



SCI ENGINEERING, INC.

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Wetland Delineation

**PORT OF EAST ST. LOUIS
ST. CLAIR COUNTY, ILLINOIS**

**May 24, 2012
Revised June 22, 2012**

Prepared for:

SLAY INDUSTRIES

SCI No. 2011-3213.31



SCI ENGINEERING, INC.

CONSULTANTS IN DEVELOPMENT,
DESIGN AND CONSTRUCTION
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

June 22, 2012

Mr. Glen Slay
Slay Industries
1441 Hampton Avenue
St. Louis, Missouri 63139

RE: Wetland Delineation – Revised
Port of East St. Louis
East St. Louis, Illinois
SCI No. 2011-3213.31

Dear Mr. Slay:

We are pleased to submit our report entitled *Wetland Delineation – PORT OF EAST ST. LOUIS – EAST ST. LOUIS, ILLINOIS*, dated May 2012, Revised June 2012. Our May site assessment identified two wetlands within the project boundaries. It is likely the U. S. Army Corps of Engineers (CE) would classify these areas as waters of the United States. The CE requires a Section 404 Permit for the development of a site that contains or impacts jurisdictional wetlands or waterbodies. Likewise, a Section 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA) is typically required for a project that also requires a Section 404 Permit. However, the CE has the sole authority to determine if any of the features we identified would be under their jurisdiction.

To initiate the permitting process, a development plan should be sent to the CE along with a delineation report, permit application, and other associated documents and figures. An impact assessment would be conducted based on the development plan to determine if the project would impact any waters of the United States. We are available to assist you throughout the permitting process.

If you have any questions or comments, please contact us at (636) 949-8200.

Respectfully,

SCI ENGINEERING, INC.

A handwritten signature in cursive script, reading 'Jane A. Farrington'.

Jane A. Farrington
Project Scientist

A handwritten signature in cursive script, reading 'Scott D. Harding'.

Scott D. Harding, CPSS/SC
Vice President

JAF/SDH/lf

Enclosure

One copy and one electronic version submitted.

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Wetland Delineation

PORT OF EAST ST. LOUIS EAST ST. LOUIS, ILLINOIS

1.0 INTRODUCTION

SCI Engineering, Inc. (SCI) was retained by Mr. Glen Slay of Slay Industries to conduct a wetland delineation on the referenced site. The scope of the study included performing site reconnaissance to characterize the soils, vegetation, and hydrology for delineation of wetlands and waterbodies. Our services were provided in general accordance with our proposal dated April 24, 2012.

The area delineated is approximately 59 acres. The site contains a previously-delineated emergent wetland of approximately 10.6 acres and a newly-identified wetland of approximately 0.65 acre. These two wetlands are likely to be considered waters of the United States as identified under the definitions described in Section 328.3 of the *Code of Federal Regulations* (33CFR). Any impact to waters of the United States, including draining, filling, piping, rerouting, crossing, and discharging to will require a *Section 404 Permit* from the U.S. Army Corps of Engineers (CE) and *Section 401 Water Quality Certification* from the Illinois Environmental Protection Agency (IEPA). Based on their physical characteristics and location in proximity to the Mississippi River, the wetlands will likely be considered waters of the United States.

2.0 SITE LOCATION

The site is located south of Interstates 55/70/64 at the Poplar Street Bridge and west of Mississippi Avenue (Route 3) in East St. Louis, St. Clair County, Illinois. Monsanto Avenue borders the site to the south and an elevated access road and levee borders the site to the west. West of the levee is undeveloped land along with the Mississippi River. An elevated railroad line borders much of the site to the east. This facility will be known as the Port of East St. Louis. The proposed current development consists of construction of a rail spur within the northern portion of the property and the construction of a new road entrance from Route 3. All development will be within the delineated area (Township 2 North, Range 10 West, Section 23). The Vicinity Map is enclosed as Figure 1.

3.0 SOIL SURVEY AND TOPOGRAPHIC RESEARCH

According to the *Soil Survey of St. Clair County, Illinois*, prepared by the Natural Resources Conservation Service (NRCS), and dated 1999, the site is mapped as Orthents loamy steep and Urban land with symbols indicating dumps and other similar non-soil areas. These soils are not listed as hydric

soils on the *NRCS National Hydric Soils List: Hydric Soils of the United States* or the St. Clair County Hydric Soils List.

The *USGS Topographic Map* and *National Wetlands Inventory (NWI) map* were reviewed for information concerning the site. The USGS map is a reproduction of a portion of the USGS topographic map for the *Granite City, Illinois-Missouri* quadrangle dated 1993 (photorevised 1998) and the *Cahokia, Illinois-Missouri* quadrangle, dated 1993 (photorevised 1998). According to this map, the topography of the site is relatively level and drains toward the northeast. These maps indicate the presence of a temporarily flooded emergent wetland and a seasonally flooded emergent wetland on the subject site. Surface topography observed on the date of the site reconnaissance appeared to generally coincide with the topography depicted on the USGS map. Fill has been placed for the levee and the railroad line, as well as in the northwest portion of the site. Copies of the USGS topographic and NWI maps are enclosed as Figures 1 and 2, respectively.

4.0 SITE RECONNAISSANCE AND CONDITION SUMMARY

In May 2012, an SCI Natural Resource Scientist performed a field exploration of the subject site to delineate the extent of existing waterbodies and wetlands. Suspect areas on the site were explored for wetland and waterbody characteristics. A photographic summary of the representative site conditions is included as Appendix A. Included in Appendix B are the *Routine Wetland Determination Data Forms* for suspect wetland areas. The conditions summarized below are mapped on the *Wetland Delineation and Aerial Photograph*, enclosed as Figure 3.

The subject site is mainly undeveloped with the exception of a pump station located along the site's western boundary. An elevated railroad line borders the site to the southeast and runs through the center of the site on the northern portion. Site surrounding adjacent properties are a mix of undeveloped and industrial.

Our site visit confirmed the presence of the previously-identified and above-mentioned emergent wetland. This wetland (Wetland 1) exists as a depressed area surrounded by fill slopes, and the boundaries are defined by railroad tracks to the east, a levee and access road fill to the west, and an obvious change in site topography to the south. The wetland is approximately 10.6 acres. Vegetation consists of *Asclepias incarnate*, *Packera glabella*, and *Ambrosia trifida*. Hydrology was provided by levee relief wells and the runoff from adjacent slopes.

SCI Engineering, Inc.
Slay Industries

Port of East St. Louis
SCI No. 2011-3213.31

We identified another emergent wetland (Wetland 2) located on the northern portion of the site toward the center. It abuts the western slope of the elevated railroad line and is approximately 0.65 acre. Vegetation consists of *Salix nigra*, *Populus deltoids*, *Polygonum sp.*, *Carex sp.*, and *Packera glabella*.

5.0 CONCLUSION

Based on our May 2012 field exploration, the two emergent wetlands identified would likely be considered under the jurisdiction of the CE due to their location within the 100-year floodplain. Therefore, a permit would be required before development can occur. However, the CE has the sole authority to determine if any of the features identified would be under their jurisdiction.

The CE requires a *Section 404 Permit* for the development of a site that impacts jurisdictional waterbodies. Likewise, a *Section 401 Water Quality Certification* from the IEPA is typically required for a project that requires a *Section 404 Permit*. The CE generally requires a preliminary development plan along with an impact assessment before issuing any formal authorization regarding a permit. We are available to assist you with satisfying the requirements of the CE and/or IEPA as you advance in your planning for this development.



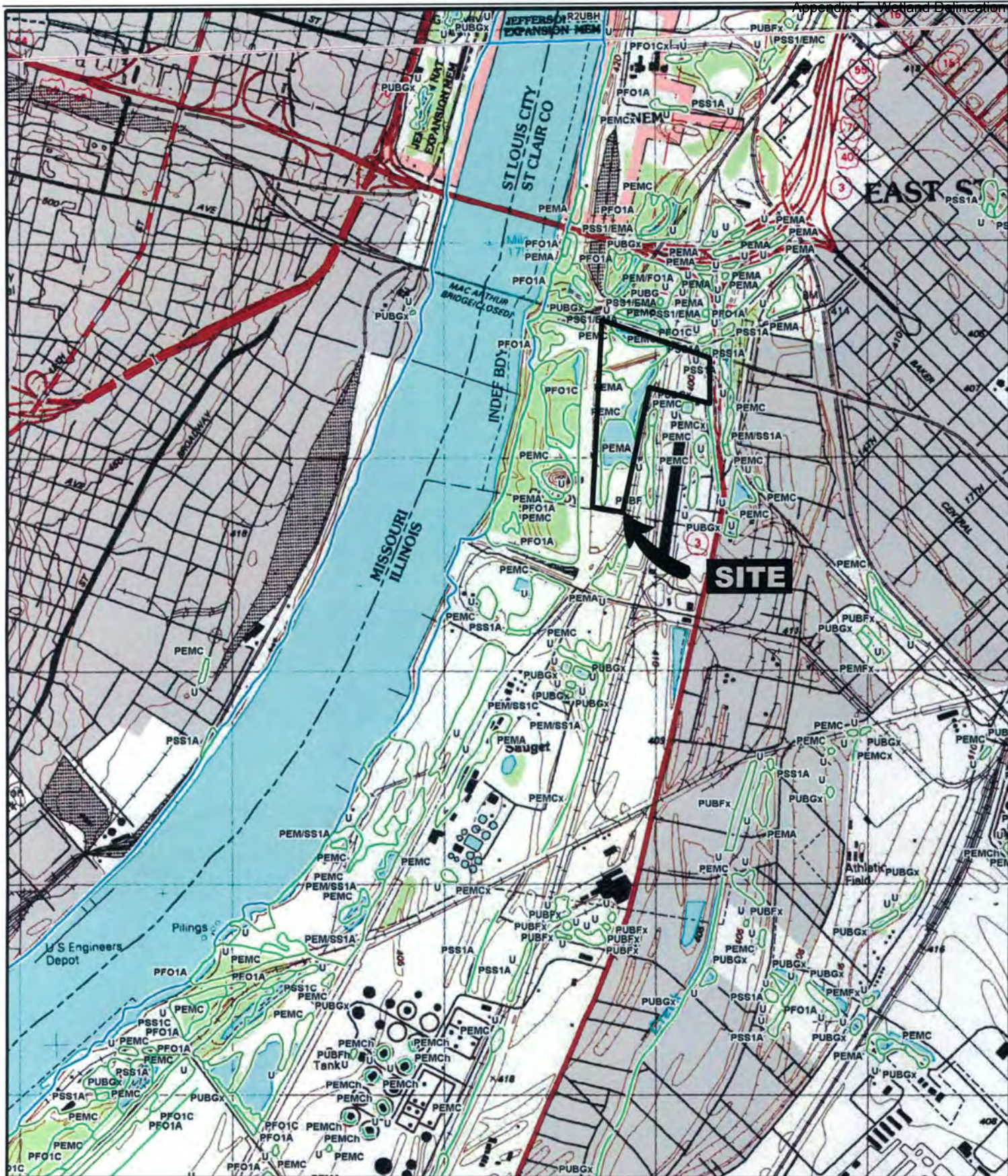
VICINITY AND TOPOGRAPHIC MAP

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FIGURE 1



PROJECT NAME
PORT OF EAST SAINT LOUIS - RAIL LOOP
EAST SAINT LOUIS, ILLINOIS

NATIONAL WETLANDS
INVENTORY MAP

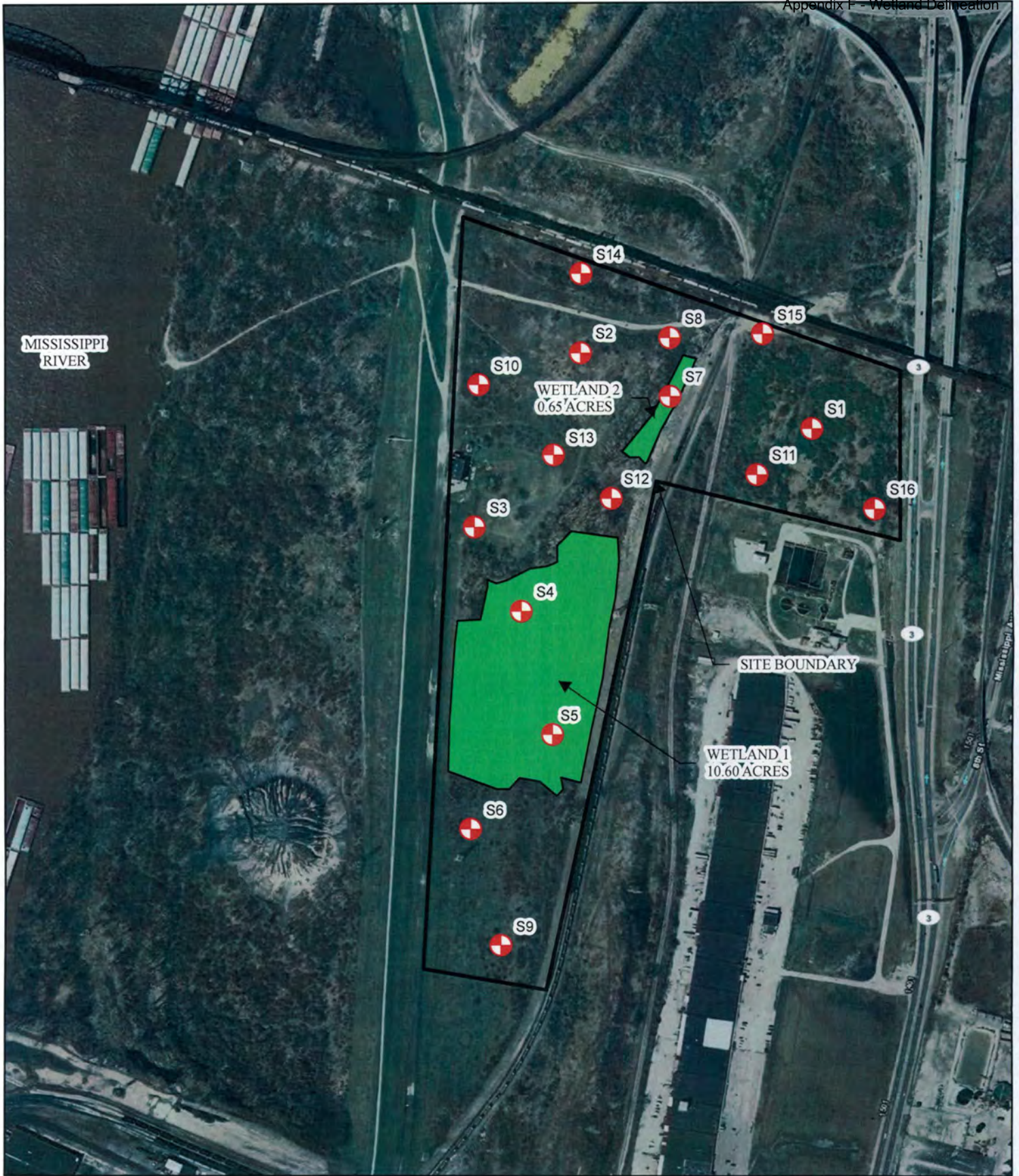
DRAWN BY	RCV	DATE	JOB NUMBER
CHECKED BY	SDH	05/2012	2011-3213.31

General Notes/Legend

NATIONAL WETLANDS INVENTORY MAP
CAHOKIA, ILLINOIS - MISSOURI QUADRANGLE
DATED OCTOBER 13, 2008
10' CONTOURS



SCALE 1" = 2000'
FIGURE 2



PROJECT NAME
PORT OF EAST SAINT LOUIS
EAST SAINT LOUIS, ILLINOIS

WETLAND DELINEATION AND
AERIAL PHOTOGRAPH

DRAWN BY	RCV	DATE	JOB NUMBER
CHECKED BY	SDH	06/2012	2011-3213.31

GENERAL NOTES/LEGEND

⊕ INDICATES APPROXIMATE SOIL BORING LOCATION

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY.
DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT
FOR WHICH IT WAS GENERATED.



SCALE 1" = 500'

FIGURE 3

Appendix A



Photo 1. Facing west in northeastern portion of site; non-wetland. 5



Photo 2. Facing north in northwestern portion of site; non-wetland, near location of data form S10. 16



Photo 3. Facing south in northwestern portion of site; non-wetland, area of fill, near location of data form S10. 18



Photo 4. Facing north near location of data form S3. 22



Photo 5. Facing east in 10.6-acre wetland; near location of data form S4. 35



Photo 6. Facing southeast within 10.6-acre wetland; near location of data form S5. 37



Photo 7. Facing northwest in 10.6-acre wetland. 38



Photo 8. Facing south; near location of data form S6; non-wetland.



Photo 9. Facing northeast within 0.65-acre wetland; near location of data form S7.

Appendix B

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S1
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:		S23 T2N R10W	
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NW1 classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area of fill.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>90</u> x3 = <u>270</u> FACU species <u>30</u> x4 = <u>120</u> UPL species _____ x5 = _____ Column Totals: <u>120</u> (A) <u>390</u> (B) Prevalence Index = B/A = <u>3.25</u>
1. <i>Lonicera maackii</i>	50	X	NI	
2. _____				
3. _____				
4. _____				
50 = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Sorghum halepense</i>	25	X	FACU	
2. <i>Rumex crispus</i>	15		FAC	
3. <i>Galium aparine</i>	5		FACU	
4. <i>Asclepias syriaca</i>	10		NI	
5. <i>Poa pratensis</i>	75	X	FAC	
130 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

SOIL

Sampling Point: S1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____ Remarks: Soil too rocky for soil sample (fill soils)	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>					
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks:								

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S2
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area of fill.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
				= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>33</u> x3 = <u>99</u> FACU species <u>95</u> x4 = <u>380</u> UPL species _____ x5 = _____ Column Totals: <u>128</u> (A) <u>479</u> (B) Prevalence Index = B/A = <u>3.7</u>	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				= Total Cover	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <u>N</u> Dominance Test is >50% <u>N</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
1. <u>Conyza canadensis</u>	25		FAC		
2. <u>Rumex crispus</u>	3		FAC		
3. <u>Galium aparine</u>	5		FAC		
4. <u>Ambrosia trifida</u>	10		NI		
5. <u>Festuca subverticillata</u>	95	X	FACU		
					<u>138</u> = Total Cover
Woody Vine Stratum (Plot size: _____)					
1. _____					
2. _____					
				= Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)					

SOIL

Sampling Point: S2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>Surface</u> Remarks: Soil too rocky for soil sample (fill soils)	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>			
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u>			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Remarks:						

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S3
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area surrounding MSD building - mowed and maintained			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>78</u> x3 = <u>234</u> FACU species <u>75</u> x4 = <u>300</u> UPL species _____ x5 = _____ Column Totals: <u>153</u> (A) <u>534</u> (B) Prevalence Index = B/A = <u>3.5</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Hydrophytic Vegetation Indicators: <u>N</u> Dominance Test is >50% <u>N</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: _____)				
1. <i>Ranunculus repens</i>	75	X	FACU	
2. <i>Rumex crispus</i>	3		FAC	
3. <i>Poa pratensis</i>	75	X	FAC	
4. _____				
5. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>Surface</u> Remarks: Soil too rocky for soil sample (fill soils)	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>					
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥15</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥15</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks:								

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S4
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:	PEMA, PEMC		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Wetland hydrology provided by levee relief wells.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>Salix nigra</i>	3		OBL	Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100</u> (A/B)
2. <i>Forestiera acuminata</i>	5		OBL	
3. <i>Populus deltoides</i>	1		FAC	
4. _____				
5. _____				
9 = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet:
1. _____				Total % Cover of: Multiply by:
2. _____				OBL species <u>78</u> x1 = <u>78</u>
3. _____				FACW species <u>6</u> x2 = <u>12</u>
4. _____				FAC species <u>51</u> x3 = <u>153</u>
5. _____				FACU species _____ x4 = _____
_____ = Total Cover				UPL species _____ x5 = _____
				Column Totals: <u>135</u> (A) <u>243</u> (B)
				Prevalence Index = B/A = <u>1.8</u>
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. <i>Vitis vulpina</i>	3		FACW	<u>Y</u> Dominance Test is >50%
2. <i>Asclepias incarnata</i>	20	X	OBL	<u>Y</u> Prevalence Index is ≤3.0 ¹
3. <i>Ambrosia trifida</i>	50	X	FAC	_____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. <i>Impatiens capensis</i>	3		FACW	_____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. <i>Packera glabella</i>	50	X	OBL	
<u>126</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-15	10YR 4/1	55	10YR 4/4	5			sic1	
	10YR 3/2	40						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Restrictive Layer (if observed): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input checked="" type="checkbox"/> Drift Deposits (B3) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Wetland hydrology provided by levee relief wells.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-10-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S5
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:		S23 T2N R10W	
Landform (hillslope, terrace, etc.):	_____	Local relief (concave, convex, none):		_____	
Slope (%):	_____	Lat:	_____	Long:	_____
Soil Map Unit Name:	_____	NW1 classification:		_____	
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Area is at lower elevation than surrounding areas. Bordered to the east by railroad grade			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>Salix nigra</i>	3		OBL	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>67</u> (A/B)
2. <i>Populus deltoides</i>	3		FAC	
3. _____				
4. _____				
5. _____				
6 = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species <u>28</u> x1 = <u>28</u> FACW species <u>35</u> x2 = <u>70</u> FAC species <u>3</u> x3 = <u>9</u> FACU species <u>31</u> x4 = <u>124</u> UPL species _____ x5 = _____ Column Totals: <u>97</u> (A) <u>231</u> (B) Prevalence Index = B/A = <u>2.38</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <u>Y</u> Dominance Test is >50% <u>Y</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Ambrosia artemisiifolia</i>	25	X	FACU	
2. <i>Polygonum pensylvanicum</i>	25	X	FACW	
3. <i>Carex sp.</i>	10		FACW	
4. <i>Humulus japonicus</i>	6		FACU	
5. <i>Packera glabella</i>	25	X	OBL	
91 = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-15	10YR 4/1	85	10YR 4/3	10			sic1	
			10YR 2/1	5				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>				<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input checked="" type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>surface</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>surface</u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: Surface water observed in central portion of wetland in lower areas.					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S6
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:	PEMA		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area at higher elevation than adjacent wetland.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet:
1. _____				Total % Cover of: Multiply by:
2. _____				OBL species _____ x1 = _____
3. _____				FACW species _____ x2 = _____
4. _____				FAC species <u>20</u> x3 = <u>60</u>
5. _____				FACU species <u>100</u> x4 = <u>400</u>
_____ = Total Cover				UPL species _____ x5 = _____
Herb Stratum (Plot size: _____)				Column Totals: <u>120</u> (A) <u>460</u> (B)
1. <i>Conyza canadensis</i>	20		FAC	Prevalence Index = B/A = <u>3.8</u>
2. <i>Galium aparine</i>	5		FACU	Hydrophytic Vegetation Indicators: <u>N</u> Dominance Test is >50% <u>N</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <i>Verbascum thapsus</i>	5		NI	
4. <i>Asclepias syriaca</i>	20		NI	
5. <i>Festuca subverticillata</i>	95	X	FACU	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/1	55					sicl	
	10YR 3/2	45						
6-15	10YR 3/1	45					sicl	significant sand layer
	10YR 3/2	40						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)
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Indicators for Problematic Hydric Soils³:
☐ Coast Prairie Redox (A16)
☐ Iron-Manganese Masses (F12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____			
Remarks: _____			

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-10-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S7
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:		S23 T2N R10W	
Landform (hillslope, terrace, etc.):	_____	Local relief (concave, convex, none):		_____	
Slope (%):	_____	Lat:	_____	Long:	_____
Soil Map Unit Name:	_____	NW1 classification:		_____	
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Area is at lower elevation than surrounding areas and is located just west of elevated railroad facility.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>Salix nigra</i>	3		OBL	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>67</u> (A/B)
2. <i>Populus deltoides</i>	3		FAC	
3. _____				
4. _____				
5. _____				
6 = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species <u>28</u> x1 = <u>28</u> FACW species <u>35</u> x2 = <u>70</u> FAC species <u>3</u> x3 = <u>9</u> FACU species <u>31</u> x4 = <u>124</u> UPL species _____ x5 = _____ Column Totals: <u>97</u> (A) <u>231</u> (B) Prevalence Index = B/A = <u>2.38</u>
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: Y Dominance Test is >50% Y Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Ambrosia artemisiifolia</i>	25	X	FACU	
2. <i>Polygonum pensylvanicum</i>	25	X	FACW	
3. <i>Carex sp.</i>	10		FACW	
4. <i>Humulus japonicus</i>	6		FACU	
5. <i>Packera glabella</i>	25	X	OBL	
91 = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-15	10YR 4/1	90	10YR 4/3	10			s cl	
			10YR 2/1	10				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>				<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input checked="" type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>surface</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>surface</u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: Surface water observed in central portion of wetland.					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S8
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):	_____	Local relief (concave, convex, none):	_____		
Slope (%):	_____	Lat:	_____	Long:	_____
Soil Map Unit Name:	_____	NWI classification:	_____		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Fill area.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>90</u> x3 = <u>270</u> FACU species <u>30</u> x4 = <u>120</u> UPL species _____ x5 = _____ Column Totals: <u>120</u> (A) <u>390</u> (B) Prevalence Index = B/A = <u>3.25</u>
1. <u>Lonicera maackii</u>	50	X	NI	
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Sorghum halepense</u>	25		FACU	
2. <u>Rumex crispus</u>	15		FAC	
3. <u>Galium aparine</u>	5		FACU	
4. <u>Asclepias syriaca</u>	10		NI	
5. <u>Poa pratensis</u>	75	X	FAC	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>Surface</u> Remarks: Soil rocky for soil sample (fill soils)	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>					
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks: Just south of access road								

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S9
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):	_____	Local relief (concave, convex, none):	_____		
Slope (%):	_____	Lat:	_____	Long:	_____
Soil Map Unit Name:	_____	NWI classification:	PEMA		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area at higher elevation than adjacent wetland.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>20</u> x3 = <u>60</u> FACU species <u>100</u> x4 = <u>400</u> UPL species _____ x5 = _____ Column Totals: <u>120</u> (A) <u>460</u> (B) Prevalence Index = B/A = <u>3.8</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <u>N</u> Dominance Test is >50% <u>N</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Coryza canadensis</u>	20		FAC	
2. <u>Galium aparine</u>	5		FACU	
3. <u>Verbascum thapsus</u>	5		NI	
4. <u>Asclepias syriaca</u>	20		NI	
5. <u>Festuca subverticillata</u>	95	X	FACU	
145 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Hydrophytic Vegetation Present?			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/1	55					sicl	
	10YR 3/2	45						
6-15	10YR 3/1	45					sicl	significant sand layer
	10YR 3/2	40						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>15</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____					
Remarks: _____					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S10
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area of fill.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>33</u> x3 = <u>99</u> FACU species <u>95</u> x4 = <u>380</u> UPL species _____ x5 = _____ Column Totals: <u>128</u> (A) <u>479</u> (B) Prevalence Index = B/A = <u>3.7</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				Hydrophytic Vegetation Indicators: <u>N</u> Dominance Test is >50% <u>N</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Coryza canadensis</u>	25		FAC	
2. <u>Rumex crispus</u>	3		FAC	
3. <u>Galium aparine</u>	5		FAC	_____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. <u>Ambrosia trifida</u>	10		NI	
5. <u>Festuca subverticillata</u>	95	X	FACU	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				_____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
_____ = Total Cover				Hydrophytic Vegetation Present?
Remarks: (Include photo numbers here or on a separate sheet.)				Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

SOIL

Sampling Point: S10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)
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Indicators for Problematic Hydric Soils³:
☐ Coast Prairie Redox (A16)
☐ Iron-Manganese Masses (F12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>Surface</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Soil too rocky for soil sample (fill soils)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	05-08-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S11
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>Y</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area of fill.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>90</u> x3 = <u>270</u> FACU species <u>30</u> x4 = <u>120</u> UPL species _____ x5 = _____ Column Totals: <u>120</u> (A) <u>390</u> (B) Prevalence Index = B/A = <u>3.25</u>
1. <u>Lonicera maackii</u>	50	X	NI	
2. _____				
3. _____				
4. _____				
50 = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Sorghum halepense</u>	25		FACU	
2. <u>Rumex crispus</u>	15		FAC	
3. <u>Galium aparine</u>	5		FACU	
4. <u>Asclepias syriaca</u>	10		NI	
5. <u>Poa pratensis</u>	75	X	FAC	
130 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

SOIL

Sampling Point: S11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>Surface</u> Remarks: Soil too rocky for soil sample (fill soils)	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> (includes capillary fringe)		
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	06-19-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S12
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):	_____	Local relief (concave, convex, none):	_____		
Slope (%):	_____	Lat:	_____	Long:	_____
Soil Map Unit Name:	_____	NWI classification:	_____		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Potential Fill Area north of Wetland 1.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>75</u> x3 = <u>225</u> FACU species <u>15</u> x4 = <u>60</u> UPL species _____ x5 = _____ Column Totals: <u>90</u> (A) <u>285</u> (B) Prevalence Index = B/A = <u>3.16</u>
1. <u>Lonicera maackii</u>	40	Y	NI	
2. _____				
3. _____				
4. _____				
40 = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Poa pratensis</u>	60	Y	FAC	
2. <u>Rumex crispus</u>	15		FAC	
3. <u>Galium aparine</u>	15		FACU	
4. <u>Asclepias syriaca</u>	10		NI	
100 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

SOIL

Sampling Point: S12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10 YR 3/3	95					sic	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>4</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: Soil likely fill material based on observed characteristics.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥4</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥4</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis: St. Clair	Sampling Date:	06-19-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S13
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:		S23 T2N R10W	
Landform (hillslope, terrace, etc.):			Local relief (concave, convex, none):		
Slope (%):		Lat:		Long:	
Soil Map Unit Name:			NW1 classification:		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Potential Fill Area north of Wetland 1, directly east of a pump station.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>80</u> x3 = <u>240</u> FACU species <u>50</u> x4 = <u>200</u> UPL species _____ x5 = _____ Column Totals: <u>130</u> (A) <u>440</u> (B) Prevalence Index = B/A = <u>3.38</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: _____)				
1. <i>Poa pratensis</i>	50	Y	FAC	
2. <i>Conyza canadensis</i>	20		FAC	
3. <i>Galium aparine</i>	10		FAC	
4. <i>Ambrosia trifida</i>	20		NI	
5. <i>Festuca subverticillata</i>	50	Y	FACU	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10 YR 4/3	30					sic	
	10 YR 3/2	70						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>2</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Soil likely fill material based on observed characteristics.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	06-19-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S14
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NWI classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area is located south of an existing rail bed and appears to have been filled in the past.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species across all Strata: <u>4</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>75</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species <u>105</u> x3 = <u>315</u> FACU species <u>60</u> x4 = <u>240</u> UPL species _____ x5 = _____ Column Totals: <u>165</u> (A) <u>555</u> (B) Prevalence Index = B/A = <u>3.37</u>
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: X Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>Poa pratensis</u>	40	Y	FAC	
2. <u>Conyza canadensis</u>	30	Y	FAC	
3. <u>Galium aparine</u>	10		FAC	
4. <u>Ambrosia trifida</u>	25	Y	FAC	
5. <u>Festuca subverticillata</u>	60	Y	FACU	
<u>165</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10 YR 4/4	40					sic	
	10 YR 3/3	60						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>8</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: Soil likely fill material based on observed characteristics.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>8</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>>8</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	06-19-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S15
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:	S23 T2N R10W		
Landform (hillslope, terrace, etc.):	_____	Local relief (concave, convex, none):	_____		
Slope (%):	_____	Lat:	_____	Long:	_____
Soil Map Unit Name:	_____	NWI classification:	_____		
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Area is located along access road near northern boundary of the subject site.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>Populus deltoides</i>	10		FACW	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species across all Strata: <u>4</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. <i>Acer saccharinum</i>	15		FACW	
3. <i>Acer negundo</i>	15		FACW	
4. _____				
5. _____				
40 = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species <u>40</u> x2 = <u>80</u> FAC species <u>80</u> x3 = <u>240</u> FACU species <u>50</u> x4 = <u>200</u> UPL species _____ x5 = _____ Column Totals: <u>170</u> (A) <u>520</u> (B) Prevalence Index = B/A = <u>3.06</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. <i>Lonicera maackii</i>	35	Y	NI	
2. _____				
3. _____				
35 = Total Cover				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: _____)				
1. <i>Poa pratensis</i>	50	Y	FAC	
2. <i>Conyza canadensis</i>	30	Y	FAC	
3. <i>Sorghum halepense</i>	40	Y	FACU	
4. <i>Asclepias syriaca</i>	10		FACU	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5. _____				
130 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epiedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>Surface</u> Remarks: Unable to obtain soil sample based on rocky conditions.	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥2</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Port of East St. Louis	City/County:	East St. Louis; St. Clair	Sampling Date:	06-19-2012
Applicant/Owner:	Slay Industries	State:	Illinois	Sampling Point:	S16
Investigator(s):	SCI Engineering, Inc.	Section, Township, Range:		S23 T2N R10W	
Landform (hillslope, terrace, etc.):		Local relief (concave, convex, none):			
Slope (%):		Lat:		Long:	
Soil Map Unit Name:		NW1 classification:			
Are climatic/hydrologic conditions on the site typical for this time of year?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>Y</u> , or Hydrology <u>N</u> significantly disturbed?				Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?				(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Point taken near the northeastern boundary of the subject site.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>Populus deltoides</i>	5		FACW	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species across all Strata: <u>4</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50</u> (A/B)
2. <i>Acer saccharinum</i>	15		FACW	
3. _____				
4. _____				
5. _____				
<u>20</u> = Total Cover				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species _____ x1 = _____ FACW species <u>40</u> x2 = <u>80</u> FAC species <u>80</u> x3 = <u>240</u> FACU species <u>50</u> x4 = <u>200</u> UPL species _____ x5 = _____ Column Totals: <u>170</u> (A) <u>520</u> (B) Prevalence Index = B/A = <u>3.06</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. <i>Lonicera maackii</i>	25	Y	NI	
2. _____				
3. _____				
4. _____				
5. _____				
<u>25</u> = Total Cover				
Herb Stratum (Plot size: _____)				
1. <i>Poa pratensis</i>	35	Y	FAC	
2. <i>Conyza canadensis</i>	35	Y	FAC	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
3. <i>Sorghum halepense</i>	30	Y	FACU	
4. <i>Asclepias syriaca</i>	10		FACU	
5. <i>Rumex crispus</i>	15		FAC	
<u>125</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10 YR 3/2						sicl	
	10 YR 3/3							

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>6</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: Rocky soil conditions observed at approximately 6 inches below surface. The area has likely been filled in the past based on site observations.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>				<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥6</u> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>≥6</u>				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					