

Figure 2: Project Site

June 2012 Notes: Base Map: USGS 2-Foot Orthoimagery, 2008.







Figure 3: On-Site Ecological Communites

June 2012 Notes: Base Map: USGS 2-Foot Orthoimagery 2008.





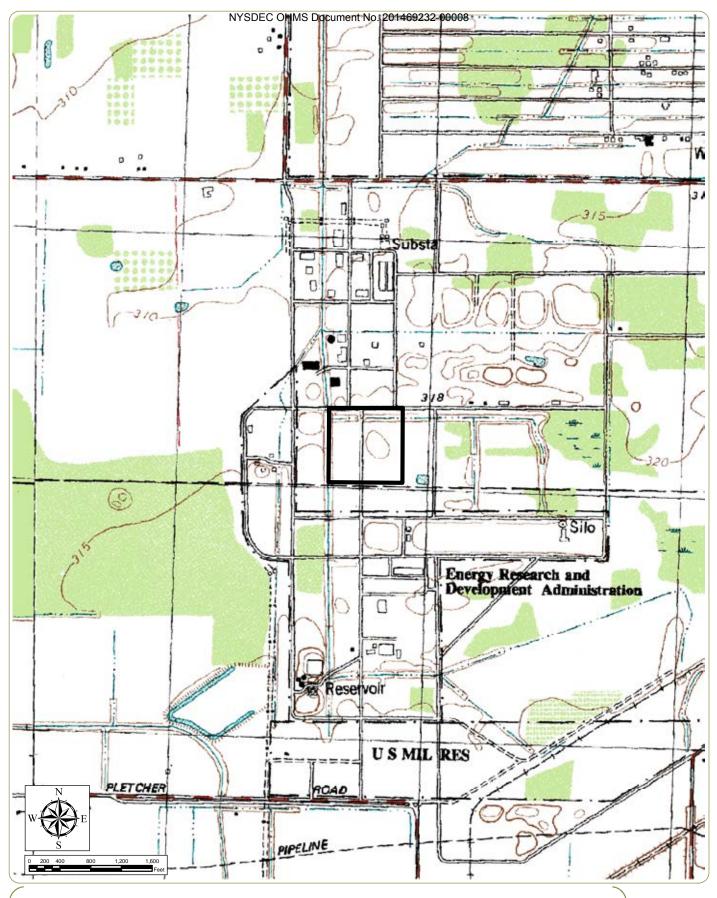
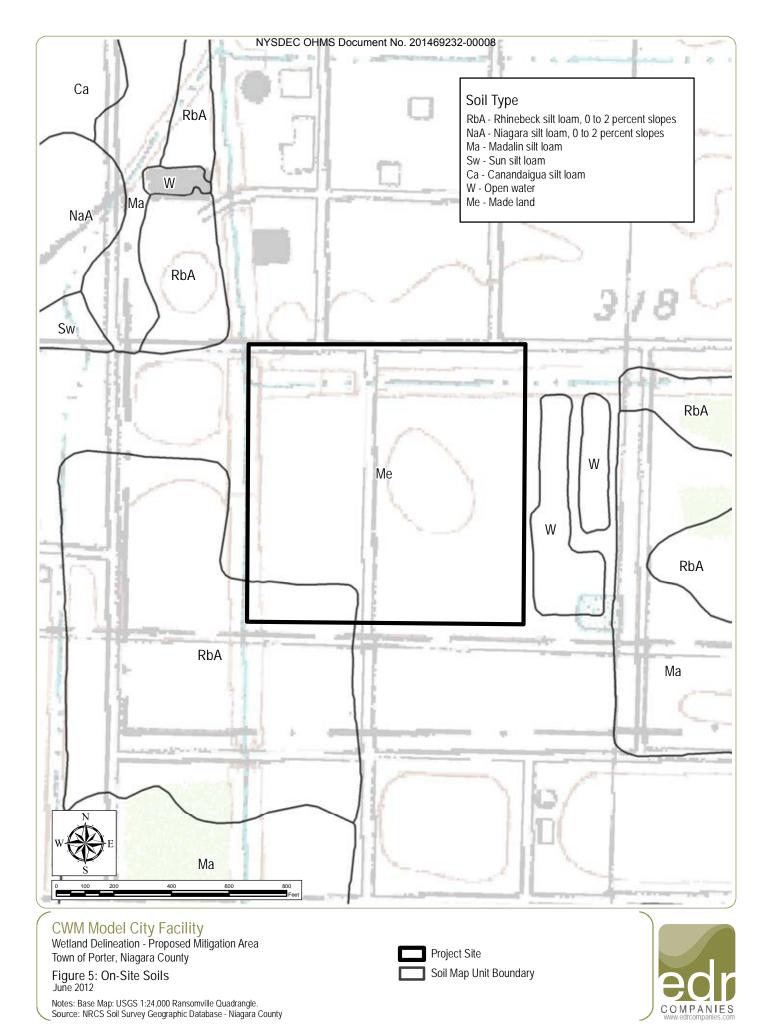


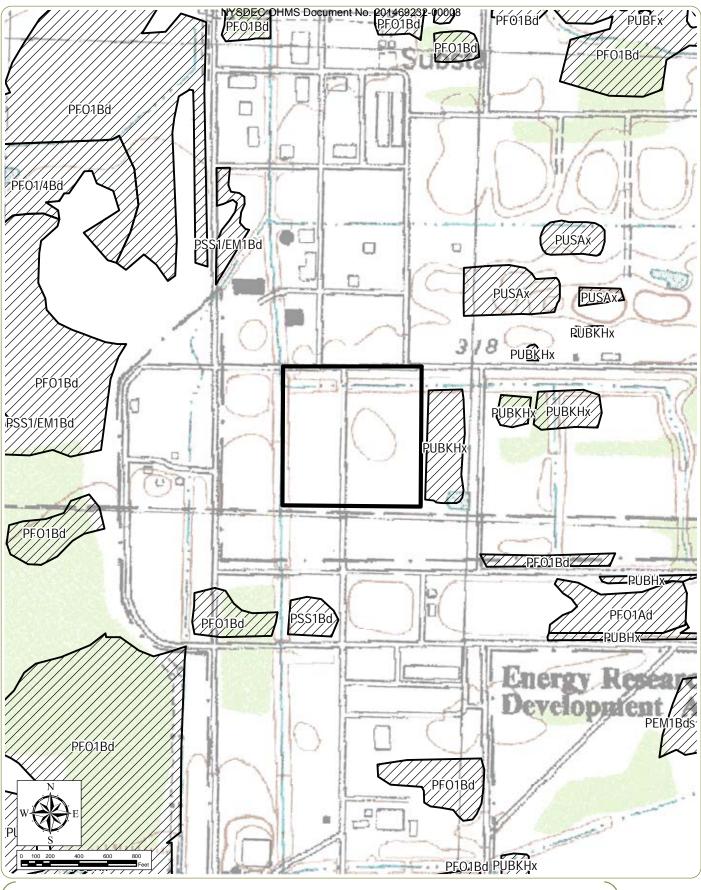
Figure 4: USGS Topographic Mapping

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle.

Project Site







# **CWM Model City Facility**

Wetland Delineation - Proposed Mitigation Area Town of Porter, Niagara County

Figure 6: NWI Wetlands

June 2012

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle.
Source: National Wetland Inventory Map - Ransomville Quadrangle



NWI Wetland



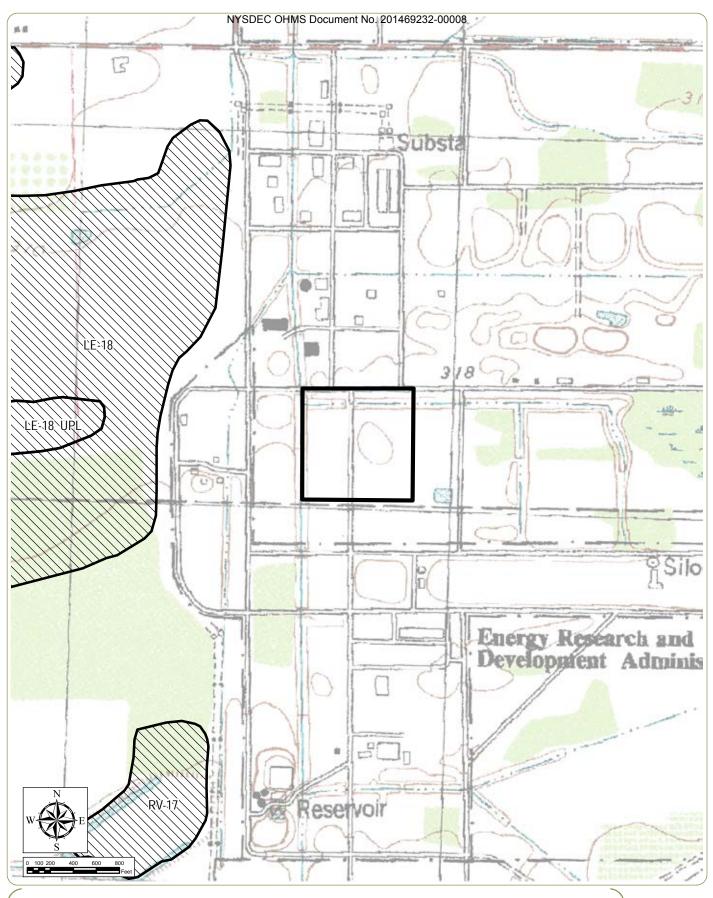


Figure 7: NYS DEC Freshwater Wetlands June 2012

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle. Source: NYS DEC Freshwater Wetland Map - Niagara County

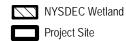
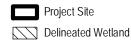






Figure 8: Delineated Wetlands

June 2012 Notes: Base Map: USGS 2-Foot Orthoimagery, 2008.





edr Companies 217 Montgomery Street, Suite 1000	DATA FORM	274 North Goodman Street
Syracuse, New York 13202	Northcentral and Northeast Regional Supplement	Rochester, New York 14607
Project Number: '09022	Town: Porter (Model City) Sampling Da County: Niagara	
Applicant: CWM Chemical Services, LLC	State: New York Community:	PEM
Data Point ID (i.e. 2W@Wet. G): / W ( Wef.	Nearest Flag to Data Point: A - 4	17
Investigator(s) Pippin/Stebbins  Landform: Hillside/Seep Toe of Slope Depressions	Is the area a potential problem	em area? Yes No
Landscape Position: Flat Undulating Sloping Conve	Is the site significantly distu ex Concave	rbed? Yes No
Are climatic/hydrologic conditions on the site typical for this	Approximate Slope (%):	0
Do Normal Circumstances exist on site? Yes No		<b>3</b>
Hydrology		
Primary Indicators (min 1 required; check all that apply	v)	Secondary Indicators (min 2 required) Surface Soil Cracks (B6)
Surface Water (A1) High Water Table (A2)	X Water-Stained Leaves (B9)	Orainage Patterns (B10)
Saturation (A3)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Water Marks (B1)	Marl Deposits (B15)	Dry-Season Water Table (C2) Crayfish Burrows (C8)
Sediment Deposits (B2) Drift Deposits (B3)	Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D-1)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	Other (Explain In Remarks)	FAC-Neutral Test (D5)
A CONTRACTOR OF THE CONTRACTOR		
Field Observations	Depth of Water (inches):	
Inundation Present? Yes No X No	Depth to Sat. Soil (inches): Ves	
	Death to Water (inches)	
> inundated further into welfar	-d	
Stream Association (Take a Stream Inventory Data Form	for each stream Identified in Study Area)	
		W
Record observations (e.g. location, stream type, adjacent co	mmunity type, state protected etc.) of any streams within	or adjacent to the Study Area:
The second secon		
	Committee of the second se	
Remarks		
Remarks		
8		
	8	

Project Number: 09022			Sampling Date: 5/22/2012  Data Point ID: / W @ Wet A
Applicant: CWM Chemical Services, LLC			Data Politi ID.
1. CALX SP. Gall day 2. CAX PLAN 3.	Absolute % Cover	Dominant Species?	Indicator Status  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  (A)  (B)
Sapling/Shrub Stratum (Plot size: 15-foot radius)  1. Covnus race		= Total Cover	Prevalence Index worksheet: Total % Cover of: Multiply by:
2. Frax pern 3 4			
Herb Stratum (Plot size: 5-foot radius)  1. Phrasmites 2. MOSS 3. yyeria 4.	70	= Total Cover	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test >50% Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (provide supporting data in remarks) Problematic Hydrophytic Vegetation¹ (explain in remarks) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6		= Total Cover	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Remarks
Woody Vine Stratum (Plot size: 30-foot radius)  1  2  3  4  5			
×		= Total Cover	

## NYSDEC OHMS Document No. 201469232-00008

Project Number: 09022	Sampling Dat	
Applicant: CWM Chemical Services, LLC		o: Iwewetlan A
Soil Map Unit:		
	e to the depth needed to document the indicator or co	nfirm the absence of indicators).
Depth Matrix (inches) Color (moist) % Color (mo	Redux Features  pist) Frequency Type Loc3	Texture, Structure, Other
D-16+ 2.54 3/1 ~		Chy luam
Frequency: F=Few, MA=Moderately Abundant, C=Common		
<sup>2</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or <sup>3</sup> Location: PL=Pore Lining, M=Matrix	or Coated Sand Grains	
Hydric Soil Indicators  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present,	Coast Prairie Redox (A16)  5 cm Mucky Peat or Peat (S3)  Dark Surface (S7)  Polyvalue Below Surface (S8)  Thin Dark Surface (S9)  Iron-Manganese Masses (F12)  Piedmont Floodplain Soils F19)  Mesic Spodic (TA6)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in remarks)	Restrictive Layer (if observed)  Type:  Depth (inches):
Saturaled Soils low the Cobbles present through See photo	roma with Clay ront Pedoni	
	<u> </u>	
Vetland Determination		
ydric Soil Present? (es) No. Does Any Part of	nectivity to Off-site Wetlands? Yes No N/A of this Delineated Wetland/Stream Extend Past the Fl Potentially Isolated? Yes No N/A	lagged Boundary? (Yes) No N/A
	lassificationvetland ID	

edr Companies 217 Montgomery Street, Suite 1000 Syracuse, New York 13202	DATA FORM ROUTINE WETLAND DETERMINATION	274 North Goodman Street Rochester, New York 14607
Project Number: '09022	Northcentral and Northeast Regional Supplement  Town: Porter (Model City) Sampling Do	ale: 5/22/2012
i i	County: Niagara	SAN
Applicant: CWM Chemical Services, LLC	0	Succ. forest
Data Point ID (i.e. 2W@Wet. G): 146 wet A	Nearest Flag to Data Point: $A-4$	
Investigator(s) Pippin/Stebbins  Landform: Hillside/Seep Toe of Slope Depressional Landscape Position: Flat Undulating Sloping Conve  Are climatic/hydrologic conditions on the site typical for this to  Do Normal Circumstances exist on site? Yes No  Hydrology	Is the site significantly distraction of the site significant of the site signif	
Tyurongy Tyurongy Tyurongy		
Primary Indicators (min 1 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) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) 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) Other (Explain In Remarks)	Secondary Indicators (min 2 required)  Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D-1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations Inundation Present? Yes No X Saturated Conditions? Yes No X	Depth of Water (inches):  Depth to Sat. Soil (inches):  Depth to Water (inches):	
Stream Association (Take a Stream Inventory Data Form to Record observations (e.g. location, stream type, adjacent con	_	n or adjacent to the Study Area:
Remarks		
No hydric I'd	aton	
	8	

Project Number: 09022	-			ampling Date: 5/22/2012 ata Point ID: / U @ / wet A
Applicant: CWM Chemical Services, LLC	-		D	ata Point ID: / U (a) / Net Pi
vegetation  Tree Stratum (Plot size: 30-foot radius)  1. Robinia p-a  2. Populus dett	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)  Total Number of Dominant Species Across All Strata:(B)
3		= Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15-foot radius)  1. LONICERA MON  2. RUBUS OCCI	40			FACW species
3				
Herb Stratum (Plot size: 5-foot radius)  1. Hesperis matror  2. Archum  3. Solidazzo  4.  5.	30 30 60	= Total Cover		Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test > 50%  Prevalence Index is ≤ 3.0¹  Morphological Adaptations¹ (provide supporting data in remarks)  Problematic Hydrophytic Vegetation¹ (explain in remarks) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
8. 9. 10.	120	= Total Cover		No hydrophytic Veyetation
Woody Vine Stratum (Plot size: 30-foot radius)  1				
5	***************************************	= Total Cover		,

Project Number:	09022	K		Sampling Date:	5/22/2012
Applicant: CWM Chemical Service				Data Point ID	The All All
Soil Map Unit:					tlag A-47
Soils	Profile Descrip	tion: (Describe to the o	depth needed to document the	indicator or con	firm the absence of indicators).
Depth Matrix			Redux Features Frequency Type <sup>2</sup>	Loc <sup>3</sup>	<u>I</u>
(inches) Color (moist)	%	Color (moist)	Prequency Type	Loc	Texture, Structure, Other
D-10, MK-12					CICH ID471
					0225
			* <del>}</del>		
7) 					
1Frequency: F=Few, MA=Moderately Abi	undant C=Common				
<sup>2</sup> Type: C=Concentration, D=Depletion, R		CS=Covered or Coate	d Sand Grains		
<sup>3</sup> Location: PL=Pore Lining, M=Matrix	Zearen ia		H		
Hydric Soil Indicators			Problematic Hydric Soll In	ndicators <sup>3</sup>	Restrictive Layer (if observed)
Histosol (A1)		Below Surface (S8) Surface (S9)	2 cm Muck (A10) Coast Prairie Redox (A	16)	Туре:
Histic Epipedon (A2) Black Histic (A3)	Loamy Mu	cky Mineral (F1)	5 cm Mucky Peat or Pe	100 TO CONTROL CO.	Depth (inches):
Hydrogen Sulfide (A4) Stratified Layers (A5)	Depleted N		Dark Surface (\$7) Polyvalue Below Surface		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted D	k Surface (F6) Park Surface (F7)	Thin Dark Surface (S9) Iron-Manganese Masse	es (F12)	
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Redox Dep	oressions (F8)	Piedmont Floodplain S Mesic Spodic (TA6)		10 m
Sandy Redox (S5) Stripped Matrix (S6)			Red Parent Material (T Very Shallow Dark Sur	face (TF12)	
Dark Surface (S7)			Other (Explain in remains)	rks)	
<sup>3</sup> Indicators of hydrophylic vegetation and	wetland hydrology m		s disturbed or problematic.		
Remarks		v			
70114 Co	11 Cah	1.60 100	er through	But	No bydnic
prijui soi	13, COD	b 10 13-691	10000911	0017	l
Soil cha	meterist	il) ob.	Selved-		
and the second s					CONTRACTOR
Wetland Determination		AND THE PARTY OF T			
Hydrophytic Vegetation Present? Yes	(No)	Hydrologic Connectivit	y to Off-site Wetlands? Yes	No N/A	
Hydric Soil Present? Yes Wetland Hydrology Present? Yes Is this Sampling Point Within a Wetland?	Yes Wo	Does Any Part of this I s this Wetland Potenti	Delineated Wetland/Stream Ext ally Isolated? Yes No N/	end Past the Fi A	lagged Boundary? Yes No N/A
Is the wetland mapped in the NWI? Is the wetland a mapped state wetla	Yes No I		eation		
			-		

edr Companies 217 Montgomery Street, Suite 1000 Syracuse, New York 13202	DATA FOI	ETERMINATION		oodman Street New York 14607
Project Number: '09022	Northcentral and Northeast Reg Town: Porter (Mod	a amorata to the same and	Date:	5/22/2012
Applicant: CWM Chemical Services, LLC	County: Niagara State: New York	Community	gers.	PFO
Data Point ID (i.e. 2W@Wet. G): 2 W @ We. f	'_A Nearest Fla	g to Data Point: A-	//	
Investigator(s) Pippin/Stebbins  Landform: HillsIde/Seep Toe of Slope Depressional Landscape Position: Flat Undulating Sloping Convert  Are climatic/hydrologic conditions on the site typical for this to Do Normal Circumstances exist on site? Yes No  Hydrology	ex Concave	Is the area a potential pro Is the site significantly dist Approximate Slope (%):		No
Primary Indicators (min 1 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) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water-Stained Leaves Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced In Recent Iron Reduction Thin Muck Surface (C7 Other (Explain In Rema	(C1) on Living Roots (C3) ron (C4) in Tilled Soils (C6)	Surface Soil Ci Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visi	erns (B10) es (B16) fater Table (C2) ws (C8) ble on Aerial Imagery (C9) essed Plants (D-1) osition (D2) rd (D3) hic Relief (D4)
Field Observations Inundation Present? Saturated Conditions?  Yes No No No	Depth of Wa Depth to Sal Depth to Wa	l. Soil (inches):		
			5 1 2 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1	
Stream Association (Take a Stream Inventory Data Form  Record observations (e.g. location, stream type, adjacent co			in or adjacent to the	Study Area:
Remarks			2	
				i.

Project Number: 09022				ampling Date: 5/22/2012  Pata Point ID: LW W wet A
Applicant: CWM Chemical Services, LLC				add I Ollitio.
Vegetation  Tree Stratum (Plot size: 30-foot radius)  1. FYOX PLOO	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A) Total Number of Dominant
2				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  Prevalence Index worksheet:
5	40	= Total Cover		Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =
Sapling/Shrub Stratum (Plot size: 15-foot radius)				FACU species
1. Cornus mace	25			Column Totals: (A) (B)
	5	-		Prevalence Index = B/A =
2. Ulmus am 3. Frax fran	25			š
5				
	- 0 0	= Total Cover		Hydrophytic Vegetation Indicators: Rapid Test for Hydrophylic Vegetation
1. (avex	<u>50</u> 20			Dominance Test > 50% Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (provide supporting data in remarks) Problematic Hydrophytic Vegetation¹ (explain in remarks) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.         4.         5         6.				Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
7				Woody vines - All woody vines greater than 3.28 ft in height.
9.				Remarks
10.		-		
	70_	= Total Cover		*
Woody Vine Stratum (Plot size: 30-foot radius)				
1				
2.		(		y y
4.		-		
5				
z z		= Total Cover		

## NYSDEC OHMS Document No. 201469232-00008

		01. F					Maria Maria	
Project Number	r;	09022				Sampling Date		
Applicant:	CWM Chemical Services, L	LC			х ж	Data Point ID	: Dwg wetter A	
Soil Map Unit:								
Soils		Profile Descr	ption: (Describe to the o	lepth needed to d	locument the in	ndicator or con	firm the absence of indicators).	
Depth B	! Matrix			Redux Fealu	res			
(inches)	Color (moist)	%	Color (moist)	Frequency <sup>1</sup>	Type <sup>2</sup>	Loc <sup>3</sup>	Texture, Structure, Other	
0-61	104R 3/1					_	Silt loam	
6"+	1048412	and the same of th	9,548-9/3	E	JSM	M	Clay	
	Few, MA=Moderately Abunda entration, D=Depletion, RM=I			d Sand Grains				
Location: PL=P	ore Lining, M=Matrix			REPORT CLASS PARTS	WINDS WIND		Margazar (1905-1914) (1906-1914)	
Hydric Soil In	dicators			Problematic I	Hydric Soll In	dicators	Restrictive Layer (if observed)	
Histic Epipe Black Histic Hydrogen S Stratified La Depleted Be Thick Dark S Sandy Muck Sandy Gleye Sandy Redo Stripped Ma Dark Surface	Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thin Dark Surface (S9)  Loamy Mucky Mineral (F1)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Redox Depressions (F8)			5 cm Muc Dark Surf Polyvalue Thin Dark Iron-Mang Hedmont Mesic Spo Red Pare Very Shal Other (Ex	irite Redox (Al ky Peat or Pea ace (S7) Below Surface Surface (S9) panese Masses Floodplain So odic (TA6) nt Material (TF low Dark Surfa plain in remark	et (S3) e (S8) s (F12) ills F19) (2) ace (TF12)	Type: Depth (inches):	
Remarks D	ank loam intwated	j soi at s	l buer ur face,	notlle	g Cla	1.		
Vetland Deter ydrophytic Vege ydric Soil Prese	etation Present? (Yes) No		Hydrologic Connectivity	to Off-site Wellan	nds? (Yes)	No N/A	agged Boundary? Ves No N/A	
Velland Hydrolog this Sampling I	gy Present? (ve) No Point Within a Wetland?	No No	Is this Wetland Potentia				agged boundary? (es) NO NO	
the wetland r the wetland a	mapped in the NWI? Yes a mapped state wetland?	Yes No	If yes, indicate classifica If yes, indicate wetland					