is located along an access road on the property. A NYCDEP laboratory used to monitor the drinking water quality occupies the building. In addition, a wet area was observed along the access road.

No evidence of contamination from drums, tanks, and/or illegally dumped or stored material was observed on accessible properties adjacent to the site. Inaccessible properties included the Westchester County Correctional Complex to the east, the Bee-Line Bus Facility to the west, and the Westchester County Department of Public Safety to the northwest.

5.13.2.2. Future Without the Project

The Future Without the Project conditions were developed for the anticipated peak year of construction (2008) and the anticipated year of operation (2010) for the proposed plant. The anticipated peak year of construction is based on the peak number of workers.

For each year, two scenarios are assessed. The first scenario assumes that the Cat/Del UV Facility would not be present on the Eastview Site. The second scenario discloses the additional incremental impact of the proposed Croton project if the Cat/Del UV Facility and the other projects planned for the area would be built. The second assumes that the Cat/Del UV Facility is included in the site analysis; specifically the Cat/Del UV Facility would be located in the southeastern area of the Mount Pleasant parcel. It should be noted that the Eastview Site is the only location under consideration for the Cat/Del UV Facility. This scenario without the Cat/Del UV Facility is included because that project has not yet received its necessary approvals and its inclusion or not would reflect major changes to the site. By the peak construction year, two additional NYCDEP projects could be located on the Eastview Site, namely a Police Precinct and possibly an Administration Building[1]. The Police Precinct may be located in the southwest corner of the Eastview Site. The Administration Building is less certain; however, as the Eastview Site is one of several properties currently being evaluated for use as a possible site for that particular building. In addition to these projects, NYCDEP's Kensico-City Tunnel (KCT) may be under construction at the Eastview Site starting in 2009. All of these NYCDEP projects are discussed in this Final SEIS to the extent to which information is available. They are all separate actions from the proposed project and will undergo their own independent environmental reviews.

5.13.2.2.1. Without Cat/Del UV Facility at Eastview Site

In the Future Without the Project, the Eastview Site would remain largely unchanged through the year 2010. The property would remain largely undeveloped, with the exception of the existing Hammond House, NCA Shaft No. 19, a new NYCDEP Police Precinct, the KCT Project, and possibly an Administration Building. The uses immediately surrounding the site in the Town of Mount Pleasant would be anticipated to remain generally the same, although additional development may occur in the adjacent Grasslands Reservation (see Section 5.2, Land Use, Zoning, and Public Policy). This development is not anticipated to affect the site in terms of hazardous materials; although, some of the projects proposed for the site would likely increase the amount of hazardous materials on the site from current conditions, during their construction and operation. However, due to the nature of these proposed projects, the types and quantities of

[1] This depends on the results of a siting evaluation which is currently ongoing. The siting decision will be evaluated and discussed as part of a separate independent environmental review.

these potential materials are not anticipated to result in substantial impacts to the site of study area. Hazardous materials associated with any additional future NYCDEP projects on the Eastview Site would be surveyed and/or remediated, if necessary, as part of those projects.

5.13.2.2.2. With Cat/Del UV Facility at the Eastview Site

In the Future Without the Project, but with the Cat/Del UV Facility at the Eastview Site, the site would experience peak construction activities of the Cat/Del UV Facility in 2008. The Police Precinct and Administration Building are anticipated to be completed on the site by that year. By 2009, it is anticipated that the Cat/Del UV Facility would commence operations at the site and that the site could be a major staging area for the KCT project.

Construction of the Cat/Del UV Facility. Hazardous materials associated with the construction of the Cat/Del UV Facility would depend on the nature and extent of activities being performed (e.g., excavation, foundation construction, etc.). In general, various petroleum-related materials would be used to support the operation of vehicles and heavy equipment (e.g., diesel fuel, gasoline, lubricants, glycol) as well as hazardous materials used in the construction process itself (e.g., concrete release agents, adhesives, paints and coatings). Each contractor would provide Material Safety Data Sheets (MSDS) for the construction-related hazardous materials that they would introduce to the project site. In addition, these materials would be stored and handled in a manner that would prevent improper releases to the environment and/or exposure to site workers, according to applicable Federal, State and local regulations. These measures would be specified in a Construction Health and Safety Plan to be prepared by the contractor(s) in accordance with the hazardous materials contract specifications and OSHA regulations.

Based on the history of the Eastview Site and results from geotechnical studies and groundwater sampling, it is unlikely that soils contaminated with hazardous materials would be discovered during excavation and construction of the Cat/Del UV Facility. Based on results from groundwater sampling, metals from naturally occurring sources were detected in groundwater at the Eastview Site; however, the detected concentrations were below applicable NYSDEC Ambient Water Quality Standards/Guidance Values (AWQS/ GVs) in the area of the Cat/Del UV Facility.

Operation of the Cat/Del UV Facility. In general, the hazardous materials introduced to the site as a result of the Cat/Del UV Facility operation would include approximately 10,000 low pressure high output (LPHO) mercury lamps containing small amounts of mercury (0.15 grams/lamp), food grade acid for cleaning of lamps, four 10,000-gallon underground storage tanks that would be utilized for the storage of diesel fuel for the emergency generators, lead acid batteries associated with the facility's backup power systems (uninterruptible power supplies or UPS), and process laboratory chemicals (for sample preparation and instrument maintenance and calibration; the other analyses would be performed using colorimetric processes with commercially-prepared reagent packets). All batteries would be situated within secondary containment to prevent potential spills to the environment and all chemical storage tanks would

be provided with secondary containment with the capacity to hold at least 110 percent of the largest single tank volume in the containment area.

The Cat/Del UV Facility would not generate any RCRA-regulated hazardous wastes through normal operations. All of the chemicals discussed above would be consumed during Cat/Del UV Facility operations. The spent acid from cleaning of the lamps would be neutralized and either discharged to the sanitary sewer or transported off-site for disposal at a licensed facility. Both used/broken lamps and used batteries would be transported to licensed recycling facilities. Used batteries would be transported to a properly licensed recycling facility at the end of their useful life

All of hazardous materials from the Cat/Del UV Facility would be stored and handled in a manner that would prevent improper releases to the environment and/or exposure to site workers, according to applicable Federal, State and local regulations. In addition, reporting under the Emergency Planning and Community Right-To-Know Act (EPCRA) would be completed for the storage and use of chemicals utilized at the Cat/Del UV Facility.

5.13.3. Potential Impacts

5.13.3.1. Potential Project Impacts

The anticipated year of operation for the proposed plant is 2010. Therefore, potential project impacts have been assessed by comparing the Future With the Project conditions against the Future Without the Project conditions without the Cat/Del UV Facility at the Eastview Site, and by comparing the Future With the Project conditions against the Future Without the Project conditions with the Cat/Del UV Facility at the Eastview Site for the anticipated year of operation (2010). The scenario with the Cat/Del UV Facility would only disclose the incremental impacts of the proposed Croton project as compared to the background conditions.

5.13.3.1.1. Without Cat/Del UV Facility at Eastview Site

Water Treatment Chemicals. Chemical facilities would be provided to store and feed the chemicals required to enhance filtration, to control corrosion, to prevent dental decay and to provide secondary disinfection. The facilities would be designed in accordance with New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation (NYSDEC) requirements at average flow/average dose. Regulatory requirements encompass chemical storage capacity, redundant transfer and feed pumps, and secondary containment of chemicals to protect against potential spills. Currently, transfer pumps and tanks are proposed for the chemical systems, to reduce space requirements in the bulk storage tank area; this would be further analyzed during preliminary design. Each chemical system would be divided into two sub-systems, each serving one half of the treatment plant.

The bulk quantities of water treatment chemicals to be stored and used at the proposed plant are summarized in Table 5.13-12. The function of each chemical is briefly described below.

TABLE 5.13-12. BULK STORAGE NEEDS

Chemical	Typical Active Concentration (lbs/gal)	Half Plant						Total Plant
		Design Conditions		Required Design Parameters				
		Average Dose (mg/l)	Average Flow (mgd)	Use (lbs/day)	Use (gal/day)	Required Storage (Days)	Required Storage (Gallons)	Required Storage (Gallons)
Sulfuric acid (77%)	11.08	2.5	75.0	1,565	141	30	4,200	8,500
Aluminum sulfate (48%)	5.32	17.0	75.0	10,640	1,998	30	60,000	120,000
Polyaluminum chloride (33%)	3.30	13.0	75.0	8,136	2,464	30	74,000	148,000
Coagulant polymer (50%)	4.38	1.25	75.0	782	179	30	5,400	10,800
Filter aid polymer (50%)	4.17	0.05	75.0	31	8	30	225	450
Sodium hypochlorite, pre-feed (10%)	0.83	2.0	75.0	1262	1520	15	22,800	45,600
Sodium hypochlorite, Post-feed (10%)	0.83	1.4	72.0	900	1086	15	15,200	30,400
Corrosion inhibitor [1]	3.58	1.0	72.0	601	168	30	5,000	10,100
Sodium hydroxide (50%)	6.42	5.0	72.0	3,004	468	30	14,000	28,100
Hydrofluosilicic acid (23%)	1.84	1.0	72.0	601	327	30	9,800	19,600
Cationic polymer for dewatering centrifuges (50%)	4.59	16 lbs/ton	0.025	49	10.5	30	315	630
Ferric chloride for dewatering centrifuges (40%)	4.70	5 lbs/ton	0.025	15.4	3.0	30	90	180
Ammonia (Future)(29%)	2.17	0.3	72.0	180	8.3	30	2,490	4,980

Notes:[1] Average dose is based on 36% solution as phosphate and 1.0 mg/l dose as phosphate.

Polymers would also be used in the residuals facilities. If the filter media used at Croton Lake Gate House changes, potassium permanganate would be introduced at Croton Lake Gate House, as discussed in Section 5.1, Introduction and Project Description.

- Sulfuric Acid – For pH correction prior to coagulation; fed at first-stage rapid mixer.
- Coagulant – Alum (Aluminum Sulfate) / PACl (Polyaluminum Chloride) – For coagulation; fed at first-stage rapid mixer.
- Coagulant Aid Polymer – As coagulant; fed at second-stage rapid mixer.
- Filter Aid Polymer – As filtration aid; fed at second-stage flocculation tank.
- Sodium Hypochlorite –
    - Pre-Feed: Intermittent feed at first-stage rapid mix. This feed point is optional and would only be used at plant start-up or reactivating a flow train.
    - Intermediate: Pre-filtration for manganese removal; fed at the Dissolved Air Flotation baffle wall.
    - Post-Feed: Secondary and virus disinfection; fed at treated water discharge from the UV reactors.
- Hydrofluorosilicic Acid – To prevent dental decay; fed at treated water discharge from the UV reactors.
- Sodium Hydroxide – For pH adjustment; fed at treated water discharge from the UV reactors.
- Corrosion Inhibitor (Orthophosphate or Phosphoric Acid) – For corrosion control; fed at treated water discharge from the UV reactors.
- Ferric Chloride – For solids dewatering; fed at centrifuge.
- Residual Polymer – For solids dewatering; fed at centrifuge.

Chemical system capacities would be based on the chemical usage data from pilot testing[2] and estimates of required dosages for other chemicals. The storage tank volume would be based on 30-day storage for the design usage, except sodium hypochlorite and potassium permanganate, which would be based on 15-day storage. In order to standardize the design of the chemical systems, tanks would be designed for the larger of the 30-day storage volume or 7,000 gallons, except for the filter aid polymer and residual polymer, which would be shipped in totes rather than in tanker trucks. The transfer tank volumes would be based on maximum flow and maximum dose conditions with a 24-hour detention time for all chemicals except the coagulant and sodium hypochlorite pre-feed/intermediate transfer tanks that would be sized for a 12-hour detention time. All chemical storage tanks would be provided with secondary containment with the capacity to hold at least 110 percent of the largest single tank volume in the containment area. Incompatible chemicals would be stored in separate areas. No potentially significant adverse impacts are anticipated to occur from the transport, storage, or usage of the water treatment plant chemicals.

Trucks carrying chemicals to the water treatment plant would have to go through a security checkpoint before arriving at the chemical fill station. The trucks would enter the unloading area, which can be sealed with rolling doors, and then unload its chemicals. There would also be

[2] New York City Department of Environmental Protection. November 1997. Additional Pilot Studies for the Croton Water Treatment Plant.

a chemical containment sump that would be capable of holding a 110 percent of the volume of a truckload of chemicals. The chemicals can later be pumped out of the sump in the event of a spill during unloading. The chemicals used on-site are the same as chemicals routinely trucked throughout the city for water pollution control plants. None of these chemicals are flammable. The routine and safe transport of these chemicals is well established, and the transport of the water treatment chemicals would not be a potential significant impact.

Combined significant impacts related to the use of hazardous materials during operation of other NYCDEP projects at the Eastview Site are not anticipated.

Alternative Chemicals. Alternatives to the chemicals that were selected for the proposed water treatment processes are listed in Table 5.13-13. Each alternative chemical and its issue of concern are discussed in more detail below.

TABLE 5.13-13. ALTERNATIVE TREATMENT PROCESS CHEMICALS

Treatment Objective	Selected Chemical	Alternative Chemical	Comments
Disinfection	Sodium Hypochlorite	Chlorine (gas)	Selected chemical is safer for transporting, handling, and storage.
Coagulant	Ferric Chloride	Aluminum Sulfate or Polyaluminum Chloride	Pilot testing revealed that the selected chemical provides optimum process performance.
Coagulant Aid Polymer	Clarifloc C-138 or equivalent (Cationic Polymer)	Similar products by other manufacturers.	N/A
Flocculant Aid Polymer	Superfloc N-1986 or equivalent (Nonionic Polymer)	Similar products by other manufacturers.	N/A
Secondary Disinfection	Sodium Hypochlorite	Chlorine (gas)	Selected chemical is safer for transporting, handling, and storage.
Fluoridation to prevent tooth decay	Hydrofluosilicic Acid	Sodium Fluoride	Alternative chemical results in operational and maintenance difficulty and is supplied as a dry substance rather than a liquid. Liquid is preferred.
Thickening	Percol LT27 or equivalent	Similar products by other manufacturers.	N/A
Dewatering	Percol 778 or equivalent	Similar products by other manufacturers.	N/A

Aluminum Sulfate. Aluminum sulfate [Al_2 $(SO_4)_3$ (18 H_2O)], a white to blue-green liquid, could be used as a primary coagulant. Under normal handling and storage conditions, this material is stable. According to the manufacturer, this material may pose a slip hazard.

Symptoms of short-term exposure include mild skin and respiratory irritation. Pilot testing revealed that the selected chemical (ferric chloride) provides optimum process performance.

Polyaluminum Chloride (i.e., Westchlor FA 900S). Polyaluminum chloride, a clear white to slightly yellow odorless liquid, could be used as a primary coagulant. This product is considered stable; however, this material reacts with metals including aluminum, zinc, steel, bronze and copper. Contact with caustic soda can result in a highly exothermic (heat generating) reaction. Symptoms of short-term exposure include mild skin and respiratory irritation. Pilot testing revealed that the selected chemical (ferric chloride) provides optimum process performance.

Chlorine Gas. Chlorine (Cl_2) could be used for secondary disinfection. Chlorine is a greenish gas with an acrid odor. Under normal storage and handling conditions, chlorine is stable. However, contact with alkalis, reducing agents, and/or organic materials can produce hydrochloric acid, which is highly corrosive. Symptoms of exposure include respiratory allergic reactions and skin and eye irritation. Chlorine gas is more difficult to control than sodium hypochlorite, and if released, can disperse through the air and travel a considerable distance.

Sodium Fluoride. Sodium fluoride, clear white or blue colored crystals that are odorless, could be used for fluoridation (dental) purposes. This material is considered stable, but it reacts with acids to produce dangerous hydrogen fluoride gas. Symptoms of exposure include respiratory allergic reactions and skin and eye irritation. The use of this alternative chemical would result in operational and maintenance difficulty, as it is supplied as a dry substance rather than a liquid.

No potentially significant adverse impacts are anticipated to occur from the transport, storage, or usage of the alternative chemicals.

Process Laboratory Chemicals. The proposed plant would require a process laboratory for monitoring and controlling the treatment process. The laboratory would be equipped to perform process control water quality tests. The parameters to be measured and their frequency are outlined in Table 5.13-14. No potentially significant adverse impacts are anticipated to occur from the transport, storage, or usage of the process laboratory chemicals.

TABLE 5.13-14. PROCESS LABORATORY CHEMICAL USAGE AND WASTE DISPOSAL

Analysis	Method [(1)]	Required Reagents	Quantity	Daily Waste Discharges Type	Disposal Method
Turbidity	SM180. 1	None		Water	Sewer
Color	SM204	None		Water	Sewer
PH	SM424	None		Water	Neutralizing sink/ sewer
Alkalinity	SM403	0.02 N Sulfuric	Approx. 100 ml	Solution	Neutralizing sink/

TABLE 5.13-14. PROCESS LABORATORY CHEMICAL USAGE AND WASTE DISPOSAL

Analysis	Method [1]	Required Reagents	Quantity	Daily Waste Discharges Type	Disposal Method
		Acid (1 L)	per sample per day		sewer
Particle Count	Laser Diode Technology	None		Water	Sewer
Iron	SM310A	FerroVer [2]	Approx. 10 ml per sample per day	Solution	Neutralizing sink/ sewer
Manganese	USEPA LR PAN Method	PAN indicator [3] Alkaline Cyanide [4] Ascorbic Acid	1ml – PAN 0.5ml – Alkaline 1 packet – Ascorbic (each per sample/ day)	Solution	Neutralizing sink/ sewer
Chlorine Residual	SM409E	None/ DPD		Solution	Neutralizing sink/ sewer
Cleaning Reagents		Nitric Acid (4%) Standard Detergent (Alconox)	5 gallons per year 10 gallons per year	Solution	Neutralizing sink/ sewer
Total Estimated Discharge Volume To Sewer Per Day					10,000 ml

Notes:
1. SM – Standard method for the analysis of water and wastewater
2. FerroVer – Iron phenanthroline
3. PAN Indicator – Dimethyl formamide, Ammonium acetate, Triton X, Water
4. Alkaline cyanide – Water, Sodium cyanide, Sodium hydroxide

Mercury-Containing Ultraviolet (UV) Disinfection Lamps. The estimated total number of UV lamps to be contained in the facility is 960 lamps (48 lamps per unit x 20 units). As the useful life of a lamp diminishes, it would need to be replaced. According to the manufacturer's recommendations, the lamp life expectancy ranges between 10,000 and 12,000 hours. According to engineering estimates, each lamp should be changed roughly every 840 days (2.3 years). Approximately 1.14 lamps per day would be changed and generated as waste at the proposed facility (960 lamps/840 days). The lamps would contain a small amount of mercury, about 0.15 grams each. The weekly quantity of mercury generated would be 0.00264 lbs/week (1.14 lamps/day x 0.15 grams Hg x 7 days/week equals 1.2 grams/week). Lamps containing mercury would be hauled off-site to a USEPA Licensed Recycle Facility. This would be done under contract between the City and the private hauler.

Each lamp would be protected by a glass (quartz) sleeve to protect it (the lamp) from breakage and to create a barrier between the water to be treated and the actual lamp surface. In case of accidental breakage due to either an external force (during installation or on-line usage) or internal force, the risk of mercury release would be reduced by the presence of the sleeve. The presence of a lamp sleeve also allows lamps to be replaced without having to drain the units. The quartz sleeves are often cleaned automatically, typically with a wiping mechanism and/or cleaning chemicals. However, if the sleeves cannot be cleaned with an automatic on-line mechanism, the UV units must be hydraulically isolated, drained, and the sleeves given a manual cleaning normally in place. This manual cleaning is generally performed with chemicals (detergents or mild acids) and/or ultrasonic baths.

Cleaning of UV lamps is a significant operation and maintenance issue, and its frequency is dependent on the fouling of quartz sleeves. Fouling of sleeves is a result of water quality effects such as precipitation of iron, calcium, aluminum, and manganese salts along with other inorganic and organic constituents. Fouling is also dependent on the type of lamp used; medium pressure lamps operate at much higher temperatures and irradiance concentrations than low pressure lamps and therefore foul much more quickly. Lamp cleaning fluid would be a food-grade (non-hazardous) acid such as Phosphoric Acid (currently added to the water supply for corrosion control), which can be discharged to the sewer or hauled off-site for disposal. Approximately 200 gallons per month of phosphoric acid would be used to clean the UV disinfection units. Disposal of spent acid and related liquid waste would be intermittent and is estimated to be 16,000 gallons per month.

As part of routine maintenance, workers at the UV Facility would handle mercury lamps during cleaning and replacement of the lamps. When handling the lamps, they could potentially break during their removal from the disinfection unit or if dropped. In that case, workers could be exposed to mercury as a result of lamp breakage and the mercury could subsequently become airborne. The most stringent limit for mercury in the workplace is established by the American Conference of Governmental Industrial Hygienists (ACGIH) at a concentration of 0.025 milligrams per cubic meter. Based on the number of lamps being replaced daily, it is not anticipated that the hazardous levels of vapor would be released. Furthermore, should a breakage occur, appropriate measure would be taken to remediate all possible contamination. Workers would be trained in the proper handling of the lamps to prevent breakage and ensure prompt cleanup of any broken lamps and the associated mercury. Consequently, no potential significant impacts from mercury releases into the air are expected to occur.

In the event of lamp breakage, there is potential dermal (skin) exposure to workers handling the lamps. Workers would be trained in the proper handling of the lamps to prevent breakage and ensure prompt cleanup of any broken lamps and the associated mercury. Consequently, no potential significant impacts from dermal exposure to mercury are expected to occur.

It is anticipated that twenty (20) disinfection units each containing 48 lamps may be used at the water treatment plant. In rare circumstances, the protective glass sleeve and the lamp tube could break, causing the mercury within the lamp to be released to the water being treated. Under this scenario, the mercury would be diluted to below the maximum contaminant level (MCL) for mercury (2 parts per billion). Operational observations pertaining to potential contamination

from mercury lamps indicate that breakage occurs rarely and that multiple lamp breakage does not occur concurrently. However, to determine the effect of a catastrophic event, a worst-case scenario would be the breakage of all 48 lamps from a single disinfection unit. In this case, the mercury would be diluted to below the MCL prior to consumption.

For both the typical and catastrophic breakage scenarios, the potential exposure to mercury above the MCL to consumers is not a concern. The worst-case scenario is also unprecedented, making its impact both slight and highly unlikely. Furthermore, the MCL for mercury is based upon long-term exposure to the contaminant over a period of years, and therefore, any potential release of mercury from lamp breakage would not pose a significant adverse impact.

Emergency Planning And Community Right-to-Know Act (EPCRA). Under the EPCRA, established in 1986 as part of the Superfund Amendments and Reauthorization Act (SARA), there are three subtitles: Subtitle A for emergency planning; Subtitle B for specific hazardous chemical reporting requirements; and Subtitle C for how the public can gain access to information pertaining to chemical and/or hazardous materials quantities at a facility. Chemicals and/or hazardous materials that would be stored at the project site above their Threshold Reportable Quantities (TRQ) must be reported to NYSDEC and to local and State agencies, including local fire and police departments, the Westchester County Local Emergency Planning Committee, and the State Emergency Response Commission (SERC). This allows emergency personnel to determine the location and quantities of chemicals in the event of a release. The standard that is set for the limits of TRQs is determined by factoring in the potential risk and health factor to both human and ecological receptors. Ecological receptors include air, land, and water.

A Tier II Form must be submitted each year by March outlining and reporting quantities of hazardous materials used on-site. MSDS would be submitted for each chemical in accordance with OSHA's Hazard Communication Standard (29 CFR Part 1910.1200). All hazardous materials containers would be labeled with the chemical name clearly visible (the side or top of the container). The proposed plant would be in compliance with EPCRA.

Waste Disposal. The proposed plant would not generate any RCRA-regulated hazardous wastes. All of the chemicals discussed above would be consumed during the treatment process. As discussed in Section 5.1, Introduction and Project Description, waste washwater and filter-to-waste would be created during the backwashing of the filters. The filter-to-waste would be collected and then returned, or recycled, to the head of the main treatment process. The waste washwater would be treated on-site. Treatment of the waste washwater would produce two additional wastes: solids cake and liquid filtrate. The sludge would consist of iron coagulant, clay and other natural particles and organic matter. After the dewatering process, the sludge cake would be hauled to an off-site disposal facility and the liquid filtrate would be conveyed by a sanitary sewer to the Yonkers Joint Treatment Plant. The liquid filtrate may contain traces of aluminum hydroxide. Both the solids cake and liquid filtrate would comply with all applicable pretreatment standards. For more details on how these wastes would be disposed, see Section 5.16, Infrastructure.

5.13.3.1.2. With Cat/Del UV Facility at Eastview Site

The hazardous materials that would be used at the proposed Croton project and the Cat/Del UV Facility are discussed in Sections 5.13.2.2.2 and 5.13.3.1.1, respectively. All chemical storage facilities would be designed in accordance with NYSDEC, NYSDOH, WCDOH, and WCDEF requirements. The transport, storage, and usage of all chemicals would be conducted according to applicable Federal, State and local regulations; therefore it is not anticipated that there would be substantial potential impacts associated with the use of these chemicals on the property.

Neither the proposed Croton project nor the Cat/Del UV Facility would generate any RCRA-regulated hazardous wastes through normal operations. Wastes generated would either be discharged to the sanitary sewer system or transported to a licensed recycling or disposal facility, as appropriate. Irrespective of whether the Cat/Del UV Facility were located at the Eastview Site or not, measures would be taken to ensure that the proposed Croton project is in compliance with EPCRA.

5.13.3.2. Potential Construction Impacts

The anticipated year of peak construction for the proposed plant is 2008. Therefore, potential construction impacts have been assessed by comparing the Future With the Project conditions against the Future Without the Project conditions without the UV Facility at the Eastview Site, and the Future Without the Project conditions with the UV Facility at the Eastview Site for the anticipated year of peak construction (2008).

5.13.3.2.1. Without Cat/Del UV Facility at Eastview Site

Hazardous Materials Disturbed During Construction. The approximate ground elevation of the main treatment building area is 298 to 364 ft above MSL. The main treatment building is approximately 890 ft by 265 ft with the following four stories: Foundation Level, Lower Level, Intermediate Level, and Operating Level. The pumping station and turbine facility would be located in the raw water pumping station adjacent to the main treatment building, which extends to an approximate elevation of 116.0 ft MSL. This elevation represents the lowest level of the proposed plant. Groundwater levels ranged from 4 ft to more that 40 ft below the existing ground surface or 277 to 324 ft MSL.

Based on the history of the site and results from the geotechnical and environmental quality investigations, it is unlikely that soils contaminated with hazardous materials would be discovered during excavation and construction of the proposed plant. The water treatment plant site is located upgradient or is hydrologically separated from significant spill sites in the study area. Therefore, no significant adverse impacts are anticipated. Since some plant structures would extend below the water table, groundwater management (i.e., dewatering, containment) would be necessary (see Section 5.15, Water Resources). As discussed above, metals from either naturally occurring or manmade sources have minimally impacted the groundwater. It does not appear as if the metals concentration levels are sufficiently elevated to require specialized treatment of the groundwater prior to discharge. There are no on-site sources of surface water

contamination. On-site stormwater management practices (e.g., detention ponds, vegetation) would likely improve water quality in Mine Brook at its tributaries, which pass through the project site, but would not eliminate off-site (i.e., upstream) sources of contamination (see Section 5.15, Water Resources).

With the existing weep holes and other faults in the NCA that allow the inflow of water, significant amounts of groundwater discharge to the NCA. Pressurization would block the weep holes downstream of Shaft 10 where the Eastview water treatment plant would be built. If all the discharges to the aqueduct were eliminated, groundwater levels would rise. Groundwater conditions currently change significantly over the 12.6-mile length of aqueduct between Shaft No. 10 and Gate House No.1, downstream of which the tunnel is currently under pressure. This rise in the water table could potentially mobilize hazardous materials in the soil released from sources near the NCA alignment. However, it is not anticipated that this potential mobilization of hazardous materials would be a significant hazardous materials impact or pose a threat to public health.

Hazardous Materials Used During Construction. During the construction of the proposed plant, the Contractor may introduce a variety of hazardous materials to the project site to support the construction activity. The specific types and quantities of hazardous materials stored and used on the construction site would depend on the nature and extent of activities being performed (e.g., excavation, foundation construction, tunneling). In general, various petroleum-related materials would be used to support the operation of vehicles and heavy equipment (e.g., diesel fuel, gasoline, lubricants, glycol) as well as hazardous materials used in the construction process itself (e.g., concrete release agents, adhesives, paints and coatings). Each contractor would provide MSDS for the construction-related hazardous materials that they would introduce to the project site.

5.13.3.2.2. With Cat/Del UV Facility at Eastview Site

Hazardous Materials Management During Construction. The overall quantity of hazardous materials introduced by the proposed Croton project to the Eastview Site to support construction activities would not increase as a result of the Cat/Del UV Facility also being located at the Eastview Site. All materials would continue be stored, handled and disposed of in accordance with Federal, State and local regulations to prevent improper releases to the environment or exposure to site workers. Siting the proposed Croton project at the Eastview Site would not have any incremental hazardous material impacts.

Hazardous Materials Disturbed During Construction. With the introduction of the proposed Croton project to the Eastview Site with the Cat/Del UV Facility, the amount of materials disturbed would be similar to the amount if the proposed Croton project were on the site alone. Based on this analysis, no significant hazardous materials impacts would occur during construction in the Future With the Project even if the Cat/Del UV Facility were built on the Eastview Site.

In summary, the proposed project would not involve construction methods, procedures, or hazardous materials handling actions that would pose a significant health and safety risk to the

general public. Most construction activities would occur in areas where the general public has no access. Public access to all construction sites would be restricted.