APPENDIX A

U.S. ARMY CORPS OF ENGINEERS DATA SHEETS

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W3-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Poa pratensis	H	80	FAC-	1. Geum macrophyllum	H	<5	FACW+
2. Solidago canadensis	H	20	FACU	2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MORLEY SILT LOAM, 2-6% SLOPES Drainage Class WD

Taxonomy (Subgroup) TYPIC HAPLUDALFS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-11		10YR3/2	-	-	SICL
11>18		10YR5/4	-	-	SICL

Hydric Soil Indicators:

_____Histosol
_____Histic Epipedon
_____Sulfidic Odor
_____Aquic Moisture Regime
_____Reducing Conditions
_____Gleyed or Low-Chroma Colors
_____Concretions
_____High Organic Content in Surface Layer in Sandy Soil
_____Organic Streaking in Sandy Soils
_____Listed on Local Hydric Soils List
_____Listed on National Hydric Soils List
_____Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W3-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1. Viburnum lentago	S	<5	FAC+
2. Acer saccharinum	T	50	FACW	2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____Recorded Data (Describe in Remarks)
_____Stream, Lake, or Tide Gauge
__X__Aerial Photographs
_____Other
_____No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____Inundated
_____Saturated in Upper 12 inches
_____Water Marks
_____Drift Lines
_____Sediment Deposits
_____Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____Oxidized Root Channels
_____Water-Stained Leaves
__X__Local Soil Survey Data
__X__FAC-Neutral Test
_____Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR3/1	-	-	SIL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Wetland Hydrology Present	(Yes)	No			
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W3-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	95	FACW+	1. Typha x glauca	H	5	OBL
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
__X__ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	7.5YR 5/8	ROOT CHANNELS FEW/PROMINENT	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? (Yes) No LANDFILL GRADING	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W3-P4

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	60	FACW+	1. Agrostis gigantea	H	10	FACW
2. Poa pratensis	H	20	FAC-	2. Taraxacum officinale	H	<5	FACU
3.				3. Daucus carota	H	<5	UPL
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 50%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: SAMPLE POINT IS APPROX. 24 INCHES HIGHER THAN ADJACENT WETLAND.

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

SOILS

Map Unit Name:

(Series and Phase): ELLIOTT SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		10YR3/1	—	—	SICL
10>18		2.5Y 5/3	—	—	SICL

Hydric Soil Indicators:

____ Histosol	____ Concretions
____ Histic Epipedon	____ High Organic Content in Surface Layer in Sandy Soil
____ Sulfidic Odor	____ Organic Streaking in Sandy Soils
____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
____ Reducing Conditions	____ Listed on National Hydric Soils List
____ Gleyed or Low-Chroma Colors	____ Other

Remarks:

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland	Yes	(No)
Hydric Soils Present	Yes	(No)			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W3-PS

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	40	FACW+	1.			
2. Eleocharis palustris	H	40	OBL	2.			
3. Eutrania graminifolia	H	20	FACW-	3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10YR 2/1	—	—	SICL
6>18		5Y 7/4	10YR 5/8	FEW/PROMINENT	C

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: F 2 LOAMY GLEYED MATRIX

WETLAND DETERMINATION

	(Circle)		(Circle)	
Hydrophytic Vegetation Present	(Yes)	No		
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes) No
Hydric Soils Present	(Yes)	No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W3-P6

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Tritium aestivum	H	80	UPL	1. Sonchus arvensis	H	10	FAC-
2.				2. Glycine max	H	5	UPL
3.				3. Taraxacum officinale	H	5	FACU
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR2/1	-	-	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	(Yes) No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	80	FACW+	1. Eutrannia graminifolia	H	<5	FACW-
2. Solidago canadensis	H	20	FACU	2. Sonchus arvensis	H	<5	FAC-
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 50%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-14		10YR 2/1	—	—	SICL
14>18		10YR 2/1	5Y 5/3	COMMON/PROMINENT	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	___ Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: F3 DEPLETED MATRIX

WETLAND DETERMINATION

	(Circle)		
Hydrophytic Vegetation Present	(Yes)	No	(Circle)
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland (Yes) No
Hydric Soils Present	(Yes)	No	

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Solidago canadensis	H	20	FACU	1. Aster ericoides	H	<5	FACU-
2. Solidago gigantea	H	20	FACW	2. Melilotus alba	H	<5	FACU
3. Taraxacum officinale	H	20	FACU	3. Daucus carota	H	<5	UPL
4. Festuca arundinacea	H	20	FACU+	4. Geum laciniatum	H	<5	FACW
5. Phalaris arundinacea	H	20	FACW+	5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 40%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 2/1	—	—	SICL
12>24		5Y 3/2	—	—	CL

Hydric Soil Indicators:

_____ Histosol	_____ Concretions
_____ Histic Epipedon	_____ High Organic Content in Surface Layer in Sandy Soil
_____ Sulfidic Odor	_____ Organic Streaking in Sandy Soils
_____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
_____ Reducing Conditions	X Listed on National Hydric Soils List
_____ Gleyed or Low-Chroma Colors	_____ Other

Remarks: F 3 DEPLETED MATRIX

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)		
Wetland Hydrology Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	(Yes) No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No EARTHWORK	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? (Yes) No IN AREA, FILL	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Festuca arundinacea	H	40	FACU+	1. Rumex crispus	H	10	FAC+
2. Solidago canadensis	H	20	FACU	2. Medicago sativa	H	10	UPL
3. Agrostis gigantea	H	20	FACW	3. Taraxacum officinale	H	<5	FACU
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ELLIOTT SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	—	—	SIL, FILL AREA

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE
SOIL APPEARS TO BE AN ASHKUM INCLUSION PROFILE.

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes	(No)	
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland Yes (No)
Hydric Soils Present	(Yes)	No	

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P4

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Poa pratensis	H	40	FAC-	1. Agrostis gigantea	H	10	FACW
2. Helianthus grosseserratus	H	20	FACW-	2. Aster novae-angliae	H	<5	FACW
3. Euthamia graminifolia	H	20	FACW-	3. Aster pilosus	H	<5	FACU+
4.				4. Solidago riddellii	H	<5	OBL
5.				5. Scirpus pendulus	H	<5	OBL
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
___ Stream, Lake, or Tide Gauge
X Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
___ Inundated
___ Saturated in Upper 12 inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
___ Oxidized Root Channels
___ Water-Stained Leaves
X Local Soil Survey Data
X FAC-Neutral Test
___ Other (explain in remarks)

Remarks: TOPOGRAPHIC LOW AREA

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-11		10YR 2/1	—	—	SICL
11+18		5Y 5/1	2.5Y 6/8	MANY/PROMINENT	C

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)	
Hydrophytic Vegetation Present	(Yes)	No
Wetland Hydrology Present	(Yes)	No
Hydric Soils Present	(Yes)	No

Is This Sampling Point in a Wetland (Circle) (Yes) No

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P5

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	40	UPL	1. Taraxacum officinale	H	5	FACU
2. Medicago sativa	H	40	UPL	2. Daucus carota	H	5	UPL
3.				3. Solidago canadensis	H	<5	FACU
4.				4. Ambrosia artemisiifolia	H	<5	FACU
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		10YR 3/2	—	—	SIL
10>18		10YR 5/8	—	—	SIL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P6

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Spartina pectinata	H	80	FACW+	1. Monarda fistulosa	H	5	FACU
2.				2. Silphium terebinthinaceum	H	5	FACU
3.				3. Aster firmus	H	<5	FACW+
4.				4. Helianthus grosseserratus	H	5	FACW-
5.				5. Euthamia graminifolia	H	<5	FACW-
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >12 (in)
Depth to Saturated Soil: >12 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
__X__ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>12		N2.5/0			MUCK

Hydric Soil Indicators:

X Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks: A1 HISTOSOL

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P7

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	80	UPL	1. Taraxacum officinale	H	10	FACU
2.				2. Glycine max	H	10	UPL
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: > 18 (in)
Depth to Saturated Soil: > 18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		10YR 3/2	-	-	SICL
10>18		5Y 5/1	5Y 5/8	MANY/PROMINENT	CL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A11 DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)
Hydrophytic Vegetation Present	Yes	(No)		
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	(Yes)	No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W4-P8

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	80	FACW+	1.			
2. Typha x glauca	H	20	OBL	2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >12 (in)
Depth to Saturated Soil: 3 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
__X__ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>12		N 2.5/0	—	—	MUCK

Hydric Soil Indicators:

X Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks: A1 HISTOSOL

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? (Yes) No (FARMED WETLAND)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: WS-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	30	UPL	1. Pennesetum glaucum	H	10	FAC+
2. Thlaspi arvense	H	30	UPL	2. Daucus carota	H	5	UPL
3.				3. Fragaria virginiana	H	5	FAC-
4.				4. Poa pratensis	H	<5	FAC-
5.				5. Solidago canadensis	H	<5	FACU
6.				6. Sonchus arvensis	H	<5	FAC-
7.				7. Taraxacum officinale	H	<5	FACU
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: TOPOGRAPHIC LOW AREA

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-14		10YR2/1	—	—	SICL
14>18		50% 10YR2/1	—	—	SICL
		50% 10YR3/3	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill
Date: October 27, 2005
Applicant/Owner: Onyx Waste Services
County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman
State: Wisconsin

Do normal circumstances exist on this site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? (Yes) No MAN-INDUCED DUE TO NEW DRAIN PATTERNS
Is the site a potential problem area? Yes (No)
Community ID: WETLAND
Transect ID:
Plot ID: W6A-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Typha x glauca	H	20	OBL	1. Bidens cernuus	H	10	FACW
2. Echinochloa crusgalli	H	60	FACW	2. Setaria viridis	H	10	FAC-
3.				3. Aster lanceolatus	H	<5	FACW
4.				4. Polygonum hydropiper	H	<5	OBL
5.				5. Alisma subcordatum	H	<5	OBL
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: TOPOGRAPIC LOW AREA

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 2/1	–	–	SICL
12		5GY 7/1	10YR 6/8	MANY/PROMINENT	C (~1/4 IN. THICK)
12+18		10YR 2/1	–	–	C

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A11 DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W6A-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Daucus carota	H	40	UPL	1. Aster lanceolatus	H	10	FACW
2. Medicago sativa	H	20	UPL	2. Aster pilosus	H	10	FACU+
3. Taraxacum officinale	H	20	FACU	3. Trifolium hybridum	H	<5	FAC-
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)	Wetland Hydrology Indicators
_____ Stream, Lake, or Tide Gauge	Primary Indicators
__X__ Aerial Photographs	_____ Inundated
_____ Other	_____ Saturated in Upper 12 inches
_____ No Recorded Data Available	_____ Water Marks
	_____ Drift Lines
	_____ Sediment Deposits
	_____ Drainage Patterns in Wetlands
Field Observations:	Secondary Indicators (2 or more required)
Depth of Surface Water: 0 (in)	_____ Oxidized Root Channels
Depth to Free Water in Pit: >18 (in)	_____ Water-Stained Leaves
Depth to Saturated Soil: >18 (in)	_____ Local Soil Survey Data
	_____ FAC-Neutral Test
	_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR 3/1	—	—	SICL
4>18		10YR 4/3	—	—	SIL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W6-P1 ; W6A-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	40	UPL	1.			
2. Plantago major	H	20	FAC+	2.			
3. Taraxacum officinale	H	20	FACW	3.			
4. Daucus carota	H	20	UPL	4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 25%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ELLIOTT SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10YR 3/1	—	—	SICL
6>18		10YR 3/3	—	—	SIL

Hydric Soil Indicators:

____ Histosol	____ Concretions
____ Histic Epipedon	____ High Organic Content in Surface Layer in Sandy Soil
____ Sulfidic Odor	____ Organic Streaking in Sandy Soils
____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
____ Reducing Conditions	____ Listed on National Hydric Soils List
____ Gleyed or Low-Chroma Colors	____ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		
Hydrophytic Vegetation Present	Yes	(No)	
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland (Circle) Yes (No)
Hydric Soils Present	Yes	(No)	

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W6-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	90	FACW+	1. Scirpus fluviatilis	H	<5	OBL
2. Salix exigua	S	50	OBL	2. Aster lanceolatus	H	5	FACW
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: TOPOGRAPHIC DEPRESSION

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

SOILS

Map Unit Name:

(Series and Phase): ELLIOTT SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		10YR 2/1	–	–	SICL
3>18		5Y 6/3	10YR 6/8	MANY/PROMINENT	CL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: F2 LOAMY GLEYED MATRIX

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W6-P3; W7-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	50	UPL	1. Pennesetum glaucum	H	< 5	FACU
2. Taraxacum officinale	H	20	FACU	2. Poa pratensis	H	< 5	FAC-
3. Daucus carota	H	20	UPL	3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ELLIOTT SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		10YR 4/3	—	—	SIL
3>18		10YR 3/3	—	—	SIL

Hydric Soil Indicators:

____ Histosol	____ Concretions
____ Histic Epipedon	____ High Organic Content in Surface Layer in Sandy Soil
____ Sulfidic Odor	____ Organic Streaking in Sandy Soils
____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
____ Reducing Conditions	____ Listed on National Hydric Soils List
____ Gleyed or Low-Chroma Colors	____ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)		
Wetland Hydrology Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? (Yes) No FARMED WETLAND	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W7-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	40	UPL	1. Phalaris arundinacea	H	10	FACW+
2. Scirpus fluviatilis	H	20	OBL	2. Rumex crispus	H	<5	FAC+
3. Cyperus esculentus	H	20	FACW	3. Taraxacum officinale	H	<5	FACU
4.				4. Ambrosia trifida	H	<5	FAC+
5.				5. Daucus carota	H	<5	UPL
6.				6. Pennesetum glaucum	H	<5	FAC+
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
__X__ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: TOPOGRAPHIC DEPRESSION

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

SOILS

Map Unit Name:

(Series and Phase): ELLIOTT SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		2.5Y 5/2	—	—	SICL
8>18		10YR 2/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A11 DEPLETED BELOW DARK SURFACE
PROFILE FITS ASHKUM SILTY CLAY INCLUSIONS.

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Wetland Hydrology Present	(Yes)	No			
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W7-PZ

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Aster ericoides	H	30	FACU-	1. Phalaris arundinacea	H	10	FACW+
2. Hordeum jubatum	H	20	FAC+	2.			
3. Taraxacum officinale	H	20	FACU	3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MORLEY SILT LOAM Drainage Class WD

Taxonomy (Subgroup) TYPIC HAPLUDALFS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 3/1	—	—	SIL
8>18		2.5Y 6/3	10YR 6/8	COMMON/PROMINENT	SL

Hydric Soil Indicators:

_____Histosol
_____Histic Epipedon
_____Sulfidic Odor
_____Aquic Moisture Regime
_____Reducing Conditions
_____Gleyed or Low-Chroma Colors
_____Concretions
_____High Organic Content in Surface Layer in Sandy Soil
_____Organic Streaking in Sandy Soils
_____Listed on Local Hydric Soils List
_____Listed on National Hydric Soils List
_____Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Poa pratensis	H	90	FAC-	1. Solidago canadensis	H	5	FACU
2.				2. Helianthus grosseserratus	H	5	FACW-
3.				3. Geum macrophyllum	H	<5	FACW+
4.				4. Solidago gigantea	H	<5	FACW
5.				5. Achillea millifolium	H	<5	FACU
6.				6. Fragaria virginiana	H	<5	FAC-
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MORLEY SILT LOAM, ERODED Drainage Class: W D

Taxonomy (Subgroup): TYPIC HAPLUDALFS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 3/1	—	—	SICL
8>20		2.5Y 5/4	—	—	CL

Hydric Soil Indicators:

_____Histosol
_____Histic Epipedon
_____Sulfidic Odor
_____Aquic Moisture Regime
_____Reducing Conditions
_____Gleyed or Low-Chroma Colors
_____Concretions
_____High Organic Content in Surface Layer in Sandy Soil
_____Organic Streaking in Sandy Soils
_____Listed on Local Hydric Soils List
_____Listed on National Hydric Soils List
_____Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9-PZ

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris aruridinacea	H	90	FACW+	1. Carex lacustris	H	10	OBL
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): ASHKUM SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 2/1	—	—	SICL
8>18		10YR 2/1	5GY 5/1 DEPLETIONS 10YR 5/8 REDOX	MANY/PROMINENT FEW/PROMINENT	CL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: ALL DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)		
Hydrophytic Vegetation Present	(Yes)	No	
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland (Yes) No
Hydric Soils Present	(Yes)	No	

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9A-PF

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Poa pratensis	H	90	FAC-	1. Daucus carota	H	5	UPL
2.				2. Aster pilosus	H	5	FACU+
3.				3. Spartina pectinata	H	<5	FACW+
4.				4. Euthamia graminifolia	H	<5	FACW-
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class SPD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10YR 2/1	—	—	SIL
6>18		5Y 5/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: ALL DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	(Yes) No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 26, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9A-P2-

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1. Carex stricta	H	<5	OBL
2.				2. Solidago gigantea	H	<5	FACW
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A 12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Wetland Hydrology Present	(Yes)	No			
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Solidago canadensis	H	30	FACU	1. Daucus carota	H	<5	UPL
2. Melilotus alba	H	30	FACU	2. Euthamia graminifolia	H	<5	FACW-
3. Ambrosia trifida	H	20	FAC+	3.			
4. Cirsium arvense	H	20	FACU	4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 25%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR2/1	-	-	SIL
8>18		2.5Y5/3	-	-	SIL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9-P4

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	80	FACW+	1.			
2. Helianthus grosseserratus	H	20	FACW-	2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR 2/1	—	—	SIC
4>18		5GY 6/1	10YR 6/8	COMMON/PROMINENT	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: F 2 LOAMY GLEYED MATRIX

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Wetland Hydrology Present	(Yes)	No			
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9-PS

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	100	UPL	1. Taraxacum officinale	H	<5	FACU
2.				2. Daucus carota	H	<5	UPL
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-14		10YR 3/1	—	—	SIL
14>18		2.5Y 6/2	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)		
Wetland Hydrology Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	(Yes) No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 27, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W9 - P6

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	100	UPL	1. Phalaris arundinacea	H	<5	FACW+
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%*

Remarks: FARMED WETLAND; *WEEDS ARE WETLAND SPECIES

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >12 (in)
Depth to Saturated Soil: >12 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MUSKEGO MUCK Drainage Class VPD

Taxonomy (Subgroup) Limnic Medisaprists Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>12		N 2.5/0	-	-	MUCK

Hydric Soil Indicators:

X Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks: A1 HISTOSOL

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Wetland Hydrology Present	(Yes)	No			
Hydric Soils Present	(Yes)	No			

Remarks: ACTIVELY FARMED WETLAND

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	90	UPL	1. Glycine max	H	5	UPL
2.				2. Taraxacum officinale	H	5	FACU
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR2/1	—	—	SIL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)
Hydrophytic Vegetation Present	Yes	(No)		
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	(Yes)	No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 25, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Rachel Veltman	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1.			
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		10YR 2/1	—	—	SiCL
16>18		N 4/0	—	—	Cl

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 — THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	95	UPL	1. Glycine max	H	5	UPL
2.				2. Plantago major	H	<5	FAC+
3.				3. Taraxacum officinale	H	<5	FACU
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 3/1	—	—	SICL
8>18		5Y 5/2	10YR 6/8	COMMON/PROMINENT	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A11 DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)		
Wetland Hydrology Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	(Yes) No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-P4

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1. Helianthus grosseserratus	H	<5	FACW-
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-PS

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	95	UPL	1. Glycine max	H	5	UPL
2.				2. Sonchus arvensis	H	<5	FAC-
3.				3. Taraxacum officinale	H	<5	FACU
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MARTINTON SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5		10YR 2/1	-	-	SIL
5>18		10YR 3/2	-	-	SIL

Hydric Soil Indicators:

_____ Histosol	_____ Concretions
_____ Histic Epipedon	_____ High Organic Content in Surface Layer in Sandy Soil
_____ Sulfidic Odor	_____ Organic Streaking in Sandy Soils
_____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
_____ Reducing Conditions	_____ Listed on National Hydric Soils List
_____ Gleyed or Low-Chroma Colors	_____ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)		
Wetland Hydrology Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10 - P6

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1.			
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	–	–	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12-THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill
Date: October 28, 2005
Applicant/Owner: Onyx Waste Services
County: Waukesha
Investigator: Jerry Kelly, Allison Oberc
State: Wisconsin

Do normal circumstances exist on this site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the site a potential problem area? Yes (No)
Community ID: WETLAND
Transect ID:
Plot ID: W10-P7

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1.			
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
Stream, Lake, or Tide Gauge
X Aerial Photographs
Other
No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
Inundated
Saturated in Upper 12 inches
Water Marks
Drift Lines
Sediment Deposits
Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
Oxidized Root Channels
Water-Stained Leaves
X Local Soil Survey Data
X FAC-Neutral Test
Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
A Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 - THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)		(Circle)	
Hydrophytic Vegetation Present	(Yes)	No		
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes) No
Hydric Soils Present	(Yes)	No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: WO10-P8

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	100	UPL	1. Glycine max	H	<5	UPL
2.				2. Taraxacum officinale	H	<5	FACU
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MATINTON SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10YR3/1	—	—	SIL
6>18		10YR3/3	—	—	SIL

Hydric Soil Indicators:

____Histosol	____Concretions
____Histic Epipedon	____High Organic Content in Surface Layer in Sandy Soil
____Sulfidic Odor	____Organic Streaking in Sandy Soils
____Aquic Moisture Regime	X Listed on Local Hydric Soils List
____Reducing Conditions	____Listed on National Hydric Soils List
____Gleyed or Low-Chroma Colors	____Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-P9

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Salix exigua	S	20	OBL	1. Solidago canadensis	H	10	FACU
2. Cornus racemosa	S	20	FACW-	2.			
3. Cornus stolonifera	S	20	FACW	3.			
4. Poa pratensis	H	40	FAC-	4.			
5. Phalaris arundinacea	H	20	FACW+	5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 80%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
__X__ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A 12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W10-P10

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Poa pratensis	H	80	FAC-	1. Fragaria virginiana	H	<5	FAC-
2. Solidago canadensis	H	20	FACU	2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): SAYLESVILLE SILT LOAM Drainage Class WD

Taxonomy (Subgroup) TYPIC HAPLUDALFS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR2/1	-	-	SICL

Hydric Soil Indicators:

_____ Histosol	_____ Concretions
_____ Histic Epipedon	_____ High Organic Content in Surface Layer in Sandy Soil
_____ Sulfidic Odor	_____ Organic Streaking in Sandy Soils
_____ Aquic Moisture Regime	_____ Listed on Local Hydric Soils List
_____ Reducing Conditions	_____ Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	_____ Other

Remarks: A 12 THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	Yes	(No)			
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland	Yes	(No)
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W11-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	100	UPL	1. Glycine max	H	<5	UPL
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____Recorded Data (Describe in Remarks)
_____Stream, Lake, or Tide Gauge
__X__Aerial Photographs
_____Other
_____No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____Inundated
_____Saturated in Upper 12 inches
_____Water Marks
_____Drift Lines
_____Sediment Deposits
_____Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____Oxidized Root Channels
_____Water-Stained Leaves
_____Local Soil Survey Data
_____FAC-Neutral Test
_____Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 2/1	—	—	SICL
8>18		5Y 5/1	10YR 6/8	FEW/PROMINENT	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A11 - DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)
Hydrophytic Vegetation Present	Yes	(No)		
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland	Yes (No)
Hydric Soils Present	(Yes)	No		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WET LAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W11-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Carex stricta	H	30	OBL	1. Cornus stolonifera	S	<5	FACW
2. Phalaris arundinacea	H	20	FACW+	2.			
3. Aster lateriflorus	H	20	FACW-	3.			
4. Solidago gigantea	H	20	FACW	4.			
5. Salix exigua	S	25	OBL	5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR 2/1	—	—	SICL
4>18		N 3/0	—	—	CL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks: A11 DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W11-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Carex stricta	H	60	OBL	1. Helianthus grosseserratus	H	10	FACW-
2. Spartina pectinata	H	20	FACW+	2. Solidago riddellii	H	<5	OBL
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		10YR 3/3	—	—	SIL
2-12		10YR 2/1	—	—	SICL
12>18		5GY 5/1	—	—	C

Hydric Soil Indicators:

_____ Histosol	_____ Concretions
_____ Histic Epipedon	_____ High Organic Content in Surface Layer in Sandy Soil
_____ Sulfidic Odor	_____ Organic Streaking in Sandy Soils
_____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
_____ Reducing Conditions	X Listed on National Hydric Soils List
_____ Gleyed or Low-Chroma Colors	_____ Other

Remarks: ALL DEPLETED BELOW DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: October 28, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly, Allison Oberc	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W11-P4

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	95	UPL	1. Verbascum thapsus	H	5	UPL
2.				2. Taraxacum officinale	H	<5	FACU
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR2/1	—	—	SICL
8>18		10YR3/2	—	—	SICL

Hydric Soil Indicators:

_____ Histosol	_____ Concretions
_____ Histic Epipedon	_____ High Organic Content in Surface Layer in Sandy Soil
_____ Sulfidic Odor	_____ Organic Streaking in Sandy Soils
_____ Aquic Moisture Regime	X Listed on Local Hydric Soils List
_____ Reducing Conditions	X Listed on National Hydric Soils List
_____ Gleyed or Low-Chroma Colors	_____ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: November 29, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W12-P1

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Medicago sativa	H	60	UPL	1. Taraxacum officinale	H	10	FACU
2. Triticum aestivum	H	20	UPL	2. Poa pratensis	H	10	FAC-
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: > 18 (in)
Depth to Saturated Soil: > 18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: NO INDICATORS OBSERVED

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

SOILS

Map Unit Name:

(Series and Phase): SAYLESVILLE SILT LOAM Drainage Class WD

Taxonomy (Subgroup) TYPIC HAPLUDALFS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	–	–	SIL
12>18		10YR 3/3	–	–	SIL

Hydric Soil Indicators:

_____Histosol
_____Histic Epipedon
_____Sulfidic Odor
_____Aquic Moisture Regime
_____Reducing Conditions
_____Gleyed or Low-Chroma Colors
_____Concretions
_____High Organic Content in Surface Layer in Sandy Soil
_____Organic Streaking in Sandy Soils
_____Listed on Local Hydric Soils List
_____Listed on National Hydric Soils List
_____Other

Remarks:

WETLAND DETERMINATION

	(Circle)		
Hydrophytic Vegetation Present	Yes	(No)	
Wetland Hydrology Present	Yes	(No)	Is This Sampling Point in a Wetland (Circle) Yes (No)
Hydric Soils Present	Yes	(No)	

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: November 29, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W12-P2

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	90	FACW+	1.			
2. Cornus stolonifera	S	10	FACW	2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0>18		10YR 2/1	—	—	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12 - THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: November 29, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W12-P3

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Glycine max	H	90	UPL	1. Zea mays	H	10	UPL
2.				2. Taraxacum officinale	H	45	FACU
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

_____Recorded Data (Describe in Remarks)
_____Stream, Lake, or Tide Gauge
__X__Aerial Photographs
_____Other
_____No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____Inundated
_____Saturated in Upper 12 inches
_____Water Marks
_____Drift Lines
_____Sediment Deposits
_____Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____Oxidized Root Channels
_____Water-Stained Leaves
_____Local Soil Survey Data
_____FAC-Neutral Test
_____Other (explain in remarks)

Remarks: NO INDICATORS OBSERVED

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	—	—	SICL
12>18		5Y 5/2	—	—	C

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: November 29, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: WETLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W12-P4

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Phalaris arundinacea	H	100	FACW+	1.			
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

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

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
__X__ Local Soil Survey Data
__X__ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks:

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

SOILS

Map Unit Name:

(Series and Phase): MONTGOMERY SILTY CLAY LOAM Drainage Class PD

Taxonomy (Subgroup) TYPIC HAPLAQUOLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		10YR3/2			SICL
10>18		10YR3/2	10YR6/8	MANY/PROMINENT	SICL

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soil
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	X Listed on Local Hydric Soils List
___ Reducing Conditions	X Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other

Remarks: A12-THICK DARK SURFACE

WETLAND DETERMINATION

	(Circle)			(Circle)	
Hydrophytic Vegetation Present	(Yes)	No			
Wetland Hydrology Present	(Yes)	No	Is This Sampling Point in a Wetland	(Yes)	No
Hydric Soils Present	(Yes)	No			

Remarks:

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

Project/Site: Onyx Emerald Park Landfill	Date: November 29, 2005
Applicant/Owner: Onyx Waste Services	County: Waukesha
Investigator: Jerry Kelly	State: Wisconsin
Do normal circumstances exist on this site? (Yes) No	Community ID: UPLAND
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the site a potential problem area? Yes (No)	Plot ID: W12-PS

VEGETATION

Plant Species	Stratum	% Cover	Indicator	Other Plant Species	Stratum	% Cover	Indicator
1. Triticum aestivum	H	50	UPL	1. Daucus carota	H	10	UPL
2. Medicago sativa	H	40	UPL	2. Taraxacum officinale	H	<5	FACU
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 0 %

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks)
_____ Stream, Lake, or Tide Gauge
__X__ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in)
Depth to Free Water in Pit: >18 (in)
Depth to Saturated Soil: >18 (in)

Wetland Hydrology Indicators
Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required)
_____ Oxidized Root Channels
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (explain in remarks)

Remarks: NO INDICATORS OBSERVED

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

SOILS

Map Unit Name:

(Series and Phase): MARTINTON SILT LOAM Drainage Class SPD

Taxonomy (Subgroup) AQUIC ARGIUDOLLS Field Observations Confirm Mapped Type? Yes (No)

Profile Description

Depth (inches)	Horizon	Matrix Color Munsell Moist	Concentration Color	Concentration Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	—	—	SIL
12>18		10YR 3/3	—	—	SIL

Hydric Soil Indicators:

____Histosol	____Concretions
____Histic Epipedon	____High Organic Content in Surface Layer in Sandy Soil
____Sulfidic Odor	____Organic Streaking in Sandy Soils
____Aquic Moisture Regime	>A Listed on Local Hydric Soils List
____Reducing Conditions	____Listed on National Hydric Soils List
____Gleyed or Low-Chroma Colors	____Other

Remarks:

WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present	Yes (No)	Is This Sampling Point in a Wetland	Yes (No)
Wetland Hydrology Present	Yes (No)		
Hydric Soils Present	Yes (No)		

Remarks:

APPENDIX B

MINUTES FROM WDNR FIELD MEETING; NOVEMBER 12. 2007

NRC
Natural Resources Consulting, Inc.

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MEETING MINUTES

SUBJECT: Wetland Boundary Review / Navigability Review – Emerald Park Landfill, Veolia ES	**DATE/TIME:** Monday, November 12, 2007 / 9:00 am
PROJECT: Emerald Park Landfill Expansion	**LOCATION:** Emerald Park Landfill, Muskego, WI
ATTENDEES: Ms. Pamela Schense, WDNR; Mr. Jay Warzinski, Veolia ES, Mr. James Dunham, Veolia ES, Mr. Brian Karczewski, Natural Resources Consulting, Inc., Mr. Douglas Genthe, RMT, Inc., Mr. Mark Torresani, RMT, Inc.	

Meeting was held with Ms. Pamela Schense to field review:

1) The wetland boundaries within and adjacent to the proposed expansion footprint; and
2) The farm ditches within and adjacent to the proposed expansion footprint.

1) Pam Schense indicated that she did receive our opinion paper regarding navigability of the farm ditches within the expansion footprint. She said that she was not aware of the Department dealing with or addressing the applicability of a drainage district with relation to the navigability exemption for farm ditches. This discussion will continue internally within the WDNR.
2) General concurrence regarding the wetland boundaries was obtained. Small changes to the north side of wetland W-4 need to be made. I will visit the site on Monday, November 19th to make the necessary changes. Jim will have a survey crew follow up and locate the new flags. It does not appear that this change, considered minor in extent, will impact the proposed expansion.
3) Questions regarding a previously delineated area, wetland W-5, were addressed in the field. Pam agreed that there did not appear to be any indicators of wetland in the area. However, she would like a farm service agency crop slide review completed to show that the area was consistently farmed. If so, she will consider the area upland.
4) Pam agreed with arguments presented in the field that Pond P-6 is not wetland. This area is now considered non-navigable and non-wetland and does not require further evaluation during the practical alternatives analysis process under NR 103.
5) Questions were raised about the field, currently in forage production, located south of the east-west reach of D-2 and west of the north-south reach of D-2. This area has been delineated by Jerry Kelly as wetland in 1996 and in 2005. Pam agreed that the area does not appear to have the characteristics of wetland. She asked if the area could remain fallow in the Spring of 2008 and if we could revisit the issue at that time.
6) Questions were raised about another potential upland area within the heart of wetland 9 located to the south of the area addressed in point 5 and west of the north-south reach of D-2. This area appears to have upland characteristics which Pam agreed with in the field. However, limited information is available to clearly prove an upland condition since it is farmed and the soils are hydric. Pam is willing to consider its removal from wetland status. She will get back to me and let me know if this is possible from the Department's position.

7) If the argument regarding the area being part of a drainage district is not accepted by the WDNR, Pam agreed to previously marked locations of navigability for D-4, and our opinion of where navigability starts for D-2 (approximately 240 feet south of the 90 degree bend in D-2). This location needs to be surveyed and presented to Pam on a map for agreement. This should be done after any discussions regarding the drainage district issue play out.

APPENDIX C

FSA AERIAL REVIEW

NRCS-CPA-32W
(1-9-98)

WETLAND DOCUMENTATION RECORD
Remotely Sensed Data Summary

Appellant: Veolia ES Emerald Park County Waukesha State WI

Slide Reviewer Brian Karczewski, NRC Date 12/8/08

Site Identification No. _____ - _____ (Tract No. + Site No.)

for area previously identified as wetland W-5

Farm Service Agency Aerial Color Slide Data

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr-June ave. = _____)	Interpretation- (codes listed in box below)
1990	4.44 (W)	Y 4, 6b
1991	3.62 (N)	Y 5, 6a
1992	1.77 (D)	Y 4, 6b
1993	5.73 (W)	Y 4, 6b
1994	2.25 (D)	Y 3, 6d with white (bare ground on edges)
1995	2.64 (N)	Y 5, 6a
1996	4.76 (W)	Y 5, 6e
1997	3.40 (N)	Y 4, 6e
1998	4.17 (N)	Y 5, 6d
1999	4.90 (W)	Y 1, 3, 6d
2000	5.39 (W)	Y 3, 6c construction of biomass compost area began to south effecting drainage to W-5 area
2001	4.40 (W)	Y 5, 6d
2002	3.75 (N)	Y 3, 6d
2003	3.29 (N)	N
2004	5.35 (W)	N
2005	2.34 (D)	N
2006	4.46 (W)	N

Air Photo

Y = signal indicates wetness (+ = strong, - = weak)
CR = cropped (row crop or tilled)
N = NO wetness signature
NC = not cropped (hay, pasture, idle, etc.)

Feature	Color	Manipulation	Other
1 = water	6a = dark green	7a = ditched	write explanation
2 = mud flat	6b = light green	7b = tiled	
3 = bare spot	6c = yellow	7c = filled	
4 = drowned crop	6d = brown	7d = tree/brush removal	
5 = planted late	6e = black	8 = plowed/tilled	

Does Slide/Air Photo data indicate the site is a wetland? (y/n) _____

#____years out of #____years observed have wet (Y) signatures.

new normal circumstance in area surrounding W-5

Farm Service Agency Aerial Color Slide Review

Veolia ES Emerald Park Landfill, LLC

T-5-N, R-20-E, Section 36; City of Muskego, Waukesha County, Wisconsin

Description of Interest: Area identified as Wetland W-5 in previous wetland investigations.

Year	Monthly Rainfall in Inches *			Total	Mean (April - May)	Relative Wetness	Cropped?	Wetness Signature?
	April	May	June					
1981	4.48	1.08	2.84	8.40	2.80	N		
1982	4.07	4.41	2.67	11.15	3.72	N		
1983	2.68	3.96	2.83	9.47	3.16	N		
1984	3.20	4.57	5.90	13.67	4.56	W		
1985	1.48	1.82	2.28	5.58	1.86	D		
1986	1.88	2.50	6.08	10.46	3.49	N		
1987	4.20	3.50	1.73	9.43	3.14	N		
1988	3.26	0.69	1.33	5.28	1.76	D		
1989	1.98	3.53	2.60	8.11	2.70	N		
1990	1.98	5.49	5.84	13.31	4.44	W	CR	Y
1991	3.97	2.35	4.53	10.85	3.62	N	CR	Y
1992	2.82	0.93	1.55	5.30	1.77	D	CR	Y
1993	7.14	3.46	6.59	17.19	5.73	W	CR	Y
1994	1.26	1.30	4.20	6.76	2.25	D	CR	Y
1995	4.15	3.14	0.62	7.91	2.64	N	CR	Y
1996	3.10	2.50	8.69	14.29	4.76	W	CR	Y
1997	1.48	3.45	5.26	10.19	3.40	N	CR	Y
1998	3.64	3.72	5.16	12.52	4.17	N	CR	Y
1999	6.38	5.23	6.10	17.71	5.90	W	CR	Y
2000	2.84	8.54	4.78	16.16	5.39	W	CR	Y
2001	3.80	4.79	4.61	13.20	4.40	W	CR	Y
2002	4.15	2.48	4.63	11.26	3.75	N	CR	Y
2003	1.97	7.14	2.56	11.67	3.89	N	CR	N
2004	2.43	10.40	3.23	16.06	5.35	W	CR	N
2005	1.32	4.03	1.67	7.02	2.34	D	CR	N
2006	4.30	5.70	3.38	13.38	4.46	W	---	N
30% chance less than	2.39	2.09	2.84	7.32	2.44	---	---	---
30 Year Average	3.25	3.14	3.99	10.38	3.46	---	---	---
30% chance more than	3.77	3.81	4.98	12.56	4.19	---	---	---

* Oconomowoc Weather Station (476200), Waukesha County, Wisconsin

DRY
NORMAL
WET

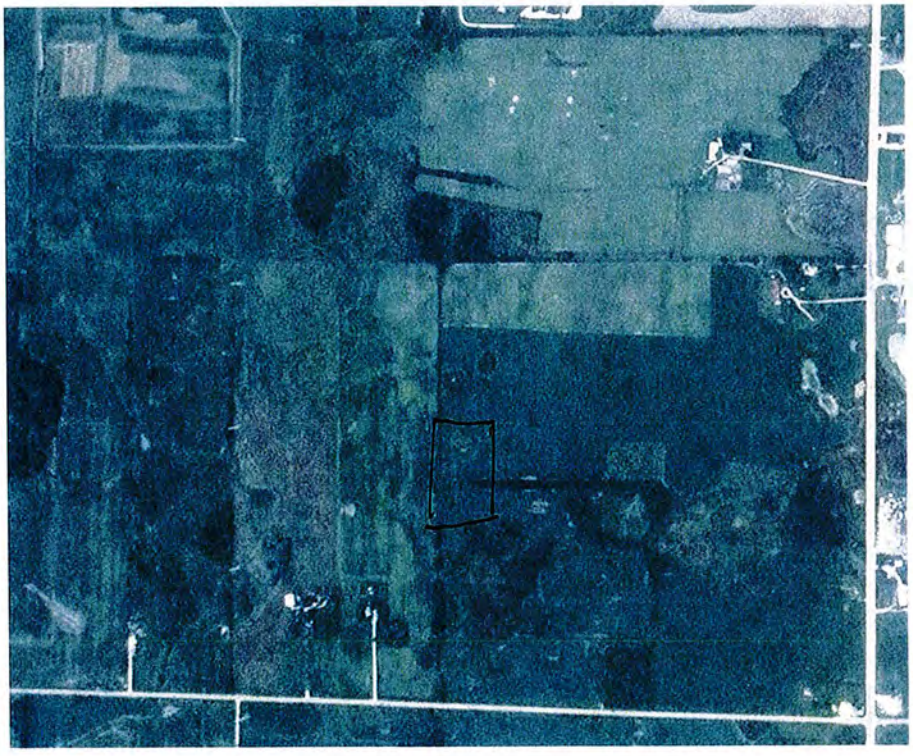
132

Farm Service Agency Crop Compliance Slides

1990

1991

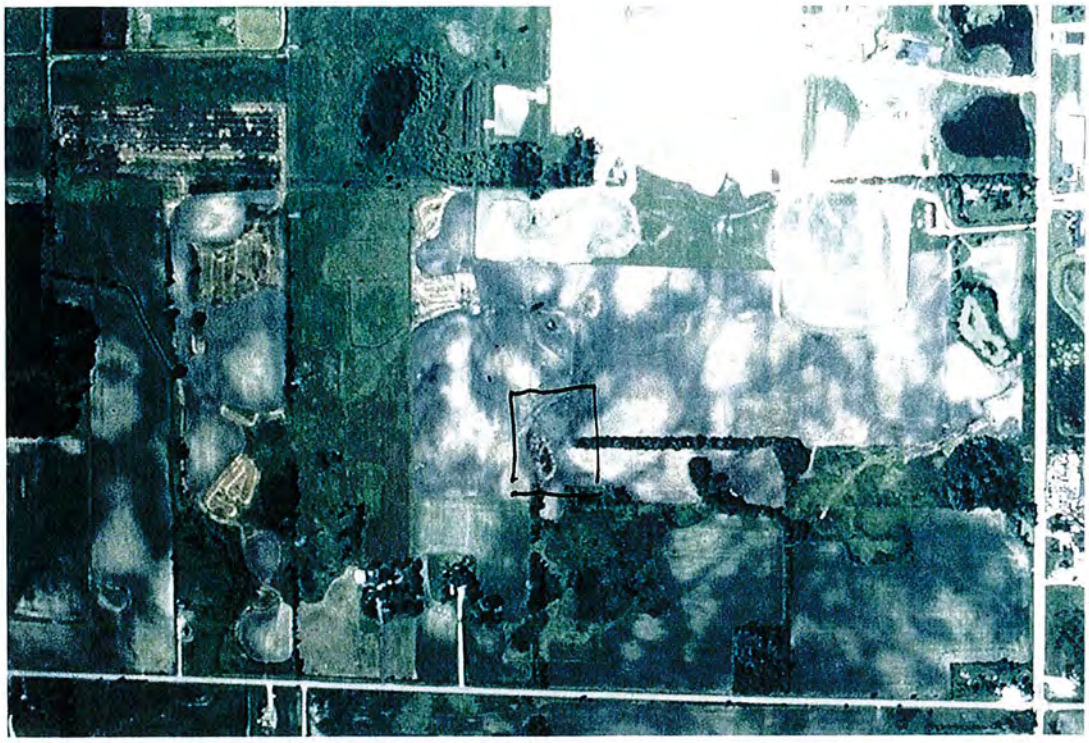
1992



1993

1994

1995



1996

1997

1998

1999

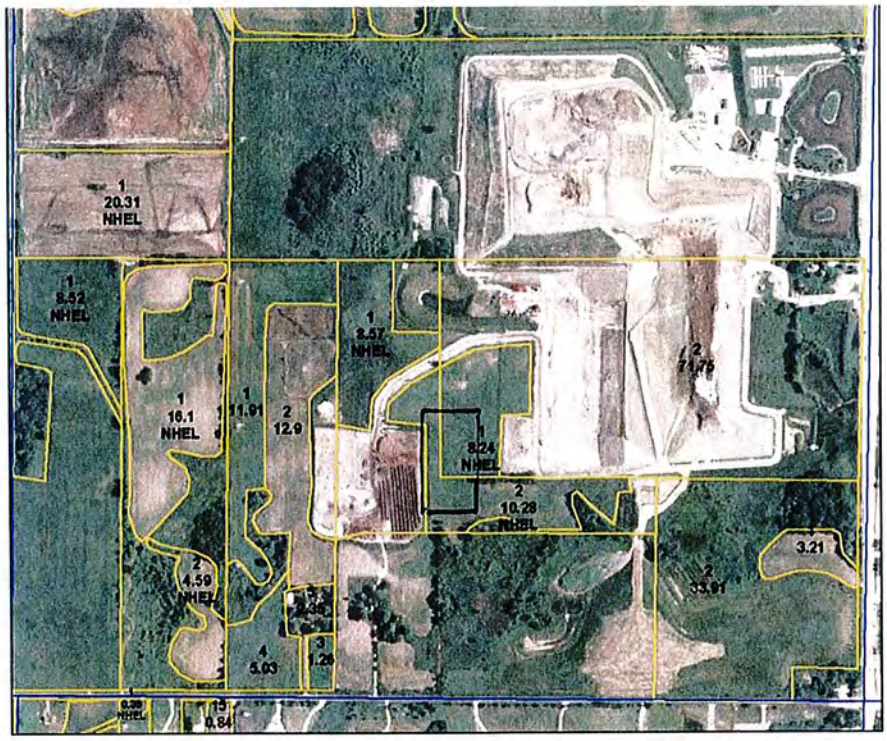
2000

2001

2002

2003

2004


1
20.31
NHEL
1
8.52
NHEL
1
16.1
NHEL
1
11.91
2
12.9
1
8.57
NHEL
2
11.78
1
8.24
NHEL
2
10.28
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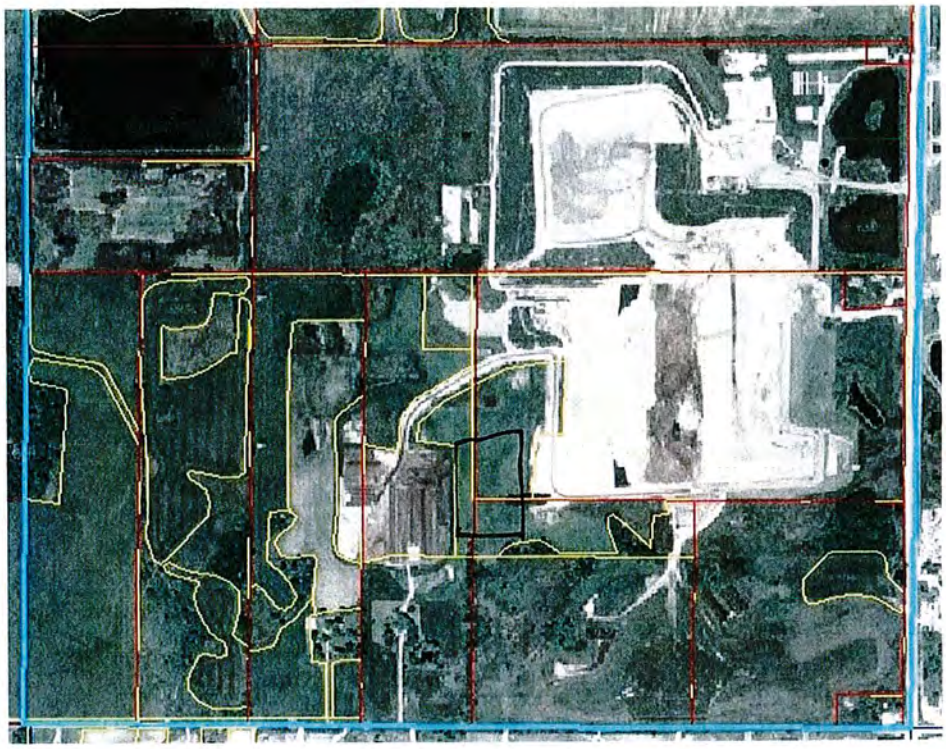
2
4.59
NHEL
4
5.03
3.21
2
33.91

2005



2006