

ATTACHMENT F

Wetland Monitoring Plan for Wetlands RG-5, RG-6 and RG-7

**MILL SEAT LANDFILL
FACILITY ID NO. 8-2648-00014
RIGA, NEW YORK**

**6 NYCRR PART 360 SOLID WASTE MANAGEMENT PERMIT
MODIFICATION APPLICATION**

**APPENDIX F
WETLAND MONITORING PLAN FOR
WETLANDS RG-5, RG-6 AND RG-7**

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1.0 Introduction

Monroe County ("the County") is the owner and permittee of the Mill Seat Landfill. The currently permitted landfill and associated operations shall be referred to hereafter as the "Mill Seat Facility" or the "facility" and the land on which the currently permitted Mill Seat Landfill is located will be referred to as the "landfill site" or the "site". The Mill Seat Landfill is operated by Waste Management of New York, LLC (WMNY), under a lease agreement with Monroe County. The landfill's Permit I.D. number is 8-2648-00014.

The County is seeking a 6 NYCRR Part 360, Solid Waste Management Permit modification from New York State Department of Environmental Conservation (NYSDEC) to construct and operate a soil borrow area, hereafter referred to as the "soil borrow project" or the "project". The soil borrow project consists of two areas, approximately 20 acres and 42 acres in size, which will provide on-site soils for operation of the permitted landfill site. Currently, soils for landfill construction and operation are obtained from existing borrow areas at the Mill Seat Facility, but there will not be adequate soil volumes from these areas to operate the presently permitted landfill site.

The soil borrow project is detailed in the associated Borrow Area Use Plan (BAUP) (McMahon & Mann, 2011). The proposed East and West borrow areas are located on either side of NYSDEC regulated freshwater wetland RG-6. NYSDEC regulated freshwater wetland RG-5 is located to the west of the soil borrow sites and wetland RG-7 is located to the east, across Brew Road. Wetlands RG-5, RG-6, and RG-7 also meet the criteria for federal jurisdiction by the U.S. Army Corps of Engineers (USACE).

This wetland monitoring plan is being submitted to support the BAUP and ensure that the regulated freshwater wetlands in the project vicinity will not be impacted by the proposed project operations. The NYSDEC has requested that this wetland monitoring plan be completed so that specific monitoring guidelines and procedures are outlined and a baseline is completed prior to project construction. The baseline round of wetland monitoring for wetland RG-5, RG-6, and RG-7 is proposed to begin in the early spring of 2010. Such monitoring efforts will be established in order to ensure that no significant reduction in the quality, functions, or values of these wetlands occurs as a result of the borrow area excavation activities. The following report outlines a brief history of the Mill Seat Landfill, the results of an on-site wetland delineation, the existing site characteristics of wetlands RG-5, RG-6, and RG-7, and a detailed outline of the wetland monitoring procedures and parameters, both for the baseline assessment and subsequent annual monitoring.

2.0 Site History

The Mill Seat Facility was issued a Part 360 permit and began operations in May 1993. The landfill site is located in the Town of Riga, Monroe County, New York. The landfill limits, property lines and existing features are depicted on Figure 1 and in the figures associated with the BAUP. The landfill site encompasses approximately 385 acres of land. Facility operations within this area include the 98.6-acre landfill, and approximately 80 acres of ancillary facilities, including leachate storage tanks, sediment ponds, office/maintenance buildings, access roads and a landfill gas to energy plant.

The landfill is a municipal solid waste disposal facility that accepts municipal solid waste (MSW). The landfill is comprised of four stages, stages I, II and III have been constructed and Stage IV is currently under construction. Stage IV A excavation and liner is complete and Stage IV B and C excavation and liners are yet to be completed. Additionally, two large stockpiles created during construction of Stages I and II are located south of Stage IV. The excess soil in Stage IV and the stockpiled soils will be utilized prior to the start of the proposed soil borrow project.

3.0 Wetland Delineations

A wetland delineation was conducted for the Mill Seat Facility property in the early 1990's by Clark Engineers & Associates. The first step for the current wetland monitoring plan was to update the previous delineation for the lands to the south of the current landfill footprint. An updated delineation was requested by the NYSDEC as part of the wetland monitoring plan. Personnel from Barton & Loguidice, P.C. completed a wetland field delineation for the lands south of the existing Mill Seat Landfill, including areas immediately east and west of the soil borrow project area locations, on November 10 -14, 2008 and June 8, 2009. Four wetlands that met the criteria outlined in the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual were located within the approximately 280-acre study limits (Figure 2). These wetland areas exhibited vegetative, hydrologic, and soil conditions characteristic of palustrine forested, emergent, wet meadow, and scrub-shrub wetlands. The boundaries of these delineated areas were surveyed in the field using a hand-held Trimble GeoXT global positioning system (GPS).

Three of these freshwater wetlands, delineated wetlands A, B, and D, are associated with NYSDEC mapped wetlands RG-5, RG-6, and RG-7, respectively. An additional isolated wetland area, delineated wetland C, was mapped to the east of Brew Road, west of wetland RG-7. Only the boundaries of wetlands B and C were completely located within the delineation limits. These two wetlands were calculated at 12.54 and 0.76 acres, respectively. The remaining wetland boundaries continue outside the project limits.

Wetland RG-5 encompasses both a forested cover-type and an emergent cover-type. The middle areas of the boundary line for wetland A represent the forested wetland location. A farm access road from a property located off of Bovee Road bisects

wetland RG-5; however, a culvert installed at this location provides a continuous hydrologic connection. Wetland RG-5 is associated with Hotel Creek, which flows from west to east through the middle of the wetland. This wetland is comprised of sandy clay loams with an ample amount of redoximorphic features observed in the B soil horizon. The forested areas of this wetland were dominated by deciduous tree species including: red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), green ash (*Fraxinus pennsylvanica*), and ironwood (American hornbeam) (*Carpinus caroliniana*).

Wetland RG-6 is a depressional, predominantly forested wetland that is located between the project locations encompassing the two soil borrow areas. This wetland includes a drainage feature that extends south along the boundaries of multiple agricultural fields, eventually connecting to a section of wetland RG-5. This drainage feature has been observed to contain flowing water throughout its whole length during times of high flow or snow melt. Wetland RG-6 receives most of its hydrology from precipitation and from an outfall to the adjacent detention pond, which was constructed as part of the initial landfill construction.

Wetland C is a depressional, scrub-shrub wetland that is approximately 0.76 acres in size. No evidence of inundation was noted at this location; however, the soils within the wetland were saturated within 12-inches of the soil surface. Saplings and woody shrubs dominate this wetland, which was not observed to have any defined hydrologic inlets or outlets that connected to other Waters of the U.S. The dominant woody vegetation observed at this wetland includes green ash, gray dogwood (*Cornus foemina*), and red osier dogwood (*Cornus stolonifera*). This wetland location is not associated with any other mapped or delineated wetlands or waters.

Wetland RG-7 is located east/southeast of the Mill Seat Facility, east of Brew Road, both north and south of O'Brien Road. This wetland is also predominantly

forested with an abundance of groundcover and a thick canopy. There are a handful of emergent, open water pockets scattered throughout this wetland area as well. The soils in wetland RG-7 consist mostly of sandy loams with soils saturated at the surface and frequent pockets of inundation. Dominant vegetation within this wetland includes red osier dogwood, green ash, and black willow (*Salix nigra*).

Wetland delineation datasheets detailing field recorded information for each wetland area are included as Appendix A.

4.0 Baseline Assessment: Wetlands RG-5, RG-6, and RG-7

The main focus of this monitoring plan is wetland RG-6, though monitoring activities are also proposed for wetlands RG-5 and RG-7. Wetland C will not be monitored during the baseline study or on an annual basis due to its location within the east soil borrow area footprint. Background data associated with flora and fauna species richness, abundance and diversity, and water level fluctuations within wetlands RG-5 (wetland A), RG-6 (wetland B), and RG-7 (wetland D) was reviewed (2004 Bio-Monitoring Report, Stantec, February 2005) prior to the completion of this plan. This information was obtained as part of the bio-monitoring efforts that were previously completed at the Mill Seat Facility as a past permit condition. In addition to the previously approved and conducted monitoring and sampling performed at the landfill site, this section proposes additional monitoring efforts for wetlands RG-5, RG-6, and RG-7, due to their proximity to the two proposed soil borrow areas.

4.1 Existing Functions and Values

The USACE's Highway Methodology Workbook Supplement (HMWS) (U.S. Army Corps of Engineers, NE District, 1999) is the reference in which the approach for wetland monitoring for wetland RG-6 is based. This approach uses a multi-disciplinary team to evaluate the potential impacts a project may have upon 13 wetland functions and values including:

Functions

- groundwater recharge/discharge (considers the potential for a wetland to serve as a groundwater recharge and/or discharge area)

- flood flow attenuation (considers the effectiveness of the wetland in reducing flood damage)
- fish and shellfish habitat (considers the effectiveness of the wetland to provide fish and/or shellfish habitat)
- sediment/toxicant/pathogen removal (considers the effectiveness of the wetland to reduce or prevent the degradation of water quality)
- nutrient removal/retention (considers the effectiveness of the wetland to prevent adverse effects of excess nutrients)
- production export (considers the effectiveness of the wetland to produce food or other usable products for humans and other living organisms)
- sediment/shoreline stabilization (considers the effectiveness of the wetland to stabilize stream banks and shorelines against erosion)
- wildlife habitat (considers the effectiveness of the wetland to provide habitat for various types and populations of animals)

Values

- recreation (considers the effectiveness of the wetland to provide recreational opportunities)
- educational/scientific value (considers the effectiveness of the wetland as a scientific study or research)
- uniqueness/heritage (considers the effectiveness of the wetland to produce special values, i.e., archeological sites, historical events, unique geologic features, etc.)

- visual quality/aesthetics (considers the aesthetic qualities of the wetland)
- threatened or endangered species habitat (considers the effectiveness of the wetland to support threatened or endangered species).

In following this type of analysis, field personnel will first determine whether wetland RG-6 provides for the previously mentioned functions and values and why these particular functions and values are deemed present. The principal functions and values of this wetland will then be determined and documented. The existing functions and values of wetland RG-6 will be documented using a form similar to the Function-Value Evaluation Form included in the HMWS (Appendix B of this report). The criteria included in Appendix B of the HMWS will be used to determine which functions and values are present within wetland RG-6 and its associated fringe areas.

4.2 Surface Water Sampling

Current surface water sampling efforts at the Mill Seat Facility, which will continue in the near future, include the collection of samples from seven (7) drainage channels and two detention ponds on the property. These water levels are recorded three (3) times annually. In addition, the surface water levels in wetlands RG-5, RG-6, and RG-7 will be monitored on a monthly basis from April to October at a handful of the existing staff gauges that were previously installed in ponded areas of these wetlands. Two (2) existing staff gauges installed each in RG-6 (Wetland B) and RG-5 (Wetland A) will be monitored as part of this baseline analysis. A new staff gauge will be installed in wetland RG-7 and will be monitored between the months of April and October, in conjunction with the

surface water monitoring of wetlands RG-5 and RG-6. All of the existing staff gauges in wetland RG-7 are located north of O'Brien Road, outside of the project limits. The water quantity and quality from the detention pond, located adjacent to wetland RG-6, are currently sampled at this location three (3) times annually.

A review of the current locations of staff gauges within wetland RG-6 was completed to determine whether any additional locations were warranted. The existing staff gauges for this wetland are located within the center of the wetland (staff gauge 4) and at the outlet of wetland RG-6 (staff gauge 7). Two additional staff gauge locations are proposed within the drainage channel that is the outlet for wetland RG-6. The addition of these two locations will provide a more accurate overview of the seasonal water fluctuations associated with this wetland. Flowing water has been observed within the entire outlet channel during the late winter/early spring months; whereas, during the summer and fall months only standing water is observed within the channel, ending at the Mill Seat Landfill facility fence line. These two additional staff gauges will also be monitored on a monthly basis from April to October.

Recording surface water data during the year 2011 will establish a baseline intended to represent the rate of seasonal discharge that outlets from this wetland. This data will be compiled along with the surface water sampling results from the detention pond located adjacent to Wetland RG-6.

4.3 Wildlife Observations

Two wildlife surveys will be completed in 2010 to establish a baseline dataset of wildlife species that commonly utilize the wetlands adjacent to the proposed soil borrow area locations. These surveys will take place in spring and

summer and will incorporate random searches to document all mammal, bird, reptile, amphibian, fish, and macroinvertebrate observations within wetland RG-6. Besides direct wildlife observations, vocalizations, tracks, scat, den sites, and other wildlife signs will be noted and included in these wildlife surveys.

Previous wildlife survey results, completed as part of the landfill site's previous biomonitoring efforts, are included as Appendix C to provide a pre-baseline analysis of the species that have previously been observed utilizing on-site wetland areas. These results offer a view of what may be encountered during the wildlife surveys in 2010. Except for the recommendations included in Section 4.4, no additional wildlife survey locations, procedures, or events are proposed in order to establish a baseline of wildlife species observed within RG-6.

4.4 Amphibian Surveys

To coincide with the amphibian species breeding season, two amphibian survey events will be conducted in spring 2010 to determine the presence and use of amphibian species within wetland RG-6. Amphibian utilization is an important component to survey since amphibian species are considered to be good ecological indicators and can be used to assess wetland health and quality (Hecnar & M'Closkey, 1996; Adamus et al., 2000). During spring breeding, the observations of amphibians are more prevalent and there is a greater potential to encounter a larger diversity of species.

These spring amphibian surveys will be conducted around dusk when amphibian activity is usually greatest, once in early spring and once in late spring to cover both the early and the late breeding species. A breeding chorus survey

will be completed to determine presence of frog and toad species. Prior to the breeding chorus survey and the onset of dusk, an amphibian egg mass search will also be conducted. The presence of some amphibian species, including mole salamanders (*Ambystoma*), can be determined by locating and identifying egg masses. The results of these survey events will be joined with the results of the wildlife surveys to establish a baseline list of wildlife observations and utilization for wetland RG-6.

4.5 Photographic Survey

Four (4) photographic locations will be permanently established at each staff gauge location within wetland RG-6. These photographs will be used to document the baseline condition of wetland RG-6 prior to soil borrow area construction. These photographs will show a detailed mosaic of the vegetative conditions at these sampling locations. Photographs will be taken in late spring of 2010 and 2011, in conjunction with the amphibian monitoring event.

4.6 Vegetative Analysis

At each of the four (4) established photographic survey locations in RG-6, a vegetative analysis of the dominant plant species will be completed in late spring, in conjunction with the amphibian monitoring event and photographic surveys. This analysis will include the recording of dominant plant species located within 10-feet of the staked survey location. This survey effort will provide vegetative information for wetland RG-6 at four specific locations that can be easily monitored in the future.

A vegetative analysis will also be completed in late spring at the approximate location of the new staff gauge to be added to wetland RG-7 and at the southernmost staff gauge included within wetland RG-5. Color photographs of the vegetative communities present at these locations will also be documented.

5.0 Subsequent Monitoring: Wetland RG-6

Upon the establishment of the baseline condition for RG-6 in 2010, subsequent sampling and monitoring events and activities are proposed in order to ensure that no significant construction related impacts will occur to wetland RG-6 in the future as a result of the proposed soil borrow area project. The goal of this continued monitoring is to assess potentially significant changes in the characteristics, size, composition, etc. of wetland RG-6 so that corrective actions may be taken if it is determined that construction related impacts occur.

The surveys and analyses that will be completed as part of the baseline monitoring effort will be closely duplicated on a frequency determined by the level of activity, in an attempt to identify potentially significant changes to the plants, wildlife, hydrology, or overall functions and values of wetland RG-6. Changes in the functions and or values of wetland RG-6 will be analyzed. Minor variations in the functions and values that this wetland possesses may naturally change over time; so, changes that are observed will be closely analyzed to determine any potential cause or causes. The following activities will be completed as part of the ongoing monitoring of this wetland:

- 1) Surface water level readings will be recorded for the four staff gauge locations within wetland RG-6 (existing locations #4 and #7 and the two gauges within the wetland's outlet channel that will be installed in 2011) on a monthly basis between the months of April and October, in order to illustrate the seasonal water fluctuations of this wetland.
- 2) Wildlife observations within wetland RG-6 will continue to be documented twice a year, during the spring and summer. The type of observation and specific species will be recorded, if able to be determined. Direct

observations will also be detailed with notes on the general behavior and health of the observed individual(s), if appropriate.

- 3) In addition to the wildlife surveys, amphibian species will be monitored within wetland RG-6 on two (2) occasions in the spring. During these monitoring events, an egg mass survey will be completed within the main part of wetland RG-6 and a breeding chorus survey will be completed around dusk to document utilization of this wetland by frog and toad species.
- 4) An photographic survey will take place annually in conjunction with the late spring amphibian monitoring event. Photographs will be taken at the four (4) staff gauge locations within wetland RG-6. A vegetative analysis of the dominant plant species in each stratum will also be completed annually at each of the four locations in order to identify any changes occurring within the plant communities observed in this wetland.
- 5) Water quality testing of the detention basin adjacent to wetland RG-6 will continue to be completed three (3) times annually to ensure that the water being discharged to the wetland meets water quality standards.

6.0 Subsequent Monitoring: Wetlands RG-5 and RG-7

6.1 Wetland RG-5

There are two existing staff gauges (#5 and #6) located within the limits of wetland RG-5. Staff gauge #5 would be closest to the proposed west soil borrow area. The baseline water levels for both staff gauges will be recorded monthly between April and October in 2011. Subsequently, the surface water level at staff gauge #5 will continue to be recorded in the future (after 2011) on a monthly basis, between April and October, in order to identify any changes to wetland RG-5 that may occur as a result of minor variations to the existing hydrologic flow of the proposed project area.

A vegetative analysis and photographic survey will also continue to be completed on an annual basis at staff gauge #5 within wetland RG-5.

6.2 Wetland RG-7

The three existing staff gauges installed in wetland RG-7 are all located north of O'Brien Road. In order to more accurately identify any potentially significant changes to the hydrologic characteristics of wetland RG-7, an additional staff gauge location will be installed in RG-7 during 2011. This staff gauge will be located at the discharge location from the sedimentation basin that will be included in the east soil borrow area design. Baseline surface water level readings will be recorded between the months of April and October. In subsequent years, surface water levels will also be recorded at this location during the same months of the year.

A vegetative analysis and photographic survey will also continue to be completed on an annual basis at the staff gauge that will be installed in wetland RG-7, south of O'Brien Road.

7.0 Summary

The surveys and analyses included in this wetland monitoring plan are instituted to establish an accurate baseline of conditions for wetlands RG-5, RG-6, and RG-7. These monitoring efforts have been focused on wetland RG-6 due to its location between the two proposed soil borrow areas. Monitoring at wetlands RG-5 and RG-7 focuses on potentially significant changes to wetland hydrology and vegetation at these locations. All baseline monitoring, as detailed within this report, will be completed in the years 2010 and 2011. All subsequent monitoring will be completed, as indicated in this report, every year during soil borrow area construction and utilization until the borrow areas are reclaimed. Surveys will also occur the year after the reclamation of the soil borrow areas is completed and soil is no longer being excavated from these locations.

The expectation is that, based on the current design, the soil borrow areas should have a minimal affect on the surrounding wetland ecosystems. Other project specifics such as the staging of the excavated soils within the borrow areas, the inclusion of sediment control measures, and the compliance with all other storm water regulations, will also be implemented in order to keep any potential impacts to a minimum. Details regarding the soil borrow project design and implementation are included in the associated BAUP.

8.0 Works Cited

Adamus, P., et al. 2000. Indicators for monitoring biological integrity of inland, Freshwater wetlands: a survey of North American technical literature (1990-2000). US EPA.

Hecnar, S.J., and R.T. M'Closkey. 1996. Regional Dynamics and the status of amphibians. *Ecology*. 77: 2091-2097.

McMahon & Mann Consulting Engineers, P.C. 2011. Waste Management of New York Mill Seat Facility; 6 NYCRR Part 360 Solid Waste Management Permit Modification Application; Borrow Area Use Plan.

Stantec. February 2005. Biomonitoring Report; Mill Seat Landfill Site; Spring and Summer 2004.

U.S. Army Corps of Engineers, New England District. September 1999. The Highway Methodology Workbook Supplement, Wetland Functions and Values. NAEEP-360-1-30a.

Figures

Legend

 Road Centerline

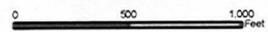
 Tax Parcel Boundary

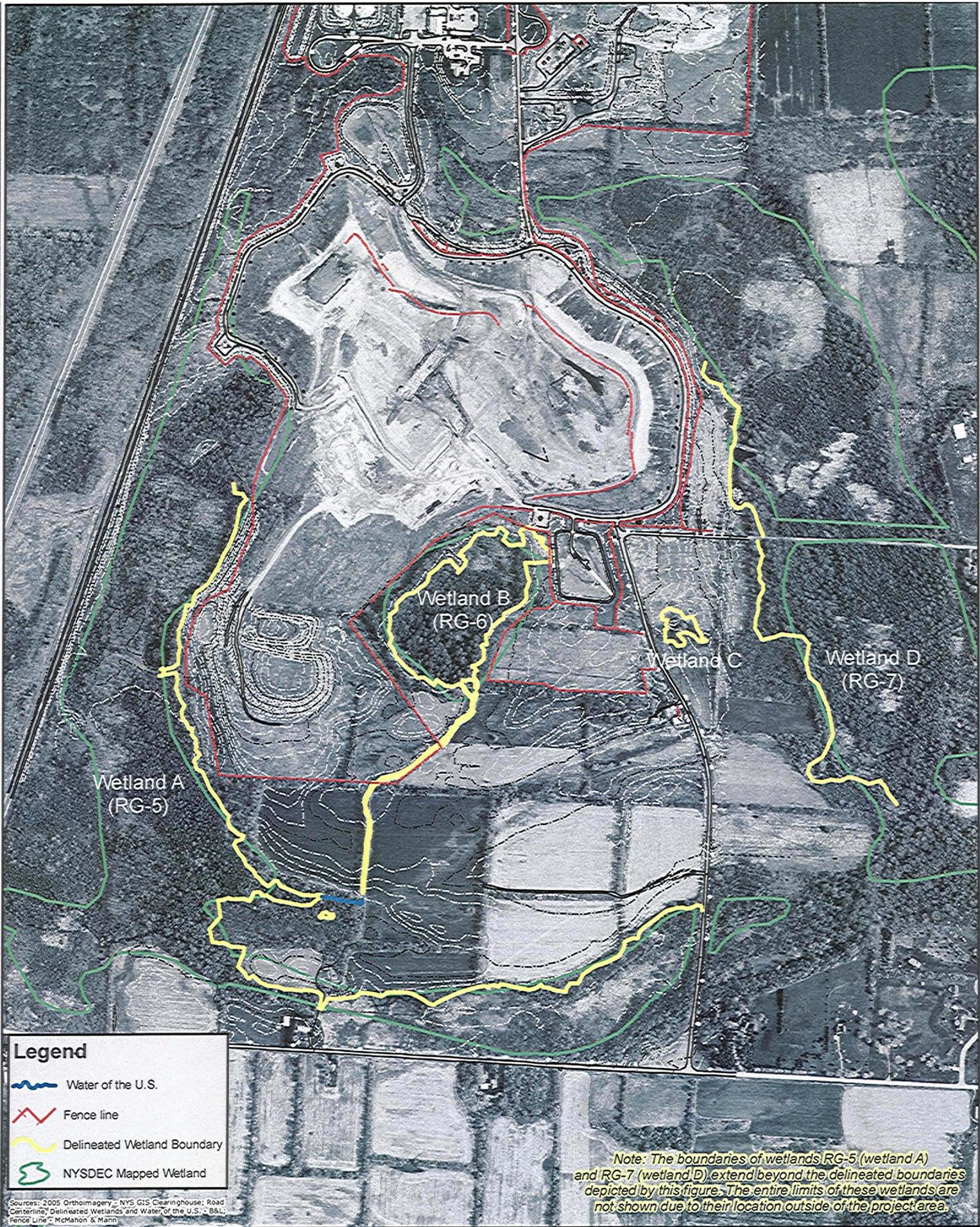
Property Owners

 Monroe County

 Waste Management (WM)

 Leased to WM by Monroe County



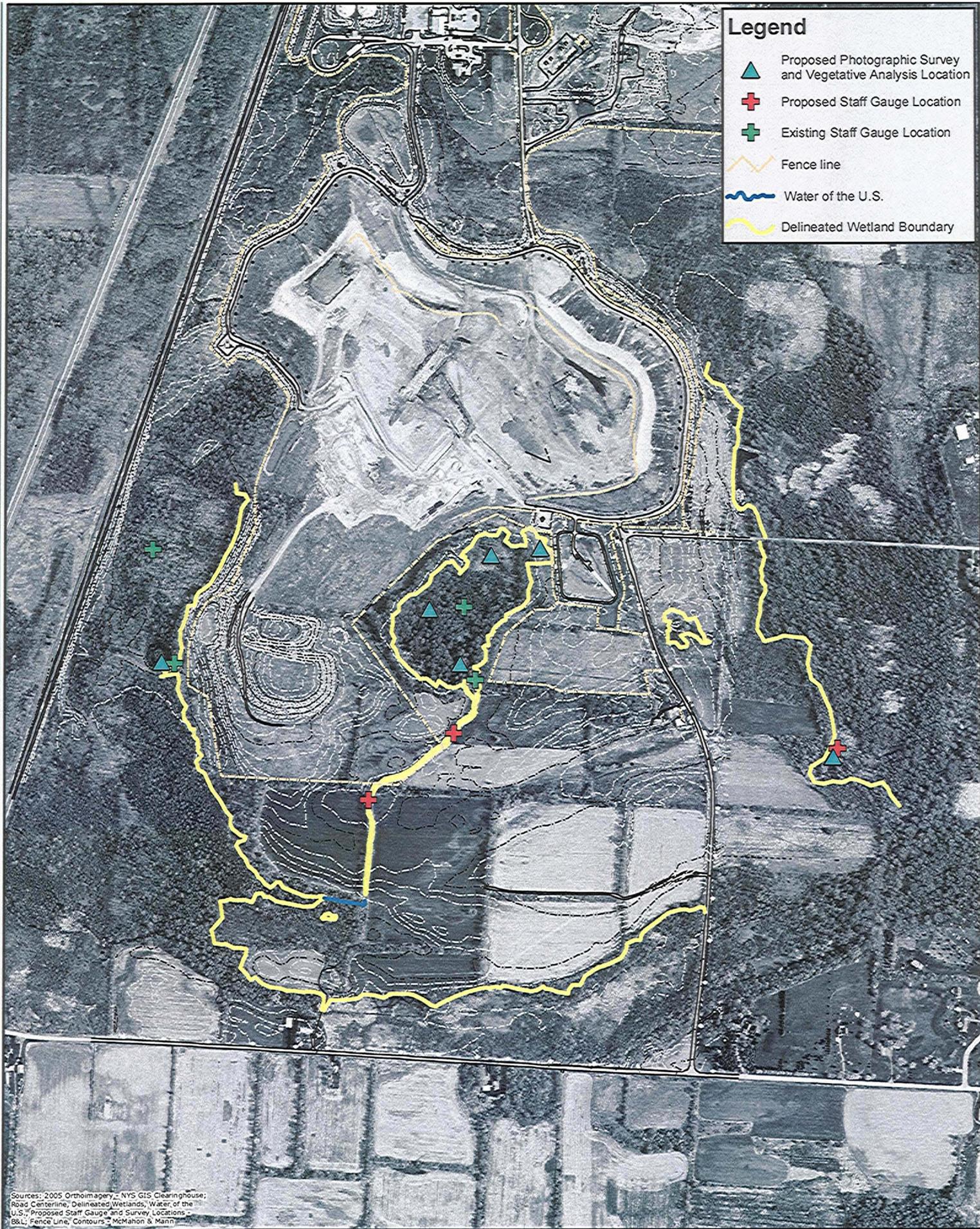


Legend

-  Water of the U.S.
-  Fence line
-  Delineated Wetland Boundary
-  NYSDEC Mapped Wetland

Sources: 2005 Orthoimagery - NYS GIS Clearinghouse; Road Centerline; Delineated Wetlands and Water of the U.S. - B&L; Fence Line - McMahon & Mann

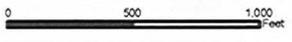
Note: The boundaries of wetlands RG-5 (wetland A) and RG-7 (wetland D) extend beyond the delineated boundaries depicted by this figure. The entire limits of these wetlands are not shown due to their location outside of the project area.



Legend

- ▲ Proposed Photographic Survey and Vegetative Analysis Location
- + Proposed Staff Gauge Location
- + Existing Staff Gauge Location
- Fence line
- Water of the U.S.
- Delineated Wetland Boundary

Sources: 2005 Orthomaps, NYS GIS Clearinghouse; Road Centerline; Delineated Wetlands; Water of the U.S.; Proposed Staff Gauge and Survey Locations - B&L; Fence Line, Contours - McMahon & Mann



Appendix A
Wetland Delineation Field Datasheets

SOILS

Map Unit Name (Series and Phase): <u>Churchville Silt Loam 0-2%</u>		Drainage Class: <u>Somewhat poorly</u>			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10 YR 3/2	10YR 3/6	MMD	Silt Loam
7-12+	B	10 YR 5/2	10YR 5/8	MLP	Silt Loam
Hydric Soil Indicators:					
_____ Histosol		_____ Concretions			
_____ Histic Epipedon		_____ High Organic Content in Surface Layer Sandy Soils			
_____ Sulfidic Odor		_____ Organic Streaking in Sandy Soils			
_____ Aquic Moisture Regime		_____ Listed on Local Hydric Soils List			
_____ Reducing Conditions		_____ Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		_____ Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	
Remarks:			
Wetland A is associated with NYSDEC mapped wetland RG-5 This wetland is also associated with Hotel Creek Wetland A starts parallel to the active cell on the landfill, heads south and then east, ar One farmland access was observed in the middle of Wetland A - a culvert provided for continued flow			

SOILS

Map Unit Name (Series and Phase): <u>Churchville Silt Loam 0-2%</u>		Drainage Class: <u>Somewhat poorly</u>			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10 YR 4/2	_____	_____	Silt Loam
8-16+	B	10 YR 5/2	10YR 5/6	FFF	Silt Loam
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
_____ Histosol		_____ Concretions			
_____ Histic Epipedon		_____ High Organic Content in Surface Layer Sandy Soils			
_____ Sulfidic Odor		_____ Organic Streaking in Sandy Soils			
_____ Aquic Moisture Regime		_____ Listed on Local Hydric Soils List			
_____ Reducing Conditions		_____ Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		_____ Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	
Remarks:			
Upland plot for Wetland A Wetland A is associated with NYSDEC mapped wetland RG-5			

SOILS

Wetland A (2)

Map Unit Name (Series and Phase): <u>Ed: Edwards Muck</u>		Drainage Class: <u>very poorly drained</u>			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10"	A	10 YR 2/1	-	-	sandy clay loam
10+"	B	10 YR 5/1	10 YR 5/8	CMD	sandy clay loam
Hydric Soil Indicators:					
	<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions		
	<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils		
	<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils		
	<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List		
	<input checked="" type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List		
	<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <p style="text-align: center;">hydric soil criteria met</p>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	
Wetland Hydrology Present?	Yes	No	(Circle)
Hydric Soils Present?	Yes	No	Is this Sampling Point Within a Wetland? Yes No
Remarks: Wetland A is associated with NYSDEC mapped wetland RG-5 Wetland A is associated with Hotel Creek and its on-site tributary Wetland A is a forested wetland throughout its western extent and turns into an emerge closer to Brew Road			

SOILS

Upl A (2)

Map Unit Name (Series and Phase): <u>Ed: Edwards Muck</u>		Drainage Class: <u>very poorly drained</u>			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-9"	A	10 YR 4/2	-	-	loam
9+"	B	10 YR 4/2	10 YR 3/4	CFF	clay loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <p style="text-align: center;">hydric soil criteria met</p>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	
Remarks:			

SOILS

Wetland B

Map Unit Name		Drainage Class:			
(Series and Phase): <u>ChA: Churchville silt loam, 0-2% slopes</u>		<u>SW poorly</u>			
Taxonomy (Subgroup): _____		Field Observations			
		Confirm Mapped Type? Yes No			
Profile Description:					
Depth	Horizon	Matrix Color	Mottle Color	Mottle	Texture, Concretions,
(Inches)		(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.
0-7"	A	10 YR 2/1	-	-	silt loam
7-12+"	B	10 YR 4/1	10 YR 5/6	MMD	sandy clay loam
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
_____	Histosol	_____	Concretions		
_____	Histic Epipedon	_____	High Organic Content in Surface Layer Sandy Soils		
_____	Sulfidic Odor	_____	Organic Streaking in Sandy Soils		
_____	Aquic Moisture Regime	_____	Listed on Local Hydric Soils List		
<u>X</u>	Reducing Conditions	_____	Listed on National Hydric Soils List		
<u>X</u>	Gleyed or Low-Chroma Colors	_____	Other (Explain in Remarks)		
Remarks:					
hydric soil criteria met					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	
Wetland Hydrology Present?	Yes	No	(Circle)
Hydric Soils Present?	Yes	No	Is this Sampling Point Within a Wetland? Yes No
Remarks:			
<p>Wetland B is associated with NYSDEC mapped wetland RG-6 this wetland drains south via a drainage channel flow from the nearby sediment pond is received into Wetland B Wetland B is located in a depressional area and receives the majority of its water from precipitation</p>			

SOILS

Upl B

Map Unit Name (Series and Phase): <u>ChA: Churchville silt loam, 0-2% slopes</u>		Drainage Class: <u>SW poorly</u>			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
<u>0-7"</u>	<u>A</u>	<u>10 YR 3/1</u>	<u>-</u>	<u>-</u>	<u>silt loam</u>
<u>7-12+"</u>	<u>B</u>	<u>10 YR 5/2</u>	<u>10 YR 6/4</u>	<u>CMF</u>	<u>sandy loam</u>
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Gleyed or Low-Chroma Colors
<input type="checkbox"/> Concretions	<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils	<input type="checkbox"/> Organic Streaking in Sandy Soils	<input type="checkbox"/> Listed on Local Hydric Soils List	<input type="checkbox"/> Listed on National Hydric Soils List	<input type="checkbox"/> Other (Explain in Remarks)
Remarks: <p style="text-align: center;">hydric soil criteria met</p>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	
Remarks:			

SOILS

Map Unit Name (Series and Phase): <u>Lakemont silt loam, loamy subsoil variant - Lk</u>		Drainage Class: <u>Poorly</u>			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10 YR 2/1	-	-	Silt Loam
6-12+	B	10 YR 5/2	10YR 5/6	MMD	Sandy Clay Loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input checked="" type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	
Remarks:			
Wetland B is located in the center of the inspected area and drains south via a drainage channel			
Wetland B is associated with NYSDEC mapped wetland RG-6			
Wetland B receives flow from the sediment pond located immediately to the east of the wetland boundary			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site _____ Mill Seat Landfill	Date: 11/14/2008
Applicant/Owner _____ Waste Management of NY	County: Monroe
Investigator _____ James Saxton	State: New York
Do Normal Circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID: JB
Is the site significantly disturbed (Atypical Situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: 1
Is the area a potential Problem Area? (If needed, explain on reverse) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: Wet C

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Fraxinus pennsylvanica	Tree	FACW	9 _____	_____	_____
2 Cornus stolonifera	Shrub	FACW+	10 _____	_____	_____
3 Cornus racemosa	Shrub	FAC	11 _____	_____	_____
4 Aster spp.	Herb	FAC-OBL	12 _____	_____	_____
5 Vitis riparia	Vine	FACW	13 _____	_____	_____
6 Eupatoriadelphus maculatus	Herb	FACW	14 _____	_____	_____
7 Toxicodendron radicans	Vine	FAC	15 _____	_____	_____
8 _____	_____	_____	16 _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC
(excluding FAC -) 100%

Remarks:

HYDROLOGY

<p>Recorded Data (Describe in Remarks)</p> <p>_____ Steam, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: _____ 0 (in.)</p> <p>Depth of Free Water in Pit: _____ 8 (in.)</p> <p>Depth to Saturated Soil: _____ 8 (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p>_____ Inundated</p> <p><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p>_____ Water Marks</p> <p>_____ Drift Lines</p> <p>_____ Sediment Deposits</p> <p>_____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p>_____ Oxidized Root Channels in Upper 12 Inches</p> <p>_____ Water-Stained Leaves</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>
Remarks:	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Mill Seat Landfill</u>	Date: <u>11/14/2008</u>
Applicant/Owner: <u>Waste Management of NY</u>	County: <u>Monroe</u>
Investigator: <u>James Saxton</u>	State: <u>New York</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>JB</u>
Is the site significantly disturbed (Atypical Situation)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Transect ID: <u>1</u>
Is the area a potential Problem Area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If needed, explain on reverse)	Plot ID: <u>Upl C</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Fraxinus pennsylvanica	Tree	FACW	9		
2 Lonicera tatarica	Shrub	FACU	10		
3 Cornus stolonifera	Shrub	FACW+	11		
4			12		
5			13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 67%

Remarks:

HYDROLOGY

<p>Recorded Data (Describe in Remarks)</p> <p><input type="checkbox"/> Steam, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth of Free Water in Pit: <u>>16</u> (in.)</p> <p>Depth to Saturated Soil: <u>14</u> (in.)</p>	
Remarks:	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Mill Seat Landfill</u>	Date: <u>11/14/2008</u>
Applicant/Owner: <u>Waste Management of NY</u>	County: <u>Monroe</u>
Investigator: <u>James Saxton</u>	State: <u>New York</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>J</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>1</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse)	Plot ID: <u>Wet D</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Populus deltoides</u>	<u>Tree</u>	<u>FAC</u>	9 _____	_____	_____
2 <u>Cornus stolonifera</u>	<u>Shrub</u>	<u>FACW+</u>	10 _____	_____	_____
3 <u>Phalaris arundinacea</u>	<u>Herb</u>	<u>FACW+</u>	11 _____	_____	_____
4 <u>Leersia oryzoides</u>	<u>Herb</u>	<u>OBL</u>	12 _____	_____	_____
5 <u>Onoclea sensibilis</u>	<u>Herb</u>	<u>FACW</u>	13 _____	_____	_____
6 <u>Juncus effusus</u>	<u>Herb</u>	<u>FACW+</u>	14 _____	_____	_____
7 _____	_____	_____	15 _____	_____	_____
8 _____	_____	_____	16 _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100%

Remarks:

HYDROLOGY

<p>Recorded Data (Describe in Remarks)</p> <p><input type="checkbox"/> Steam, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p> <p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth of Free Water in Pit: <u>2</u> (in.)</p> <p>Depth to Saturated Soil: <u>0</u> (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p><input type="checkbox"/> Inundated</p> <p><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input checked="" type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: <u>Areas slopes up from wetland area.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Lakemont</u>		Drainage Class: <u>somewhat poorly</u>			
Taxonomy (subgroup): <u>Udolic endoaqualfs</u>		Field Observations Confirm mapped type? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Profile Description					
Depth (inches)	Horizon	Matrix Color (Munsell moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR5/1	7.5YR5/8	many, fine distinct many medium	crumb, mucky silt loam
4+	B	10YR6/1	10YR6/8	prominent	msbk, heavy silt loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Remarks:			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site _____ Mill Seat Landfill	Date: 11/14/2008
Applicant/Owner _____ Waste Management of NY	County: Monroe
Investigator _____ James Saxton	State: New York
Do Normal Circumstances exist on the site? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Community ID: J
Is the site significantly disturbed (Atypical Situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: 1
Is the area a potential Problem Area? (If needed, explain on reverse) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: Upl D

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Dipsacus sylvestris	Herb	NI	9 _____		
2 Solidago canadensis	Herb	FACU	10 _____		
3 Phalaris arundinacea	Herb	FACW+	11 _____		
4 Lonicera tatarica	Shrub	FACU	12 _____		
5 _____			13 _____		
6 _____			14 _____		
7 _____			15 _____		
8 _____			16 _____		

Percent of Dominant Species that are OBL, FACW or FAC
(excluding FAC -) 33%

Remarks:

HYDROLOGY

<p>Recorded Data (Describe in Remarks)</p> <p>_____ Steam, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p> <p>Field Observations:</p> <p>Depth of Surface Water: _____ 0 (in.)</p> <p>Depth of Free Water in Pit: _____ >16 (in.)</p> <p>Depth to Saturated Soil: _____ >16 (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p>_____ Inundated</p> <p>_____ Saturated in Upper 12 Inches</p> <p>_____ Water Marks</p> <p>_____ Drift Lines</p> <p>_____ Sediment Deposits</p> <p>_____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p>_____ Oxidized Root Channels in Upper 12 Inches</p> <p>_____ Water-Stained Leaves</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>
Remarks: Areas slopes up from wetland area.	

SOILS

Map Unit Name (Series and Phase): <u>Lakemont</u>		Drainage Class: <u>somewhat poorly</u>
Taxonomy (subgroup): <u>Udolic endoaqualfs</u>		Field Observations Confirm mapped type? <u>Yes</u> <input type="checkbox"/> NO <input checked="" type="checkbox"/>

Profile Description					
Depth (inches)	Horizon	Matrix Color (Munsell moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5		10YR5/2	None		crumb, silt loam
5-9	A	10YR4/2	10YR5/6	few fine faint	wsbk, silt loam
9+	B	10YR4/3	10YR6/6	common, fine faint	msbk, heavy silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: Area appears to have received fill many years ago. Soils exhibited a thin (5-8 inch thick) veneer of mixed soil fill.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	<input type="checkbox"/> NO <input checked="" type="checkbox"/>	Is this Sampling Point Within a Wetland? Yes <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes	<input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Hydric Soils Present?	Yes	<input type="checkbox"/> NO <input checked="" type="checkbox"/>	

Remarks: Area appears to have received fill many years ago. Soils exhibited a thin (5-8 inch thick) veneer of mixed soil fill. This situation has no effect on the wetland determination for this location.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Mill Seat Landfill</u> Applicant/Owner: <u>Waste Management of NY</u> Investigator: <u>James Saxton</u>	Date: <u>11/14/2008</u> County: <u>Monroe</u> State: <u>New York</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse)	Community ID: <u>WL</u> Transect ID: <u>1</u> Plot ID: <u>Wet D (2)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Fraxinus pennsylvanica</u>	<u>Tree</u>	<u>FACW</u>	9 _____	_____	_____
2 <u>Acer saccharinum</u>	<u>Tree</u>	<u>FACW</u>	10 _____	_____	_____
3 <u>Acer rubrum</u>	<u>Tree</u>	<u>FAC</u>	11 _____	_____	_____
4 <u>Toxicodendron radicans</u>	<u>Vine</u>	<u>FAC</u>	12 _____	_____	_____
5 <u>Lindera benzoin</u>	<u>Shrub</u>	<u>FACW-</u>	13 _____	_____	_____
6 <u>Quercus bicolor</u>	<u>Tree</u>	<u>FACW+</u>	14 _____	_____	_____
7 _____	_____	_____	15 _____	_____	_____
8 _____	_____	_____	16 _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -): 100%

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks) <input type="checkbox"/> Steam, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators Primary Indicators <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required) <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth of Free Water in Pit: <u>2</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	
Remarks:	

SOILS

Map Unit Name		Lakemont		Drainage Class:	
(Series and Phase):				Field Observations	
Taxonomy (subgroup):				Confirm mapped type? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Profile Description					
Depth (Inches)	Horizon	Matrix Color (Munsell moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR5/1	7.5YR5/6	common, fine distinct many, large	crumb, mucky silt loam
5+	B	10YR6/1	10YR6/8	prominent	msbk, heavy silt loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Remarks:			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site Applicant/Owner Investigator	Mill Seat Landfill Waste Management of NY James Saxton	Date:	11/14/2008
		County:	Monroe
		State:	New York
Do Normal Circumstances exist on the site?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID:	WL
Is the site significantly disturbed (Atypical Situation)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID:	1
Is the area a potential Problem Area? (If needed, explain on reverse)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID:	Upl D (2)

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Acer saccharum	Tree	FACU	9		
2 Prunus serotina	Tree	FACU	10		
3 Fraxinus pennsylvanica	Tree	FACW	11		
4 Lonicera tatarica	Shrub	FACU	12		
5 Rubus idaeus	Shrub	FAC-	13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW or FAC
(excluding FAC -) 20%

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks) <input type="checkbox"/> Steam, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required) <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth of Free Water in Pit: <u>>16</u> (in.) Depth to Saturated Soil: <u>>16</u> (in.)	
Remarks: Areas slopes up from wetland area.	

Appendix B

Highway Methodology Workbook Supplement Wetland Function and Value Evaluation Form

Wetland Function-Value Evaluation Form

Wetland I.D. _____
 Latitude _____ Longitude _____
 Prepared by: _____ Date _____
 Wetland Impact: _____ Area _____
 Evaluation based on:
 Office _____ Field _____
 Corps manual wetland delineation
 completed? Y _____ N _____

Total area of wetland _____ Human made? _____ Is wetland part of a wildlife corridor? _____ or a "habitat island"? _____
 Adjacent land use _____ Distance to nearest roadway or other development _____
 Dominant wetland systems present _____ Contiguous undeveloped buffer zone present _____
 Is the wetland a separate hydraulic system? _____ If not, where does the wetland lie in the drainage basin? _____
 How many tributaries contribute to the wetland? _____ Wildlife & vegetation diversity/abundance (see attached list) _____

Function/Value	Suitability Y N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge				
 Floodflow Alteration				
 Fish and Shellfish Habitat				
 Sediment/Toxicant Retention				
 Nutrient Removal				
 Production Export				
 Sediment/Shoreline Stabilization				
 Wildlife Habitat				
 Recreation				
 Educational/Scientific Value				
 Uniqueness/Heritage				
 Visual Quality/Aesthetics				
ES Endangered Species Habitat				
Other				

Notes: _____
 * Refer to backup list of numbered considerations.

Appendix C

Wildlife Observation List (Compiled from Previous Biomonitoring Efforts at the Mill Seat Landfill Facility)

Wildlife Species Observed or Expected
Results from Biomonitoring events at Mill Seat Landfill (2003&2004)

Birds

Great blue heron
Green heron
Turkey vulture
Red-tailed hawk
Cooper's hawk
Broad-winged hawk
American kestrel
Ruffed grouse
American woodcock
Eastern screech owl
Great horned owl
Wild turkey
Killdeer
Ring-billed gull
American bittern
Rock dove
Mourning dove
Ruby-throated hummingbird
Red-bellied woodpecker
Yellow-bellied sapsucker
Downy woodpecker
Northern flicker
Eastern wood-pewee
Willow flycatcher
Least flycatcher
Great crested flycatcher
Warbling vireo
Red-eyed vireo
Blue jay
American crow
Barn swallow
Black-capped chickadee
Tufted titmouse
White-breasted nuthatch
Brown creeper
Wood thrush
American Robin
Gray catbird
European starling
Cedar waxwing
Yellow warbler

Magnolia warbler
American redstart
Common yellowthroat
Eastern towhee
Song sparrow
Swamp sparrow
Dark-eyed junco
Northern cardinal
Rose-breasted grosbeak
Indigo bunting
Red-winged blackbird
Common grackle
Baltimore oriole
American goldfinch
Mallard
Wood duck
Black-billed cuckoo
Red-headed woodpecker
Eastern phoebe
Eastern kingbird
Veery
Chestnut-sided warbler
Yellow-rumped warbler
Black-throated green warbler

Mammals

Raccoon
Striped skunk
Coyote
Red fox
Opossum
Woodchuck
Muskrat
Porcupine
Eastern chipmunk
Eastern gray squirrel
Red squirrel
Meadow jumping mouse
Eastern cottontail rabbit
White tail deer

Amphibians/Reptiles

Jefferson salamander

Eastern American toad

Eastern gray treefrog

Spring peeper

Bullfrog

Western chorus frog

Green frog

Leopard frog

Common garter snake

Northern red-bellied snake

Northern brown snake