



8/23/2011

Site Code: 336027 Site Name: Mayer Landfill
City: Blooming Grove Town: Blooming Grove

**Region:** 3 **County:** Orange

Current Classification: 02 Proposed Classification: 04

Estimated Size (acres): 15.15 Disposal Area: Landfill

**Significant Threat:** Previously **Site Type:** 

**Priority ranking Score:** 270 **Project Manager:** David Chiusano

**Summary of Approvals** 

Originator/Supervisor: Gerard Burke 06/20/2011

RHWRE: : 06/20/2011

BEEI of NYSDOH: 07/19/2011

CO Bureau Director: Michael Cruden, Director, Remedial 06/20/2011

Bureau E:

07/20/2011

**Assistant Division Director:** Robert Schick:

#### **Site Description**

Location: The Mayer Landfill site is an inactive landfill approximately 15 acres in size located in rural Orange County on Prospect Road near the intersection of Peddlar Hill Road. The site is bounded by Peddler Hill Road to the north, private property to the south, private property to the east, and Prospect Road and a utility right-of-way to the west. The site has been reclassified frm a Class 2 to Class 4 since remediation is complete and an environmental notice was placed on the parcel.

Site Features: The site is covered by grasses and low brush and surrounded by hardwood forests, with intermittent streams along the western and southern borders.

Current Zoning/Use(s): The site is currently inactive, used for a utility right-of-way and is zoned for residential use. The surrounding area is either undeveloped parcels or homes.

Historical Use(s): The landfill operation began at the site in 1940 as an open-face dump, with periodic burning of refuse. Residential, commercial, industrial, demolition, and agricultural waste were allegedly disposed of at the landfill. Part of the landfill was designated as a public dump in 1956.

The Orange County Department of Health (OCDOH)

cited the landfill for mismanagement and violations many times in the early-1970s. The landfill ceased operations in April 1975 due to failure to comply with state and county regulations.

In 1975, the OCDOH conducted an initial investigation of surface water at the landfill. Analytical results showed elevated levels of zinc in a wet area to the south of the landfill.





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The NYSDEC first listed the site on the NYS Registry of Inactive Hazardous Waste Disposal Sites in 1985. A Phase I Investigation was completed in 1987, and a Phase II Investigation was completed in June 1991. A State-funded RI/FS began in March 1999 and the Record of Decision (ROD) was completed in January 2005.

The ROD required the excavation of a small amount of contaminated soil identified at the edge of waste on the north side of the landfill, and an environmental easement to protect the existing cover, prevent groundwater use and implement a long-term groundwater monitoring program.

In April 2008 the ROD remedy was changed by way of an Explanation of Significant Differences (ESD) issued by the DEC. The change to the remedy included the excavation and off-site disposal of an additional volume of contaminated soil than was originally estimated in the ROD.

Remedial design investigations were completed in July 2007. Environmental cleanup work at the site began in September 2008 and was completed in June 2009. The following major cleanup activities were completed at the site:

- Approximately 7,500 tons of non-hazardous, solid waste consisting primarily of LNAPL contaminated soils were removed from the site and disposed of at an off-site, state permitted facility;
- Groundwater generated from excavation activities was collected and treated onsite. Samples of the collected water were regularly obtained prior to onsite discharge and analyzed for site specific contaminants of concern to ensure compliance with DEC discharge standards;
- Excavated areas were backfilled, re-graded with off-site, clean soil to promote proper site drainage, and seeded; and
- Installation of five (5) sentinel groundwater monitoring wells for long term monitoring of groundwater quality between the site and the surrounding residential areas.

Since the remedy results in contamination above unrestricted use levels remaining at the site, a Site Management Plan (SMP) has been developed. An Environmental Notice on the entire parcel was filed with the Orange County Clerk's Office in Spring 2011.

Site Geology and Hydrogeology: Native overburden material at the site consists of discontinuous layers of sand, silt, and

clay and a highly-compacted lodgment till. The overburden varies in depth from 14 feet to 60 feet. Bedrock beneath the till is black-gray shale with abundant calcite (calcium carbonate) veins with traces of pyrite (iron sulfide). The top few feet of the shale are highly weathered. Maximum depth of waste exceeds 18 feet below ground surface (bgs).

Depth to shallow groundwater varies across the site and seasonally from 6 feet bgs to 20 feet bgs south of the landfill. Shallow groundwater appears to flow radially from the center of the landfill to the north, west, and





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south.

Depth to bedrock groundwater varies from about 6 ft bgs at the north side of the site to 27 feet bgs on the northeast edge of the landfill.

Contaminants of Concern (Including Materials Disposed)	<b>Quantity Disposed</b>	_
OU 01		0.00
ACETONE		0.00
XYLENE EPOXIDES AND PHTHALATE ESTERS		0.00
PHTHALIC ANHYDRIDES, MALEIC ANHYDRIDES AND		0.00
PHTHALIC ACID		0.00
PROPYLENE GLYCOL AND ETHYLENE GLYCOL		0.00
AMINES (VARIOUS)		0.00
TOTAL (D001 WASTES)		0.00
ACETONE		gal
LEAD ZINC		gal
ZINC		gal

Analytical Data Available for: Groundwater, Surface Water, Soil, Sediment

**Applicable Standards Exceeded for:** Groundwater, Surface Water

#### Site Environmental Assessment

Nature and Extent of Contamination: This site no longer presents a significant threat to the environment. The Site was remediated in accordance with the ROD dated January 2005, the April 2008 ESD, and the May 2008 Remedial Action Contract Documents.

Prior to remediation, the primary contamiants of concern were volatile organic compounds (VOCs) and inorganics found to exceed the standards, criteria, and guidance (SCGs) values in soil and groundwater.

Soils: An area of LNAPL-contaminated soil with an estimated volume of 900 cu yds was defined at the edge of waste. The most prominent VOC exceedences on the site were ethylbenzene, acetone, benzene, MEK, chlorobenzene, and xylene. Lead and mercury were the principal metals considered to be anthropogenic when compared with background sample concentrations.

Groundwater: Groundwater contamination was limited to three shallow wells located at the edge of waste. Concentrations of VOCs exceeding SCGs were detected in shallow wells of the southern portion of the landfill. These contaminants included ethylbenzene, chlorobenzene, benzene, and xylene.

Adjacent private water supply wells were sampled during the remedial investigation and during the remedial design. There were no site specific contaminants of concern detected in any of the wells sampled.

Soil Vapor: Site soil vapor was sampled during the RI, supplemental RI, and additional site characterization investigation. In 2007 a soil gas investigation was performed to evaluate the potential for vapor intrusion in residential structures to the southeast of the site. The soil gas monitoring included soil gas sample collection from sampling points located to the south and east of the source area, primarily along Peddler Hill Road. Soil





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gas sampling results indicated elevated concentrations of trichloroethene, tetrachloroethene, and carbon tetrachloride for samples collected near the source area. The source area has since been removed as part of the remedial action. Other analytes detected appear to be primarily from petroleum products, and are not considered to be vapor migration concerns.

The site management plan (SMP) for the site was approved by the NYSDEC in October 2010. In addition, an Environmental Notice was developed and filed with the Orange County Clerk's Office in June 2011(EN was recorded on 6/3/11 in Liber 13183 at page 646)to address residual contaminated soils remaining at depth that may be excavated from the site during future redevelopment, restricts future use of groundwater at the site, requires maintenance of the engineering controls, prohibits current and future property owners from activities that would affect the remedy performance, and is transferable with a property transaction.

The SMP includes the following institutional and engineering controls: (a) a plan for long-term groundwater monitoring; (b) maintenance of the existing cover; (c) a plan to manage any development of the landfill that would result in excavation into the existing cover and/or waste; (d) an exclusion against future residential or restricted residential uses; and (e) a prohibition against the use of groundwater at the site as a source of potable or process water without necessary water quality treatment; and an annual submission by the site owner of an Institutional Controls/Engineering Controls (IC/EC) certification for a period to be approved by the DEC, which would certify that the institutional and engineering controls are unchanged and nothing has occurred that would impair the ability of the controls to protect public health or the environment or constitute a violation or failure to comply with any operation and maintenance or the SMP.

#### **Site Health Assessment**

Measures are in place to control the potential for coming into contact with subsurface soil and groundwater contamination remaining on-site. Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no on-site building, inhalation of site contaminants in indoor air via soil vapor intrusion is not a concern. In addition, environmental sampling indicates soil vapor intrusion is not a concern in off-site buildings.

# **Remedy Description and Cost**

## Remedy Description for Operable Unit 01

The proposed remedy for the landfill is a cap or cover with removal of surface debris and LNAPL removal.

**Total Cost** \$397,000

OU 00 Site Management Plan Approval: 12/04/2009 Status: ACT





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## **Basis for Classification Change**

Hazardous waste disposal at this site was addressed by implementation of the remedy identified for the site by the January 2005 Record of Decision (ROD) and April 2008 Explanation of Significant Differences (ESD). All construction of the components of the site-wide remedy was completed no later than June 2009. The December 2009 Final Engineering Report (FER) confirms that the remedy has been constructed consistent with the requirements in the ROD. The FER is in edocs. Management of contamination remaining at the site, including any required monitoring, is and has been controlled pursuant to the October 2010 Site Management Plan (SMP). A copy of the SMP is in edocs. Institutional controls were required to ensure the protectiveness of the site. The required control, in the form of an environmental notice is in place. A significant threat to public health and the environment no longer exists at the site. The site is properly remediated and requires site management, therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

Mayer Landfill Site Site No. 336027 Blooming Grove, Orange County

# **Reclass Package List of Figures:**

- Contaminant Concentrations Remaining in Groundwater Following Remediation
- Mayer Landfill Site Location Maps
- Environmental Notice Metes and Bounds Description with Map

Contaminant Concentrations Remaining in Groundwater Following Remediation	

#### Table 15 Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027) Blooming Grove, New York

	Sample ID	3-36-027-MW-1	3-36-027-MW2		3-36-027-MW3	3-36-027-MV	V-04	3-36-027-MW	4D	3-36-027-MW	5	3-36-027-MW-6	3-36-027-MW-7	3-36-027-MW-7D	
Parameter List	Lab ID	AC33257-009	AC33317-002		AC33317-004	AC33257-0	01	AC33317-00	6	AC33317-001	l	AC33257-005	AC33257-006	AC33257-007	NYSDEC Ambient Water
EPA Method 8260	Sample Type	Groundwater	Groundwater		Groundwater	Groundwat	er	Groundwater		Groundwater		Groundwater	Groundwater	Groundwater	Quality Standard (ppb)
	Sample Date	9/27/2007	9/27/2007		9/27/2007	9/26/2001	,	9/28/2007		9/27/2007		9/26/2007	9/26/2007	9/26/2007	
1,2-Dichlorobenzene	ug/L	U	1	U	U		U		U		U	U	U	U	3
1,4-Dichlorobenzene	ug/L	U	1	U	U		U		U		U	U	U	U	3
Acetone	ug/L	U	1	U	U		U		U		U	U	U	U	
Benzene	ug/L	U	1	U	U	290	J		U		U	U	U	U	1
Carbon disulfide	ug/L	U	1	U	U		U		U		U	U	U	U	60
Chlorobenzene	ug/L	U	1	U	U	3.1	J		U		U	U	U	U	5
Ethylbenzene	ug/L	U	1	U	U	100			U		U	U	U	U	5
Isopropylbenzene	ug/L	U	1	U	U	8.1			U		U	U	U	U	5
M&p-Xylenes	ug/L	U	1	U	U	100			U		U	U	U	U	5
Methylene chloride	ug/L	U	1	U	U	3.6	J		U	3.3	J	2 J	U	U	5
O-Xylene	ug/L	U	1	U	U	42			U		U	U	U	U	5
Toluene	ug/L	U	1	U	U	30		1.4	U		U	U	U	U	5

	Sample ID	3-36-027-MW	7-8	3-36-027-MW-9	1	3-36-027-MW-	9D	3-36-027-MW	10	3-36-027-MW-	11	3-36-027-MW1	12	3-36-027-MW1	4D	3-36-027-MW-	13	
Parameter List	Lab ID	AC33257-01	2	AC33257-013		AC33257-01-	4	AC33317-00	3	AC33257-008	3	AC33317-005	5	AC33317-00	7	AC33257-004	4	NYSDEC Ambient Water Quality
EPA Method 8260	Sample Type	Groundwate	r	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Standard (ppb)
	Sample Date	9/27/2007		9/27/2007		9/27/2007		9/27/2007		9/26/2007		9/27/2007		9/28/2007		9/27/2007		41.7
1,2-Dichlorobenzene	ug/L	2	J		U		U	3	J		U		U		U		U	3
1,4-Dichlorobenzene	ug/L	7.2			U		U	13			U		U		U		U	3
Acetone	ug/L		U		U	1200			U		U		U		U	18	J	
Benzene	ug/L	9.7			U		U	8.7			U		U		U		U	1
Carbon disulfide	ug/L		U		U	10	J		U		U		U		U		U	60
Chlorobenzene	ug/L	56			U		U	66			U		U		U		U	5
Ethylbenzene	ug/L		U		U		U		U		U		U		U		U	5
Isopropylbenzene	ug/L	2.6			U		U	4.2			U		U		U		U	5
M&p-Xylenes	ug/L	25			U		U	6.2			U		U		U		U	5
Methylene chloride	ug/L		U		U		U		U		U		U		U		U	5
O-Xylene	ug/L	1.7			U		U		U		U		U		U		U	5
Toluene	ug/L		U		U		U		U	-	U		U	_	U	,	U	5

#### Notes

All analytical data results provided by Hampton Clarke-Veritech.

Bold values indicate that the analyte was detected above the NYSDEC AWQS.

EPA = Environmental Protection Agency

NYSDEC = New State Department of Environmental Conservation

J = Estimated Value

 $U \hspace{1cm} = \hbox{The analyte was analyzed for, but was not detected above the sample reporting limit.}$ 

 $ug/L \hspace{1cm} = mircograms \hspace{1cm} per \hspace{1cm} liter \hspace{1cm} (ppb)$ 

#### Table 15 Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027)

#### **Blooming Grove, New York**

	Sample ID	3-36-027-DUP01	3-36-027-MW-04MS	3-36-027-MW-04MSI	RINSE BLANK	TB	TB 02	
Parameter List	Lab ID	AC33257-011	AC33257-002	AC33257-003	AC33317-008	AC33257-010	AC33317-009	NYSDEC Ambient Water
EPA Method 8260	Sample Type	Duplicate	MS	MSD	Rinse Blank	Trip Blank	Trip Blank	Quality Standard (ppb)
	Sample Date	9/26/2007	9/26/2007	9/26/2007	9/28/2007	9/26/2007	9/27/2007	ĺ
1.1.1-Trichloroethane	ug/L	U	21	20	U	U	U	5
1,1,2,2-Tetrachloroethane	ug/L	U	15	16	U	U	U	5
1.1.2-trichloro-1.2.2-trifluoroethane	ug/L	U	25	24	U	U	U	5
1,1,2-Trichloroethane	ug/L	Ü	17	15	U	U	Ü	1
1,1-Dichloroethane	ug/L	U	22	23	U	U	U	5
1,1-Dichloroethene	ug/L	Ü	20	20	U	U	Ü	5
1,2,4-Trichlorobenzene	ug/L	Ü	9.1	8.2	U	U	Ü	
1,2-Dibromo-3-chloropropane	ug/L	U	13	14	U	U	U	
1,2-Dibromoethane	ug/L	U	16	16	U	U	U	
1.2-Dichlorobenzene	ug/L	U	14	14	U	U	U	3
1,2-Dichloroethane	ug/L	U	26	25	U	U	U	0.6
1,2-Dichloropropane	ug/L	U	21	20	U	U	U	1
1,3-Dichlorobenzene	ug/L	U	14	13	U	U	II.	3
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ug/L ug/L	U	16	15	U	Ü	U	3
2-Butanone	ug/L ug/L	U	16	17	U	U	U	3
2-Butanone		U	12	13	II.	U	IJ	
	ug/L ug/L	U	17	15	U	U	U	
4-Methyl-2-Pentanone						Ü	U	
Acetone	ug/L	U	59	64	U			
Benzene	ug/L	U	320	320	U	U	U	1
Bromodichloromethane	ug/L	U	20	20	U	U	U	
Bromoform	ug/L	U	13	13	U	U	U	
Bromomethane	ug/L	U	22	23	U	U	U	5
Carbon disulfide	ug/L	U	34	33	U	U	U	60
Carbon tetrachloride	ug/L	U	19	19	U	U	U	5
Chlorobenzene	ug/L	U	19	18	U	U	U	5
Chloroethane	ug/L	U	29	29	U	U	U	5
Chloroform	ug/L	U	22	21	U	U	U	
Chloromethane	ug/L	U	27	25	U	U	U	5
Cis-1,2-Dichloroethene	ug/L	U	21	20	U	U	U	5
Cis-1,3-Dichloropropene	ug/L	U	15	14	U	U	U	
Cyclohexane	ug/L	U	24	25	U	U	U	
Dibromochloromethane	ug/L	U	15	14	U	U	U	5
Dichlorodifluoromethane	ug/L	U	17	17	U	U	U	5
Ethylbenzene	ug/L	U	110	110	U	U	U	5
Isopropylbenzene	ug/L	U	20	20	U	U	U	5
M&p-Xylenes	ug/L	U	130	130	U	U	U	5
Methyl Acetate	ug/L	U	24	24	U	U	U	
Methylcyclohexane	ug/L	U	17	19	U	U	U	
Methylene chloride	ug/L	U	22	23	U	U	2.5 J	5
Methyl-t-butyl ether	ug/L	U	22	23	U	U	U	10
O-Xylene	ug/L	U	53	52	U	U	U	5
Styrene	ug/L	U	16	16	U	U	U	5
Tetrachloroethene	ug/L	U	15	15	U	U	U	5
Toluene	ug/L	U	47	46	U	U	U	5
Trans-1,2-dichloroethene	ug/L	U	21	22	U	U	U	5
Trans-1,3-dichloropropene	ug/L	U	15	14	U	U	U	
Trichloroethene	ug/L	U	17	17	U	U	U	5
Trichlorofluoromethane	ug/L	U	28	24	U	U	U	5
Vinyl chloride	ug/L	U	25	26	U	U	U	2
	45 E	1 0				1 0	U	

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= Estimated Value

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

ug/L = mircograms per liter (ppb)

3-36-027-DUP01 collected at 3-36-027-MW-07D

# Table 16 Summary of Detected Semi-Volatile Organic Compounds (SVOCs) in Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027) Blooming Grove, New York

	Sample ID	3-36-027-MW-1	3-36-027-MW2	3-36-027-MW3	3-36-027-MW-	04	3-36-027-MW4	D	3-36-027-MW-6	3-36-027-MW-7	3-36-027-MW-7D	
Parameter List	Lab ID	AC33257-009	AC33317-002	AC33317-004	AC33257-00	1	AC33317-006		AC33257-005	AC33257-006	AC33257-007	NYSDEC Ambient Water
EPA Method 8270	Sample Type	Groundwater	Groundwater	Groundwater	Groundwater		Groundwater		Groundwater	Groundwater	Groundwater	Quality Standard (ppb)
	Sample Date	9/27/2007	9/27/2007	9/27/2007	9/26/2007		9/28/2007		9/26/2007	9/26/2007	9/26/2007	
1,1'-Biphenyl	ug/L	U	U	U	73	J		U	U	U	U	
2-Methylnaphthalene	ug/L	U	U	U	370			U	U	U	U	
Acenaphthene	ug/L	U	U	U	230			U	U	U	U	20
Acenaphthylene	ug/L	U	U	U	19	J		U	U	U	U	
Anthracene	ug/L	U	U	U	190			U	U	U	U	
Benzo[a]Anthracene	ug/L	U	U	U	210			U	U	U	U	
Benzo[a]Pyrene	ug/L	U	U	U	170			U	U	U	U	ND
Benzo[b]Fluoranthene	ug/L	U	U	U	200			U	U	U	U	
Benzo[g,h,i]Perylene	ug/L	U	U	U	85	J		U	U	U	U	
Benzo[k]Fluoranthene	ug/L	U	U	U	81	J		U	U	U	U	
bis(2-Ethylhexyl)phthalate	ug/L	U	U	U			33	U	U	U	U	5
Carbazole	ug/L	U	U	U	32	J		U	U	U	U	
Chrysene	ug/L	U	U	U	170			U	U	U	U	
Dibenzo[a,h]Anthracene	ug/L	U	U	U	18	J		U	U	U	U	
Dibenzofuran	ug/L	U	U	U	140			U	U	U	U	
DI-n-octylphthalate	ug/L	U	U	U			5.2	J	U	U	U	
Fluoranthene	ug/L	U	U	U	690			U	U	U	U	
Fluorene	ug/L	U	U	U	250			U	U	U	U	
Indeno[1,2,3-cd]Pyrene	ug/L	U	U	U	69	J		U	U	U	U	
Naphthalene	ug/L	U	U	U	1100			U	U	U	U	
Phenanthrene	ug/L	U	U	U	1100			U	U	U	U	
Pyrene	ug/L	U	U	U	700			U	U	U	U	

	Sample ID	3-36-027-MW	-8	3-36-027-MW-	9	3-36-027-MW-	9D	3-36-027-MW	10	3-36-027-MW-	11	3-36-027-MW	12	3-36-027-MW-	-13	3-36-027-MW1	4D	
Parameter List	Lab ID	AC33257-012 Groundwater 9/27/2007		AC33257-013	i	AC33257-014	4	AC33317-00	3	AC33257-008	3	AC33317-005	5	AC33257-00	4	AC33317-00	7	NYSDEC Ambient Water
EPA Method 8270	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater	г	Groundwater		Groundwater		Groundwater	г	Groundwater	ſ	Quality Standard (ppb)
	Sample Date			9/27/2007		9/27/2007		9/27/2007		9/26/2007		9/27/2007		9/27/2007		9/28/2007		
2,4-Dimethylphenol	ug/L		U		U	17	J		U		U		U		U		U	1
bis(2-Ethylhexyl)phthalate	ug/L	11	J		U		U		U		U		U		U		U	5
Butylbenzylphthalate	ug/L		U		U		U		U		U		U		U		U	
Caprolactam	ug/L		U		U		U	3.1	J		U		U		U	2	J	
Naphthalene	ug/L	17			U		U	6.7	J		U		U		U		U	
Phenol	ug/L		U		U	190			U		U		U		U		U	1

#### Notes:

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# Table 16 Summary of Detected Semi-Volatile Organic Compounds (SVOCs) in Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027) Blooming Grove, New York

	Sample ID	3-36-027-DUP	)1	3-36-027-MW-0	)4MS	3-36-027-MW-0	4MSD	RINSE BLANK	
Parameter List	Lab ID	AC33257-011		AC33257-00	)2	AC33257-0	03	AC33317-008	NYSDEC Ambient Water
EPA Method 8270	Sample Type	Groundwater		Groundwate	r	Groundwat	er	Groundwater	Quality Standard (ppb)
	Sample Date	9/26/2007		9/26/2007		9/26/2007	7	9/28/2007	
1,1'-Biphenyl	ug/L			260	J	290	J		
2-Methylnaphthalene	ug/L			1200		1300			
Acenaphthene	ug/L			1000		1000			20
Acenaphthylene	ug/L			130	J	130	J		
Anthracene	ug/L			1100		1200			
Benzo[a]Anthracene	ug/L			1300		1400			
Benzo[a]Pyrene	ug/L			1100		1100			ND
Benzo[b]Fluoranthene	ug/L			1300		1400			
Benzo[g,h,i]Perylene	ug/L			590		640			
Benzo[k]Fluoranthene	ug/L			510	J	450	J		
Chrysene	ug/L			990		1000			
Dibenzo[a,h]Anthracene	ug/L			150	J	140	J		
Dibenzofuran	ug/L			620		630			
Fluoranthene	ug/L			4000		4100			
Fluorene	ug/L			1200		1300			
Indeno[1,2,3-cd]Pyrene	ug/L			470	J	550			
Naphthalene	ug/L			1300		1400			
Phenanthrene	ug/L			5800		6000			
Pyrene	ug/L			4300		4500			

#### **Notes:**

All analytical data results provided by Hampton Clarke-Veritech.

Bold values indicate that the analyte was detected above the NYSDEC AWQS.

EPA = Environmental Protection Agency

NYSDEC = New State Department of Environmental Conservation

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

ug/L = mircograms per liter (ppb)

#### Table 17 Summary of Detected Metals In Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027) Blooming Grove, New York

	Sample ID	3-36-027-1	1W-1	3-36-027-MW	V2	3-36-027-MW	73	3-36-027-MW-	-04	3-36-027-MW	ID.	3-36-027-MW	5	3-36-027-MW	-6	3-36-027-MW	-7	3-36-027-MW-	7D	
Parameter List	Lab ID	AC33257	-009	AC33317-00	2	AC33317-004	4	AC33257-00	1	AC33317-000	5	AC33317-00	1	AC33257-00	5	AC33257-00	5	AC33257-007	7	NYSDEC Ambient Water
EPA Method 6010/7470	Sample Type	Groundy	ater	Groundwate	r	Groundwater		Groundwater	г	Groundwater		Groundwater		Groundwater	г	Groundwater		Groundwater		Quality Standard (ppb)
	Sample Date	9/27/20	07	9/27/2007		9/27/2007		9/26/2007		9/28/2007		9/27/2007		9/26/2007		9/26/2007		9/26/2007		
Aluminum	ug/L		U		U		U		U	430		180000		420			U	180		
Arsenic	ug/L		U		U		U		U		U	85			U		U		U	25
Barium	ug/L		U		U	50		85			U	1100			U		U		U	1000
Beryllium	ug/L		U		U		U		U		U	12			U		U		U	11*
Cadmium	ug/L		U		U		U		U		U	3.8			U		U		U	5
Calcium	ug/L	21000	J	38000		52000		79000		25000		160000		79000		72000	J	76000	J	
Chromium	ug/L		U		U		U		U		U	300			U		U		U	50
Cobalt	ug/L		U		U		U		U		U	180			U		U		U	
Copper	ug/L		U		U		U		U		U	850			U		U		U	200
Iron	ug/L		U		U	610		43000			U	340000		650		420			U	300
Lead	ug/L		U		U		U		U		U	320			U		U		U	25
Magnesium	ug/L	3400	U	10000		15000		13000		15000		75000		6500		13000		12000		
Manganese	ug/L		U	61		810		1200		89		21000			U	1400	J	4300	J	300
Nickel	ug/L		U		U		U		U		U	440			U		U		U	100
Potassium	ug/L		U		U		U	11000		5000		14000			U		U		U	
Sodium	ug/L		U	13000		15000		30000		12000		10000			U	9600		12000		20000
Vanadium	ug/L		U		U		U		U		U	230			U		U		U	
Zinc	ug/L		U	70			U		U		U	1300			U		U		U	

	Sample ID	3-36-027-MW	-8	3-36-027-MW	-9	3-36-027-MW-	9D	3-36-027-MW	10	3-36-027-MW-	11	3-36-027-MW	12	3-36-027-MW-	13	3-36-027-MW1	4D	
Parameter List	Lab ID	AC33257-012	2	AC33257-013	3	AC33257-014	1	AC33317-003	3	AC33257-008	3	AC33317-00	5	AC33257-004	4	AC33317-00	7	NYSDEC Ambient Water Quality
EPA Method 6010/7470	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Standard (ppb)
	Sample Date	9/27/2007		9/27/2007		9/27/2007		9/27/2007		9/26/2007		9/27/2007		9/27/2007		9/28/2007		camera (PF+)
Aluminum	ug/L		U		U		U		U	490		600		7200		450		
Barium	ug/L	200		250		190		230			U	55		53		100		1000
Calcium	ug/L	99000	J	91000	J	13000		93000		4600	J	170000		66000		27000		
Iron	ug/L	44000		6900			U	52000		660		18000		13000		870		300
Lead	ug/L	15			U		U	4.7			U		U		U		U	25
Magnesium	ug/L	27000		11000			U	22000				37000		9300		4500		
Manganese	ug/L	340	J	340	J		U	450				4000		320		120		300
Mercury	ug/L		U		U		U		U		U		U		U		U	0.7
Nickel	ug/L		U		U	220			U		U		U		U		U	100
Potassium	ug/L	44000		6400		27000		33000			U		U		U		U	
Sodium	ug/L	64000		24000		150000		71000				5200				62000		20000

#### Notes:

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Bold values indicate that the analyte was detected above the NYSDEC AWQS.

EPA = Environmental Protection Agency

NYSDEC = New State Department of Environmental Conservation

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

ug/L = mircograms per liter (ppb)

# Table 17 Summary of Detected Metals In Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027) Blooming Grove, New York

	Sample ID	3-36-027-DUP	01	3-36-027-MW-04	4MS	3-36-027-MW-04MS	SD	RINSE BLANK	
Parameter List	Lab ID	AC33257-01	1	AC33257-002	2	AC33257-003		AC33317-008	NYSDEC Ambient Water
EPA Method 6010/7470	Sample Type	Groundwater	r	Groundwater	r	Groundwater		Groundwater	Quality Standard (ppb)
	Sample Date	9/26/2007		9/26/2007		9/26/2007		9/28/2007	
Aluminum	ug/L		U	4500		4700		U	
Antimony	ug/L		U	430		460		U	3
Arsenic	ug/L		U	440		460		U	25
Barium	ug/L		U	540		590		U	1000
Beryllium	ug/L		U	440		450		U	11*
Cadmium	ug/L		U	440		460		U	5
Calcium	ug/L	79000	J	130000		140000		U	
Chromium	ug/L		U	440		460		U	50
Cobalt	ug/L		U	440		460		U	
Copper	ug/L		U	470		490		U	200
Iron	ug/L		U	50000		75000		U	300
Lead	ug/L		U	440		460		U	25
Magnesium	ug/L	12000		58000		62000		U	
Manganese	ug/L	4500	J	1800		1600		U	300
Mercury	ug/L		U	9.7		11		U	0.7
Nickel	ug/L		U	450		470		U	100
Potassium	ug/L		U	58000		63000		U	
Selenium	ug/L		U	450		480		U	10
Silver	ug/L		U	92		97		U	50
Sodium	ug/L	11000		79000		88000		U	20000
Thallium	ug/L		U	430		440		U	
Vanadium	ug/L		U	440		460		U	
Zinc	ug/L		U	450		480		U	

#### **Notes:**

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Bold values indicate that the analyte was detected above the NYSDEC AWQS.

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NYSDEC = New State Department of Environmental Conservation

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ug/L = mircograms per liter (ppb)

#### Table 18 Summary of Detected Polychlorinated Biphenyls (PCBs) in Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027)

#### **Blooming Grove, New York**

	Sample ID	3-36-027-MW	-1	3-36-027-MV	<b>/</b> 2	3-36-027-MW	'3	3-36-027-MW-	04	3-36-027-MW	4D	3-36-027-MW-	6	3-36-027-MW	<b>'-7</b>	3-36-027-MW-7	7D	NYSDEC
Parameter List	Lab ID	AC33257-009	9	AC33317-00	2	AC33317-004	4	AC33257-00	1	AC33317-00	6	AC33257-005	5	AC33257-00	6	AC33257-007	7	Ambient Water
EPA Method 608	Sample Type	Groundwate	r	Groundwate	r	Groundwater	1	Groundwate	r	Groundwate	r	Groundwater		Groundwate	r	Groundwater	•	Quality Standard
	Sample Date	9/27/2007		9/27/2007		9/27/2007		9/26/2007		9/28/2007		9/26/2007		9/26/2007		9/26/2007		(ppb)
Aroclor-1016	ug/L		U		U		U		U		U		U		UJ		U	5
Aroclor-1260	ug/L		U		U		U		U		U		U		UJ		U	5

	Sample ID	3-36-027-MW-8		3-36-027-MW-9 3-36-		3-36-027-MW-9D 3-36-027-MW10		3-36-027-MW-11		3-36-027-MW14D		RINSE BLANK		NYSDEC		
Parameter List	Lab ID	AC33257-01	2	AC33257-01	3	AC33257-014		AC33317-003		AC33257-008	3	AC33317-00	7	AC33317-00	3	Ambient Water
EPA Method 608	Sample Type	Groundwate	r	Groundwate	r	Groundwater		Groundwater		Groundwater	r	Groundwate	r	Groundwate	r	Quality Standard
	Sample Date	9/27/2007		9/27/2007		9/27/2007		9/27/2007		9/26/2007		9/28/2007		9/28/2007		(ppb)
Aroclor-1016	ug/L		U		U		U		U		U		U		U	5
Aroclor-1260	ug/L		J		U		U		U		U		U		U	5

	Sample ID	3-36-027-DUP	01	3-36-027-MW-0	4MS	3-36-027-MW-04N	MSD	RINSE BLAN	K	NYSDEC	
Parameter List	Lab ID	AC33257-011		AC33257-002		AC33257-003		AC33317-008		Ambient Water	
EPA Method 608	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Quality Standard	
	Sample Date	9/26/2007		9/26/2007		9/26/2007		9/28/2007		(ppb)	
Aroclor-1016	ug/L		U	12		12			U	5	
Aroclor-1260	ug/L		U	11		12		·	U	5	

#### Notes

All analytical data results provided by Hampton Clarke-Veritech.

Bold values indicate that the analyte was detected above the NYSDEC AWQS.

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NYSDEC = New State Department of Environmental Conservation

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

ug/L = mircograms per liter (ppb)

# Table 19 Summary of Detected Pesticides in Groundwater Samples Collected September 2007 Mayer Landfill (NYSDEC Site No. 3-36-027) Blooming Grove, New York

	Sample ID	3-36-027-MW-1	3-36-027-MW2	3-36-027-MW3	3-36-027-MW-04	3-36-027-MW4D	3-36-027-MW-6	3-36-027-MW-7	3-36-027-MW-7D	
Parameter List	Lab ID	AC33257-009	AC33317-002	AC33317-004	AC33257-001	AC33317-006	AC33257-005	AC33257-006	AC33257-007	NYSDEC Ambient Water
EPA Method 608	Sample Type	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Quality Standard (ppb)
	Sample Date	9/27/2007	9/27/2007	9/27/2007	9/26/2007	9/28/2007	9/26/2007	9/26/2007	9/26/2007	
p,p'-DDT	ug/L	0.027							0.023	0.2

	Sample ID	3-36-027-MW-8	3-36-027-MW-9	3-36-027-MW-9D	3-36-027-MW10	3-36-027-MW-11	NYSDEC	
Parameter List Lab I		AC33257-012	AC33257-013	AC33257-014	AC33317-003	AC33257-008	Ambient Water	
EPA Method 608	Sample Type	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Quality Standard	
	Sample Date	9/27/2007	9/27/2007	9/27/2007	9/27/2007	9/26/2007	(ppb)	
p,p'-DDT	ug/L	0.026	U	U	U	0.02	0.2	

	Sample ID	3-36-027-DUP	01	3-36-027-MW-0	4MS	3-36-027-MW-04	MSD	RINSE BLAN	K	NYSDEC	
Parameter List	Lab ID	AC33257-011		AC33257-002		AC33257-003		AC33317-008		Ambient Water	
EPA Method 608	Sample Type	Groundwater		Groundwate	Groundwater			Groundwater		Quality Standard	
	Sample Date	9/26/2007		9/26/2007		9/26/2007		9/28/2007		(ppb)	
Aldrin	ug/L		U	0.93		0.85			U	ND	
Alpha-BHC	ug/L		U	0.89		0.8			J		
beta-BHC	ug/L		U	1		0.85			U		
Chlordane	ug/L									0.05	
delta-BHC	ug/L		U	0.93		0.8			U		
Dieldrin	ug/L		U	1.1		0.99			U	0.004	
Endosulfan I	ug/L		U	1.1		1			U		
Endosulfan II	ug/L		U	1.4		1.1			U		
Endosulfan Sulfate	ug/L		U	1.2		1.1			U		
Endrin	ug/L		U	1.1		1			U	ND	
Endrin Aldehyde	ug/L		U	1.1		0.85			U	5	
Endrin Ketone	ug/L		U	1.1		1			U	5	
Gamma-BHC	ug/L		U	1		0.89			U		
Heptachlor	ug/L		U	1		0.99			U	0.04	
Heptachlor Epoxide	ug/L		U	1.1		1			U	0.03	
Methoxychlor	ug/L		U	1.2		1.1			U	35	
p,p'-DDD	ug/L		U	1.2		1.2			U	0.3	
p,p'-DDE	ug/L		U	1.2		1.2			U	0.2	
p,p'-DDT	ug/L	0.028		1.1		0.97			U	0.2	

#### Notes:

All analytical data results provided by Hampton Clarke-Veritech.

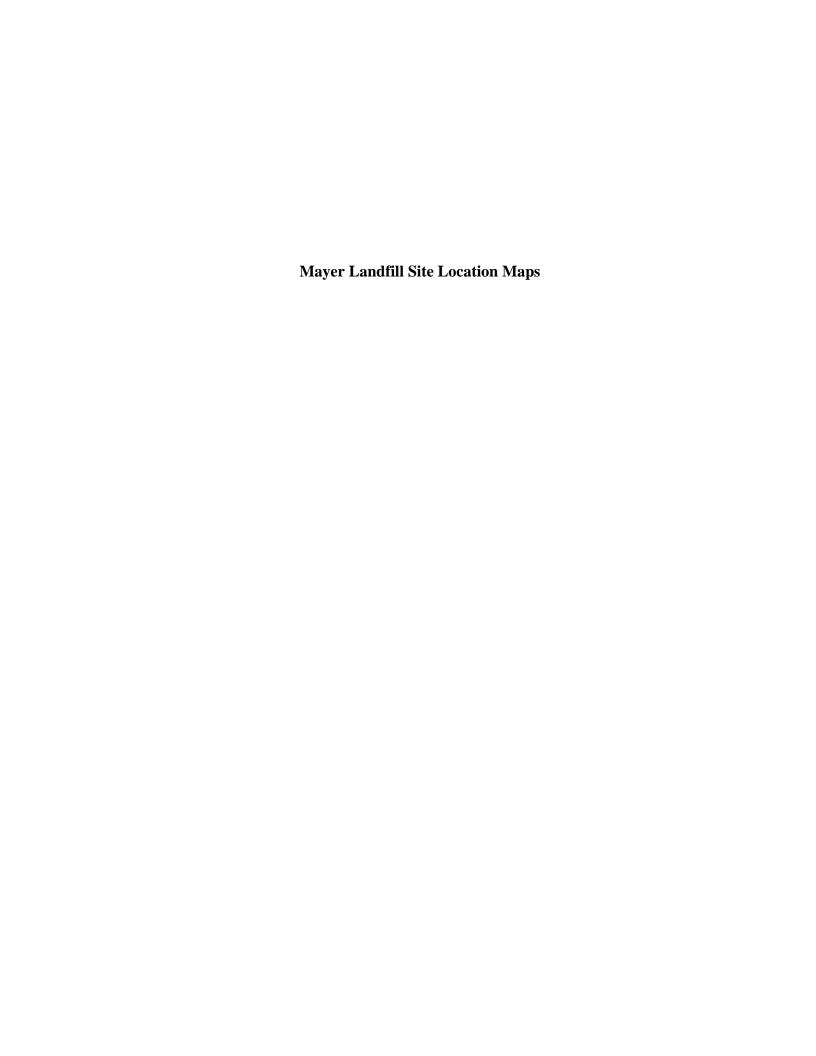
Bold values indicate that the analyte was detected above the NYSDEC AWQS.

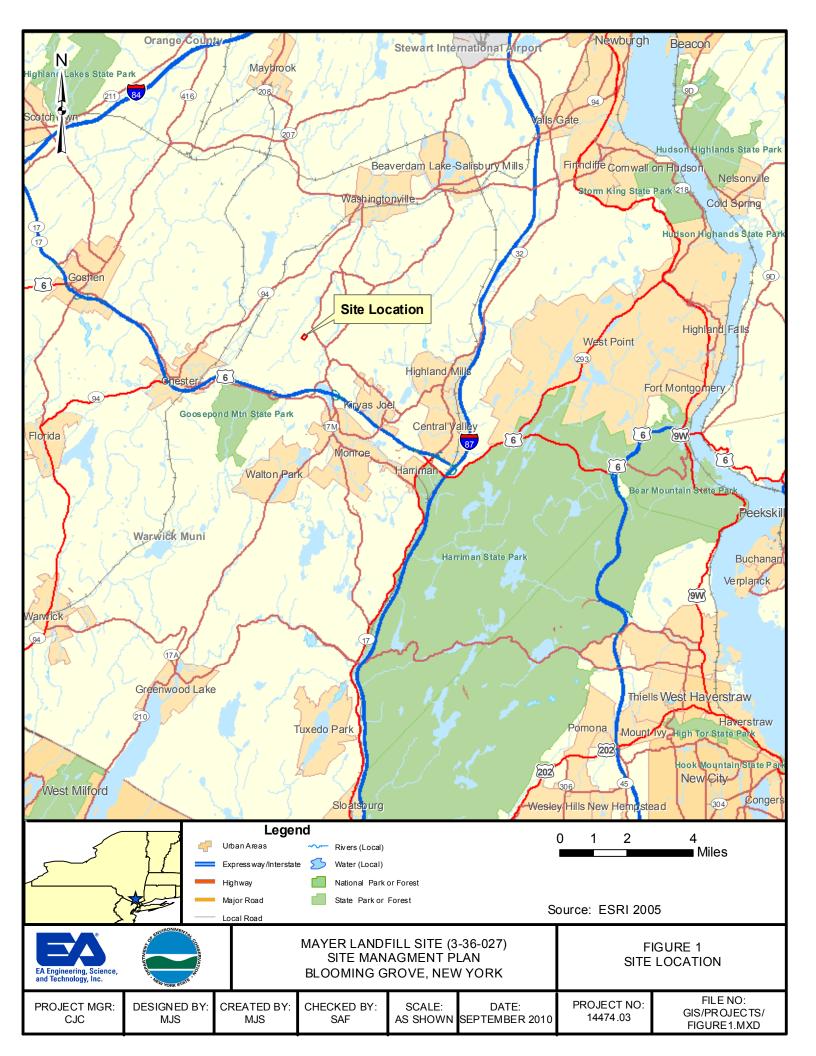
EPA = Environmental Protection Agency

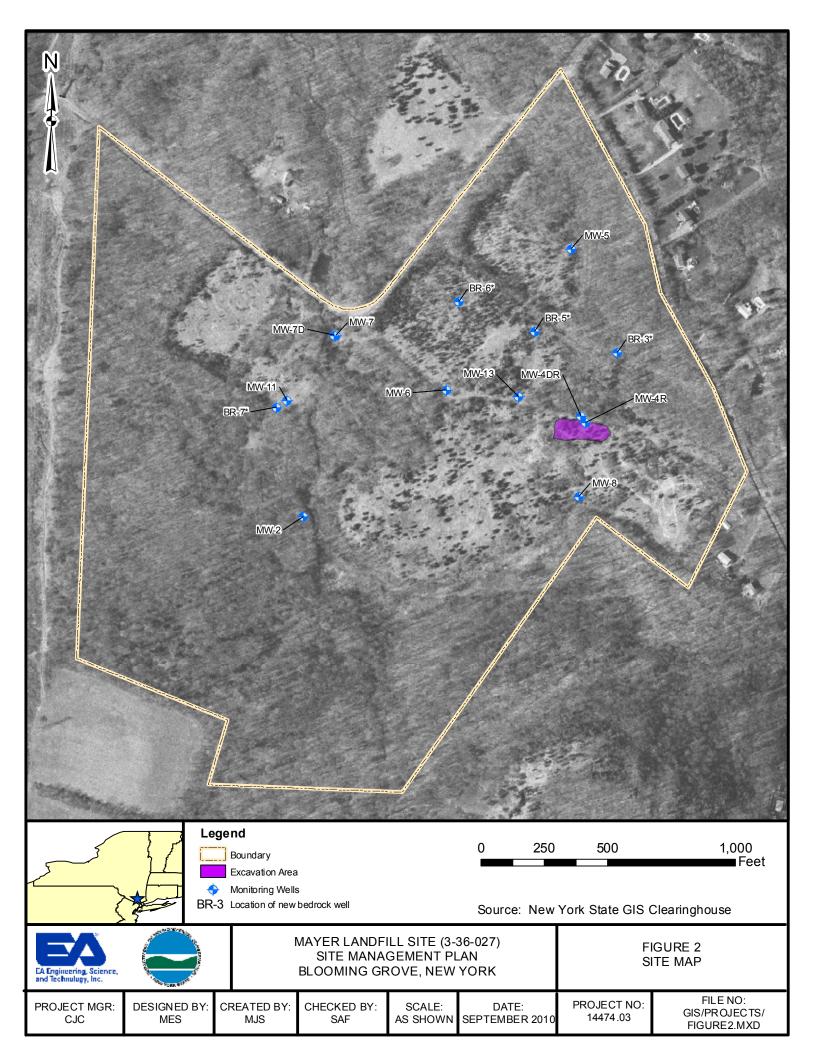
NYSDEC = New State Department of Environmental Conservation

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

ug/L = mircograms per liter (ppb)







Environmental Notice Metes and Bounds Description with Map

### **APPENDIX "A" METES AND BOUNDS DESCRIPTION**

Mayer Landfill Prospect Road Orange County, NY Tax Map: 44 – 1 – 63.92

#### APPENDIX "A"

#### METES AND BOUNDS DESCRIPTION

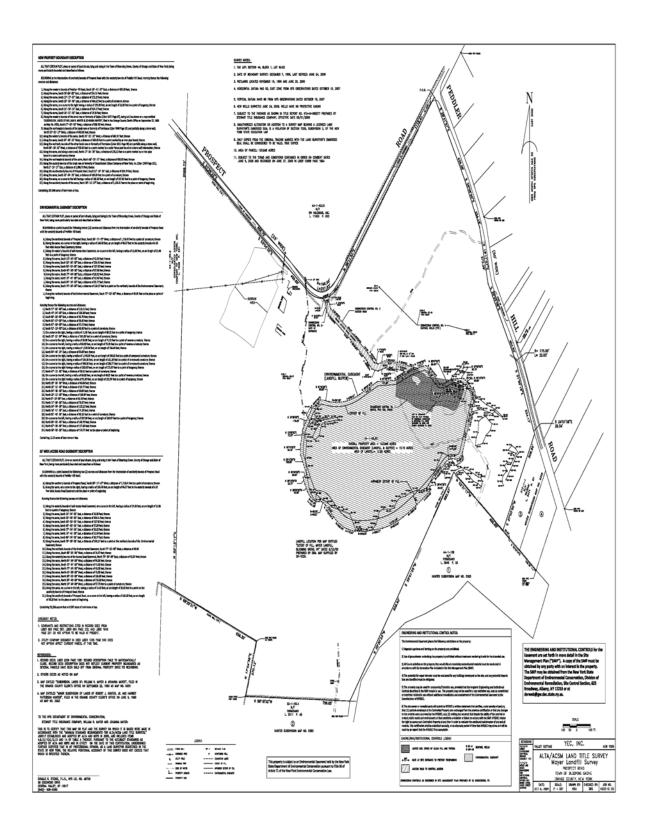
ALL THAT CERTAIN PLOT, piece or parcel of land situate, lying and being in the Town of Blooming Grove, County of Orange and State of New York; being more particularly bounded and described as follows:

BEGINNING AT THE INTERSECTION OF SOUTHERLY BOUNDS OF Prospect Road with the westerly bounds of Peddler Hill road; running thence the following courses and distances:

- 1) Along the westerly bounds of Peddler Hill Road, South 29°- 41'- 57" East, a distance of 439.38 feet; thence
- 2) Along the same, South 26°-06'-00" East, a distance of 254.16 feet; thence
- 3) Along the same, South 13°- 17'- 07" East, a distance of 272.29 feet; thence
- 4) Along the same, South 29°-03'-06" East, a distance of 404.52 feet to a point of curvature; thence
- 5) Along the same, on a curve to the right having a radius of 175.00 feet, an arc length of 22.03 feet to a point of tangency; thence
- 6) Along the same, South 21°-50'-16" East, a distance of 324.17 feet; thence
- 7) Along the same, South 24°-51'-56" East, a distance of 29.34 feet; thence
- 8) Along the westerly bounds of the lands now or formerly of Sajduk (Liber 5471 Page 67), being Lot 3 as shown on a map entitled "SUBDIVISION, LANDS OF WILLIAM R. MAYER & JOHANNA MAYER," filed in the Orange County Clerk's Office on September 22, 1983 as Map No. 6355, South 27°-03'-50" West, a distance of 508.90 feet; thence
- 9) Along the northeasterly bounds of the lands now or formerly of Formisano (Liber 5846 page 33) and partially along a stone wall, North 52°-31'-17" West, a distance of 450.65 feet; thence
- 10) Along the westerly bounds of the same, South 35°- 01'- 25" West, a distance of 682.97 feet; thence
- 11) Along the same, South 35°- 30'- 23" West, a distance of 629.93 feet to a point marked by an iron pipe found; thence
- 12) Along the northerly bounds of the other lands now or formerly of Formisano (Liber 5511 Page 48) and partially along a stone wall, North 88°- 18'- 52" West, a distance of 759.65 feet to a point marked by a cedar fence post found at a stone wall intersection; thence
- 13) Along the same, and along a stone wall, North 17°- 04'- 38" East, a distance of 270.12 feet to a point marked by an iron pipe found in a stone wall corner; thence
- 14) Along the northeasterly bounds of the same, North 68°- 29'- 21" West, a distance of 638.30 feet; thence
- 15) Along the easterly bounds of the lands now or formerly of Consolidated Edison Company of New York, Inc. (Liber 1945 Page 231), North 2°- 13'- 17" East, a distance of 2,086.73 feet; thence
- 16) Along the southwesterly bounds of Prospect Road, South 51°- 59'- 33" East, a distance of 658.79 feet; thence
- 17) Along the same, South 53°-04'-33" East, a distance of 459.69 feet to a point of curvature; thence
- 18) Along the same, on a curve to the left having a radius of 166.50 feet, an arc length of 257.83 feet to a point of tangency; thence
- 19) Along the southerly bounds of the same, North 38°- 11'- 57" East, a distance of 1,118.41 feet to the place or point of beginning.

Containing 103.848 acres of land more or less.

## **APPENDIX "B" SURVEY MAP**





Nirav R. Shah, M.D., M.P.H. Commissioner

Sue Kelly Executive Deputy Commissioner

July 19, 2011

Mr. Michael Cruden Remedial Bureau E Division of Environmental Remediation NYS Dept. of Environmental Conservation 625 Broadway – 11<sup>th</sup> Floor Albany, NY 12233-7014

Re: Classification Package

Mayer Landfill Site # 336027

Blooming Grove (T), Orange County

Dear Mr. Cruden:

Staff have reviewed the Classification Package for the Mayer Landfill site located in Blooming Grove, Orange County. Based on that review, I understand the site is an inactive landfill that received residential, industrial, commercial, agricultural, and demolition waste. The remedy for the site included the excavation and off-site disposal of approximately 7,500 tons of nonhazardous solid waste consisting primarily of LNAPL-contaminated soils. Excavations were backfilled with clean soil. Five sentinel groundwater monitoring wells were installed for long-term monitoring between the site and the surrounding residential areas.

In addition, a Site Management Plan (SMP) has been implemented and enforced via an environmental notice for long-term management and monitoring of residual contamination remaining on-site. The SMP requires: (a) a plan for long-term groundwater monitoring; (b) maintenance of the existing cover; (c) a plan to manage any development of the landfill that would result in excavation into the existing cover and/or waste; (d) an exclusion against future residential or restricted residential uses; and (e) a prohibition against the use of groundwater at the site as a source of potable or process water without necessary water quality treatment.

Based on this information, I concur with the proposal to reclassify the Mayer Landfill site from a Class 2 to a Class 4. If you have any questions concerning these issues, please contact me at (518) 402-7880.

Sincerely,

Steven M. Bates, Acting Director

Bureau of Environmental Exposure Investigation

ec: A. Salame-Alfie, Ph.D.

K. Anders, Ph.D./C. Bethoney/FILE K. Kulow - ODO B. Devine - MARO

M. Schleifer - OCHD

G. Burke/D. Chiusano - NYSDEC Central

K. Lewandowski - NYSDEC Central

E. Moore - NYDEC Region3

# **New York State Department of Environmental Conservation**

Division of Environmental Remediation Bureau of Technical Support, 11<sup>th</sup> Floor

625 Broadway, Albany, NY 12233-7020

Phone: (518) 402-9553 • Fax: (518) 402-9547

Website: www.dec.ny.gov



July 22, 2011

Mr. William R. Mayer 41 West 71<sup>st</sup> Street New York, NY 10023

Ms. Johanna Mayer 54 Valencia Street Halfmoon Bay, CA 94019

Dear Mr. Mayer and Ms. Mayer:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (Department) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that this Department notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

**DEC Site No.:** 336027 **Site Name:** Mayer Landfill

Site Address: Prospect & Peddler Hill Roads, Blooming Grove, 10914, Orange County

Classification change from Class 2 to Class 4

The reason for the change is as follows:

The December 2009 Final Engineering Report confirmed that the remedy implemented was completed in conformity with the January 2005 Record of Decision. The remedial construction activity has been successful in removing the threat to public health and the environment. The reduced contamination at the site will be controlled and monitored consistent with the October 2010 Site Management Plan. The institutional control of an environmental notice is also in place.



Enclosed is a copy of the Department's Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry. An explanation of the site classifications is available at <a href="http://www.dec.ny.gov/chemical/8663.html">http://www.dec.ny.gov/chemical/8663.html</a>. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of the New York State Department of Environmental Conservation for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition.

Such petition may be addressed to:

Honorable Joseph J. Martens Commissioner New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233-1010

For additional information, please contact Mr. David Chiusano, the project manager at 518-402-9814 or  $\underline{\text{djchiusa@gw.dec.state.ny.us}}$ .

Sincerely,

Kelly A. Lewandowski, P.E.

Kelly a Sewandersh

Chief

Site Control Section

KAL/WB/ss Enclosures

ec: D. Desnoyers

D. Weigel

A. English

K. Lewandowski

w/Enc. bec:

S. Bates, NYSDOH

M. Ryan, Director, Remedial Bureau C J. Parker, Regional Attorney, Region 3

A. Ciesluk, Regional Permit Administrator, Region 3

E. Moore, RHWRE, Region 3

M. Schleifer, Orange Co. DOH

D. Church, Orange Co. Water Authority

D. Chiusano, Project Manager

W. Bayer, Site Control Section



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

### DIVISION OF ENVIRONMENTAL REMEDIATION Inactive Hazardous Waste Disposal Report



Site Code

336027

Site Name

Mayer Landfill

Address

Prospect and Peddler Hill Roads

Classification

04

City

Blooming Grove

Zip

10914

Region

3

County

Orange

Town Blooming Grove

Latitude

41 degrees, 22 minutes, 15.23 seconds

**Estimated Size** 

15.1500

Longitude Site Type

-74 degrees, 12 minutes, 5.38 seconds

Disposal Area Landfill

## Site Description

Location: The Mayer Landfill site is an inactive landfill approximately 15 acres in size located in rural Orange County on Prospect Road near the intersection of Peddlar Hill Road. The site is bounded by Peddler Hill Road to the north, private property to the south, private property to the east, and Prospect Road and a utility right-of-way to the west.

Site Features: The site is covered by grasses and low brush and surrounded by hardwood forests, with intermittent streams along the western and southern borders.

Current Zoning/Use(s): The site is currently inactive, used for a utility right-of-way and is zoned for residential use. The surrounding area is either undeveloped parcels or homes.

Historical Use(s): The landfill operation began at the site in 1940 as an open-face dump, with periodic burning of refuse. Residential, commercial, industrial, demolition, and agricultural waste were allegedly disposed of at the landfill. Part of the landfill was designated as a public dump in 1956.

The Orange County Department of Health (OCDOH)

cited the landfill for mismanagement and violations many times in the early-1970s. The landfill ceased operations in April 1975 due to failure to comply with state and county regulations.

In 1975, the OCDOH conducted an initial investigation of surface water at the landfill. Analytical results showed elevated levels of zinc in a wet area to the south of the landfill.

The NYSDEC first listed the site on the NYS Registry of Inactive Hazardous Waste Disposal Sites in 1985. A Phase I Investigation was completed in 1987, and a Phase II Investigation was completed in June 1991. A State-funded RI/FS began in March 1999 and the Record of Decision (ROD) was completed in January 2005.

The ROD required the excavation of a small amount of contaminated soil identified at the edge of waste on the north side of the landfill, and an environmental easement to protect the existing cover, prevent groundwater use and implement a long-term groundwater monitoring program.

In April 2008 the ROD remedy was changed by way of an Explanation of Significant Differences (ESD) issued by the DEC. The change to the remedy included the excavation and off-site disposal of an additional volume of contaminated soil than was originally estimated in the ROD.

Remedial design investigations were completed in July 2007. Environmental cleanup work at the site began in September 2008 and was completed in June 2009. The following major cleanup activities were completed at the site:

- Approximately 7,500 tons of non-hazardous, solid waste consisting primarily of LNAPL contaminated soils were removed from the site and disposed of at an off-site, state permitted facility;
- Groundwater generated from excavation activities was collected and treated onsite. Samples of the collected water were regularly obtained prior to onsite discharge and analyzed for site specific contaminants of concern to ensure compliance with DEC discharge standards;
- Excavated areas were backfilled, re-graded with off-site, clean soil to promote proper site drainage, and seeded; and

#### 7/21/2011

Installation of five (5) sentinel groundwater monitoring wells for long term monitoring of groundwater quality between the site
and the surrounding residential areas.

Since the remedy results in contamination above unrestricted use levels remaining at the site, a Site Management Plan (SMP) has been developed. An Environmental Notice on the entire parcel was filed with the Orange County Clerk's Office in Spring 2011.

Site Geology and Hydrogeology: Native overburden material at the site consists of discontinuous layers of sand, silt, and clay and a highly-compacted lodgment till. The overburden varies in depth from 14 feet to 60 feet. Bedrock beneath the till is black-gray shale with abundant calcite (calcium carbonate) veins with traces of pyrite (iron sulfide). The top few feet of the shale are highly weathered. Maximum depth of waste exceeds 18 feet below ground surface (bgs).

Depth to shallow groundwater varies across the site and seasonally from 6 feet bgs to 20 feet bgs south of the landfill. Shallow groundwater appears to flow radially from the center of the landfill to the north, west, and south.

Depth to bedrock groundwater varies from about 6 ft bgs at the north side of the site to 27 feet bgs on the northeast edge of the landfill.

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PHTHALIC ANHYDRIDES, MALEIC ANHYDRIDES AND 0.00	
PHTHALIC ACID 0.00	
PROPYLENE GLYCOL AND ETHYLENE GLYCOL 0.00	
AMINES (VARIOUS) 0.00	
TOTAL (D001 WASTES) 0.00	
ACETONE gal	
LEAD gal	
ZINC gal	

Analytical Data Available for: Groundwater, Surface Water, Soil, Sediment

Applicable Standards Exceeded for: Groundwater, Surface Water

#### Site Environmental Assessment

Nature and Extent of Contamination: This site no longer presents a significant threat to the environment. The Site was remediated in accordance with the ROD dated January 2005, the April 2008 ESD, and the May 2008 Remedial Action Contract Documents.

Prior to remediation, the primary contamiants of concern were volatile organic compounds (VOCs) and inorganics found to exceed the standards, criteria, and guidance (SCGs) values in soil and groundwater.

Soils: An area of LNAPL-contaminated soil with an estimated volume of 900 cu yds was defined at the edge of waste. The most prominent VOC exceedences on the site were ethylbenzene, acetone, benzene, MEK, chlorobenzene, and xylene. Lead and mercury were the principal metals considered to be anthropogenic when compared with background sample concentrations.

Groundwater: Groundwater contamination was limited to three shallow wells located at the edge of waste. Concentrations of VOCs exceeding SCGs were detected in shallow wells of the southern portion of the landfill. These contaminants included ethylbenzene, chlorobenzene, benzene, and xylene.

Adjacent private water supply wells were sampled during the remedial investigation and during the remedial design. There were no site specific contaminants of concern detected in any of the wells sampled.

Soil Vapor: Site soil vapor was sampled during the RI, supplemental RI, and additional site characterization investigation. In 2007 a soil gas investigation was performed to evaluate the potential for vapor intrusion in residential structures to the southeast of the site. The soil gas monitoring included soil gas sample collection from sampling points located to the south and east of the source area, primarily along Peddler Hill Road. Soil gas sampling results indicated elevated concentrations of trichloroethene, tetrachloroethene, and carbon tetrachloride for samples collected near the source area. The source area has since been removed as part of the remedial action. Other analytes detected appear to be primarily from petroleum products, and are not considered to be vapor migration concerns.

The site management plan (SMP) for the site was approved by the NYSDEC in October 2010. In addition, an Environmental Notice was developed and filed with the Orange County Clerk's Office in June 2011(EN was recorded on 6/3/11 in Liber 13183 at page 646) to address residual contaminated soils remaining at depth that may be excavated from the site during future redevelopment, restricts future use of groundwater at the site, requires maintenance of the engineering controls, prohibits current and future property owners from activities that would affect the remedy performance, and is transferable with a property transaction.

The SMP includes the following institutional and engineering controls: (a) a plan for long-term groundwater monitoring; (b) maintenance of the existing cover; (c) a plan to manage any development of the landfill that would result in excavation into the existing cover and/or waste; (d) an exclusion against future residential or restricted residential uses; and (e) a prohibition against the use of groundwater at the site as a source of potable or process water without necessary water quality treatment; and an annual submission by the site owner of an Institutional Controls/Engineering Controls (IC/EC) certification for a period to be approved by the DEC, which would certify that the institutional and engineering controls are unchanged and nothing has occurred that would impair the ability of the controls to protect public health or the environment or constitute a violation or failure to comply with any operation and maintenance or the SMP.

#### Site Health Assessment

Measures are in place to control the potential for coming into contact with subsurface soil and groundwater contamination remaining on-site. Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no on-site building, inhalation of site contaminants in indoor air via soil vapor intrusion is not a concern. In addition, environmental sampling indicates soil vapor intrusion is not a concern in off-site buildings.

# PUBLIC NOTICE

# State Superfund Program

Receive Site Information by Email. See "For More Information" to Learn How.

Site Name: Mayer Landfill August 23, 2011

**Site No.** 336027 **Tax Map No.** 44-1-63.9

Site Location: Prospect & Peddler Hill Roads, Blooming Grove, 10914, Rockland County

# **Inactive Hazardous Waste Disposal Site Classification Notice**

The Inactive Hazardous Waste Disposal Site Program (the State Superfund Program) is the State's program for identifying, investigating, and cleaning up sites where the disposal of hazardous waste may present a threat to public health and/or the environment. The New York State Department of Environmental Conservation (Department) maintains a list of these sites in the Registry of Inactive Hazardous Waste Disposal Sites (the "Registry"). The site identified above, and located on a map on the reverse side of this page, was recently reclassed to a Class 4 site that no longer presents a significant threat to public health and/or the environment for the following reason(s):

The December 2009 Final Engineering Report confirmed that the remedy implemented was completed in conformity with the January 2005 Record of Decision. The remedial construction activity has been successful in removing the threat to public health and the environment. The reduced contamination at the site will be controlled and monitored consistent with the October 2010 Site Management Plan. The institutional control of an environmental notice is also in place.

If you own property adjacent to this site and are renting or leasing your property to someone else, please share this information with them. If you no longer wish to be on the contact list for this site or otherwise need to correct our records, please contact the Department's Project Manager listed below.

#### FOR MORE INFORMATION

Additional information about this site can be found using the Department's "Environmental Site Remediation Database Search" engine which is located on the internet at: <a href="https://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3">www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3</a>

Comments and questions are always welcome and should be directed as follows:

## **Project Related Questions**

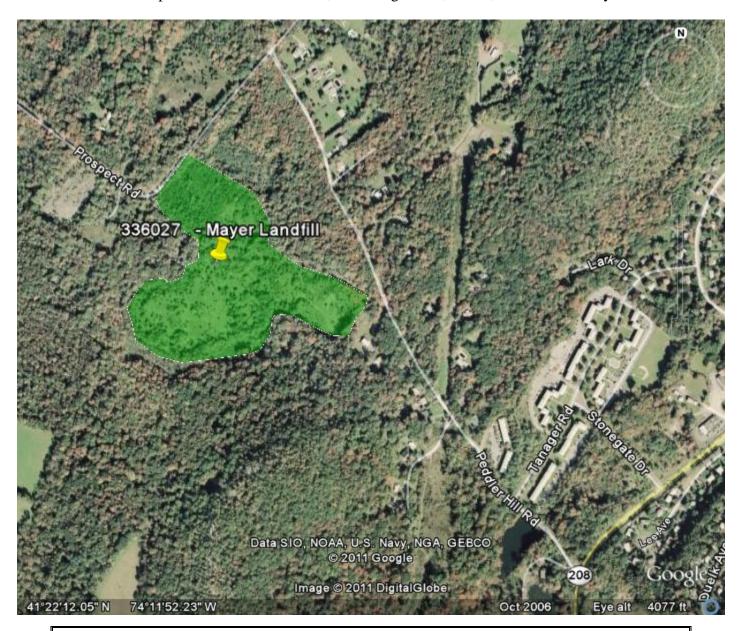
Mr. David Chiusano, Project Manager NYS Department of Env. Conservation Div. of Env. Remediation, Remedial Bureau E 625 Broadway, 12<sup>th</sup> Fl., Albany, NY 12233-7017 518-402-9795, djchiusa@gw.dec.state.ny.us

The Department is sending you this notice in accordance with Environmental Conservation Law Article 27, Title 13 and its companion regulation (6 NYCRR 375-2.7(b)(6)(ii)) which requires the Department to notify all parties on the contact list for this site of this recent action.

## **Approximate Site Location**

Mayer Landfill 336027

Prospect & Peddler Hill Roads, Blooming Grove, 10914, Rockland County



## **Receive Site Updates by Email**

Have site information such as this public notice sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: <a href="https://www.dec.ny.gov/chemical/61092.html">www.dec.ny.gov/chemical/61092.html</a>. It's *quick*, it's *free*, and it will help keep you *better informed*.



As a listsery member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

You may continue also to receive paper copies of site information for a time after you sign up with a county listsery, until the transition to electronic distribution is complete.

**Note:** Please disregard if you received this notice by way of a county email listserv.

# **Electronic copies:**

- D. Desnoyers, Director, Division of Environmental Remediation
- A. English, Director, Bureau of Technical Support
- K. Lewandowski, Chief, Site Control Section
- M. Ryan, Director, Remedial Bureau C
- M. Cruden, Director, Remedial Bureau E
- E. Moore, RHWRE, Region 3
- A. Ciesluk, Regional Permit Administrator, Region 3
- M. Knipfing, Regional CPS, Region 3
- S. Bates, NYSDOH
- L. Ennist, DER, Bureau of Program Management
- D. Chiusano, Project Manager
- W. Bayer, Site Control Section

Mayer Landfill 336027 52 Labels Wayne Bayer	Current Occupant 255 Prospect Rd. Monroe, NY 10950	Current Occupant 257 Prospect Rd. Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
259 Prospect Rd.	267 Prospect Rd.	269 Prospect Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
271 Prospect Rd.	277 Prospect Rd.	279 Prospect Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
281 Prospect Rd.	283 Prospect Rd.	284 Prospect Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
288 Prospect Rd.	289 Prospect Rd.	50 Peddler Hill Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
51 Peddler Hill Rd.	54 Peddler Hill Rd.	59 Peddler Hill Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
72 Peddler Hill Rd.	74 Peddler Hill Rd.	76 Peddler Hill Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
78 Peddler Hill Rd.	84 Peddler Hill Rd.	88 Peddler Hill Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
94 Peddler Hill Rd.	98 Peddler Hill Rd.	50 Peddler Hill Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950
Current Occupant	Current Occupant	Current Occupant
52 Peddler Hill Rd.	59 Peddler Hill Rd.	72 Peddler Hill Rd.
Monroe, NY 10950	Monroe, NY 10950	Monroe, NY 10950

Current Occupant 269 Prospect Rd. Monroe, NY 10950

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Superintendant Kiryas Joel Village Union Free School 48 Bakertown Road, Suite 40 Monroe, NY 10949 Current Occupant 66 Peddler Hill Rd. Monroe, NY 10950

Current Occupant 261 Prospect Rd. Monroe, NY 10950

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Current Occupant 273 Prospect Rd. Monroe, NY 10950

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Town of Blooming Grove P.O. Box 358 6 Horton Road Blooming Grove, NY 10914

William Going William Going Associates 5 Stella Drive Gardiner, NY 12525

David E. Church Executive Director Orange County Water Authority 99 Main Street Goshen, NY 10924

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