Port of East St. Louis EA Appendix F - Wetland Delineation



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



June 22, 2012

SCI ENGINEERING, INC.

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

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 – 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.

and a Farmagen

Jane A. Farrington Project Scientist Scott D. Harding, CPSS/SC

Vice President

JAF/SDH/lf

Enclosure

One copy and one electronic version submitted.

R:\emtapps\PROJECT FILES\\2011 PROJECTS\2011-3213 Port of East St. Louis\NR\113213.31 Wetland Delineation - Revised 6-22-12.doc

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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

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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.

Port of East St. Louis EA Appendix F - Wetland Delineation Port of East St. Louis

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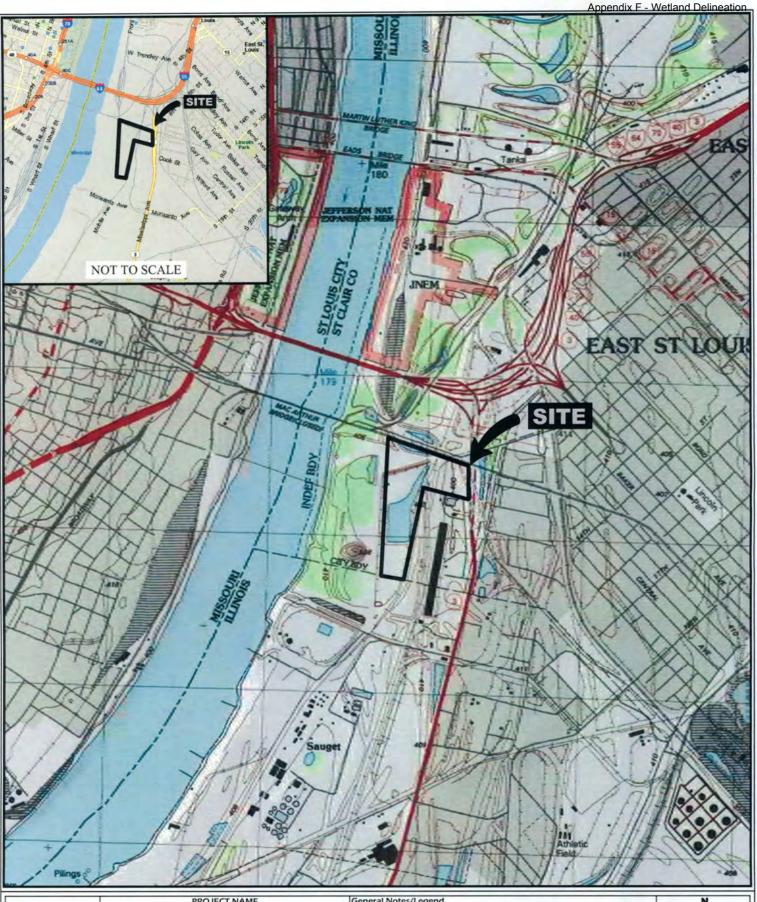
SCI No. 2011-3213.31

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.





PROJECT NAME

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

VICINITY AND TOPOGRAPHIC MAP

JOB NUMBER 10' CONTOURS DRAWN BY 05/2012 CHECKED BY SDH

General Notes/Legend

USGS TOPOGRAPHIC MAP GRANITE CITY, ILLINOIS - MISSOURI QUADRANGLE DATED 1993 PHOTO REVISED 1998

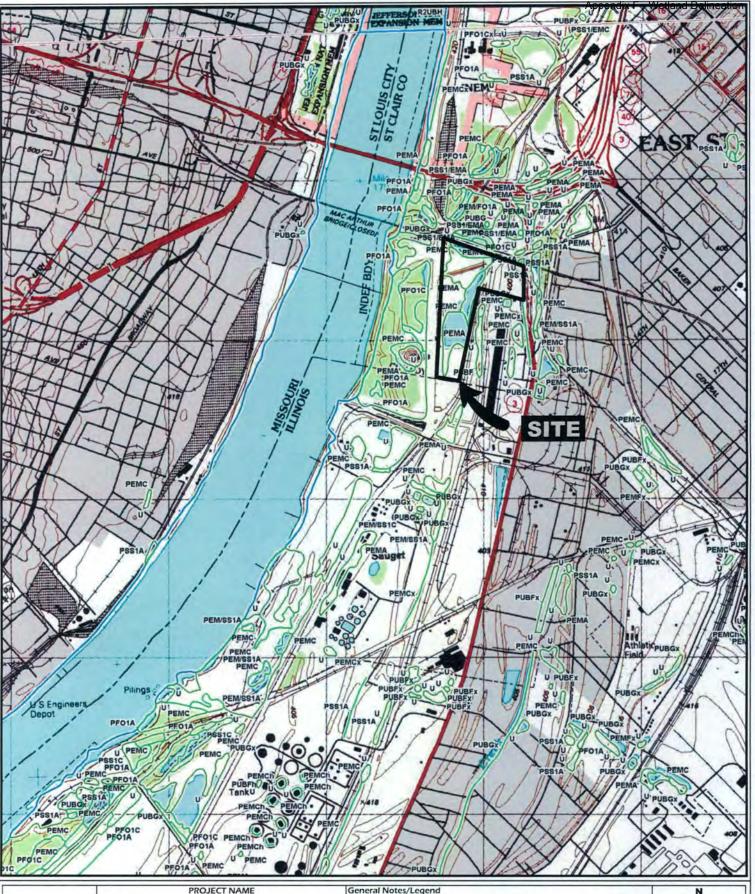
10' CONTOURS
CAHOKIA, ILLINOIS - MISSOURI QUADRANGLE
DATED 1993
PHOTO REVISED 1998

2011-3213.31 Rage Co710f148:ETS AND TRIPS 2007



SCALE 1" = 2000'

FIGURE





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

FIGURE

Page C-8 of 48





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

W E

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

Appendix A



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

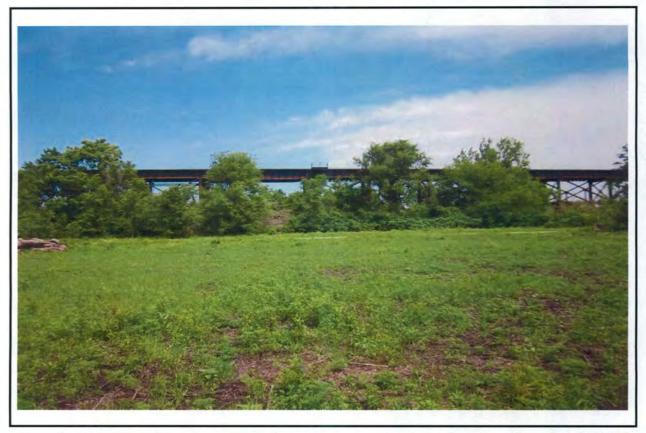


Photo 2. Facing north in northwestern portion of site; non-wetland, near location of data form S10. 16



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

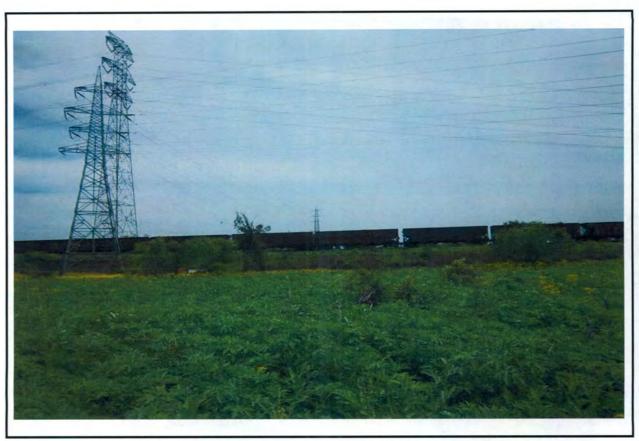


Photo 5. Facing east in 10.6-acre wetland; near location of data form S4. 35



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.

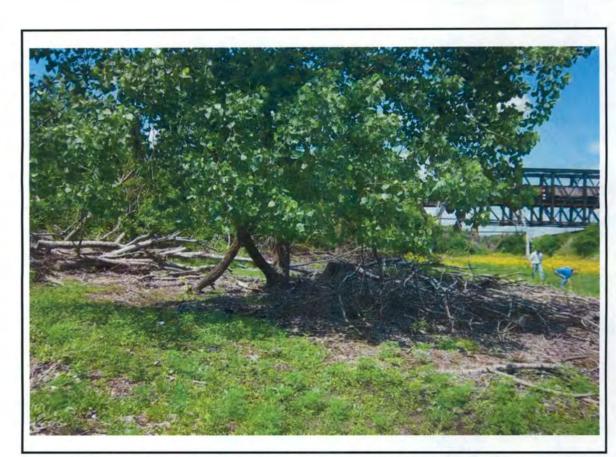


Photo 9. Facing northeast within 0.65-acre wetland; near location of data form S7.

Appendix B

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site:	Project/Site: Port of East St. Lou			East St. Lou	is; St. Clair	Sampling D	Date:	05-08-2012	
Applicant/Owner:	wner: <u>Slay Industires</u> State:			Illinois		Sampling P	Point:	<u>S1</u>	
Investigator(s):	SCI Engineering, Inc.			Section, Township, Range:			23 T2N	R10W	
Landform (hillslope, te			Local relief	(concave, conve	ex, none):				
Slope (%):		Lat		Long:		Datum:			
Soil Map Unit Name:	oil Map Unit Name:					NWI classification:			
Are climatic/hydrologic	conditions on	the site typical	l for this time of y	ear?	Yes 🛛	No ☐ (If no, ex	cplain in	Remarks.)	
Are Vegetation N, Soil	Y, or Hydrolog	y N significan	itly disturbed?	Are "Normal Circumstances"			sent?	Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrolog	y N naturally	problematic?	(If needed, explain any answers in Remarks.)					
UMMARY OF FI		Attach site	1111	g sampling	point locatio	ons, transects	, impo	ortant features, et	
Hydric Soil Present:				Is the Sampled Area			v	N 57	
Wetland Hydrology Pre-			within a Wetland?				Yes 🗌	□ No ⊠	

VEGETATION - Use scientific names of plants.

Remarks: Area of fill.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee	t:			
1				Number of Dominant Species				
2				that are OBL, FACW, or FA	$AC: \underline{1} (A)$			
3				Total Number of Dominant				
4				Species across all Strata:	<u>3</u> (B)			
5				Percent of Dominant Specie				
	= T	otal Cover	that are OBL, FACW, or FA	C: <u>33</u> (A/B)				
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksho	eet:			
1. <u>Lonicera maackii</u>	50	X	NI	Total % Cover of:	Multiply by:			
2				OBL species	x1 =			
3				FACW species	x2 =			
4				FAC species 90	x3 = 270			
5				FACU species 30	x4 = 120			
	<u>50</u> = Total	Cover		UPL species x5 =				
Herb Stratum (Plot size:)				Column Totals: <u>120</u> (A) <u>390</u> (B)				
1. Sorghum halepense	25	X	FACU	Prevalence Index = $B/A = 3$.25			
2. <u>Rumex crispus</u>	15		FAC	Hydrophytic Vegetation In	idicators:			
3. <u>Galium aparine</u>	5		FACU	Dominance Test is >5	50%			
4. <u>Asclepias syriaca</u>	10		NI	Prevalence Index is <	3.0^{1}			
5. <u>poa pratensis</u>	75	X	FAC	Morphological Adapt				
	<u>130</u> = Tota	l Cover		supporting data in Remarks sheet)	or on a separate			
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation (Explain)				
1,				¹ Indicators of hydric soil and	wetland hydrolog			
2				must be present, unless distu problematic.				
	= To	otal Cover		Hydrophytic Vegetation Present?	Yes ☐ No ☒			

SOIL Sampling Point: <u>S1</u>

Depth	Ma	rix			Rede	ox Features				
inches)	Color (mois) %	Color	(moist)	%	Type ¹	Loc	2	Texture	Remarks
Type: C=Co	oncentration D=	Depletion	RM=Reduce	ed Matrix C	S=Covere	ed or Coated San	d Grains 2I	ocation:	PL=Pore Lining,	M=Matrix
COLUMN CO. WILL	Indicators:	Depiction,	TOT TOUGH	ou muin, c	S COVER	or coured star			Problematic Hyd	
Histosol				Sandy Gley	ved Matrix	x (S4)			e Redox (A16)	Tre Souls 1
	oidedon (A2)			Sandy Red		(54)			mese Masses (F12	`
				Stripped M					lain in Remarks)	,
Black Hi								ner (Exp	idii iii Keilidiks)	
	n Sulfide (A4)			Loamy Mu						
	Layers (A5)			Loamy Gle						
2 cm Mu				Depleted N			2			
Depleted Below Dark Surface (A11)				Redox Dar					ydrophytic vegeta t be present, unless	
Thick Dark Surface (A12)				Depleted I			proble		t be present, unless	s disturbed of
	ucky Mineral (S			Redox Dep	oressions (F8)	,	Washing.		
	cky Peat or Peat									
estrictive l	Layer (if observ	ed):								
Type:										N 57
JPC							Hydri	c Soil Pr	esent? Yes	No IXI
epth (inche emarks: So	es): oil too rocky for	soil sample	e (fill soils)				Hydri	e Soil Pr	resent? Yes	No 🖾
Depth (inche demarks: So YDROLO	es): oil too rocky for		e (fill soils)				Hydri	e Soil Pr	resent? Yes	No 🗵
Pepth (inche demarks: So YDROLO Vetland Hy	es): poil too rocky for OGY rdrology Indica	tors:		eck all that a	apply)		Hydri			inimum of two require
Vetland Hy	oil too rocky for OGY drology Indica cators (minimur	tors:	required; che			ives (B9)	Hydri	Second	dary Indicators (m	inimum of two require
YDROLO Vetland Hy rimary Indi Surface V	cators (minimur Water (A1)	tors:	required; che	☐ Water-St	tained Lea		Hydri	Second Surface	dary Indicators (m rface Soil Cracks (inimum of two require B6)
YDROLO Vetland Hy rimary Indi Surface V High Wa	poil too rocky for code of too rocky for cod	tors:	required; che	☐ Water-St☐ Aquatic	tained Lea Fauna (B1	(3)	Hydri	Second Sun	dary Indicators (m rface Soil Cracks (ainage Patterns (B	inimum of two require B6) 10)
YDROLO Vetland Hy rimary Indi Surface V High Wa Saturatio	poil too rocky for code of too rocky for cod	tors:	required; che	☐ Water-St ☐ Aquatic ☐ True Aq	tained Lea Fauna (B1 uatic Plan	(3) ts (B14)	Hydri	Second Sur	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta	inimum of two require B6) 10) able (C2)
YDROLO Vetland Hy rimary Indi Surface V High Wa Saturatio Water M	poil too rocky for rocky f	tors:	required; che	☐ Water-St ☐ Aquatic ☐ True Aq ☐ Hydroge	tained Lea Fauna (B1 uatic Plant n Sulfide	ts (B14) Odor (C1)		Second Sun Dra	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C	inimum of two require B6) 10) able (C2)
Vetland Hy rimary Indi Surface V High Wa Saturatio Water M Sediment	poil too rocky for redrology Indica cators (minimur Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	tors:	required; che	☐ Water-St ☐ Aquatic ☐ True Aq ☐ Hydroge ☐ Oxidized	tained Lea Fauna (B1 uatic Plant n Sulfide d Rhizosph	ts (B14) Odor (C1) heres on Living F		Second Sur Drr	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C turation Visible on	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)
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Vetland Hy rimary Indi Surface V High Wa Saturatio Water M Sediment Drift Dep Inundatio Sparsely rield Observariace Water Table	cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Ae Vegetated Concevations: er Present?	rial Imager	y (B7) Property (B8) Prope	Water-Si Aquatic Aquatic True Aq Hydroge Oxidized Presence Recent In Thin Mu Gauge of Other (E	tained Lea Fauna (B1 uatic Plant n Sulfide d Rhizosph of Reduct ron Reduct ron Reduct row Well Dat xxplain in I : None : >2	ts (B14) Odor (C1) heres on Living F ted Iron (C4) tion in Tilled So te (C7) ta (D9) Remarks)	Roots (C3)	Second Sur Dr.	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C turation Visible on unted or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)
YDROLO Vetland Hy rimary Indi Surface W High Wa Saturatio Water M Sediment Drift Dep Inundatio Sparsely Field Observation Pr	poil too rocky for rocky for too rocky for rocky for too rocky for rocky for too rocky for too rocky for too rocky for rocky for too rocky for rocky for too rocky for roc	rial Imager	y (B7) y (B8) De	Water-Si Aquatic True Aq Hydroge Oxidized Presence Recent In Thin Mu Gauge of Other (E	tained Lea Fauna (B1 uatic Plant n Sulfide d Rhizosph of Reduct ron Reduct ron Reduct row Well Dat xxplain in I : None : >2	ts (B14) Odor (C1) heres on Living F ted Iron (C4) tion in Tilled So te (C7) ta (D9)	Roots (C3)	Second Sur Dr.	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C turation Visible on unted or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)
YDROLO Vetland Hy rimary Indi Surface V High Wa Saturatio Water M Sediment Drift Dep Algal Ma Iron Dep	poil too rocky for rocky for too rocky for rocky for too rocky for rocky for too rocky for too rocky for too rocky for rocky for too rocky for rocky for too rocky for roc	rial Imager	y (B7) y (B8) De	Water-Si Aquatic Aquatic True Aq Hydroge Oxidized Presence Recent In Thin Mu Gauge of Other (E	tained Lea Fauna (B1 uatic Plant n Sulfide d Rhizosph of Reduct ron Reduct ron Reduct row Well Dat xplain in I : None : >2	ts (B14) Odor (C1) heres on Living F ted Iron (C4) tion in Tilled So te (C7) ta (D9) Remarks)	Roots (C3)	Second Sur Dr.	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C turation Visible on unted or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)
Vetland Hy rimary Indi Surface W High Wa Saturatio Water M Sediment Drift Dep Inundatio Sparsely ield Observation Princludes capinge)	objective of the control of the cont	rial Imager ave Surface Yes Yes	y (B7) c (B8) 1 No \(\text{De} \) No \(\text{De} \) No \(\text{De} \)	□ Water-Si □ Aquatic □ True Aq □ Hydroge □ Oxidized □ Presence □ Recent In □ Thin Mu □ Gauge on □ Other (E pth (inches) pth (inches)	tained Lea Fauna (B1 uatic Plant n Sulfide d Rhizosph of Reduct ron Reduct ron Reduct r Well Dat xxplain in I : None : >2 : >2	ts (B14) Odor (C1) heres on Living Bed Iron (C4) tion in Tilled Socie (C7) ta (D9) Remarks) Wetland Hy	Roots (C3)	Second Sur Dr. Cr. Sat Stu	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C turation Visible on unted or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)
Wetland Hy rimary Indi Surface W High Wa Saturatio Water M Sediment Indi Inon Dep Inundatio Sparsely ield Observariace Water Vater Table atturation Princludes capinge)	objective of the control of the cont	rial Imager ave Surface Yes Yes	y (B7) c (B8) 1 No \(\text{De} \) No \(\text{De} \) No \(\text{De} \)	□ Water-Si □ Aquatic □ True Aq □ Hydroge □ Oxidized □ Presence □ Recent In □ Thin Mu □ Gauge on □ Other (E pth (inches) pth (inches)	tained Lea Fauna (B1 uatic Plant n Sulfide d Rhizosph of Reduct ron Reduct ron Reduct r Well Dat xxplain in I : None : >2 : >2	ts (B14) Odor (C1) heres on Living F ted Iron (C4) tion in Tilled So te (C7) ta (D9) Remarks)	Roots (C3)	Second Sur Dr. Cr. Sat Stu	dary Indicators (m rface Soil Cracks (ainage Patterns (B y-Season Water Ta ayfish Burrows (C turation Visible on unted or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St	. Louis	City/County:	East St. Louis	t. Louis; St. Clair Sa		ng Date:	05-08-2012	
Applicant/Owner:	Slay Industires	5	State:	Illinois	nois Sa		ng Point:	<u>S2</u>	
nvestigator(s): SCI Engineering, Inc.				Section, Township, Range:			S23 T2N	R10W	
Landform (hillslope, ter			Local relief (c	concave, conve	x, none):				
Slope (%):		Lat:		Long:		Datum:			
Soil Map Unit Name:			NWI classification:						
Are climatic/hydrologic	conditions on the	ne site typical f	or this time of ye	ear?	Yes 🛛 1	No 🗌 (If no	o, explain ir	Remarks.)	
Are Vegetation Y, Soil	N, or Hydrology	Y significantl	y disturbed?	Ar	Are "Normal Circumstances" present?			Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrology	N naturally pr	oblematic?	(If	(If needed, explain any answers in Remarks.)				
SUMMARY OF FI		Attach site		sampling p	oint locatio	ns, transe	ects, imp	ortant features, etc	
Hydric Soil Present:		es No 🗵		100000000000000000000000000000000000000	impled Area Wetland?		Ves [No ⊠	

VEGETATION - Use scientific names of plants.

Yes □ No 🛛

Wetland Hydrology Present:

Remarks: Area of fill.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1				Number of Dominant Species		
2				that are OBL, FACW, or FAC: 0 (A)		
3				Total Number of Dominant		
4				Species across all Strata: 1 (B)		
5				Percent of Dominant Species		
		otal Cover		that are OBL, FACW, or FAC: 0 (A/B)		
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 $\underline{33}$ $x3 = \underline{99}$		
5				FACU species 95 $x4 = 380$		
	= T	otal Cover		UPL species x5 =		
Herb Stratum (Plot size:)				Column Totals: <u>128</u> (A) <u>479</u> (B)		
1. Conyza canadensis	25		FAC	Prevalence Index = $B/A = 3.7$		
2. Rumex crispus	3		FAC	Hydrophytic Vegetation Indicators:		
3. <u>Galium aparine</u>	5		FAC	N Dominance Test is >50%		
4. <u>Ambrosia trifida</u>	10		NI	N Prevalence Index is ≤3.01		
5. <u>Festuca subverticillata</u>	95	X	FACU	Morphological Adaptations ¹ (Provide		
	<u>138</u> = Tota	l Cover		supporting data in Remarks or on a separate sheet)		
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)		
L				¹ Indicators of hydric soil and wetland hydrolog		
2				must be present, unless disturbed or problematic.		
	= T	otal Cover		Hydrophytic Yes ☐ No ☒ Vegetation Present?		

SOIL

Sampling Point: <u>S2</u>

Histosol (A1) Sandy Gleyed Matrix (S4) C Histic Epidedon (A2) Sandy Redox (S5) Ir Black Histic (A3) Stripped Matrix (S6) O Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) inhydrogen Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Restrictive Layer (if observed):	e ² Texture Remarks
Nydric Soil Indicators: Histosol (A1)	
ydric Soil Indicators: Histosol (A1)	
ydric Soil Indicators: Histosol (A1)	
ydric Soil Indicators: Histosol (A1)	
ydric Soil Indicators: Histosol (A1)	
Nydric Soil Indicators: Histosol (A1)	
Hydric Soil Indicators: Histosol (A1)	ocation: DIPore I ining MMatrix
Histosol (A1)	ators for Problematic Hydric Soils ³ :
Histic Epidedon (A2)	past Prairie Redox (A16)
Black Histic (A3) Stripped Matrix (S6) O Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) 3 Indicators (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Problem (F8) Stratified Layer (if observed): Sandy Mucky Mineral (S1) Redox Depressions (F8) Problem (F8) Strictive Layer (if observed): Surface (F8) Problem (F8) Strictive Layer (if observed): Surface (F8) Problem	n-Manganese Masses (F12)
Hydrogen Sulfide (A4)	her (Explain in Remarks)
Stratified Layers (A5)	ici (Expiani in Kemarks)
2 cm Muck (A10)	
□ Depleted Below Dark Surface (A11) □ Redox Dark Surface (F6) □ Indich bydro Depleted Dark Surface (F7) □ Depleted Dark Surface (F8) □ Depleted Dark Surface (F8	
Thick Dark Surface (A12) □ Depleted Dark Surface (F7) hydroproble Redox Depressions (F8) □ Sandy Mucky Mineral (S1) □ Redox Depressions (F8) □ Standy Mucky Peat or Peat (S3) □ Restrictive Layer (if observed): Type: Rock	ators of hydrophytic vegetation and wetland
Sandy Mucky Mineral (S1)	logy must be present, unless disturbed or
S cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Sype: Rock Poepth (inches): Surface Surface Remarks: Soil too rocky for soil sample (fill soils) Surface Poepth (inches): Surface Surface Remarks: Soil too rocky for soil sample (fill soils) Surface Poepth (inches): Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surfac	matic.
Restrictive Layer (if observed): Type: Rock Depth (inches): Surface Remarks: Soil too rocky for soil sample (fill soils) PAROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) High Water Table (A2) Saturation (A3) True Aquatic Plants (B14) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7)	
Pepth (inches): Surface Remarks: Soil too rocky for soil sample (fill soils) PAPOLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Water Marks (B1) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Hydrogen Sulfide Odor (C1) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	
Pepth (inches): Surface Remarks: Soil too rocky for soil sample (fill soils) PUROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7)	
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Wetland Hydrology Indicators: Water All that apply) Water All that apply) Aquatic Fauna (B13) True Aquatic Fauna (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	c Soil Present? Yes 🗌 No 🖂
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Wetland Hydrogey Indicators: Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	
☐ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)	Secondary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D2) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): None	
Water Table Present? Yes □ No ☒ Depth (inches): ≥2	250 20 2 0 20 20
aturation Present? Yes ☐ No ☒ Depth (inches): ≥2 Wetland Hydrology Princludes capillary ringe)	esent? Yes □ No ⊠
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if availa	sle:
, il avana	100

Yes □ No ⊠

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St.	Louis	City/County:	East St. Loui	ouis; St. Clair Sampling Date:		Date:	05-08-2012	
Applicant/Owner:	Slay Industires		State:	Illinois	Illinois S		Point:	<u>S3</u>	
Investigator(s): SCI Engineering, Inc.				Section, Tow	nship, Range:		S23 T2N	R10W	
Landform (hillslope, ter			Local relief (concave, convey	x, none):				
Slope (%):		Lat:		Long:		Datum:			
Soil Map Unit Name:				NWI classifi	cation:				
Are climatic/hydrologic	conditions on the	e site typical f	for this time of ye	ear?	Yes 🛛 N	No 🗌 (If no,	explain in	Remarks.)	
Are Vegetation Y, Soil	N, or Hydrology	Y significantl	y disturbed?	A	Are "Normal Circumstances" present? Yes ⊠				
Are Vegetation N, Soil	N, or Hydrology	N naturally pr	roblematic?	(I	(If needed, explain any answers in Remarks.)				
SUMMARY OF FI		ttach site i		sampling p	ooint location	ns, transec	ts, impe	ortant features, e	
Hydric Soil Present:	201000000000000000000000000000000000000	s 🗆 No 🏻			Is the Sampled Area		Ves 🗆	No 🖾	

within a Wetland?

VEGETATION - Use scientific names of plants.

Remarks: Area surrounding MSD building - mowed and maintained

Wetland Hydrology Present:

Yes 🗌

No 🛛

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee	t:	
1				Number of Dominant Speci		
2				that are OBL, FACW, or FA	$AC: \underline{1} (A)$	
3				Total Number of Dominant		
4				Species across all Strata:	<u>2</u> (B)	
5				Percent of Dominant Specie		
	= T	otal Cover	that are OBL, FACW, or FA	AC: <u>50</u> (A/B)		
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksh	eet:	
1				Total % Cover of:	Multiply by:	
2				OBL species	x1 =	
3				FACW species	x2 =	
4				FAC species 78	x3 = 234	
5				FACU species 75	x4 = 300	
		otal Cover		UPL species	x5 =	
Herb Stratum (Plot size:)				Column Totals: 153 (A)	534 (B)	
1. Ranunculus repens	75	X	FACU	Prevalence Index = $B/A = 3$.5	
2. Rumex crispus	3		FAC	Hydrophytic Vegetation I	idicators:	
3. <u>Poa pratensis</u>	75	X	FAC	N Dominance Test is >50%		
4				<u>N</u> Prevalence Index is $\le 3.0^{1}$		
5,				Morphological Adap		
	= Te	otal Cover		supporting data in Remarks sheet)	or on a separate	
Woody Vine Stratum (Plot size:)				Problematic Hydropl (Explain)	ytic Vegetation1	
1				¹ Indicators of hydric soil and	d wetland hydrolog	
2				must be present, unless disturbed or problematic.		
	= To	otal Cover		Hydrophytic Vegetation Present?	Yes □ No ☒	

SOIL Sampling Point: S3

Type: C=Conc Hydric Soil In Histosol (A	Matrix Color (moist)	% (Color (moist)	%	Type ¹	Loc	,2	Texture	Remarks	
Iydric Soil In ☐ Histosol (A										
ydric Soil In Histosol (A	centration, D=Dep									
ydric Soil In Histosol (A	centration, D=Dep									
ydric Soil In Histosol (A	centration, D=Dep									
ydric Soil In Histosol (A	centration, D=Dep									
ydric Soil In Histosol (A	centration, D=Dep							-		
lydric Soil In Histosol (A	centration, D=Dep						-			
lydric Soil In Histosol (A	centration, D=Dep			00.0	1 0 10 10	. 2.	T P	. D I : :	LAT.	
Histosol (A	**	letion, RM=	Reduced Matrix,	CS=Covere	ed or Coated Sand G					
					(C.1)			roblematic Hydr	ric Solls":	
Lietin Caid			☐ Sandy G		(S4)			Redox (A16)		
			☐ Sandy R					ese Masses (F12)		
Black Histic			☐ Stripped			Otl	her (Explai	n in Remarks)		
Hydrogen S	Sulfide (A4)		☐ Loamy N	Aucky Miner	ral (F1)					
Stratified La	ayers (A5)		☐ Loamy C	ileyed Matri	x (F2)					
2 cm Muck	(A10)		☐ Depleted	Matrix (F3)						
Depleted B	elow Dark Surface	e (A11)	☐ Redox D	ark Surface	(F6)	3Indica	ators of hy	drophytic vegetat	ion and wetland	
Thick Dark	Surface (A12)		☐ Depleted	Dark Surfac	ce (F7)	hydrol proble		be present, unless	disturbed or	
Sandy Muc	ky Mineral (S1)		☐ Redox D	epressions (F8)	proble	matic.			
5 cm Muck	y Peat or Peat (S3)								
estrictive La	yer (if observed)									
ype: Rock										
Depth (inches):	Surface					Hydri	c Soil Pres	sent? Yes 🗌	No 🖂	
-	too rocky for soil	comple (fill	naile)							
	rology Indicators tors (minimum of ter (A1) • Table (A2)		☐ Water- ☐ Aquati	t apply) Stained Lea c Fauna (B1 equatic Plant gen Sulfide	3) ss (B14)		☐ Surfa ☐ Drain ☐ Dry-	ry Indicators (minute Soil Cracks (Inage Patterns (B1 Season Water Ta fish Burrows (C8	0) ble (C2)	
Sediment D	eposits (B2)		☐ Oxidiz	ed Rhizosph	neres on Living Roo					
Drift Depos	its (B3)		☐ Presen	ce of Reduc	ed Iron (C4)		☐ Stunted or Stressed Plants (D2)			
Algal Mat o	or Crust (B4)		Recent	Iron Reduc	tion in Tilled Soils	(C6)	☐ FAC	-Neutral Test (D:	5)	
Iron Deposi	its (B5)		☐ Thin N	luck Surface	c(C7)		0.00			
	Visible on Aerial	Imagery (B7)	☐ Gauge	or Well Dat	a (D9)					
	egetated Concave			Explain in F						
ield Observat										
urface Water l		□ No ⊠	Depth (inche	s). None						
Vater Table Pr										
aturation Presenctudes capille	ent? Yes				Wetland Hydr	ology Pr	esent?	Yes □ N	o 🖾	
	ded Data (stream	gauge monit	oring well serie	l photos pre	evious inspections),	if availab	le.			
escribe Recor	ucu Data (Stream	gauge, mont	ornig wen, aeria	n photos, pre	vious inspections),	ii avaiiab	ne.			

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St.	Louis	City/County:	East St. L	ouis;	St. Clair Samplin		g Date:	05-08-2012
Applicant/Owner:	Slay Industires		State:	Illinois		Sampling	g Point:	<u>\$4</u>	
Investigator(s): SCI Engineering, Inc.		ng, Inc.		Section, Township, Range:				S23 T2N R10W	
Landform (hillslope, terrace, etc.):				Local reli	ef (co	ncave, conve	x, none):		
Slope (%):		Lat:		Long:	-		Datum:		
Soil Map Unit Name:				NWI classification:			PEMA, PEMC		
Are climatic/hydrologi	c conditions on the	e site typical	for this time of y	ear?		Yes 🛛	No ☐ (If no,	explain ir	Remarks.)
Are Vegetation Y, Soil		Are "Normal Circumstances" present? Yes ⊠			Yes ⊠ No □				
Are Vegetation N, Soil	Are Vegetation N, Soil N, or Hydrology N naturally problematic?					(If needed, explain any answers in Remarks.)			rks.)

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

Hydrophytic Vegetation Present:	Yes ⊠ No □		
Hydric Soil Present:	Yes ⊠ No □	Is the Sampled Area within a Wetland?	Yes ⊠ No □
Wetland Hydrology Present:	Yes ⊠ No □		
Remarks: Wetland hydrology provi	ided by levee relief wells.		

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. Salix nigra	3		OBL	Number of Dominant Species			
2. Forestiera acuminata	5		OBL	that are OBL, FACW, or FAC: 3 (A)			
3. Populus deltoides	1		FAC	Total Number of Dominant			
4				Species across all Strata: 3 (B)			
5				Percent of Dominant Species			
	<u>9</u> = Total (Cover		that are OBL, FACW, or FAC: 100 (A/B)			
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:			
1				Total % Cover of: Multiply by:			
2				OBL species $\frac{78}{}$ $x1 = \frac{78}{}$			
3				FACW species $\underline{6}$ $x2 = \underline{12}$			
4				FAC species 51 $x3 = 153$			
5				FACU species x4 =			
	= T	otal Cover		UPL species x5 =			
Herb Stratum (Plot size:)				Column Totals: <u>135</u> (A) <u>243</u> (B)			
1. Vitis vulpina	3		FACW	Prevalence Index = $B/A = 1.8$			
2. Asclepias incarnata	20	X	OBL	Hydrophytic Vegetation Indicators:			
3. Ambrosia trifida	50	X	FAC	Y Dominance Test is >50%			
4. Impatiens capensis	3		FACW	$\underline{\underline{Y}}$ Prevalence Index is $\leq 3.0^1$			
5. <u>Packera glabella</u>	50	X	OBL	Morphological Adaptations ¹ (Provide			
	<u>126</u> = Tota	al Cover		supporting data in Remarks or on a separate sheet)			
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)			
1				¹ Indicators of hydric soil and wetland hydrolog			
2				must be present, unless disturbed or problematic.			
	= T	otal Cover		Hydrophytic Yes ⊠ No ☐ Vegetation Present?			

SOIL

Sampling Point: <u>S4</u>

0-15		ral (F1) ix (F2)) (F6) ce (F7)	Indicators Coast F Iron-M Other (Prairie Redox (A16) anganese Masses (F12) Explain in Remarks) of hydrophytic vegetal must be present, unless	ric Soils ³ :	
Type: C=Concentration, D=Depletion, RM=Reduce Hydric Soil Indicators: Histosol (A1) Histic Epidedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check the content of the cont	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Miner Loamy Gleyed Matrix Depleted Matrix (F3) Redox Dark Surface Depleted Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Indicators Coast F Iron-M Other (ion: PL=Pore Lining, Note of Problematic Hyd Prairie Redox (A16) anganese Masses (F12) Explain in Remarks) of hydrophytic vegetar must be present, unless	ric Soils ³ :	
Type: C=Concentration, D=Depletion, RM=Reduced Hydric Soil Indicators: Histosol (A1) Histic Epidedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Cem Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Some Mucky Mineral (S1) Some Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Primary Indicators (minimum of one is required; chemical Content of the Content of the Content of the Content of Content	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Miner Loamy Gleyed Matrix Depleted Matrix (F3) Redox Dark Surface Depleted Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Indicators Coast F Iron-M Other (Prairie Redox (A16) anganese Masses (F12) Explain in Remarks) of hydrophytic vegetal must be present, unless	ric Soils ³ :	
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Sandy Mucky Mineral (S1) Set of Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Remarks: Primary Indicators (minimum of one is required; chemical content of the peat			problemati	c.		
Sestrictive Layer (if observed): Spe: Depth (inches): Depth						
Restrictive Layer (if observed): Type: Depth (inches):						
Poppth (inches):						
Perpth (inches):						
Primary Indicators (minimum of one is required; chair Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)		-	Hydric So	il Present? Yes ⊠	No 🗆	
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)						
	heck all that apply) Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide (Oxidized Rhizosph Presence of Reduce Recent Iron Reduce Thin Muck Surface Gauge or Well Dat Other (Explain in F	ts (B14) Odor (C1) heres on Living Roots ted Iron (C4) tion in Tilled Soils (C e (C7) ta (D9)	s (C3)	condary Indicators (mi Surface Soil Cracks (I Drainage Patterns (B) Dry-Season Water Ta Crayfish Burrows (CS Saturation Visible on Stunted or Stressed P FAC-Neutral Test (D	B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2)	
CONTRACTOR CONTRACTOR						
Surface Water Present? Yes □ No ☒ D	epth (inches): None					
	epth (inches): >15					
		Wetland Hydro	Wetland Hydrology Present? Yes ⊠ No □			
Describe Recorded Data (stream gauge, monitoring	epth (inches): <u>>15</u>		f available:			
		evious inspections), if	i available.			

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St.	Port of East St. Louis City/County: East					Sampling	g Date:	05-10-2012
Applicant/Owner:	Slay Industires		State:	Illinois		Sampling Point:		<u>S5</u>	
Investigator(s):	SCI Engineerin	SCI Engineering, Inc.				ship, Range:		S23 T2N	R10W
Landform (hillslope, ter		Local relief (concave, convex, none):							
Slope (%):		Lat:		Long:	_		Datum:		
Soil Map Unit Name:			NWI classification:						
Are climatic/hydrologic	conditions on the	e site typical f	or this time of ye	ear?		Yes 🖾 🗎	No ☐ (If no,	explain ir	Remarks.)
Are Vegetation Y, Soil	N, or Hydrology	Y significantl	y disturbed?		Are "Normal Circumstances" present? Yes ⊠ No □			Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrology l	N naturally p	oblematic?		(If needed, explain any answers in Remarks.)				rks.)

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

Hydrophytic Vegetation Present:	Yes ⊠ No □			
Hydric Soil Present:	Yes ⊠ No □	Is the Sampled Area within a Wetland?	Yes ⊠ No □	
Wetland Hydrology Present:	Yes ⊠ No □			
Remarks: Area is at lower elevation		red to the east by railroad grade		

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. Salix nigra	3		OBL	Number of Dominant Species			
2. Populus deltoides	3		FAC	that are OBL, FACW, or FAC: 2 (A)		
3				Total Number of Dominant			
4				Species across all Strata: 3 (B))		
5				Percent of Dominant Species			
	$\underline{6} = \text{Total } 0$	Cover		that are OBL, FACW, or FAC: 67 (A	A/B)		
Sapling/Shrub Stratum (Plot size:)		Prevalence Index Worksheet:	t:				
1				Total % Cover of: Multiply	by:		
2				OBL species $\underline{28}$ $x1 = \underline{28}$			
3,				FACW species 35 $x2 = 70$			
4				FAC species $\underline{3}$ $x3 = \underline{9}$			
5				FACU species 31 $x4 = 124$	4		
	= T	otal Cover		UPL species x5 =			
Herb Stratum (Plot size:)				Column Totals: <u>97</u> (A) <u>231</u> (B)			
1. Ambrosia artemisiifolia	25	X	FACU	Prevalence Index = $B/A = 2.38$			
2. Polygonum pensylvanicum	25	X	FACW	Hydrophytic Vegetation Indicators:			
3. <u>Carex sp.</u>	10		FACW	Y Dominance Test is >50%			
4. <u>Humulus japonicus</u>	6		FACU	Y Prevalence Index is ≤3.01			
5. <u>Packera glabella</u>	25	X	OBL	Morphological Adaptations ¹ (Provide			
	<u>91</u> = Total	Cover		supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain)			
Woody Vine Stratum (Plot size:)							
1				¹ Indicators of hydric soil and wetland hy	drolog		
2				must be present, unless disturbed or problematic.			
	= T	otal Cover		Hydrophytic Yes ⊠ Yes ⊠	No 🗆		

SOIL Sampling Point: <u>S5</u>

Depleted Below Darks (A10) Depleted Below Darks (A10) Sandy Mucky Min Stratified Layers (in the Dark Surface Sundy Mucky Peat Restrictive Layer (in the Dark Surface Sundy Mucky Min to	on, D=Ders: A2) (A4) A5) ark Surfae (A12) heral (S1) or Peat (S	face (A11)) (S3) ed):	☐ Sandy (☐ Sandy I☐ Strippe ☐ Loamy ☐ Loamy ☐ Deplete ☐ Redox ☐ Deplete	% 10 5 x, CS=Covered Gleyed Matrix Redox (S5) d Matrix (S6) Mucky Miner Gleyed Matrix Gleyed Matrix Ed Matrix (F3) Dark Surface Ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Indicate Coas Iron Othe	ation: PL=Pore Lining, ors for Problematic Hyot Prairie Redox (A16) Manganese Masses (F12 or (Explain in Remarks) ors of hydrophytic vegetary must be present, unlessatic.	dric Soils ³ : 2) ation and wetland ss disturbed or	
Type: C=Concentrat Hydric Soil Indicato Histosol (A1) Histic Epidedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers (2 cm Muck (A10) Depleted Below D Thick Dark Surfact Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (iff Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Inundation Visible	on, D=Ders: A2) (A4) A5) ark Surfae (A12) heral (S1) or Peat (S	face (A11)) (S3) ed):	M=Reduced Matrix Sandy I Sandy I Strippe Loamy Loamy Deplete Redox Deplete	Sleyed Matrix Redox (S5) d Matrix (S6) Mucky Miner Gleyed Matrix d Matrix (F3) Dark Surface ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Indicate Coas Iron Othe	ation: PL=Pore Lining, ors for Problematic Hyo t Prairie Redox (A16) Manganese Masses (F12 r (Explain in Remarks) ors of hydrophytic vegeta sy must be present, unles atic.	dric Soils ³ : 2) ation and wetland ss disturbed or	
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Hydric Soil Indicator Histosol (A1) Histic Epidedon (A1) Histic Epidedon (A2) Hydrogen Sulfide Stratified Layers (A2) Depleted Below Day Depleted Below Day Depleted Below Day Sandy Mucky Min Som Mucky Peat Restrictive Layer (if Type:	(A4) (A5) ark Surfa e (A12) eral (S1) or Peat (S	face (A11)) (S3) ed):	☐ Sandy (☐ Sandy I☐ Strippe ☐ Loamy ☐ Loamy ☐ Deplete ☐ Redox ☐ Deplete	Gleyed Matrix Redox (S5) d Matrix (S6) Mucky Mine Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Indicate Coas Iron Othe	rs for Problematic Hyd t Prairie Redox (A16) Manganese Masses (F12 r (Explain in Remarks) ors of hydrophytic vegeta ty must be present, unles atic.	dric Soils ³ : 2) ation and wetland ss disturbed or	
Hydric Soil Indicator Histosol (A1) Histic Epidedon (A1) Histic Epidedon (A2) Hydrogen Sulfide Stratified Layers (A2) Depleted Below Day Depleted Below Day Depleted Below Day Sandy Mucky Min Som Mucky Peat Restrictive Layer (If Type:	(A4) (A5) ark Surfa e (A12) eral (S1) or Peat (S	face (A11)) (S3) ed):	☐ Sandy (☐ Sandy I☐ Strippe ☐ Loamy ☐ Loamy ☐ Deplete ☐ Redox ☐ Deplete	Gleyed Matrix Redox (S5) d Matrix (S6) Mucky Mine Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Indicate Coas Iron Othe	rs for Problematic Hyd t Prairie Redox (A16) Manganese Masses (F12 r (Explain in Remarks) ors of hydrophytic vegeta ty must be present, unles atic.	dric Soils ³ : 2) ation and wetland ss disturbed or	
Histosol (A1) Histic Epidedon (A) Black Histic (A3) Hydrogen Sulfide Stratified Layers (A10) Depleted Below D Thick Dark Surfact Sandy Mucky Min Som Mucky Peat Restrictive Layer (iff Type: Depth (inches): Remarks: PAROLOGY Vetland Hydrology Trimary Indicators (In Surface Water (A) High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible	(A4) (A5) ark Surfa e (A12) eral (S1) or Peat (S	(S3) (ed):	Sandy I Strippe Loamy Loamy Deplete Redox Deplete	Redox (S5) d Matrix (S6) Mucky Mine Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	☐ Coas ☐ Iron- ☐ Othe	t Prairie Redox (A16) Manganese Masses (F12 r (Explain in Remarks) ors of hydrophytic vegeta ry must be present, unlessatic.	ation and wetland ss disturbed or	
Histic Epidedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers (2 cm Muck (A10) Depleted Below D Thick Dark Surfact Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (iff Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible	(A4) A5) ark Surfa e (A12) eral (S1) or Peat (S	(S3) (ed):	Sandy I Strippe Loamy Loamy Deplete Redox Deplete	Redox (S5) d Matrix (S6) Mucky Mine Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	☐ Iron-☐ Othe	Manganese Masses (F12 r (Explain in Remarks) ors of hydrophytic vegeta ry must be present, unlessatic.	ation and wetland as disturbed or	
Black Histic (A3) Hydrogen Sulfide Stratified Layers (2 cm Muck (A10) Depleted Below D Thick Dark Surfact Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (iff Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrology Primary Indicators (n Surface Water (A	(A4) A5) ark Surfa e (A12) eral (S1) or Peat (S	(S3) (ed):	☐ Strippe ☐ Loamy ☐ Loamy ☐ Deplete ☐ Redox ☐ Deplete	d Matrix (S6) Mucky Mine: Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surface	ral (F1) ix (F2)) (F6) ce (F7)	Othe	r (Explain in Remarks) ors of hydrophytic vegeta sy must be present, unles	ation and wetland as disturbed or	
Hydrogen Sulfide Stratified Layers (2 cm Muck (A10) Depleted Below D Thick Dark Surfact Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (iff Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Trimary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Inundation Visible	A5) ark Surfa e (A12) aeral (S1) or Peat (S	(S3) (ed):	☐ Loamy ☐ Loamy ☐ Deplete ☐ Redox ☐ Deplete	Mucky Mine Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surfa	ral (F1) ix (F2)) (F6) ce (F7)	³ Indicate hydrolog problem	ors of hydrophytic vegeta sy must be present, unles atic.	ss disturbed or	
Stratified Layers (2 cm Muck (A10) Depleted Below D Thick Dark Surface Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (if Type: Depth (inches): Remarks: POROLOGY Vetland Hydrology Trimary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B5) Inundation Visible	A5) ark Surfa e (A12) aeral (S1) or Peat (S	(S3) (ed):	☐ Loamy ☐ Deplete ☐ Redox ☐ Deplete	Gleyed Matrix ed Matrix (F3) Dark Surface ed Dark Surface	ix (F2)) (F6) ce (F7)	hydrolog	y must be present, unles	ss disturbed or	
2 cm Muck (A10) Depleted Below D Thick Dark Surfar Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (if Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Trimary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Inundation Visible	ark Surfa te (A12) teral (S1) or Peat (S	(S3) (ed):	☐ Deplete	ed Matrix (F3) Dark Surface ed Dark Surfa	(F6) ce (F7)	hydrolog	y must be present, unles	ss disturbed or	
Depleted Below I Thick Dark Surface Sandy Mucky Min Sandy Mucky Peat Restrictive Layer (if Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Inundation Visible	e (A12) eral (S1) or Peat (S	(S3) (ed):	☐ Redox	Dark Surface ed Dark Surfa	(F6) ce (F7)	hydrolog	y must be present, unles	ss disturbed or	
Thick Dark Surfact Sandy Mucky Min Sandy Mucky Peat Restrictive Layer (iff Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Inundation Visible	e (A12) eral (S1) or Peat (S	(S3) (ed):	☐ Deplete	ed Dark Surfa	ce (F7)	hydrolog	y must be present, unles	ss disturbed or	
Sandy Mucky Min 5 cm Mucky Peat Restrictive Layer (if Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Iron Deposits (B5) Inundation Visible	or Peat (S) (S3) ed):	100000000000000000000000000000000000000			problem	atic.		
5 cm Mucky Peat Sestrictive Layer (if Sype: Depth (inches): Proposition Deposits (B1)	or Peat (S	(S3)	Redox	Depressions (.18)	Hydric	Soil Present? Yes ⊠] No □	
Restrictive Layer (iff Type:		ed):				Hydric	Soil Present? Yes 🖂] No □	
Popper Popper Popper Popper Pop	observed					Hydric	Soil Present? Yes ⊠] No □	
Vetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Iron Deposits (B5		ors:				Hydric	Soil Present? Yes ⊠	No □	
Vetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Iron Deposits (B5		ors:							
YDROLOGY Vetland Hydrology rimary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5		ors:							
Wetland Hydrology Primary Indicators (n Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5		ors:							
☐ Iron Deposits (B5☐ Inundation Visible						Drainage Patterns (B10) (B14) □ Dry-Season Water Table (C2) □ Crayfish Burrows (C8) □ Saturation Visible on Aerial Imagery (C			
Inundation Visible	t (B4)		Rece		tion in Tilled So	oils (C6)	FAC-Neutral Test (I	05)	
		ial Imagery		ge or Well Dat					
				r (Explain in I					
ield Observations:	Concav	ve Surface ((Be) Other	(Explain iii i	(Ciliarks)				
Surface Water Presen	9 V	Yes ⊠ No	o Depth (inch	age): 2					
Vater Table Present?				nes): surface					
aturation Present? includes capillary ringe)	V			nes): surface	Wetland H	Wetland Hydrology Present? Yes ⊠ No □			
Describe Recorded D			and tables will see	ial photos pro	evious inspection	ns) if available	:		
	Y	am gauge, m	nonitoring well, aer	protos, pro	viie as mapeene	my, ir a a and			
Remarks: Surface wa	Yenta (stream				100	110), 11 414111011			

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 Industires		State:	Illinois	Illinois		Sampling	Point:	<u>\$6</u>
Investigator(s):	SCI Engineerin	ng, Inc.		Section,	Town	ship, Range:		S23 T2N R10W	
Landform (hillslope, te	rrace, etc.):			Local relief (concave, convex, none):				_	
Slope (%):		Lat:					Datum:		_
Soil Map Unit Name: NW						NWI classification: PEMA			
Are climatic/hydrologic	c conditions on th	e site typical	for this time of y	ear?		Yes 🛛	No 🗌 (If no, o	explain in	Remarks.)
Are Vegetation Y, Soil	N, or Hydrology	Y significant	y disturbed?		Are "Normal Circumstances" present? Yes ⊠ No □			Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If needed, explain any answers in Remarks.)				ks.)

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

Yes □ No ⊠
Is the Sampled Area within a Wetland?

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet	•			
1				Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)				
2					C. <u>U</u> (A)			
3				Total Number of Dominant	1 (7)			
4				Species across all Strata:	<u>1</u> (B)			
5				Percent of Dominant Species				
		otal Cover		that are OBL, FACW, or FAC: 0 (A/B)				
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Workshe	et:			
I				Total % Cover of:	Multiply by:			
2				OBL species	x1 =			
3				FACW species	x2 =			
4				FAC species 20	x3 = 60			
5				FACU species 100	x4 = 400			
	= T	otal Cover		UPL species	x5 =			
Herb Stratum (Plot size:)				Column Totals: 120 (A)	460 (B)			
1. <u>Conyza canadensis</u>	20		FAC	Prevalence Index = $B/A = 3$.	8			
2. <u>Galium aparine</u>	5		FACU	Hydrophytic Vegetation Indicators: N Dominance Test is >50%				
3. Verbascum thapsus	5		NI					
4. Asclepias syriaca	20		NI	<u>N</u> Prevalence Index is $\le 3.0^1$				
5. Festuca subverticillata			FACU	Morphological Adaptations ¹ (Provide				
	<u>145</u> = Tota	al Cover		supporting data in Remarks or on a separate sheet)				
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)				
1				¹ Indicators of hydric soil and	wetland hydrolog			
2				must be present, unless distu problematic.	rbed or			
	=T	otal Cover		Hydrophytic Vegetation Present?	Yes No 🛛			

SOIL Sampling Point: <u>S6</u>

nches)	Matrix			Redo	ox Features				
-6	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture	Remarks
	10YR 3/1	55						sicl	
	10YR 3/2	45							
-15	10YR 3/1	45						sicl	significant sand layer
	10YR 3/2	40							
	10111372	1							
Type: C=Co	ncentration D=De	epletion, RN	1=Reduced Matrix,	CS=Covere	ed or Coated Sand (Grains. 2L	ocation: I	PL=Pore Lining	z. M=Matrix
Ivdric Soil I		parties, said						Problematic H	
Histosol (☐ Sandy Gl	eved Matrix	c (S4)			Redox (A16)	,
Histic Epi			☐ Sandy Re		16.0			iese Masses (F	12)
Black His			☐ Stripped					in in Remarks)	
	Sulfide (A4)		☐ Loamy N				ner (Expin	an in remarks)	
Stratified				Gleyed Matrix (F2)					
2 cm Muc	and the same of th		☐ Depleted						
	Below Dark Surfa	ce (A11)	☐ Redox D			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or			
	k Surface (A12)	CC (AII)	☐ Redox D						
-	and the second					proble	-	To Processing work	
E	cky Mineral (S1) ky Peat or Peat (S		Redox D	epressions ((0)				
	ayer (if observed								
	ayer (ii observed	·).							
Type: Depth (inches):						Hydri	c Soil Pre	sent? Yes [□ No ⊠
Remarks:									
ciidi ks.									
Surface W High Wate Saturation Water Ma Sediment Drift Depo	drology Indicator ators (minimum of ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)		☐ Aquati ☐ True A ☐ Hydrog ☐ Oxidiz ☐ Presend ☐ Recent ☐ Thin M	Stained Lea c Fauna (B1 quatic Plant gen Sulfide ed Rhizosph ce of Reduc Iron Reduc uck Surface	3) Is (B14) Odor (C1) Interes on Living Roa ed Iron (C4) tion in Tilled Soils to (C7)		Surf	ace Soil Cracks inage Patterns (Season Water of fish Burrows (B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2)
Iron Depo	Visible on Aeria /egetated Concave			or Well Dat Explain in I					
Iron Depo Inundation Sparsely Vield Observeurface Water	Visible on Aeria Vegetated Concave ations: r Present? Ye		8) Other (Explain in F					
Iron Depo Inundation Sparsely Vield Observ	a Visible on Aeria //egetated Concave ations: r Present? Ye //esent? Ye	es No	8) Other (Depth (inche) Depth (inche)	Explain in E					0.750
Iron Depo Inundation Sparsely Vield Observeurface Water Vater Table Faturation Prencludes capi	ations: Present? Yesent? Yesent? Yesent?	es No	8) Other (Depth (inche) Depth (inche)	Explain in F s): <u>None</u> s): <u>>15</u>		rology Pr	esent?	Yes 🗆	No ⊠
Iron Depo Inundation Sparsely Vield Observ. urface Water /ater Table Faturation Pre ncludes capi inge)	r Present? Yesent? Yesent? Yesent? Yesent? Yesent?	es No es No es No	8) Other (Depth (inches Depth (inches	Explain in F s): <u>None</u> s): <u>>15</u> s): <u>>15</u>	Wetland Hyd			Yes 🗆	No ⊠
Iron Depo Inundation Sparsely Vield Observ. urface Water /ater Table Faturation Pre ncludes capi inge)	r Present? Yesent? Yesent? Yesent? Yesent? Yesent?	es No es No es No	8) Other (Depth (inches	Explain in F s): <u>None</u> s): <u>>15</u> s): <u>>15</u>	Wetland Hyd			Yes 🗆	No ⊠

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 Industires		State:	Illinois		Sampling Point:		<u>S7</u>		
Investigator(s):	SCI Engineerin	ng, Inc.		Section,	Town	ship, Range:	3	S23 T2N	2N R10W	
Landform (hillslope, te	rrace, etc.):			Local relief (concave, convex, none):						
Slope (%):		Lat:			-		Datum:			
Soil Map Unit Name:	NWI classification:									
Are climatic/hydrologic	conditions on the	e site typical	for this time of y	ear?		Yes 🖾	No ☐ (If no, e	explain in	Remarks.)	
Are Vegetation N, Soil	Y, or Hydrology	N significantl	y disturbed?		Are "Normal Circumstances" present? Yes ⊠ No □				Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If needed, explain any answers in Remarks.)				·ks.)	

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

Hydrophytic Vegetation Present:	Yes ⊠ No □		
Hydric Soil Present:	Yes ⊠ No □	Is the Sampled Area within a Wetland?	Yes ⊠ No □
Wetland Hydrology Present:	Yes ⊠ No □		13000 - 200
Remarks: Area is at lower elevation	n than surrouding areas and is loo	cated just west of elevated railroad facility	y.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. <u>Salix nigra</u>	3		OBL	Number of Dominant Species			
2. Populus deltoides	3		FAC	that are OBL, FACW, or FAC: 2 (A)			
3				Total Number of Dominant			
4				Species across all Strata: 3 (B)			
5				Percent of Dominant Species			
	$\underline{6}$ = Total 6	Cover		that are OBL, FACW, or FAC: 67 (A/B)			
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:			
1				Total % Cover of: Multiply by:			
2				OBL species $\underline{28}$ $x1 = \underline{28}$			
3				FACW species 35 $x2 = 70$			
4				FAC species $\underline{3}$ $x3 = \underline{9}$			
5				FACU species 31 $x4 = 124$			
	= T	otal Cover		UPL species $\underline{\hspace{1cm}}$ $x5 = \underline{\hspace{1cm}}$ Column Totals: $\underline{97}$ (A) $\underline{\hspace{1cm}}$ $\underline{231}$ (B)			
Herb Stratum (Plot size:)							
1. Ambrosia artemisiifolia	25	X	FACU	Prevalence Index = $B/A = 2.38$			
2. Polygonum pensylvanicum	25	X	FACW	Hydrophytic Vegetation Indicators:			
3. Carex sp.	10		FACW	Y Dominance Test is >50%			
4. <u>Humulus japonicus</u>	6		FACU	Y Prevalence Index is ≤3.01			
5. <u>Packera glabella</u>	25	X	OBL	Morphological Adaptations ¹ (Provide			
	<u>91</u> = Total	91 = Total Cover		supporting data in Remarks or on a separate sheet)			
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)			
I				¹ Indicators of hydric soil and wetland hydrolog			
2				must be present, unless disturbed or problematic.			
	= T	otal Cover		Hydrophytic Yes ⊠ No ☐ Vegetation Present?			

SOIL Sampling Point: <u>S7</u>

epth	ription: (Describe				ox Features					
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture	Remarks	
-15	10YR 4/1	90	10YR 4/3	10				s cl		
	10.110.110		10YR 2/1	10						
			101712							
		-								
		-								
Cupa: C=C	oncentration, D=D	enletion P	M=Reduced Mate	iv CS=Cover	ed or Coated San	d Grains 21	ocation:	PL=Pore Lining N	M=Matrix	
	Indicators:	epiction, is	IVI Reduced IVIau	in, CD COVER	or coaled Star			Problematic Hyd		
Histosol			☐ Sandy	Gleyed Matri	x (S4)			Redox (A16)		
	oidedon (A2)			Redox (S5)	(51)			nese Masses (F12)		
Black Hi				ed Matrix (S6)				ain in Remarks)		
	n Sulfide (A4)			y Mucky Mine			ici (Empire	an an rectionally		
	Layers (A5)			y Gleyed Matr						
2 cm Mu				ted Matrix (F3						
	Below Dark Surfa	ce (A11)		Dark Surface		3Indica	etors of hy	drophytic vegetat	tion and wetland	
	ark Surface (A12)	ice (ATT)		ted Dark Surfa		budgeless must be account unless disturbed or				
	ucky Mineral (S1)			Depressions		proble	matic.			
	cky Peat or Peat (5		Redo.	Depressions	(10)					
	Layer (if observed									
	and the second second	.,.								
Type;						Hydric Soil Present? Yes ⊠ No □				
						Hydri	c Soil Pre	esent? Yes 🖂	No 🗆	
Depth (inche						Hydri	c Soil Pre	esent? Yes 🖂	No 🗆	
						Hydri	c Soil Pre	esent? Yes ⊠	No 🗌	
Depth (inche						Hydri	c Soil Pre	esent? Yes 🗵	No 🗆	
Depth (inche Remarks:	es):					Hydri	c Soil Pre	esent? Yes 🛛	No 🗆	
Depth (inche Remarks:	ogy					Hydri	c Soil Pre	esent? Yes 🗵	No 🗆	
Pepth (inche Remarks: YDROLO Wetland Hy	OGY					Hydri				
Pepth (inches Remarks: YDROLO Vetland Hy Primary India	OGY vdrology Indicato				(DO)	Hydri	Second	ary Indicators (mi	inimum of two require	
Primary Indi	OGY /drology Indicato icators (minimum of Water (A1)		□Wa	ter-Stained Lea		Hydri	Second Sur	lary Indicators (mi	inimum of two require B6)	
YDROLO Vetland Hy Surface V High Wa	OGY /drology Indicato icators (minimum of Water (A1) iter Table (A2)		□ Wa	ter-Stained Lea natic Fauna (B	13)	Hydri	Second Suri	lary Indicators (mi face Soil Cracks (linage Patterns (B)	inimum of two require B6) 10)	
YDROLO Wetland Hy Primary Indi Surface V High Wa Saturatio	OGY /drology Indicato icators (minimum of Water (A1) iter Table (A2) in (A3)		☐ Wa ☐ Aqu ☐ Tru	ter-Stained Lea natic Fauna (B e Aquatic Plan	13) ts (B14)	Hydri	Second Suri	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta	inimum of two require B6) 10) able (C2)	
YDROLO Vetland Hy Primary Indi Surface V High Wa Saturatio Water M	OGY Adrology Indicator ficators (minimum of Water (A1) fiter Table (A2) fin (A3) farks (B1)		☐ Wa ☐ Aqu ☐ Tru ☐ Hyo	ter-Stained Lea natic Fauna (B e Aquatic Plan lrogen Sulfide	13) ts (B14) Odor (C1)		Second Suri Dra Dry Cra	ary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (CS	inimum of two require B6) 10) able (C2)	
YDROLO Wetland Hy Primary Indi Surface V High Wa Saturatio Water M Sedimen	OGY Adrology Indicato icators (minimum of Water (A1) iter Table (A2) in (A3) arks (B1) t Deposits (B2)		☐ Wa ☐ Aqu ☐ Tru ☐ Hyo ☐ Oxi	ter-Stained Lea natic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp	ts (B14) Odor (C1) heres on Living I		Second Suri Dra Dra Cra Satu	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (C8 uration Visible on	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)	
YDROLO Vetland Hy Primary Indi Surface V High Wa Saturatio Water M Sedimen Drift Dep	OGY drology Indicato icators (minimum of water (A1) iter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3)		☐ Wa ☐ Aqu ☐ Tru ☐ Hyo ☐ Oxi ☐ Pre-	ter-Stained Lea attic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Reduc	ts (B14) Odor (C1) heres on Living I ced Iron (C4)	Roots (C3)	Second Suri Dra Dry Cra; Satt	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (Cs uration Visible on nted or Stressed P	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)	
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Pepth (inche Remarks: YDROLO Wetland Hy Primary Indi Surface V High Wa Saturatio Water M Sedimen Zorift Dep Algal Ma Iron Dep Inundatio	oGY odrology Indicator icators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav	of one is re	Wa Aqu Tru Hyo Oxi Pres Rec Thi (B7) Gau	ter-Stained Lea attic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Reduce ent Iron Reducen Muck Surface	ts (B14) Odor (C1) heres on Living led Iron (C4) tion in Tilled So e (C7) ta (D9)	Roots (C3)	Second Suri Dra Dry Cra; Satt	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (Cs uration Visible on nted or Stressed P	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)	
Pepth (inche Remarks: YDROLO Vetland Hy Primary Indi Surface V High Wa Saturatio Water M Sedimen Algal Ma Iron Dep Inundatio Sparsely	oGY drology Indicator icators (minimum of Water (A1) ater Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concavivations:	of one is re	Wa Aqu Tru Hyo Oxi Pres Rec Thi Gat (B8) Oth	ter-Stained Lea attic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Reduce ent Iron Reducent Iron Reducent Iron Reducent Iron Muck Surfacent Iron Well Dater (Explain in	ts (B14) Odor (C1) heres on Living led Iron (C4) tion in Tilled So e (C7) ta (D9)	Roots (C3)	Second Suri Dra Dry Cra; Satt	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (Cs uration Visible on nted or Stressed P	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)	
YDROLO Vetland Hy Primary Indi Surface V High Wa Saturatio Water M Sedimen Algal Ma Iron Dep Inundatio Sparsely Field Obser	oGY drology Indicator icators (minimum of Water (A1) iter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Y	al Imagery e Surface	Wa Aqu Tru Hyo Oxi Pres Rec Thi Gat (B8) Oth	ter-Stained Lea attic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Reduce ent Iron Reduce in Muck Surface age or Well Da er (Explain in	ts (B14) Odor (C1) heres on Living led Iron (C4) tion in Tilled So e (C7) ta (D9)	Roots (C3)	Second Suri Dra Dry Cra; Satt	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (Cs uration Visible on nted or Stressed P	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)	
YDROLO Vetland Hy Primary Indi Surface V High Water M Sedimen Algal Ma Iron Dep Inundatio Sparsely Field Obser Furface Water Table	oGY drology Indicator icators (minimum of Water (A1) ater Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeric Vegetated Concav vations: er Present? Y Present? Y	al Imagery e Surface es \(\sim \) N es \(\sim \) N	Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gau GB8 Oth	ter-Stained Leastatic Fauna (Base Aquatic Planal Roger Sulfide dized Rhizospasence of Reducent Iron Reducent Iron Reducent Muck Surfacege or Well Dater (Explain in thes): 3	ts (B14) Odor (C1) heres on Living led Iron (C4) tation in Tilled So e (C7) ta (D9) Remarks)	Roots (C3)	Second Surl Dra Dry Cra Satt	face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (C) uration Visible on thed or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2)	
Vetland Hy Primary Indi Surface V High Water M Sedimen Algal Ma Iron Dep Inundation Sparsely Field Obser Surface Water Table Saturation Princludes cap	oGY drology Indicator icators (minimum of Water (A1) tter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Yresent? Yresent? Yresent?	al Imagery e Surface es \(\sim \) N es \(\sim \) N	Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gau GB8 Oth	ter-Stained Lea attic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Reduce ent Iron Reduce in Muck Surface age or Well Da er (Explain in	ts (B14) Odor (C1) heres on Living led Iron (C4) tation in Tilled So e (C7) ta (D9) Remarks)	Roots (C3)	Second Surl Dra Dry Cra Satt	lary Indicators (mi face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (CS uration Visible on nted or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) flants (D2)	
YDROLO Wetland Hy Primary Indi Surface V High Water M Sedimen Algal Ma Iron Dep Inundation Sparsely Field Obser Surface Water Table Saturation Princludes captinge)	oGY Adrology Indicator icators (minimum of Water (A1) iter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Present? Y resent? Y resent? Y prillary	al Imagery e Surface es \(\sum \) N es \(\sum \) N	Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gau Gau Oth Co Depth (in Depth	ter-Stained Leastatic Fauna (Batatic Fauna (Batatic Fauna (Batatic Plana (Batatic	ts (B14) Odor (C1) heres on Living led Iron (C4) tion in Tilled So e (C7) ta (D9) Remarks) Wetland H	Roots (C3) ils (C6)	Second Suri Dra Dry Cra Satt Stur	face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (C) uration Visible on thed or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2) 5)	
YDROLO Wetland Hy Primary Indi Surface V High Water M Sedimen Algal Ma Iron Dep Inundation Sparsely Field Obser Surface Water Table Saturation Princludes captinge)	oGY drology Indicator icators (minimum of Water (A1) tter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Yresent? Yresent? Yresent?	al Imagery e Surface es \(\sum \) N es \(\sum \) N	Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gau Gau Oth Co Depth (in Depth	ter-Stained Leastatic Fauna (Batatic Fauna (Batatic Fauna (Batatic Plana (Batatic	ts (B14) Odor (C1) heres on Living led Iron (C4) tion in Tilled So e (C7) ta (D9) Remarks) Wetland H	Roots (C3) ils (C6)	Second Suri Dra Dry Cra Satt Stur	face Soil Cracks (inage Patterns (B) -Season Water Ta yfish Burrows (C) uration Visible on thed or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2) 5)	

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St	ort of East St. Louis City/County:			East St. Louis; St. Clair		Date:	05-08-2012
Applicant/Owner:	Slay Industires	5	State:	Illinois		Sampling Point:		<u>S8</u>
Investigator(s):	SCI Engineeri	ng, Inc.	1	Section, T	ownship, Range:		S23 T2N	R10W
Landform (hillslope, te	rrace, etc.):			Local relie	ef (concave, conv	rex, none):		
Slope (%):		Lat:		Long:		Datum:		
Soil Map Unit Name:				NWI class	ification:			
Are climatic/hydrologic	c conditions on th	ne site typical	for this time of y	ear?	Yes 🛛	No ☐ (If no,	explain in	Remarks.)
Are Vegetation Y, Soil	N, or Hydrology	Y significant	ly disturbed?		Are "Normal Circumstances" present? Yes ⊠ No □			
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(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 □ No ⊠	- III Landon Maria	
Hydric Soil Present:	Yes No No	Is the Sampled Area within a Wetland?	Yes □ No ⊠
Wetland Hydrology Present:	Yes □ No ☒		
Remarks: Fill area.			
Kentaks. Till aca.			

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	et:	
1				Number of Dominant Spec		
2				that are OBL, FACW, or F	AC: $\underline{1}$ (A)	
3				Total Number of Dominan		
4				Species across all Strata:	<u>2</u> (B)	
5				Percent of Dominant Speci		
	= T	otal Cover		that are OBL, FACW, or F	AC: <u>50</u> (A/B)	
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Works	neet:	
1. Lonicera maackii	50	X	NI	Total % Cover of:	Multiply by:	
2		X 1		OBL species	x1 =	
3				FACW species	x2 =	
4				FAC species 90	x3 = 270	
5				FACU species 30	x4 = 120	
	<u>50</u> = Total	Cover		UPL species	x5 =	
Herb Stratum (Plot size:)				Column Totals: 120 (A)	390 (B)	
1. <u>Sorghum halepense</u>	25		FACU	Prevalence Index = B/A =	3.25	
2. Rumex crispus	15		FAC	Hydrophytic Vegetation	indicators:	
3. Galium aparine	5		FACU	Dominance Test is	>50%	
4. <u>Asclepias syriaca</u>	10		NI	Prevalence Index is ≤3.01		
5. poa pratensis	75	X	FAC	Morphological Adaptations ¹ (Prov		
	$\underline{130} = \text{Tota}$	al Cover		supporting data in Remarks sheet)	s or on a separate	
Woody Vine Stratum (Plot size:)				Problematic Hydrop (Explain)	hytic Vegetation1	
1		1		¹ Indicators of hydric soil a		
2				must be present, unless dis problematic.	turbed or	
	= T	otal Cover		Hydrophytic Vegetation Present?	Yes □ No ☒	

Sampling Point: <u>S8</u>

SOIL

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: Histosol (A1)	2 Location: PL=Pore Lining, M=Matrix dicators for Problematic Hydric Soils³: Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
Indicators:	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
ydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
ydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
ydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
ydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
ydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
lydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
ydric Soil Indicators: Histosol (A1)	dicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
Histosol (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) In Sandy Redox (S5) Sandy Matrix (S6) Sandy Matrix (S6) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F2) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Peat or Peat (S3) Sandy Mucky Peat or Peat (S3) Sandy Mucky Peat or Peat (S3) Sandy San	Iron-Manganese Masses (F12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
Histic Epidedon (A2) Sandy Redox (S5) Stripped Matrix (S6) Straiffied Layers (A5) Straiffied Layers (A5) Straiffied Layers (A10) Straiffied Layers (A10) Straiffied Below Dark Surface (A11) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Straiffied Layer (if observed): Sandy Mucky Peat or Peat (S3) Strictive Layer (if observed): Sandy Mucky Peat or Peat (S3) Surface Sandy Redox (S5) Surface Sandy Redox (S5) Surface Sandy Redox (S5) Surface Sandy Redox (S5) Surface Sandy Mucky Mineral (F1) Surface Sandy Redox (S5) Surface Sandy Redox (S	Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
Black Histic (A3) Stripped Matrix (S6) CHydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Jandy Mucky Mineral (S1) Depleted Dark Surface (F7) Problem Sandy Mucky Mineral (S1) Redox Depressions (F8) Sermicative Layer (if observed): Stratified Layers (A10) Depleted Matrix (F3) Depleted Matrix (F3) Redox Dark Surface (F6) Jandy Mucky Mineral (S1) Redox Depressions (F8) Problem Sandy Mucky Mineral (S1) Redox Depressions (F8) Problem Sermicative Layer (if observed): Stripped Matrix (S6) Depleted Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F2) Problem Surface (F6) Jandy Mucky Mineral (F1) Redox Dark Surface (F7) Problem Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Problem Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Problem Sandy Mucky Mineral (S1) Problem Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Problem Sandy Mucky Mineral (S1) Problem Sandy Mucky Mineral (F1) Proble	dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
Hydrogen Sulfide (A4)	dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or oblematic.		
Stratified Layers (A5)	drology must be present, unless disturbed or oblematic.		
2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Hydr prob Thick Dark Surface (A12) Depleted Dark Surface (F7) Prob Sandy Mucky Mineral (S1) Redox Depressions (F8) Sestrictive Layer (if observed): Type: Rock Depth (inches): Surface Temarks: Soil rocky for soil sample (fill soils) Wetland Hydrology Indicators: Trimary Indicators (minimum of one is required; check all that apply)	drology must be present, unless disturbed or oblematic.		
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sestrictive Layer (if observed): Type: Rock Depth (inches): Surface The surface (F7) Bestrictive Layer (if observed): Type: Rock Depth (inches): Surface The surface (F7) Bestrictive Layer (if observed): Type: Rock Depth (inches): Surface Type: Rock Depth (inches): Surface Type: Rock (F8) Type	drology must be present, unless disturbed or oblematic.		
Thick Dark Surface (A12) Depleted Dark Surface (F7) prob Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Rock Depth (inches): Surface Remarks: Soil rocky for soil sample (fill soils) YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	drology must be present, unless disturbed or oblematic.		
Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Rock Depth (inches): Surface Remarks: Soil rocky for soil sample (fill soils) YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			
Sestrictive Layer (if observed): Type: Rock Depth (inches): Surface Remarks: Soil rocky for soil sample (fill soils) YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	dric Soil Present? Yes □ No ⊠		
Restrictive Layer (if observed): Type: Rock Depth (inches): Surface Remarks: Soil rocky for soil sample (fill soils) YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	dric Soil Present? Yes □ No ⊠		
Type: Rock Depth (inches): Surface Remarks: Soil rocky for soil sample (fill soils) YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	dric Soil Present? Yes □ No ⊠		
Pepth (inches): Surface Remarks: Soil rocky for soil sample (fill soils) YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	dric Soil Present? Yes No 🗵		
Primary Indicators (minimum of one is required; check all that apply)			
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			
	Secondary Indicators (minimum of two requi		
Surface Water (A1) Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D2)		
☐ Saturation (A3) ☐ True Aquatic Plants (B14)			
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)			
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)			
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)			
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)	☐ FAC-Neutral Test (D5)		
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)			
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)			
field Observations:			
Surface Water Present? Yes No Depth (inches): None			
Water Table Present? Yes ☐ No ☒ Depth (inches): ≥15			
Saturation Present? Yes ☐ No ☒ Depth (inches): ≥15 Wetland Hydrology I			
	Present? Yes No 🖂		
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if avail			

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St.	Louis	is City/County: East St. Louis; St. Clair Sampling Date:				te: <u>05-08-2012</u>	
Applicant/Owner:	Slay Industires		State: <u>Illinois</u>		Sampling Po	int: <u>\$9</u>		
Investigator(s):	SCI Engineerin	g. Inc. Secti			ownship, Range:	<u>S23</u>	3 T2N R10W	
Landform (hillslope, te	errace, etc.):			Local reli	ef (concave, conv	ex, none):		
Slope (%):		Lat:	4-5	Long:		Datum:		
Soil Map Unit Name:				NWI class	sification:	PEMA		
Are climatic/hydrologi	c conditions on the	e site typical f	for this time of y	ear?	Yes 🛛	No ☐ (If no, exp	lain in Remarks.)	
Are Vegetation Y, Soil	N, or Hydrology	Y significantl	y disturbed?		Are "Normal Circumstances" present? Yes ⊠ No □			
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If needed, explain any answers in Remarks.)			

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

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1				Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)			
2			-				
3,				Total Number of Dominant Species across all Strata: 1 (B)			
4				Species across an Strata. <u>I</u> (B)			
5		. 10		Percent of Dominant Species that are OBL, FACW, or FAC: 0 (A/B)			
	=1	otal 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 $\underline{20}$ $x3 = \underline{60}$			
5				FACU species $\underline{100}$ $x4 = \underline{400}$			
	= T	otal Cover		UPL species x5 =			
Herb Stratum (Plot size:)				Column Totals: <u>120</u> (A) <u>460</u> (B)			
1. Conyza canadensis	20		FAC	Prevalence Index = $B/A = 3.8$			
2. Galium aparine	5		FACU	Hydrophytic Vegetation Indicators:			
3. Verbascum thapsus	5		NI	N Dominance Test is >50%			
4. Asclepias syriaca	20		NI	N Prevalence Index is ≤3.01			
5. <u>Festuca subverticillata</u>	95	X	FACU	Morphological Adaptations ¹ (Provide			
	<u>145</u> = Tota	al Cover		supporting data in Remarks or on a separate sheet)			
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)			
1				¹ Indicators of hydric soil and wetland hydrolog			
2				must be present, unless disturbed or problematic.			
	= T	otal Cover		Hydrophytic Yes ☐ No ☒ Vegetation Present?			

SOIL Sampling Point: <u>S9</u>

Depth	Matrix			Red	lox Features			L		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture	Remarks	
)-6	10YR 3/1	55						sicl		
	10YR 3/2	45								
-15	10YR 3/1	45						sicl	significant sand layer	
15	10YR 3/2	40								
	101103/2	10		1						
Type: C=C	oncentration, D=De	nletion R	M=Reduced Mat	rix CS=Cover	red or Coated San	d Grains. 2L	ocation:	PL=Pore Lining	2. M=Matrix	
	Indicators:	pretion, re		,				Problematic Hy		
Histosol			☐ Sands	Gleyed Matri	x (S4)			e Redox (A16)	, englishment	
7 37 7	pidedon (A2)			Redox (S5)	(0.1)	1000000		nese Masses (F)	12)	
Black H			100	ed Matrix (S6)			ain in Remarks)		
	n Sulfide (A4)			y Mucky Mine			ici (Enpi	an m remans)		
	d Layers (A5)			y Gleyed Mat						
2 cm Mu				ted Matrix (F:						
	i Below Dark Surfa	ce (A11)		Dark Surface	******	3Indic	ators of h	vdronhytic vege	tation and wetland	
3 70 70	ark Surface (A12)	cc (ATT)		ted Dark Surfa			dicators of hydrophytic vegetation and wetland drology must be present, unless disturbed or			
	fucky Mineral (S1)		1000	Depressions		proble	matic.			
	icky Peat or Peat (S	3)	L Redo.	Depressions	(1.0)					
	Layer (if observed									
ype:	11.5	,-				1.5				
	-).			Hydr				ic Soil Present? Yes 🗌 No 🛛		
	es):					12,000	C Son I I	escut. Tes L		
Depth (inche Remarks:	8.5%					11000	Court	csent. Tes		
YDROL Vetland Hy Primary Ind Surface Y High Wa Saturatio Water M Sedimen Drift Dep Iron Dep	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) it Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria	f one is re	Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gar.	ter-Stained Le ter-Stained Le ter-Stained (B ter-St	ats (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) tta (D9)	Roots (C3)	Second Sur Dra Dry Cra Sat Stu	dary Indicators (rface Soil Crack: ainage Patterns (y-Season Water ayfish Burrows (B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2)	
YDROL Vetland Hy rimary Ind Surface High Wa Saturatio Water M Sedimen Drift Dep Algal M: Iron Dep Inundatio	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concave	f one is re	Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gar.	ter-Stained Le natic Fauna (B e Aquatic Plar drogen Sulfide dized Rhizosp sence of Redu ent Iron Redu n Muck Surfac	ats (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) tta (D9)	Roots (C3)	Second Sur Dra Dry Cra Sat Stu	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible o	s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2)	
YDROL Vetland Hy rimary Ind Surface High Wa Saturatio Water M Sedimen Drift De Inundatio Sparsely	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concave rvations:	f one is re I Imagery Surface (Wa Aqu Tru Hyo Oxi Pre: Rec Thi Gau B8) Oth	ter-Stained Le natic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Redu ent Iron Redu n Muck Surfac age or Well Da er (Explain in	ats (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) tta (D9)	Roots (C3)	Second Sur Dra Dry Cra Sat Stu	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible o	s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2)	
YDROL Vetland Hy Primary Ind Surface Y High Wa Sedimen Drift De Algal Ma Iron Dep Inundation Sparsely Vield Obser	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) bosits (B5) on Visible on Aeria Vegetated Concave vations: ter Present? Ye	I Imagery	Wa Aqu Tru Hyo Oxi Pres	ter-Stained Le natic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Redu ent Iron Redu n Muck Surfac ige or Well Da er (Explain in	ats (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) tta (D9)	Roots (C3)	Second Sur Dra Dry Cra Sat Stu	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible o	s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2)	
YDROL Vetland Hy rimary Ind Surface V High Wa Sedimen Drift De Inundation Sparsely Field Obser	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concave rvations: ter Present? Ye	I Imagery	Wa Aqu Tru Hyo Oxi Pre: Thi Gat B8 Oth	ter-Stained Le natic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Redu ent Iron Redu n Muck Surfac ige or Well Da er (Explain in ches): None	nts (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) tta (D9) Remarks)	Roots (C3)	Second Sur Dra Dry Cra Sat Stu	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible of urted or Stressed C-Neutral Test (s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2) (D5)	
Primary Ind Surface High Water M Sedimen Drift De Inundation Sparsely	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concave rvations: ter Present? Ye present? Ye present? Ye present?	I Imagery	Wa Aqu Tru Hyo Oxi Pre: Thi Gat B8 Oth	ter-Stained Le natic Fauna (B e Aquatic Plan drogen Sulfide dized Rhizosp sence of Redu ent Iron Redu n Muck Surfac ige or Well Da er (Explain in	nts (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) tta (D9) Remarks)	Roots (C3)	Second Sur Dra Dry Cra Sat Stu	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible o	s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2)	
YDROL Vetland Hy rimary Ind Surface V High Wa Saturatio Horift De Inundatio Sparsely Field Obser Vater Table Saturation Princludes capringe)	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concave rvations: ter Present? Ye present? Ye present? Ye present?	I Imagery Surface (Wa Aqu Tru Hyo Oxi Pre: Thi Gat B8 Oth Openth (in o Depth (in	ter-Stained Le natic Fauna (B natic Fauna (B ne Aquatic Plan lrogen Sulfide dized Rhizosp nence of Redu nent Iron Redu n Muck Surfac ner (Explain in neches): None ches): >15 hes): >15	nts (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) nta (D9) Remarks) Wetland H	Roots (C3) ils (C6)	Second Sur Dra Dry Cra Sat Stu FA	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible of urted or Stressed C-Neutral Test (s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2) (D5)	
YDROL Vetland Hy rimary Ind Surface V High Wa Saturatio Horift De Inundatio Sparsely Field Obser Vater Table Saturation Princludes capringe)	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concave rvations: ter Present? Ye Present? Ye pillary	I Imagery Surface (Wa Aqu Tru Hyo Oxi Pre: Thi Gat B8 Oth Openth (in o Depth (in	ter-Stained Le natic Fauna (B natic Fauna (B ne Aquatic Plan lrogen Sulfide dized Rhizosp nence of Redu nent Iron Redu n Muck Surfac ner (Explain in neches): None ches): >15 hes): >15	nts (B14) Odor (C1) heres on Living I ced Iron (C4) ction in Tilled So te (C7) nta (D9) Remarks) Wetland H	Roots (C3) ils (C6)	Second Sur Dra Dry Cra Sat Stu FA	dary Indicators (rface Soil Cracks ainage Patterns (y-Season Water ayfish Burrows (uration Visible of urted or Stressed C-Neutral Test (s (B6) B10) Table (C2) C8) on Aerial Imagery (C9) Plants (D2) (D5)	

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Port of East St. Louis City/County:			East St. L	ouis; St. Clair	Sampling Date:	05-08-2012	
Applicant/Owner:	Slay Industires	State:		Illinois		Sampling Point	<u>S10</u>	
Investigator(s):	SCI Engineering, Inc.			Section, T	ownship, Range:	S23 T	2N R10W	
Landform (hillslope, te	rrace, etc.):			Local reli	ef (concave, conv	ex, none):		
Slope (%):		Lat:		Long:		Datum:		
Soil Map Unit Name:				NWI class	sification:			
Are climatic/hydrologic	c conditions on the	site typical f	or this time of y	ear?	Yes 🖂	No [(If no, explai	in Remarks.)	
Are Vegetation Y, Soil	N, or Hydrology	Y significantly	y disturbed?		Are "Normal Circumstances" present? Yes ⊠ No □			
Are Vegetation N, Soil	N, or Hydrology N	naturally pr	oblematic?		(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 No 🛛			
Hydric Soil Present:	Yes No 🛛	Is the Sampled Area within a Wetland?	Yes □ No ⊠	
Wetland Hydrology Present:	Yes □ No ⊠			
Remarks: Area of fill.				

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1				Number of Dominant Species	0.74		
2				that are OBL, FACW, or FAC: 0 (A)			
3				Total Number of Dominant	2 141		
4				Species across all Strata:	<u>1</u> (B)		
5				Percent of Dominant Species			
	= T	otal Cover		that are OBL, FACW, or FAC: 0 (A/B)			
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:			
1				Total % Cover of: N	Aultiply by:		
2				OBL species x	1 =		
3				FACW species x	2 =		
4					3 = 99		
5				FACU species 95 x	4 = 380		
	= Total Cover			UPL species x5 =			
Herb Stratum (Plot size:)				Column Totals: <u>128</u> (A) <u>479</u> (B)			
1. Conyza canadensis	25		FAC	Prevalence Index = $B/A = 3.7$			
2. Rumex crispus	3		FAC	Mydrophytic Vegetation Indicators: N Dominance Test is >50% N Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provide			
3. <u>Galium aparine</u>	5		FAC				
4. Ambrosia trifida	10		NI				
5. <u>Festuca subverticillata</u>	95	X	FACU				
	138 = Total Cover			supporting data in Remarks or on a separate sheet)			
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)			
1				¹ Indicators of hydric soil and wetland hydrolog must be present, unless disturbed or problematic.			
2							
	= Total Cover			Hydrophytic Yes Vegetation Present?	□ No 🖾		

SOIL Sampling Point: S10

Depth	Matrix			Redo	ox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2 .	Texture	Remarks	
				-						
T C=-C	oncentration, D=Dep	lation DM-	Paduaad Matrix	CS=Covere	d or Coated Sand (Graine 21	ocation: PI =F	Pore Lining	M=Matrix	
		netion, Rivi-	Reduced Mairix,	C3-Covere	d of Coaled Saild (tors for Prob			
Hydric Soil Indicators:					(64)				ric Sons .	
Histosol	Victoria de la companya del companya del companya de la companya d						Coast Prairie Redox (A16)			
	oidedon (A2)						Iron-Manganese Masses (F12)			
Black Hi				☐ Stripped Matrix (S6) ☐ Loamy Mucky Mineral (F1)			Other (Explain in Remarks)			
	n Sulfide (A4)									
	Layers (A5)		☐ Loamy C							
2 cm Mu			☐ Depleted			3				
	Below Dark Surfac	e (A11)	☐ Redox D						tion and wetland s disturbed or	
	ark Surface (A12)			Depleted Dark Surface (F7)			hydrology must be present, unless disturbed or problematic.			
	ucky Mineral (S1)		☐ Redox D	epressions (F8)	, , , , , ,				
	cky Peat or Peat (S3					1				
	Layer (if observed)	:								
Type: Rock						Hydric	c Soil Present	? Yes 🗆	No 🖾	
Depth (inche	es): Surface						-26 36 1-4107-			
Remarks: S	oil too rocky for soil	sample (fill	soils)							
☐ Drift Deposits (B3) ☐ Presence of Red			Stained Lea c Fauna (B1 quatic Plant gen Sulfide ded Rhizosph ce of Reduc t Iron Reduc duck Surfact or Well Dat	ves (B9) B (B14) Codor (C1) eres on Living Roots (C3) d Iron (C4) ion in Tilled Soils (C6) (C7) a (D9)		☐ Surface ☐ Drainage ☐ Dry-Sea ☐ Crayfish ☐ Saturatio ☐ Stunted	Secondary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D2) FAC-Neutral Test (D5)			
Field Obser										
Surface Wat	er Present? Yes	No ⊠	Depth (inche	s): None						
Water Table		No ⊠								
Saturation P includes cap ringe)	resent? Yes	No ⊠			Wetland Hydrology Present? Yes □ No ⊠					
	corded Data (stream	gauge, moni	toring well, aeria	al photos, pro	evious inspections)), if availab	le:			
			44 300 300							
Remarks:										

Project/Site:	Port of East St.	. Louis	City/County:	East St. Louis; St. Clair		Sampling	Date:	05-08-2012	
Applicant/Owner:	Slay Industires		State:	Illinois		Sampling	Point:	<u>S11</u>	
Investigator(s):	SCI Engineerin	ng, Inc.	g, Inc.			hip, Range:	S23 T2N	R10W	
Landform (hillslope, te	rrace, etc.):			Local reli	ef (co	ncave, conve	x, none):		
Slope (%):		Lat:		Long:	_		Datum:		
Soil Map Unit Name:				NWI classification:					
Are climatic/hydrologic	c conditions on th	e site typical	for this time of y	ear?		Yes 🛛	No 🗌 (If no,	explain in	Remarks.)
Are Vegetation Y, Soil	N, or Hydrology	Y significant	y disturbed?		Are "Normal Circumstances" present? Yes			Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If needed, explain any answers in Remarks.)			ks.)	

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

Hydrophytic Vegetation Present:	Yes No 🛛		
Hydric Soil Present: Yes ☐ No ☒		Is the Sampled Area within a Wetland?	Yes □ No ⊠
Wetland Hydrology Present:	Yes □ No ⊠		
Remarks: Area of fill.			

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksho	et:	
I	70 00101	Species.	Status	Number of Dominant Spec		
2				that are OBL, FACW, or F	AC: <u>1</u> (A)	
3				Total Number of Dominar	t	
4				Species across all Strata:	<u>2</u> (B)	
5				Percent of Dominant Spec		
	= T	otal Cover		that are OBL, FACW, or F	AC: <u>50</u> (A/B)	
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Works	heet:	
1. Lonicera maackii	50	X	NI	Total % Cover of:	Multiply by:	
2				OBL species	x1 =	
3				FACW species	x2 =	
4				FAC species 90	x3 = 270	
5				FACU species 30	x4 = 120	
	<u>50</u> = Total Cover			UPL species x5 =		
Herb Stratum (Plot size:)				Column Totals: 120 (A)	390 (B)	
1. <u>Sorghum halepense</u>	25		FACU	Prevalence Index = B/A =	3.25	
2. Rumex crispus	15		FAC	Hydrophytic Vegetation	Indicators:	
3. Galium aparine	5		FACU	Dominance Test is	>50%	
4. <u>Asclepias syriaca</u>	10		NI	Prevalence Index is	≤3.0 ¹	
5. Poa pratensis	75	X	FAC	Morphological Ada		
	<u>130</u> = Tota	al Cover		supporting data in Remark sheet)	s or on a separate	
Woody Vine Stratum (Plot size:)				Problematic Hydrog (Explain)	phytic Vegetation1	
1				¹ Indicators of hydric soil a	nd wetland hydrolog	
2				must be present, unless dis problematic.		
	= T	otal Cover		Hydrophytic Vegetation Present?	Yes □ No ☒	

inches)	Matrix			Redo	x Features				
	Color (moist)	%	Color (moist)	%	Type ¹	Loc	,2	Texture	Remarks
Type: C=Cor	ncentration, D=Dep	letion RM=	Reduced Matrix	CS=Covere	d or Coated Sand	Grains 2I	ocation: F	L=Pore Lining	M=Matrix
lydric Soil In		retion, reivi	teduced Printing	CD COTO	a or come o omi			roblematic Hy	
Histosol (A			☐ Sandy Gl	eved Matrix	(\$4)			Redox (A16)	
					(34)			ese Masses (F1	2)
			☐ Sandy Re						2)
			Stripped				ner (Expia	in in Remarks)	
	Sulfide (A4)		☐ Loamy N						
Stratified I			☐ Loamy C						
2 cm Muck			☐ Depleted			2	5.00.52.00		
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface								tation and wetland	
☐ Thick Dark Surface (A12) ☐ Depleted Dark S					proble		be present, unle	ess disturbed or	
	icky Mineral (S1)		☐ Redox D	epressions (F8)	proore	indice.		
5 cm Muck	ky Peat or Peat (S3))						-	
Restrictive La	ayer (if observed):								
ype: Rock						Undei	a Sail Pro	sent? Yes	No ⊠
Depth (inches)	s): Surface					Hydri	C Son TTC	sent. Tes	1102
YDROLO Vetland Hyd	Irology Indicators:	:							
	ators (minimum of		ed; check all that	apply)			Seconda	ary Indicators (1	minimum of two require
Surface W	ater (A1)		☐ Water-	Stained Lea	ves (B9)		☐ Surf	ace Soil Cracks	(B6)
	er Table (A2)		100	c Fauna (B1			☐ Drai	nage Patterns (B10)
Saturation	The state of the s			quatic Plant			The second second	Season Water	
☐ Water Mar				gen Sulfide				fish Burrows (
	Deposits (B2)		100000000000000000000000000000000000000	11113					on Aerial Imagery (C9)
Drift Depo					ed Iron (C4)	(01)		ted or Stressed	
					tion in Tilled Soi	ls (C6)	V 100 100 100 100 100 100 100 100 100 10	-Neutral Test (
				luck Surface		13 (00)	Line	riculai rest (55)
Algal Mat	Visible on Aerial	Imagery (R7	100000000000000000000000000000000000000	or Well Dat					
Algal Mat Iron Depos				Explain in I					
Algal Mat Iron Depos Inundation		Surface (Do)	Other	Explain in i	(Ciliarks)				
Algal Mat Iron Depos Inundation Sparsely V					1				
Algal Mat Iron Depos Inundation Sparsely V Tield Observa	ations:		Doub Carl	ali Man-					
Algal Mat Iron Depos Inundation Sparsely V Tield Observaturface Water	ations: r Present? Yes								
Algal Mat Iron Depos Inundation Sparsely V Tield Observaturface Water Vater Table P	ations: r Present? Yes Present? Yes	□ No ⊠	Depth (inche	s): <u>≥2</u>		V.10-2			
Algal Mat Iron Depos	ations: r Present? Yes Present? Yes esent? Yes	□ No ⊠	Depth (inche	s): <u>≥2</u>	Wetland Hy	drology Pr	esent?	Yes 🗆	No ⊠
Algal Mat Iron Depos Inundation Sparsely V Tield Observatorface Water Vater Table P Staturation Pre Sincludes capillringe)	ations: r Present? Yes Present? Yes esent? Yes	□ No ⊠ □ No ⊠	Depth (inche	s): <u>≥2</u> s): <u>≥2</u>				Yes 🗆	No ⊠

Project/Site:	Port of East St.	Louis	City/County:	East St. Lo	ouis; St. Clair	Samplin	g Date:	06-19-2012
Applicant/Owner:	Slay Industries		State:	Illinois		Samplin	g Point:	<u>S12</u>
Investigator(s):	SCI Engineerin	g, Inc.		Section, T	ownship, Rang	S23 T2N	N R10W	
Landform (hillslope, te	errace, etc.):			Local relie	f (concave, co	nvex, none):		
Slope (%):		Lat:		Long:		Datum:		
Soil Map Unit Name:				NWI class	ification:			
Are climatic/hydrologi	c conditions on the	e site typical	for this time of y	ear?	Yes 🛛	No 🗌 (If no	, explain ir	n Remarks.)
Are Vegetation N, Soil	Y, or Hydrology	N significantl	ly disturbed?		Are "Normal Circumstances" present? Yes ⊠			Yes ⊠ No □
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(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 □ No ☒		
Hydric Soil Present:	Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes □ No ⊠
Wetland Hydrology Present:	Yes No 🛛		
Remarks: Potential Fill Area north	of Wetland I.		

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee	et:		
1				Number of Dominant Speci that are OBL, FACW, or FA			
2			-		- 1 /		
3				Total Number of Dominant Species across all Strata:	2 (B)		
4				Species across air strata.	∠ (B)		
5				Percent of Dominant Specie			
	= T	otal Cover		that are OBL, FACW, or FA	AC: <u>50</u> (A/B)		
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksh	eet:		
1. <u>Lonicera maackii</u>	40	Y	NI	Total % Cover of: Multiply by:			
2				OBL species	x1 =		
3				FACW species	x2 =		
4				FAC species 75	x3 = 225		
5				FACU species 15	x4 = 60		
	$\underline{40} = \text{Total}$	Cover		UPL species	x5 =		
Herb Stratum (Plot size:)				Column Totals: 90 (A)	285 (B)		
1. Poa pratensis	60	Y	FAC	Prevalence Index = $B/A = 3$.16		
2. Rumex crispus	15		FAC	Hydrophytic Vegetation Indicators:			
3. Galium aparine	15		FACU	Dominance Test is >50%			
4. Asclepias syriaca	10		NI	Prevalence Index is	≤3.0¹		
5				Morphological Adap			
	<u>100</u> = Tota	al Cover		supporting data in Remarks sheet)	or on a separate		
Woody Vine Stratum (Plot size:)				Problematic Hydropl (Explain)	nytic Vegetation1		
1				¹ Indicators of hydric soil an	d wetland hydrolog		
2				must be present, unless disti problematic.			
	= T	otal Cover		Hydrophytic Vegetation Present?	Yes □ No ⊠		

Depth	1.44			Redox Features					
(inches)	Color (moist)	%	Color (me	oist) %	Type ¹	Loc	,2	Texture	Remarks
0-4	10 YR 3/3	95						sic	
		1							
Tuna C-Co	noortration D=D	anlation D	M=Deduced	Matrix CS=Co	vered or Coated San	d Grains 21	ocation: I	PI =Pore I ining	M=Matrix
		epiction, r	dvi–Reduced i	viautx, C5-C0	vereu or coated Sain			Problematic Hyd	
Hydric Soil			Пс	ands: Glaved Me	atrix (SA)			Redox (A16)	ric Sous .
Histosol (andy Gleyed Ma				ese Masses (F12	1
	Histic Epidedon (A2) ☐ Sandy Redox (S5) Black Histic (A3) ☐ Stripped Matrix (S6))
							nei (Expia	in in Remarks)	
	n Sulfide (A4)			oamy Mucky M					
	Layers (A5)			oamy Gleyed M					
2 cm Mu				epleted Matrix		2			
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface (F6)								drophytic vegeta be present, unless	
☐ Thick Dark Surface (A12) ☐ Depleted Dark Surface						proble		be present, unles	s disturbed or
☐ Sandy M	ucky Mineral (S1)		□ R	edox Depressio	ns (F8)				
5 cm Mu	cky Peat or Peat (S	33)				-			
Restrictive I	Layer (if observed	i):							
						0.55			_
Type: Rock						Hydri	e Soil Pre	sent? Ves	No X
Type: Rock Depth (inche	es): <u>4</u>					Hydri	c Soil Pre	sent? Yes 🗆	No 🛛
Depth (inche Remarks: So	oil likely fill mater	ial based (on observed d	naracteristics.		Hydri	c Soil Pre	sent? Yes	No 🖾
Wetland Hy Primary Indi Surface V High Wa Saturation Water Ma Sediment Drift Dep Algal Ma Iron Dep	oil likely fill mater OGY drology Indicator cators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4)	rs: of one is re	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) duction in Tilled So face (C7) Data (D9)	Roots (C3)	Seconda Surf Drai Dry- Cray Satu Stun	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tay fish Burrows (C	inimum of two requires B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2)
Wetland Hy Primary Indi Surface V High Wa Saturation Water Ma Sediment Drift Dep Algal Ma Iron Dep	oil likely fill mater OGY Idrology Indicator cators (minimum of Mater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav	rs: of one is re al Imagery e Surface	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Gauge or Well	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) duction in Tilled So face (C7) Data (D9)	Roots (C3)	Seconda Surf Drai Dry- Cray Satu Stun	ary Indicators (m face Soil Cracks (inage Patterns (B Season Water Tayfish Burrows (Caration Visible on	inimum of two requires B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2)
Depth (inche Remarks: So IYDROLO Wetland Hy Primary Indi Surface V High Wa Saturation Water Mai Sediment Drift Depth Algal Ma Iron Depth Inundation Sparsely	oil likely fill mater OGY rdrology Indicator cators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concavivations:	rs: of one is re al Imagery e Surface	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Gauge or Well	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) eduction in Tilled So rface (C7) Data (D9) in Remarks)	Roots (C3)	Seconda Surf Drai Dry- Cray Satu Stun	ary Indicators (m face Soil Cracks (inage Patterns (B Season Water Tayfish Burrows (Caration Visible on	inimum of two requires B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2)
Depth (inche Remarks: So IYDROLO Wetland Hy Primary Indi Surface V High Wa Saturation Water Ma Sediment Drift Dep Algal Ma Iron Depo Inundation Sparsely Field Observators	oil likely fill mater OGY Idrology Indicator cators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Y	rs: of one is re al Imagery e Surface	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Gauge or Well Other (Explain	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) eduction in Tilled So rface (C7) Data (D9) in Remarks)	Roots (C3)	Seconda Surf Drai Dry- Cray Satu Stun	ary Indicators (m face Soil Cracks (inage Patterns (B Season Water Tayfish Burrows (Caration Visible on	inimum of two requires B6) 10) able (C2) 8) Aerial Imagery (C9) lants (D2)
Depth (inche Remarks: So IYDROLO Wetland Hy Primary Indi Surface V High Wa Saturation Water Mai Sediment Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Observation	oil likely fill mater OGY Idrology Indicator cators (minimum of Mater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Yesent? Yesent? Yesent?	rs: of one is re al Imagery e Surface es Nes N	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Gauge or Well Other (Explain	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) duction in Tilled So face (C7) Data (D9) in Remarks)	Roots (C3)	Seconda Surf Drai Dry- Cray Satu Stun FAC	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tay fish Burrows (C tration Visible on thed or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)
Depth (inche Remarks: So IYDROLO Wetland Hy Primary Indi Surface W High Wa Saturation Water Ma Sediment Drift Dep Algal Ma Iron Depo Inundation Sparsely Field Obsert Surface Water Table Saturation Pr (includes capfringe)	oil likely fill mater OGY Idrology Indicator cators (minimum of Mater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Y Present? Y Present? Y Stillary	rs: of one is re al Imagery e Surface es	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Gauge or Well Other (Explain (inches): None (inches): >4 (inches): >4	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) duction in Tilled So face (C7) Data (D9) in Remarks) Wetland H	Roots (C3) ils (C6)	Seconda Surf Drai Dry- Cray Satu Stun FAC	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tay fish Burrows (C tration Visible on thed or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) clants (D2)
Depth (inche Remarks: So IYDROLO Wetland Hy Primary Indi Surface W High Wa Saturation Water Ma Sediment Drift Dep Algal Ma Iron Depo Inundation Sparsely Field Obsert Surface Water Table Saturation Pr (includes capfringe)	oil likely fill mater OGY Idrology Indicator cators (minimum of Mater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aeria Vegetated Concav vations: er Present? Y Present? Y Present? Y Stillary	rs: of one is re al Imagery e Surface es	equired; check	all that apply) Water-Stained Aquatic Fauna True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Gauge or Well Other (Explain (inches): None (inches): >4 (inches): >4	(B13) Plants (B14) ide Odor (C1) ospheres on Living I duced Iron (C4) duction in Tilled So face (C7) Data (D9) in Remarks)	Roots (C3) ils (C6)	Seconda Surf Drai Dry- Cray Satu Stun FAC	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tay fish Burrows (C tration Visible on thed or Stressed P C-Neutral Test (D	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) clants (D2)

Project/Site:	Port of East St	. Louis	City/County:	East St. Louis; St. Clair		Sampling D	ate:	06-19-2012	
Applicant/Owner:	Slay Industrie	S	State:	Illinois		Sampling P	oint:	<u>S13</u>	
Investigator(s):	SCI Engineeri	ingineering, Inc.			Section, Township, Range: S23 T2N				
Landform (hillslope, te	errace, etc.):			Local relie	f (concave, conv	/ex, none):			
Slope (%):		Lat:		Long:	_	Datum:			
Soil Map Unit Name:			•	NWI classi	fication:				
Are climatic/hydrologi	c conditions on th	ne site typical f	for this time of ye	ear?	Yes 🛛	No ☐ (If no, ex	plain ir	Remarks.)	
Are Vegetation N, Soil	Y, or Hydrology	N significantl	y disturbed?		Are "Normal Circumstances" present?			Yes ⊠ No □	
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If needed, explain any answers in Remarks.)				

The second secon		
res □ No ☒		Yes □ No ⊠
res □ No 🖾		77 - 105
(es 🗆 No 🛛	within a Wetland?

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	et:
1		7		Number of Dominant Spec	
2				that are OBL, FACW, or F	AC: 1 (A)
3				Total Number of Dominan	
4		1		Species across all Strata:	<u>2</u> (B)
5				Percent of Dominant Spec	
	= T	otal Cover		that are OBL, FACW, or F	AC: <u>50</u> (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Works	heet:
1				Total % Cover of:	Multiply by:
2				OBL species	
3				FACW species	x2 =
4				FAC species 80	x3 = 240
5				FACU species 50	x4 = 200
	= T	otal Cover		UPL species	x5 =
Herb Stratum (Plot size:)				Column Totals: 130 (A)	440 (B)
1. Poa pratensis	50	Y	FAC	Prevalence Index = B/A =	3.38
2. Conyza canadensis	20		FAC	Hydrophytic Vegetation	Indicators:
3. Galium aparine	10		FAC	Dominance Test is	>50%
4. <u>Ambrosia trifida</u>	20		NI	Prevalence Index is	$\leq 3.0^{1}$
5. <u>Festuca subverticillata</u>	50	Y	FACU	Morphological Ada	
	<u>150</u> = Tota	al Cover		supporting data in Remark sheet)	s or on a separate
Woody Vine Stratum (Plot size:)				Problematic Hydrop (Explain)	ohytic Vegetation1
1				¹ Indicators of hydric soil a	nd wetland hydrolog
2				must be present, unless dis problematic.	
	= T	otal Cover		Hydrophytic Vegetation Present?	Yes □ No ☒

Depth	iption. (Describe		pen necucu to do	cument the m	dicator of confirm	the abser	ice of indicators.)	1
	Matrix			Red	ox Features			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2 Texture	Remarks
0-2	10 YR 4/3	30					sic	
	10 YR 3/2	70						
			-					
IT-may C-Con	naantestian D=D	mlation D	M-Paducad Mate	iv CS=Cover	ed or Coated Sand	Graine 2I	ocation: PL=Pore Li	ning M=Matrix
		epietion, K	M-Reduced Man	ix, C3-Cover	od of Coaled Saild			
Hydric Soil I				01 111	(0.4)		tors for Problematic ast Prairie Redox (Al	at a transfer of the second
☐ Histosol (A	600			Gleyed Matri	(54)			
☐ Histic Epi				Redox (S5)			n-Manganese Masses	
☐ Black Hist				ed Matrix (S6)		☐ Oth	ner (Explain in Rema	rks)
☐ Hydrogen				y Mucky Mine				
☐ Stratified	Layers (A5)		☐ Loam	y Gleyed Matr	ix (F2)			
2 cm Muc	k (A10)			ted Matrix (F3				
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface (F6)								regetation and wetland
☐ Thick Dark Surface (A12) ☐ Depleted Dark Surface					ce (F7)	proble	ogy must be present,	unless disturbed or
☐ Sandy Mu	icky Mineral (S1)		Redox	Depressions	(F8)	proble	matic.	
5 cm Muc	ky Peat or Peat (S	33)						
Restrictive L	ayer (if observed	1):						
Type: Rock						Tradel	S-0 D	es 🗆 No 🖂
Depth (inches	s); 2					Hydri	e Soil Present? Y	es 🗌 No 🖾
_	il likely fill mater	ial based o	n observed charac	teristics.				
HYDROLO	OGY							
	drology Indicator							, , , , , , , , , , , , , , , , , , ,
	cators (minimum o	of one is re			The second			ors (minimum of two required
Surface W				er-Stained Lea			Surface Soil Cr	
☐ High Wate				atic Fauna (B			☐ Drainage Patter	
☐ Saturation				e Aquatic Plan			☐ Dry-Season Wa	
☐ Water Ma	rks (B1)		☐ Hyo	lrogen Sulfide	Odor (C1)		Crayfish Burro	ws (C8)
	Deposits (B2)			/ / / / / / / / / / / / / / / / / / / /	neres on Living Ro	ots (C3)	The second secon	ble on Aerial Imagery (C9)
☐ Drift Depo	osits (B3)		☐ Pre	ence of Reduc	ed Iron (C4)		☐ Stunted or Stres	
- Dimbel	or Crust (B4)		☐ Rec	ent Iron Reduc	tion in Tilled Soils	(C6)	☐ FAC-Neutral T	est (D5)
				Muck Surfac	e (C7)			
	osits (B5)		☐ Thi					
☐ Algal Mat ☐ Iron Depo	osits (B5) n Visible on Aeria	l Imagery		ge or Well Da	ta (D9)			
☐ Algal Mat ☐ Iron Depo ☐ Inundation			(B7) Gau	ge or Well Da er (Explain in				
☐ Algal Mat ☐ Iron Depo ☐ Inundation	Negetated Concav		(B7) Gau					
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V	n Visible on Aeria Vegetated Concaverations:	e Surface ((B7)					
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V Field Observ	n Visible on Aeria Vegetated Concave rations: r Present? Yes	e Surface ((B7)	er (Explain in ches): None				
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V Field Observ Surface Water Water Table I Saturation Pre (includes capi	n Visible on Aeria Vegetated Concaverations: r Present? Present? Yeesent? Yeesent?	es N	(B7)	er (Explain in ches): None ches): ≥2		drology Pr	esent? Yes [□ No ⊠
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V Field Observ Surface Water Water Table I Saturation Pre (includes capi fringe)	n Visible on Aeria Vegetated Concaverations: r Present? Your Present? You present? You present? You present? You present? You present? You present?	e Surface (es Nes Nes N	(B7) ☐ Gat (B8) ☐ Oth O ☑ Depth (in O ☑ Depth (in O ☑ Depth (in	ches): None ches): >2 ches): >2	Wetland Hyd			□ No ⊠
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V Field Observ Surface Water Water Table I Saturation Pre (includes capi fringe)	n Visible on Aeria Vegetated Concaverations: r Present? Your Present? You present? You present? You present? You present? You present? You present?	e Surface (es Nes Nes N	(B7) ☐ Gat (B8) ☐ Oth O ☑ Depth (in O ☑ Depth (in O ☑ Depth (in	ches): None ches): >2 ches): >2	Remarks)			□ No ⊠
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V Field Observ Surface Water Water Table I Saturation Pre (includes capifringe) Describe Reco	n Visible on Aeria Vegetated Concaverations: r Present? Your Present? You present? You present? You present? You present? You present? You present?	e Surface (es Nes Nes N	(B7) ☐ Gat (B8) ☐ Oth O ☑ Depth (in O ☑ Depth (in O ☑ Depth (in	ches): None ches): >2 ches): >2	Wetland Hyd			□ No ⊠
☐ Algal Mat ☐ Iron Depo ☐ Inundation ☐ Sparsely V Field Observ Surface Water Water Table I Saturation Pre (includes capi fringe)	n Visible on Aeria Vegetated Concaverations: r Present? Your Present? You present? You present? You present? You present? You present? You present?	e Surface (es Nes Nes N	(B7) ☐ Gat (B8) ☐ Oth O ☑ Depth (in O ☑ Depth (in O ☑ Depth (in	ches): None ches): >2 ches): >2	Wetland Hyd			□ No ⊠

Project/Site:	Port of East St	L Louis	City/County:	East St. L	ouis;	St. Clair	Sampling I	Date:	06-19-2012
Applicant/Owner:	Slay Industrie	S	State:	Illinois			Sampling F	Point:	<u>S14</u>
Investigator(s):	SCI Engineeri	ng, Inc.		Section,	Towns	hip, Range:	<u>s</u>	323 T2N	R10W
Landform (hillslope, te	rrace, etc.):			Local reli	ief (co	ncave, conve	ex, none):		_
Slope (%):		Lat:		Long:			Datum:		
Soil Map Unit Name:				NWI clas	sificat	ion:			
Are climatic/hydrologic	c conditions on th	ne site typical	for this time of y	ear?		Yes 🛛	No [] (If no, ex	xplain in	Remarks.)
Are Vegetation N, Soil	Y, or Hydrology	N significant	y disturbed?		Are	"Normal Cir	cumstances" pre	esent?	Yes ⊠ No □
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If n	eeded, expla	in any answers in	in Remar	ks.)

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

Hydrophytic Vegetation Present:	Yes No 🗆		
Hydric Soil Present:	Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes □ No ⊠
Wetland Hydrology Present:	Yes □ No ⊠		

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				that are OBL, FACW, or FAC: 3 (A)
3				Total Number of Dominant
4				Species across all Strata: 4 (B)
5				Percent of Dominant Species
	= T	otal Cover	1	that are OBL, FACW, or FAC: 75 (A/B)
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 $\underline{105}$ $x3 = \underline{315}$
5				FACU species $\underline{60}$ $x4 = \underline{240}$
	= T	otal Cover		UPL species x5 =
Herb Stratum (Plot size:)				Column Totals: <u>165</u> (A) <u>555</u> (B)
1. <u>Poa pratensis</u>	40	Y	FAC	Prevalence Index = $B/A = 3.37$
2. Convza canadensis	30	Y	FAC	Hydrophytic Vegetation Indicators:
3. <u>Galium aparine</u>	10		FAC	X Dominance Test is >50%
4. <u>Ambrosia trifida</u>	25	Y	FAC	Prevalence Index is ≤3.01
5. <u>Festuca subverticillata</u>	60	Y	FACU	Morphological Adaptations ¹ (Provide
	<u>165</u> = Tota	al Cover		supporting data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)
1				¹ Indicators of hydric soil and wetland hydrolo
2				must be present, unless disturbed or problematic.
	= T	otal Cover		Hydrophytic Yes ⊠ No □ Vegetation Present?

Profile Descri	ption: (Describe	to the de	pth needed to do	cument the ir	idicator or confir	m the abse	nce of indicators.)	1
Depth	Matrix	C.		Red	lox Features			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	² Texture	Remarks
0-8	10 YR 4/4	40					sic	
	10 YR 3/3	60						
¹Type: C=Con	centration D=De	enletion. F	M=Reduced Matr	ix. CS=Cover	ed or Coated Sand	Grains. 2L	ocation: PL=Pore Linin	g. M=Matrix
Hydric Soil In		protion, r		, 00 00.00			tors for Problematic I	The street has the de-
☐ Histosol (A			☐ Sandy	Gleyed Matri	ix (S4)		ast Prairie Redox (A16)	
☐ Histic Epid				Redox (S5)	a (o t)		n-Manganese Masses (F	
☐ Black Histi				ed Matrix (S6)		ner (Explain in Remarks	
☐ Hydrogen				Mucky Mine			ici (Expian iii Kemarks	,
Stratified L				Gleyed Mati				
2 cm Muck		74.115		ted Matrix (F3	*	31 1:	to a Charles to the con-	and an and another d
	Below Dark Surfa	ce (AII)		Dark Surface			ntors of hydrophytic veg ogy must be present, un	
	Surface (A12)			ted Dark Surfa		proble	W	iess distances of
	eky Mineral (S1)		Redox	Depressions	(F8)			
	y Peat or Peat (S							
	yer (if observed	1):						
Type: Rock						Hydri	c Soil Present? Yes	□ No ⊠
Depth (inches)	: <u>8</u>							
Remarks: Soil	l likely fill mater	ial based	on observed charac	teristics.				
IIVDDOI O	CV							
HYDROLO	GY							
Wetland Hyd	rology Indicator	·s:						
Primary Indica	ators (minimum o	of one is re	quired; check all t	hat apply)			Secondary Indicators	(minimum of two required)
☐ Surface Wa	ater (A1)		☐ Wat	er-Stained Le	aves (B9)		☐ Surface Soil Crack	cs (B6)
☐ High Wate	r Table (A2)		☐ Aqu	atic Fauna (B	13)		☐ Drainage Patterns	(B10)
☐ Saturation	(A3)		☐ True	Aquatic Plan	nts (B14)		☐ Dry-Season Water	Table (C2)
☐ Water Mari	ks (B1)		☐ Hyd	rogen Sulfide	Odor (C1)		☐ Crayfish Burrows	(C8)
☐ Sediment I	Deposits (B2)		Oxi	dized Rhizosp	heres on Living R	cots (C3)		on Aerial Imagery (C9)
☐ Drift Depos	sits (B3)				ced Iron (C4)		☐ Stunted or Stresse	
☐ Algal Mat					ction in Tilled Soil	s (C6)	☐ FAC-Neutral Test	
☐ Iron Depos				Muck Surfac		- ()		()
	Visible on Aeria	l Imagery		ge or Well Da				
	egetated Concav			er (Explain in				
Field Observa			, , ,	7				
Surface Water		es 🗆 N	o Depth (inc	thes): None				
Water Table P			o Depth (inc					
Saturation Pres			o ⊠ Depth (inc		Wetland Hy	drology Pr	esent? Yes	No 🏻
(includes capil		- IN	Depui (inc	103). 20	Welland Hy	di biogy I'I	isent. Tes 🗆	110 🖂
fringe)								
Describe Reco	rded Data (stream	n gauge, r	nonitoring well, ac	rial photos, pr	revious inspections), if availab	le:	
	The state of the s	100						
Remarks:								

Project/Site:	Port of East St.	Louis	City/County:	East St. I	ouis:	St. Clair	Sampling	Date:	06-19-2012
Applicant/Owner:	Slay Industries		State:	Illinois			Sampling	Point:	<u>S15</u>
Investigator(s):	SCI Engineerin	ng, Inc.		Section,	Towns	hip, Range:		S23 T2N	R10W
Landform (hillslope, te	rrace, etc.):			Local rel	ief (co	ncave, conve	ex, none):		
Slope (%):		Lat:		Long:			Datum:		
Soil Map Unit Name:				NWI clas	sifica	tion:			
Are climatic/hydrologic	c conditions on the	e site typical	for this time of y	ear?		Yes 🛛	No ☐ (If no, e	explain in	Remarks.)
Are Vegetation N, Soil	Y, or Hydrology	N significantl	y disturbed?		Are	"Normal Circ	cumstances" pr	resent?	Yes ⊠ No □
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If n	eeded, expla	in any answers	in Remar	ks.)

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

Hydrophytic Vegetation Present:	Yes No 🛛			
Hydric Soil Present:	Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes □ No ⊠	
Wetland Hydrology Present:	Yes □ No ⊠		1000000	
Remarks: Area is located along acc	ess road near northern boundar	ry of the subject site.		

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee	t:
1. Populus deltoides	10		FACW	Number of Dominant Speci	
2. Acer saccharinum	15		FACW	that are OBL, FACW, or FA	$AC: \underline{2} (A)$
3. Acer negundo	15		FACW	Total Number of Dominant	
4				Species across all Strata:	<u>4</u> (B)
5				Percent of Dominant Specie	
	40 = Total	Cover		that are OBL, FACW, or FA	AC: <u>50</u> (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksh	eet:
1. Lonicera maackii	35	Y	NI	Total % Cover of:	Multiply by:
2				OBL species	x1 =
3				FACW species 40	x2 = 80
4				FAC species 80	x3 = 240
5				FACU species 50	x4 = 200
	35 = Total	Cover		UPL species	x5 =
Herb Stratum (Plot size:)				Column Totals: 170 (A)	520 (B)
1. Poa pratensis	50	Y	FAC	Prevalence Index = $B/A = 3$.06
2. Conyza canadensis	30	Y	FAC	Hydrophytic Vegetation I	ndicators:
3. Sorghum halepense	40	Y	FACU	Dominance Test is >	50%
4. Asclepias syriaca	10		FACU	Prevalence Index is <	\$3.01
5				Morphological Adap	tations1 (Provide
	<u>130</u> = Tota	d Cover		supporting data in Remarks sheet)	or on a separate
Woody Vine Stratum (Plot size:)				Problematic Hydropl (Explain)	nytic Vegetation1
1				¹ Indicators of hydric soil an	
2				must be present, unless distr problematic.	irbed or
	= T	otal Cover		Hydrophytic Vegetation Present?	Yes No 🛛

		ne depth n	eeded to docume	ent the inc	icator or comm	m the abse	nce of marc	ators.)	
Depth	Matrix			Redo	x Features				1
(inches) Color	(moist)	% C	olor (moist)	%	Type ¹	Loc	2	Texture	Remarks
¹ Type: C=Concentrati	on D=Denleti	on RM=R	educed Matrix C	S=Covere	d or Coated Sand	Grains 21	ocation: Pl	=Pore Lining	M=Matrix
Hydric Soil Indicator		on, Rivi R	duced Matrix, C	5 COVER	d of Coated Saire			oblematic Hyd	
	S.		Candy Clay	ad Mateix	(64)			edox (A16)	ric sons .
Histosol (A1)	2)		Sandy Gley		(34)				v
Histic Epidedon (A	(2)		Sandy Red					e Masses (F12)
Black Histic (A3)			☐ Stripped M		Tomas	□ Oti	ner (Expiain	in Remarks)	
Hydrogen Sulfide			☐ Loamy Mu						
Stratified Layers (A5)		☐ Loamy Gle						
2 cm Muck (A10)			Depleted M			5			o.* / 00 / 0.* 0
☐ Depleted Below D		.11)	Redox Darl						tion and wetland
☐ Thick Dark Surfac			☐ Depleted D			proble		present, unless	s disturbed of
☐ Sandy Mucky Min	eral (S1)		☐ Redox Dep	ressions (F8)	proore			
5 cm Mucky Peat	or Peat (S3)								
Restrictive Layer (if	observed):								
Type: Rock						Undei	c Soil Prese	nt? Yes 🗆	No 🖂
Depth (inches): Surface	e					Hydri	c son rresc	iit: Tes 🗀	190 🖂
Remarks: Unable to o	btain soil sam	ple based o	n rocky condition	ıs.					
HYDROLOGY									
Watland Hydrology	ndicators								
Wetland Hydrology		is require	t check all that a	nnly)			Secondar	V Indicators (m	inimum of two required
Primary Indicators (m	nimum of one	is required			was (PO)				inimum of two required)
Primary Indicators (m	nimum of one	is required	☐ Water-Sta	ained Lea			☐ Surfac	e Soil Cracks (B6)
Primary Indicators (m ☐ Surface Water (A1 ☐ High Water Table	nimum of one	e is required	☐ Water-Sta	ained Lea Fauna (B1	3)		☐ Surfac	e Soil Cracks (age Patterns (B	B6) 10)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3)	nimum of one	is required	☐ Water-Sta	ained Lea Fauna (B1 natic Plant	3) s (B14)		☐ Surface ☐ Draina ☐ Dry-S	ee Soil Cracks (age Patterns (B eason Water Ta	B6) 10) able (C2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1)	nimum of one) (A2)	is required	☐ Water-Sta	ained Lea Fauna (B1 natic Plant n Sulfide (3) s (B14) Odor (C1)		☐ Surface ☐ Draina ☐ Dry-Se	ne Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Co	B6) 10) able (C2)
Primary Indicators (m Surface Water (Al High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits	(B2)	is required	☐ Water-Sta	ained Lear Fauna (B1 natic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Living R	dots (C3)	☐ Surface ☐ Draina ☐ Dry-Se ☐ Crayfi	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Co tion Visible on	B6) 10) able (C2) 8) Aerial Imagery (C9)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3	(B2)	is required	☐ Water-Sta	Fauna (B1 Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduce	3) s (B14) Odor (C1) eres on Living Red Iron (C4)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust	(B2)	is required	Water-Sta	Fauna (B1 Fauna (B1 Fauna (B1 Fauna (B1 Fauna (B1) Fauna (B1) Faun	3) s (B14) Odor (C1) eres on Living Red Iron (C4) ion in Tilled Soi		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Co tion Visible on	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crust Iron Deposits (B5)	(B2) (B4)		Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	Fauna (B1 ratic Plant n Sulfide (Rhizosph of Reduct on Reduct ck Surface	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible	(B2) (B4) on Aerial Ima	gery (B7)	Water-Sta	Fauna (B1 tatic Plant of Sulfide (Rhizosph of Reduction Reduction on Reduction Reduction Well Dat	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated	(B2) (B4) on Aerial Ima	gery (B7)	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	Fauna (B1 tatic Plant of Sulfide (Rhizosph of Reduction Reduction on Reduction Reduction Well Dat	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible	(B2) (B4) on Aerial Ima	gery (B7)	Water-Sta	Fauna (B1 tatic Plant of Sulfide (Rhizosph of Reduction Reduction on Reduction Reduction Well Dat	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated	(B2) (B4) on Aerial Ima	gery (B7) face (B8)	Water-Sta	ained Lea Fauna (B1 natic Plant in Sulfide (Rhizosph of Reduction on Reduction ck Surface Well Dat kplain in F	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated Field Observations:	(B2) (B4) on Aerial Ima	gery (B7) face (B8)	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	ained Lea Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduction on Reduction ck Surface Well Dat xplain in F	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9)		☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte	ee Soil Cracks (age Patterns (B eason Water Ta sh Burrows (Ci tion Visible on d or Stressed P	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated Field Observations: Surface Water Present Water Table Present? Saturation Present? (includes capillary	(B2) (B4) on Aerial Imal Concave Sur	gery (B7) face (B8) No 🏻	Water-Sta Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or Other (Ex	ained Lea Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduct on Reduct ck Surface Well Dat kplain in F	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9)	ls (C6)	☐ Surfac ☐ Draina ☐ Dry-S ☐ Crayfi ☐ Satura ☐ Stunte ☐ FAC-1	ne Soil Cracks (nege Patterns (B neason Water Ta sh Burrows (Ci tion Visible on d or Stressed P Neutral Test (D	B6) 10) uble (C2) 8) Aerial Imagery (C9) lants (D2)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated Field Observations: Surface Water Present Water Table Present? Saturation Present? (includes capillary fringe)	(B2) (B4) on Aerial Imal Concave Surry Yes Yes Yes Yes Yes	gery (B7) face (B8) No 🖾 No 🖾 No 🖾	Water-Sta Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge or Other (Ex	ained Lea Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduct on Reduct ck Surface Well Dat kplain in F None ≥2 ≥2	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9) temarks) Wetland Hy	ls (C6)	Surfac	ne Soil Cracks (nege Patterns (B neason Water Ta sh Burrows (Ci tion Visible on d or Stressed P Neutral Test (D	B6) 10) able (C2) 8) Aerial Imagery (C9) llants (D2) 5)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated Field Observations: Surface Water Present Water Table Present? Saturation Present? (includes capillary	(B2) (B4) on Aerial Imal Concave Surry Yes Yes Yes Yes Yes	gery (B7) face (B8) No 🖾 No 🖾 No 🖾	Water-Sta Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge or Other (Ex	ained Lea Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduct on Reduct ck Surface Well Dat kplain in F None ≥2 ≥2	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9) temarks) Wetland Hy	ls (C6)	Surfac	ne Soil Cracks (nege Patterns (B neason Water Ta sh Burrows (Ci tion Visible on d or Stressed P Neutral Test (D	B6) 10) able (C2) 8) Aerial Imagery (C9) llants (D2) 5)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated Field Observations: Surface Water Present Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Da	(B2) (B4) on Aerial Imal Concave Surry Yes Yes Yes Yes Yes	gery (B7) face (B8) No 🖾 No 🖾 No 🖾	Water-Sta Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge or Other (Ex	ained Lea Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduct on Reduct ck Surface Well Dat kplain in F None ≥2 ≥2	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9) temarks) Wetland Hy	ls (C6)	Surfac	ne Soil Cracks (nege Patterns (B neason Water Ta sh Burrows (Ci tion Visible on d or Stressed P Neutral Test (D	B6) 10) able (C2) 8) Aerial Imagery (C9) llants (D2) 5)
Primary Indicators (m Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetated Field Observations: Surface Water Present Water Table Present? Saturation Present? (includes capillary fringe)	(B2) (B4) on Aerial Imal Concave Surry Yes Yes Yes Yes Yes	gery (B7) face (B8) No 🖾 No 🖾 No 🖾	Water-Sta Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge or Other (Ex	ained Lea Fauna (B1 natic Plant n Sulfide (Rhizosph of Reduct on Reduct ck Surface Well Dat kplain in F None ≥2 ≥2	3) s (B14) Odor (C1) eres on Living R ed Iron (C4) ion in Tilled Soi (C7) a (D9) temarks) Wetland Hy	ls (C6)	Surfac	ne Soil Cracks (nege Patterns (B neason Water Ta sh Burrows (Ci tion Visible on d or Stressed P Neutral Test (D	B6) 10) able (C2) 8) Aerial Imagery (C9) llants (D2) 5)

Project/Site:	Port of East St.	Louis	City/County:	East St. L	ouis; St.	Clair	Sampling D	ate:	06-19-2012
Applicant/Owner:	Slay Industries		State:	Illinois			Sampling Po	oint:	<u>S16</u>
Investigator(s):	SCI Engineerin	ng, Inc.		Section, 7	Township	, Range:	<u>S2</u>	3 T2N	R10W
Landform (hillslope, te	rrace, etc.):			Local reli	ef (conc	ave, convex	, none):		
Slope (%):		Lat:		Long:			Datum:		
Soil Map Unit Name:				NWI clas	sification	n:			
Are climatic/hydrologic	c conditions on the	e site typical	for this time of y	ear?	3	es 🛛 N	lo [(If no, exp	plain in	Remarks.)
Are Vegetation N, Soil	Y, or Hydrology	N significantl	y disturbed?		Are "N	lormal Circi	umstances" pres	ent?	Yes ⊠ No □
Are Vegetation N, Soil	N, or Hydrology	N naturally p	roblematic?		(If need	ded, explair	any answers in	Remar	ks.)

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

Hydrophytic Vegetation Present:	Yes □ No ⊠			
Hydric Soil Present:	Yes □ No ☒	Is the Sampled Area within a Wetland?	Yes □ No ⊠	
Wetland Hydrology Present:	Yes □ No ☒			

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	et:
1. Populus deltoides	5		FACW	Number of Dominant Spec	
2. Acer saccharinum	15		FACW	that are OBL, FACW, or F.	AC: $\underline{2}$ (A)
3				Total Number of Dominan	
4				Species across all Strata:	<u>4</u> (B)
5				Percent of Dominant Speci	
	<u>20</u> = Total	Cover		that are OBL, FACW, or F	AC: <u>50</u> (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksh	neet:
1. Lonicera maackii	25	Y	NI	Total % Cover of:	Multiply by:
2				OBL species	x1 =
3				FACW species 40	x2 = 80
4				FAC species 80	x3 = 240
5				FACU species 50	x4 = 200
	<u>25</u> = Total	Cover		UPL species	x5 =
Herb Stratum (Plot size:)				Column Totals: 170 (A)	520 (B)
1. Poa pratensis	35	Y	FAC	Prevalence Index = B/A =	3.06
2. <u>Conyza canadensis</u>	35	Y	FAC	Hydrophytic Vegetation l	ndicators:
3. Sorghum halepense	30	Y	FACU	Dominance Test is	50%
4. <u>Asclepias syriaca</u>	10		FACU	Prevalence Index is	≤3.0¹
5. <u>Rumex crispus</u>	15		FAC	Morphological Ada	
	<u>125</u> = Tota	al Cover		supporting data in Remarks	or on a separate
Woody Vine Stratum (Plot size:)				Problematic Hydrop (Explain)	hytic Vegetation1
I,				¹ Indicators of hydric soil ar	
2				must be present, unless dist problematic.	
	= T	otal Cover		Hydrophytic Vegetation Present?	Yes □ No ☒

SOIL Sampling Point: <u>S16</u>

Profile Desc Depth	Matrix					ox Features				
(inches)	Color (moist)	%	Color (n	noiet)	% Kedd	Type ¹	Loc	2	Texture	Remarks
		70	Color (n	noist)	70	Туре	Loc		sicl	Remarks
)-6	10 YR 3/2		-					-	SICI	
	10 YR 3/3	-	-	-	_	_		-		
		-	+		-			-		
				_	-		-	-		
				_				_		
Type: C=C	oncentration, D=De	pletion,	RM=Reduced	Matrix, C	S=Covere	ed or Coated San				
Hydric Soil	Indicators:						Indica	tors for I	Problematic Hyd	ric Soils ³ :
Histosol	(A1)			Sandy Gley	yed Matrix	x (S4)	☐ Co	ast Prairie	Redox (A16)	
Histic Ep	oidedon (A2)			Sandy Red	lox (S5)		☐ Iro	n-Mangan	iese Masses (F12)
Black Hi	stic (A3)			Stripped M	fatrix (S6)		Otl	ner (Expla	in in Remarks)	
Hydroge	n Sulfide (A4)			Loamy Mu	icky Mine	ral (F1)				
	Layers (A5)			Loamy Gle						
2 cm Mu				Depleted N						
	Below Dark Surfa	ce (A11)		Redox Dar			3Indica	itors of hy	drophytic vegeta	tion and wetland
	ark Surface (A12)			Depleted D		4	hydrol	ogy must	be present, unless	
	lucky Mineral (S1)		0.000	Redox Dep			proble	matic.		
	cky Peat or Peat (S	3)		readin Dep	, and a second	/				
	Layer (if observed	-								
vesu icuse	Layer (II observed).								
ype: Rock	20): 6						Hydri	c Soil Pre	esent? Yes 🗆	No 🖾
Type: Rock Depth (inche Remarks: R	ocky soil condition	s observe	ed at approxin	nately 6 in	whes below	w surface. The ar	100			No ⊠ ed on site observations.
YDROLO Yetland Hy Primary Indi Surface V Saturatio Water M Sedimen Drift Dep Algal Ma	ocky soil condition OGY Adrology Indicator icators (minimum of the text (A1) atter Table (A2) an (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) atter (B4) atter (B4)	s: f one is t	equired; chec	k all that a Water-St Aquatic True Aqu Hydroge Oxidized Presence Recent Ir	apply) tained Lea Fauna (B1 uatic Plant in Sulfide d Rhizospl e of Reduc	oves (B9) (3) ts (B14) Odor (C1) heres on Living F ed Iron (C4) tion in Tilled Soil e (C7)	rea has likely	Second: Surf Drai Dry Cray Satu	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tayfish Burrows (Ci	inimum of two requires (B6) (10) (able (C2) (8) (Aerial Imagery (C9) (Inst) (D2)
YDROLO Yetland Hy Primary Indi Surface W Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation	ocky soil condition OGY Adrology Indicator icators (minimum of Water (A1) Inter Table (A2) In (A3) I	f one is t	required; chec	k all that a Water-St Aquatic I True Aqu Hydroge Oxidized Presence Recent Ir Thin Mu Gauge or	apply) tained Lea Fauna (B1 uatic Plant on Sulfide d Rhizospl e of Reduc ron Reduc tck Surface r Well Dat	ives (B9) (3) ts (B14) Odor (C1) heres on Living Fed Iron (C4) tion in Tilled Soil e (C7) ta (D9)	rea has likely	Second: Surf Drai Dry Cray Satu	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tayfish Burrows (Ciration Visible on atted or Stressed P	inimum of two requires (B6) (10) (able (C2) (8) (Aerial Imagery (C9) (Inst) (D2)
YDROLO Wetland Hy Primary Indi Surface V High Water M Schrift Dep Algal Ma Iron Dep Inundatio	ocky soil condition OGY Adrology Indicators icators (minimum of the condition of the cond	f one is t	required; chec	k all that a Water-St Aquatic I True Aqu Hydroge Oxidized Presence Recent Ir Thin Mu Gauge or	apply) tained Lea Fauna (B1 uatic Plant in Sulfide d Rhizospl e of Reduc	ives (B9) (3) ts (B14) Odor (C1) heres on Living Fed Iron (C4) tion in Tilled Soil e (C7) ta (D9)	rea has likely	Second: Surf Drai Dry Cray Satu	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tayfish Burrows (Ciration Visible on atted or Stressed P	inimum of two requires (B6) (10) (able (C2) (8) (Aerial Imagery (C9) (Inst) (D2)
YDROLO Wetland Hy Primary Indi Surface V High Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Obser	ocky soil condition OGY vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concavivations:	f one is r	required; chec	k all that a Water-St Aquatic I True Aqu Hydroger Oxidized Presence Recent In Thin Mu Gauge of	apply) tained Lea Fauna (B1 uatic Plant en Sulfide d Rhizospl e of Reduc ron Reduc ack Surface r Well Dan	ives (B9) (3) ts (B14) Odor (C1) heres on Living Fed Iron (C4) tion in Tilled Soil e (C7) ta (D9)	rea has likely	Second: Surf Drai Dry Cray Satu	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tayfish Burrows (Ciration Visible on atted or Stressed P	inimum of two requires (B6) (10) (able (C2) (8) (Aerial Imagery (C9) (Inst) (D2)
YDROLO Wetland Hy Primary Indi Surface V High Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Obser	ocky soil condition OGY vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) t Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria Vegetated Concavivations: er Present?	I Imagery	required; chec	de all that a Water-St Aquatic I True Aqu Hydroge Oxidized Presence Recent In Thin Mu Gauge on Other (E:	apply) tained Lea Fauna (B1 uatic Plant en Sulfide d Rhizosph e of Reduc ron Reduc ick Surface r Well Dat explain in I	ives (B9) (3) ts (B14) Odor (C1) heres on Living Fed Iron (C4) tion in Tilled Soil e (C7) ta (D9)	rea has likely	Second: Surf Drai Dry Cray Satu	ary Indicators (m face Soil Cracks (inage Patterns (B -Season Water Tayfish Burrows (Citation Visible on atted or Stressed P	inimum of two requires (B6) (10) (able (C2) (8) (Aerial Imagery (C9) (Interpretable)
YDROLO Wetland Hy Primary Indi Surface V Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obser Surface Water Table	ocky soil condition OGY Adrology Indicator icators (minimum of the text of t	I Imager	equired; chec	k all that a Water-St Aquatic True Aqu Hydroge Oxidized Presence Recent Ir Thin Mu Gauge or Other (E:	apply) tained Lea Fauna (B1 uatic Plant in Sulfide d Rhizospl e of Reduct ron Reduct ick Surface r Well Dat explain in I	aves (B9) (3) ts (B14) Odor (C1) heres on Living F red Iron (C4) tion in Tilled Soi e (C7) ta (D9) Remarks)	Roots (C3)	Second Surf Drai Dry Cray Satur FAC	ary Indicators (m. face Soil Cracks (inage Patterns (B. Season Water Tayfish Burrows (Caration Visible on ated or Stressed P. CNeutral Test (D.	inimum of two requires B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)
YDROLO Wetland Hy Primary Indi Surface V High Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Obser Surface Water Table Saturation Princludes cap	ocky soil condition OGY Adrology Indicator icators (minimum of the text of t	I Imager	required; chec	de all that a Water-St Aquatic I True Aqu Hydroge Oxidized Presence Recent In Thin Mu Gauge on Other (E:	apply) tained Lea Fauna (B1 uatic Plant in Sulfide d Rhizospl e of Reduct ron Reduct ick Surface r Well Dat explain in I	ives (B9) (3) ts (B14) Odor (C1) heres on Living Feed Iron (C4) tion in Tilled Soile (C7) ta (D9)	Roots (C3)	Second Surf Drai Dry Cray Satur FAC	ary Indicators (m. face Soil Cracks (inage Patterns (B. Season Water Tayfish Burrows (Caration Visible on atted or Stressed P. CNeutral Test (D.	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9)
YDROLO Wetland Hy Primary Indi Surface V High Wa Saturatio Horn Dep Inundatio Sparsely Field Obser Surface Wat Water Table Saturation Princludes capringe)	ocky soil condition OGY Adrology Indicator icators (minimum of the text of t	I Imagery	v (B7) C (B8) C No \(\rightarrow\) Dept	k all that a Water-St Aquatic True Aqu Hydroge Oxidized Presence Recent Ir Thin Mu Gauge or Other (E)	apply) tained Lea Fauna (B1 uatic Plant in Sulfide of Reduct ron Reduct ick Surface r Well Dat explain in I	wes (B9) (3) ts (B14) Odor (C1) heres on Living F ed Iron (C4) tion in Tilled Soi e (C7) ta (D9) Remarks) Wetland Hy	Roots (C3)	Second. Surf Drai Dry. Cray Satu FAC	ary Indicators (m. face Soil Cracks (inage Patterns (B. Season Water Tayfish Burrows (Caration Visible on ated or Stressed P. CNeutral Test (D.	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)
Primary Indi Surface V High Water M Sedimen Drift Dep Inundation Sparsely Field Obser Surface Water Table Saturation Princludes captinge)	ocky soil condition OGY Adrology Indicator icators (minimum of Water (A1) Inter Table (A2) Inter Table (A2	I Imagery	v (B7) C (B8) C No \(\rightarrow\) Dept	k all that a Water-St Aquatic True Aqu Hydroge Oxidized Presence Recent Ir Thin Mu Gauge or Other (E)	apply) tained Lea Fauna (B1 uatic Plant in Sulfide of Reduct ron Reduct ick Surface r Well Dat explain in I	wes (B9) (3) ts (B14) Odor (C1) heres on Living F ed Iron (C4) tion in Tilled Soi e (C7) ta (D9) Remarks) Wetland Hy	Roots (C3)	Second. Surf Drai Dry. Cray Satu FAC	ary Indicators (m. face Soil Cracks (inage Patterns (B. Season Water Tayfish Burrows (Caration Visible on ated or Stressed P. CNeutral Test (D.	inimum of two require B6) 10) able (C2) 8) Aerial Imagery (C9) Plants (D2)