

**edr Companies**

217 Montgomery Street, Suite 1000  
Syracuse, New York 13202

**DATA FORM  
ROUTINE WETLAND DETERMINATION**

Northcentral and Northeast Regional Supplement

274 North Goodman Street  
Rochester, New York 14607

Project Number: 09022

Town: Porter (Model City) Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC

County: Niagara  
State: New York Community: Forested

Data Point ID (i.e. 2W@Wet. G): 2U @ WFA

Nearest Flag to Data Point: A-11

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: Flat Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No

Do Normal Circumstances exist on site? Yes No

Is the area a potential problem area? Yes No

Is the site significantly disturbed? Yes No

Approximate Slope (%): \_\_\_\_\_

**Hydrology**

**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 ✓  
Saturated Conditions? Yes \_\_\_\_\_ No ✓

Depth of Water (inches): \_\_\_\_\_  
Depth to Sat. Soil (inches): \_\_\_\_\_  
Depth to Water (inches): \_\_\_\_\_

**Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)**

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remarks**

*NO hydrological indicators*

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: 2U @ Wet A

**Vegetation**

| Tree Stratum (Plot size: 30-foot radius) |                              | Absolute % Cover            | Dominant Species? | Indicator Status |
|--|------------------------------|-----------------------------|-------------------|------------------|
| 1.                                       | <u>Acer negundo</u>          | <u>50</u>                   |                   |                  |
| 2.                                       | <u>Robinia pseudo-acacia</u> | <u>50</u>                   |                   |                  |
| 3.                                       |                              |                             |                   |                  |
| 4.                                       |                              |                             |                   |                  |
| 5.                                       |                              |                             |                   |                  |
|  |                              | <u>                    </u> | = Total Cover     |                  |

| Sapling/Shrub Stratum (Plot size: 16-foot radius) |                          | Absolute % Cover            | Dominant Species? | Indicator Status |
|---|--------------------------|-----------------------------|-------------------|------------------|
| 1.  | <u>Lonicera Morrowii</u> | <u>20</u>                   |                   |                  |
| 2.  |                          |                             |                   |                  |
| 3.  |                          |                             |                   |                  |
| 4.  |                          |                             |                   |                  |
| 5.  |                          |                             |                   |                  |
|   |                          | <u>                    </u> | = Total Cover     |                  |

| Herb Stratum (Plot size: 5-foot radius) |                            | Absolute % Cover            | Dominant Species? | Indicator Status |
|---|----------------------------|-----------------------------|-------------------|------------------|
| 1.                                      | <u>Antennaria</u>          | <u>15</u>                   |                   |                  |
| 2.                                      | <u>Hesperis matronalis</u> | <u>30</u>                   |                   |                  |
| 3.                                      | <u>Galium canadense</u>    | <u>20</u>                   |                   |                  |
| 4.                                      |                            |                             |                   |                  |
| 5.                                      |                            |                             |                   |                  |
| 6.                                      |                            |                             |                   |                  |
| 7.                                      |                            |                             |                   |                  |
| 8.                                      |                            |                             |                   |                  |
| 9.                                      |                            |                             |                   |                  |
| 10.                                     |                            |                             |                   |                  |
|   |                            | <u>                    </u> | = Total Cover     |                  |

| Woody Vine Stratum (Plot size: 30-foot radius) |                               | Absolute % Cover            | Dominant Species? | Indicator Status |
|--|-------------------------------|-----------------------------|-------------------|------------------|
| 1.   | <u>Toxicodendron radicans</u> | <u>25</u>                   |                   |                  |
| 2.   |                               |                             |                   |                  |
| 3.   |                               |                             |                   |                  |
| 4.   |                               |                             |                   |                  |
| 5.   |                               |                             |                   |                  |
|  |                               | <u>                    </u> | = Total Cover     |                  |

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC:            (A)  
 Total Number of Dominant Species Across All Strata:            (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC:            (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of:            Multiply by:  
 OBL species            x 1 =             
 FACW species            x 2 =             
 FAC species            x 3 =             
 FACU species            x 4 =             
 UPL species            x 5 =             
 Column Totals:            (A)            (B)  
 Prevalence Index = B/A =           

**Hydrophytic Vegetation Indicators:**  
 Rapid Test for Hydrophytic Vegetation  
 Dominance Test >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (provide supporting data in remarks)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (explain in remarks)  
<sup>1</sup>Indicators 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.

**Remarks**  
no hydrophytic vegetation

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC  
 Soil Map Unit: \_\_\_\_\_

Sampling Date: 5/22/2012  
 Data Point ID: 200 wetland A  
Flag A-11

**Soils** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

| Depth (inches) | Matrix        |   | Redox Features |                        |                   | Texture, Structure, Other |
|----------------|---------------|---|----------------|------------------------|-------------------|---------------------------|
|                | Color (moist) | % | Color (moist)  | Frequency <sup>1</sup> | Type <sup>2</sup> |                           |
| 0-16" +        | 10YR 5/4      |   | —              | —                      | —                 | Silt loam                 |
|                |               |   |                |                        |                   |                           |
|                |               |   |                |                        |                   |                           |
|                |               |   |                |                        |                   |                           |
|                |               |   |                |                        |                   |                           |

<sup>1</sup>Frequency: F=Few, MA=Moderately Abundant, C=Common  
<sup>2</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains  
<sup>3</sup>Location: PL=Pore Lining, M=Matrix

**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)

- Polyvalue Below Surface (S8)
- Thin Dark Surface (S9)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Problematic Hydric Soil Indicators<sup>3</sup>**

- 2 cm Muck (A10)
- 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): \_\_\_\_\_

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

**Remarks**

Bright soils associated with fill area adjacent to PFO wetland. No hydrology/hydric soils observed.

**Wetland Determination**

Hydrophytic Vegetation Present? Yes  No

Hydric Soil Present? Yes  No

Wetland Hydrology Present? Yes  No

Is this Sampling Point Within a Wetland? Yes  No

Is the wetland mapped in the NWI? Yes  No

Is the wetland a mapped state wetland? Yes  No

Hydrologic Connectivity to Off-site Wetlands? Yes  No  N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes  No  N/A

Is this Wetland Potentially Isolated? Yes  No  N/A

If yes, indicate classification \_\_\_\_\_

If yes, indicate wetland ID \_\_\_\_\_

**edr Companies**

217 Montgomery Street, Suite 1000  
Syracuse, New York 13202

**DATA FORM  
ROUTINE WETLAND DETERMINATION**

Northcentral and Northeast Regional Supplement

274 North Goodman Street  
Rochester, New York 14607

Project Number: '09022 Town: Porter (Model City) Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC County: Niagara  
State: New York Community: Ditch / Stream Perm

Data Point ID (i.e. 2W@Wet. G): 1W@wet B Nearest Flag to Data Point: B-13

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: Flat Undulating Sloping Convex Concave

Is the area a potential problem area? Yes  No

Is the site significantly disturbed? Yes  No

Approximate Slope (%): \_\_\_\_\_

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No

Do Normal Circumstances exist on site? Yes  No

**Hydrology**

**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   
Saturated Conditions? Yes  No

Depth of Water (inches): \_\_\_\_\_  
Depth to Sat. Soil (inches): 0  
Depth to Water (inches): 4"

**Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)**

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remarks**



Project Number: 09022 Sampling Date: 5/22/2012  
 Applicant: CWM Chemical Services, LLC Data Point ID: 146(2) Wetland B  
 Soil Map Unit: \_\_\_\_\_

Soils Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

| Depth (inches) | Matrix        |   | Redux Features |                        |                   | Texture, Structure, Other |
|----------------|---------------|---|----------------|------------------------|-------------------|---------------------------|
|                | Color (moist) | % | Color (moist)  | Frequency <sup>1</sup> | Type <sup>2</sup> |                           |
| 0-16"          | 10YR 4/1      |   | —              | —                      | —                 | Clay                      |
|                |               |   |                |                        |                   |                           |
|                |               |   |                |                        |                   |                           |
|                |               |   |                |                        |                   |                           |
|                |               |   |                |                        |                   |                           |

<sup>1</sup>Frequency: F=Few, MA=Moderately Abundant, C=Common  
<sup>2</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains  
<sup>3</sup>Location: PL=Pore Lining, M=Matrix

| Hydric Soil Indicators  | Problematic Hydric Soil Indicators <sup>3</sup>  | Restrictive Layer (if observed)   |
|---|--|---|
| <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5)<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4)<br><input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Dark Surface (S7) | <input type="checkbox"/> Polyvalue Below Surface (S8)<br><input type="checkbox"/> Thin Dark Surface (S9)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input checked="" type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> 2 cm Muck (A10)<br><input type="checkbox"/> Coast Prairie Redox (A16)<br><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)<br><input type="checkbox"/> Dark Surface (S7)<br><input type="checkbox"/> Polyvalue Below Surface (S8)<br><input type="checkbox"/> Thin Dark Surface (S9)<br><input type="checkbox"/> Iron-Manganese Masses (F12)<br><input type="checkbox"/> Piedmont Floodplain Soils F19)<br><input type="checkbox"/> Mesic Spodic (TA6)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Very Shallow Dark Surface (TF12)<br><input type="checkbox"/> Other (Explain in remarks) |
| Type: _____<br>Depth (inches): _____  |  |   |

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

Remarks  
 Black organic streaking present no mottles except oxidizing rhizospheres. Soil sample taken at edge of man made drainage channel - to 1/4 mile creek.

**Wetland Determination**

Hydrophytic Vegetation Present? Yes  No   
 Hydric Soil Present? Yes  No   
 Wetland Hydrology Present? Yes  No   
 Is this Sampling Point Within a Wetland? Yes  No

Hydrologic Connectivity to Off-site Wetlands? Yes  No  N/A   
 Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes  No  N/A   
 Is this Wetland Potentially Isolated? Yes  No  N/A

Is the wetland mapped in the NWI? Yes  No   
 Is the wetland a mapped state wetland? Yes  No

If yes, indicate classification \_\_\_\_\_  
 If yes, indicate wetland ID \_\_\_\_\_

**edr Companies**

217 Montgomery Street, Suite 1000  
Syracuse, New York 13202

**DATA FORM  
ROUTINE WETLAND DETERMINATION**

Northcentral and Northeast Regional Supplement

274 North Goodman Street  
Rochester, New York 14607

Project Number: 09022 Town: Porter (Model City) Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC County: Niagara  
State: New York Community: old field

Data Point ID (i.e. 2W@Wet. G): 1 u @ wet B Nearest Flag to Data Point: B-13

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: Flat Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No

Do Normal Circumstances exist on site? Yes No

Is the area a potential problem area? Yes No

Is the site significantly disturbed? Yes No

Approximate Slope (%): \_\_\_\_\_

**Hydrology**

**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 ~~\_\_\_\_\_~~  
Saturated Conditions? Yes \_\_\_\_\_ No ~~\_\_\_\_\_~~

Depth of Water (inches): \_\_\_\_\_  
Depth to Sat. Soil (inches): \_\_\_\_\_  
Depth to Water (inches): \_\_\_\_\_

**Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)**

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remarks**

*no hydrological indicators*

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: 1W @ wet B

**Vegetation**

|   | Absolute % Cover    | Dominant Species? | Indicator Status |
|---|---------------------|-------------------|------------------|
| <b>Tree Stratum (Plot size: 30-foot radius)</b> |                     |                   |                  |
| 1.  |                     |                   |                  |
| 2.  |                     |                   |                  |
| 3.  |                     |                   |                  |
| 4.  |                     |                   |                  |
| 5.  |                     |                   |                  |
|   | _____ = Total Cover |                   |                  |

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: \_\_\_\_\_ (A)  
 Total Number of Dominant Species Across All Strata: \_\_\_\_\_ (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: \_\_\_\_\_ (A/B)

|  | Absolute % Cover    | Dominant Species? | Indicator Status |
|--|---------------------|-------------------|------------------|
| <b>Sapling/Shrub Stratum (Plot size: 15-foot radius)</b> |                     |                   |                  |
| 1.   |                     |                   |                  |
| 2.   |                     |                   |                  |
| 3.   |                     |                   |                  |
| 4.   |                     |                   |                  |
| 5.   |                     |                   |                  |
|  | _____ = Total Cover |                   |                  |

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by:  
 OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_  
 FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_  
 FACU species \_\_\_\_\_ x 3 = \_\_\_\_\_  
 UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_  
 Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)  
 Prevalence Index = B/A = \_\_\_\_\_

|  | Absolute % Cover    | Dominant Species? | Indicator Status |
|--|---------------------|-------------------|------------------|
| <b>Herb Stratum (Plot size: 5-foot radius)</b> |                     |                   |                  |
| 1.   | <u>40</u>           |                   |                  |
| 2.   | <u>30</u>           |                   |                  |
| 3.   | <u>10</u>           |                   |                  |
| 4.   | <u>40</u>           |                   |                  |
| 5.   | <u>5</u>            |                   |                  |
| 6.   |                     |                   |                  |
| 7.   |                     |                   |                  |
| 8.   |                     |                   |                  |
| 9.   |                     |                   |                  |
| 10.  |                     |                   |                  |
|  | _____ = Total Cover |                   |                  |

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ Rapid Test for Hydrophytic Vegetation  
 \_\_\_ Dominance Test >50%  
 \_\_\_ Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Morphological Adaptations<sup>1</sup> (provide supporting data in remarks)  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (explain in remarks)  
<sup>1</sup>Indicators 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.

**Remarks**  
no hydrophytic veg

|   | Absolute % Cover    | Dominant Species? | Indicator Status |
|---|---------------------|-------------------|------------------|
| <b>Woody Vine Stratum (Plot size: 30-foot radius)</b> |                     |                   |                  |
| 1.  |                     |                   |                  |
| 2.  |                     |                   |                  |
| 3.  |                     |                   |                  |
| 4.  |                     |                   |                  |
| 5.  |                     |                   |                  |
|   | _____ = Total Cover |                   |                  |

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: 14@ Wetland B

Soil Map Unit: \_\_\_\_\_

**Soils** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

| Depth (inches) | Matrix                 |   | Redox Features |                        |                   | Texture, Structure, Other |
|----------------|------------------------|---|----------------|------------------------|-------------------|---------------------------|
|                | Color (moist)          | % | Color (moist)  | Frequency <sup>1</sup> | Type <sup>2</sup> |                           |
| 0-3"           | 10YR 5/3               |   |                |                        |                   | Clay/silt                 |
| 3"+            | Hard packed Rock/soil. |   |                |                        |                   |                           |
|                |                        |   |                |                        |                   |                           |
|                |                        |   |                |                        |                   |                           |
|                |                        |   |                |                        |                   |                           |

<sup>1</sup>Frequency: F=Few, MA=Moderately Abundant, C=Common  
<sup>2</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains  
<sup>3</sup>Location: PL=Pore Lining, M=Matrix

| Hydric Soil Indicators  | Problematic Hydric Soil Indicators <sup>3</sup>   | Restrictive Layer (if observed)   |
|---|---|---|
| <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5)<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4)<br><input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Dark Surface (S7) | <input type="checkbox"/> Polyvalue Below Surface (S8)<br><input type="checkbox"/> Thin Dark Surface (S9)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> 2 cm Muck (A10)<br><input type="checkbox"/> Coast Prairie Redox (A16)<br><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)<br><input type="checkbox"/> Dark Surface (S7)<br><input type="checkbox"/> Polyvalue Below Surface (S8)<br><input type="checkbox"/> Thin Dark Surface (S9)<br><input type="checkbox"/> Iron-Manganese Masses (F12)<br><input type="checkbox"/> Piedmont Floodplain Soils F19)<br><input type="checkbox"/> Mesic Spodic (TA6)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Very Shallow Dark Surface (TF12)<br><input type="checkbox"/> Other (Explain in remarks) |
|   |   | Type: _____<br>Depth (inches): _____  |

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

**Remarks**  
 Soil sample is located on top of unconsolidated fill adjacent to wetland B. Soils are bright. After 3" unable to penetrate due to hard packed rock/soil.

**Wetland Determination**

Hydrophytic Vegetation Present? Yes  No   
 Hydric Soil Present? Yes  No   
 Wetland Hydrology Present? Yes  No   
 Is this Sampling Point Within a Wetland? Yes  No   
 Hydrologic Connectivity to Off-site Wetlands? Yes  No  N/A  
 Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes  No  N/A  
 Is this Wetland Potentially Isolated? Yes  No  N/A  
 Is the wetland mapped in the NWI? Yes  No   
 Is the wetland a mapped state wetland? Yes  No   
 If yes, indicate classification \_\_\_\_\_  
 If yes, indicate wetland ID \_\_\_\_\_

### Stream Inventory Data Form

**edr Companies**  
 217 Montgomery Street, Suite 1000  
 Syracuse, New York 13202

274 North Goodman Street  
 Rochester, New York 14607

**Observer:**  
 Name: Pippin/Stebbins  
 Weather: hot, sunny

**Project Information:**  
 Name: CMW  
 Number: 09022 Date: 5/22/12

**Stream Name:** Unnamed Ditch (C)

**Regulation Status:**  
 State Protected? N  
 Corps Jurisdictional? ~~Y~~

**Stream Location (nearest road, structure, etc.):** \_\_\_\_\_

**Adjacent Community:** forest (mostly cottonwood), adjacent road

**Stream Gradient:**  
 gentle X  
 moderate \_\_\_\_\_  
 steep \_\_\_\_\_

**Stream Morphology:**  
 bank width 10'  
 stream width 3'  
 water depth 2"  
 bankfull width 6"

**Channel Substrate:**  
 bed rock \_\_\_\_\_  
 boulder \_\_\_\_\_  
 cobble \_\_\_\_\_  
 gravel \_\_\_\_\_  
 sand \_\_\_\_\_  
 silt X  
 clay X

**Instream Conditions:**  
 obscured bank \_\_\_\_\_  
 well defined bank X  
 eroded/undercut bank \_\_\_\_\_  
 overhanging vegetation \_\_\_\_\_  
 vegetated channel X  
 logs/woody debris \_\_\_\_\_  
 riffles and runs \_\_\_\_\_  
 deep pools \_\_\_\_\_  
 other \_\_\_\_\_

**Stream Flow:**  
 permanent \_\_\_\_\_  
 intermittent \_\_\_\_\_  
 ephemeral X

Photo #s \_\_\_\_\_  
 Flag #'s C-3

**Additional Comments:**  
Drainage Flows South Eventually into Central ditch  
which ultimately flows to 4 mile creek.

**edr Companies**

217 Montgomery Street, Suite 1000  
Syracuse, New York 13202

**DATA FORM  
ROUTINE WETLAND DETERMINATION**

Northcentral and Northeast Regional Supplement

274 North Goodman Street  
Rochester, New York 14607

Project Number: '09022

Town: Porter (Model City)

Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC

County: Niagara

State: New York

Community: PEM (Stormwater)

Data Point ID (i.e. 2W@Wet. G): 1W@Wet P

Nearest Flag to Data Point: N/A Lake on southern edge.

Investigator(s) Pippin/Stebbins

Is the area a potential problem area? Yes  No

Landform: Hillside/Seep  Toe of Slope  Depressional  Riparian

Is the site significantly disturbed? Yes  No

Landscape Position: Flat  Undulating  Sloping  Convex  Concave

Approximate Slope (%): 0

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No

Do Normal Circumstances exist on site? Yes  No

**Hydrology**

**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   
Saturated Conditions? Yes  No

Depth of Water (inches): 0  
Depth to Sat. Soil (inches): 716"  
Depth to Water (inches): 716"

**Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)**

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Remarks**

Basin of stormwater retention pond.

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: 1 W @ wet 0

**Vegetation**

| <u>Tree Stratum</u> (Plot size: 30-foot radius) |                  |                   |                  | <b>Dominance Test worksheet:</b>                        |              |
|---|------------------|-------------------|------------------|---|--------------|
|   | Absolute % Cover | Dominant Species? | Indicator Status | Number of Dominant Species That Are OBL, FACW, or FAC:  | (A)          |
| 1.  | <u>N/A</u>       |                   |                  | Total Number of Dominant Species Across All Strata:     | (B)          |
| 2.  |                  |                   |                  | Percent of Dominant Species That Are OBL, FACW, or FAC: | (A/B)        |
| 3.  |                  |                   |                  | <b>Prevalence Index worksheet:</b>                      |              |
| 4.  |                  |                   |                  | Total % Cover of:                                       | Multiply by: |
| 5.  |                  |                   |                  | OBL species   | x 1 =        |
|   |                  |                   |                  | FACW species  | x 2 =        |
|   |                  |                   |                  | FAC species   | x 3 =        |
|   |                  |                   |                  | FACU species  | x 4 =        |
|   |                  |                   |                  | UPL species   | x 5 =        |
|   |                  |                   |                  | Column Totals:  | (A) (B)      |
|   |                  |                   |                  | Prevalence Index = B/A =                                |              |

| <u>Sapling/Shrub Stratum</u> (Plot size: 15-foot radius) |                  |           |               |
|--|------------------|-----------|---------------|
| 1.   | <u>Frax penn</u> | <u>20</u> |               |
| 2.   |                  |           |               |
| 3.   |                  |           |               |
| 4.   |                  |           |               |
| 5.   |                  |           |               |
|  |                  |           | = Total Cover |

| <u>Herb Stratum</u> (Plot size: 5-foot radius) |                       |           |               |
|--|-----------------------|-----------|---------------|
| 1.   | <u>Carex</u>          | <u>80</u> |               |
| 2.   | <u>Epilobium</u>      | <u>20</u> |               |
| 3.   | <u>Water plantain</u> | <u>5</u>  |               |
| 4.   | <u>Lotus corn</u>     | <u>20</u> |               |
| 5.   |                       |           |               |
| 6.   |                       |           |               |
| 7.   |                       |           |               |
| 8.   |                       |           |               |
| 9.   |                       |           |               |
| 10.  |                       |           |               |
|  |                       |           | = Total Cover |

**Hydrophytic Vegetation Indicators:**  
 Rapid Test for Hydrophytic Vegetation  
 Dominance Test >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (provide supporting data in remarks)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (explain in remarks)  
<sup>1</sup>Indicators 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.

| <u>Woody Vine Stratum</u> (Plot size: 30-foot radius) |  |  |               |
|---|--|--|---------------|
| 1.  |  |  |               |
| 2.  |  |  |               |
| 3.  |  |  |               |
| 4.  |  |  |               |
| 5.  |  |  |               |
|   |  |  | = Total Cover |

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: Wetland D

Soil Map Unit: \_\_\_\_\_

**Soils** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

| Depth (inches) | Matrix        |   | Redox Features |                        |                   | Texture, Structure, Other |                  |
|----------------|---------------|---|----------------|------------------------|-------------------|---------------------------|------------------|
|                | Color (moist) | % | Color (moist)  | Frequency <sup>1</sup> | Type <sup>2</sup> |                           | Loc <sup>3</sup> |
| 0-16"          | 10YR 4/2      |   | 7.5YR 4/4      | F                      | C                 | M                         | clay             |
|                |               |   |                |                        |                   |                           |                  |
|                |               |   |                |                        |                   |                           |                  |
|                |               |   |                |                        |                   |                           |                  |
|                |               |   |                |                        |                   |                           |                  |

<sup>1</sup>Frequency: F=Few, MA=Moderately Abundant, C=Common  
<sup>2</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains  
<sup>3</sup>Location: PL=Pore Lining, M=Matrix

| Hydric Soil Indicators  | Problematic Hydric Soil Indicators <sup>3</sup>  | Restrictive Layer (if observed)      |
|---|--|--------------------------------------|
| <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5)<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4)<br><input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Dark Surface (S7)   | <input type="checkbox"/> Polyvalue Below Surface (S8)<br><input type="checkbox"/> Thin Dark Surface (S9)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input checked="" type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8) | Type: _____<br>Depth (inches): _____ |
| <input type="checkbox"/> 2 cm Muck (A10)<br><input type="checkbox"/> Coast Prairie Redox (A16)<br><input type="checkbox"/> 5 cm Mucky Peal or Peal (S3)<br><input type="checkbox"/> Dark Surface (S7)<br><input type="checkbox"/> Polyvalue Below Surface (S8)<br><input type="checkbox"/> Thin Dark Surface (S9)<br><input type="checkbox"/> Iron-Manganese Masses (F12)<br><input type="checkbox"/> Piedmont Floodplain Soils F19)<br><input type="checkbox"/> Mesic Spodic (TA6)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Very Shallow Dark Surface (TF12)<br><input type="checkbox"/> Other (Explain in remarks) |  |                                      |

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

**Remarks**  
 Wetland D is a Stormwater Management Pond.  
 Soils are accounted clay for liner of the swm pond

**Wetland Determination**

Hydrophytic Vegetation Present?  Yes  No  
 Hydric Soil Present?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Is this Sampling Point Within a Wetland?  Yes  No

Hydrologic Connectivity to Off-site Wetlands?  Yes  No  N/A  
 Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary?  Yes  No  N/A  
 Is this Wetland Potentially Isolated?  Yes  No  N/A

Is the wetland mapped in the NWI? Yes  No  If yes, indicate classification \_\_\_\_\_  
 Is the wetland a mapped state wetland? Yes  No  If yes, indicate wetland ID \_\_\_\_\_

**edr Companies**

217 Montgomery Street, Suite 1000  
Syracuse, New York 13202

**DATA FORM  
ROUTINE WETLAND DETERMINATION**

Northcentral and Northeast Regional Supplement

274 North Goodman Street  
Rochester, New York 14607

Project Number: 09022

Town: Porter (Model City)

Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC

County: Niagara

State: New York

Community: old field / berm

Data Point ID (i.e. 2W@Wet. G): 1W@wet D

Nearest Flag to Data Point: \_\_\_\_\_

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: Flat Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No

Do Normal Circumstances exist on site? Yes No

Is the area a potential problem area? Yes No

Is the site significantly disturbed? Yes No

Approximate Slope (%): 0

**Hydrology**

**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 \_\_\_\_\_  
Saturated Conditions? Yes \_\_\_\_\_ No \_\_\_\_\_

Depth of Water (inches): \_\_\_\_\_  
Depth to Sat. Soil (inches): \_\_\_\_\_  
Depth to Water (inches): \_\_\_\_\_

**Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)**

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remarks**

*NO hydrologic indicators*

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: 1 u @ wet D

**Vegetation**

|   | Absolute % Cover | Dominant Species? | Indicator Status |
|---|------------------|-------------------|------------------|
| <b>Tree Stratum (Plot size: 30-foot radius)</b> |                  |                   |                  |
| 1.  |                  |                   |                  |
| 2.  |                  |                   |                  |
| 3.  |                  |                   |                  |
| 4.  |                  |                   |                  |
| 5.  |                  |                   |                  |
|   | = Total Cover    |                   |                  |

|  | Absolute % Cover | Dominant Species? | Indicator Status |
|--|------------------|-------------------|------------------|
| <b>Sapling/Shrub Stratum (Plot size: 15-foot radius)</b> |                  |                   |                  |
| 1.   |                  |                   |                  |
| 2.   |                  |                   |                  |
| 3.   |                  |                   |                  |
| 4.   |                  |                   |                  |
| 5.   |                  |                   |                  |
|  | = Total Cover    |                   |                  |

|  | Absolute % Cover         | Dominant Species? | Indicator Status |
|--|--------------------------|-------------------|------------------|
| <b>Herb Stratum (Plot size: 5-foot radius)</b> |                          |                   |                  |
| 1.   | <u>100</u>               |                   |                  |
| 2.   | <u>20</u>                |                   |                  |
| 3.   | <u>10</u>                |                   |                  |
| 4.   | <u>20</u>                |                   |                  |
| 5.   |                          |                   |                  |
| 6.   |                          |                   |                  |
| 7.   |                          |                   |                  |
| 8.   |                          |                   |                  |
| 9.   |                          |                   |                  |
| 10.  |                          |                   |                  |
|  | <u>150</u> = Total Cover |                   |                  |

|   | Absolute % Cover | Dominant Species? | Indicator Status |
|---|------------------|-------------------|------------------|
| <b>Woody Vine Stratum (Plot size: 30-foot radius)</b> |                  |                   |                  |
| 1.  |                  |                   |                  |
| 2.  |                  |                   |                  |
| 3.  |                  |                   |                  |
| 4.  |                  |                   |                  |
| 5.  |                  |                   |                  |
|   | = Total Cover    |                   |                  |

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: \_\_\_\_\_ (A)  
 Total Number of Dominant Species Across All Strata: \_\_\_\_\_ (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: \_\_\_\_\_ (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by:  
 OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_  
 FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_  
 FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_  
 FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  
 UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_  
 Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)  
 Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**  
 Rapid Test for Hydrophytic Vegetation  
 Dominance Test >50%  
 Prevalence Index is <3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (provide supporting data in remarks)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (explain in remarks)  
<sup>1</sup>Indicators 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.

**Remarks**

Project Number: 09022  
 Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012  
 Data Point ID: 1U@Wetland D

Soil Map Unit: \_\_\_\_\_

**Soils** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

| Depth (inches) | Matrix           |   | Redox Features |                        |                   | Texture, Structure, Other |
|----------------|------------------|---|----------------|------------------------|-------------------|---------------------------|
|                | Color (moist)    | % | Color (moist)  | Frequency <sup>1</sup> | Type <sup>2</sup> |                           |
| 0-6"           | 10YR 4/4         |   | —              | —                      | —                 | Clay/Silt                 |
| 6" +           | hard packed rock |   |                |                        |                   |                           |
|                |                  |   |                |                        |                   |                           |
|                |                  |   |                |                        |                   |                           |
|                |                  |   |                |                        |                   |                           |
|                |                  |   |                |                        |                   |                           |

<sup>1</sup>Frequency: F=Few, MA=Moderately Abundant, C=Common  
<sup>2</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains  
<sup>3</sup>Location: PL=Pore Lining, M=Matrix

**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)

- Polyvalue Below Surface (S8)
- Thin Dark Surface (S9)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Problematic Hydric Soil Indicators<sup>3</sup>**

- 2 cm Muck (A10)
- 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): \_\_\_\_\_

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

**Remarks**

Point located on top of SWM pond berm.  
 Soils are disturbed and hard packed clay/rock.

**Wetland Determination**

Hydrophytic Vegetation Present? Yes  No   
 Hydric Soil Present? Yes  No   
 Wetland Hydrology Present? Yes  No   
 Is this Sampling Point Within a Wetland? Yes  No   
 Hydrologic Connectivity to Off-site Wetlands? Yes  No  N/A   
 Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes  No  N/A   
 Is this Wetland Potentially Isolated? Yes  No  N/A   
 Is the wetland mapped in the NWI? Yes  No   
 Is the wetland a mapped state wetland? Yes  No   
 If yes, indicate classification \_\_\_\_\_  
 If yes, indicate wetland ID \_\_\_\_\_



Photo 01

Wetland A Sampling Point 1 at  
Flag A-47



Photo 02

Soil Test Pit for Wetland A  
Sampling Point 1 at Flag A-47

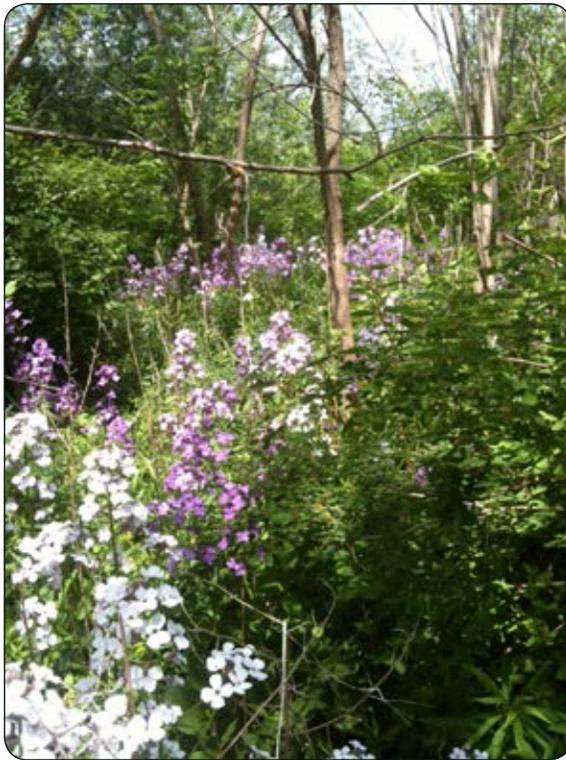


Photo 03

Upland A Sampling Point 1 at  
Flag A-47



Photo 04

Soil Test Pit for Upland A  
Sampling Point 1 at Flag A-47



Photo 05

Wetland A Sampling Point 2 at  
Flag A-11



Photo 06

Soil Test Pit for Wetland A  
Sampling Point 2 at Flag A-11



Photo 07

Upland A Sampling Point 2 at  
Flag A-11



Photo 08

Soil Test Pit for Upland A  
Sampling Point 2 at Flag A-11



Photo 09

Wetland A at Flag A-56 - View East



Photo 10

Wetland A at Flag A-79 - View East



Photo 11

Wetland A at Flag A-79 - View North



Photo 12

Wetland A at Flag A-79 - View West



Photo 13

Wetland A at Flag A-98 - View South



Photo 14

Wetland A at Flag A-98 - View West



Photo 15

Wetland B Sampling Point at  
Flag B-13



Photo 16

Alternate View of Wetland B  
Sampling Point at Flag B-13



Photo 17

Soil Test Pit for Wetland B  
Sampling Point at Flag B-13



Photo 18

Upland B Sampling Point at  
Flag B-13 - View West



Photo 19

Upland B Sampling Point at  
Flag B-13 - View East



Photo 20

Soil Test Pit for Upland B  
Sampling Point at Flag B-13



Photo 21

Wetland C - Upstream view of drainage ditch at Flag C-3



Photo 22

Wetland C - Downstream view of drainage ditch at Flag C-3



Photo 23

Wetland C - View East at Flag C-3



Photo 24

Wetland C - View West at Flag C-3

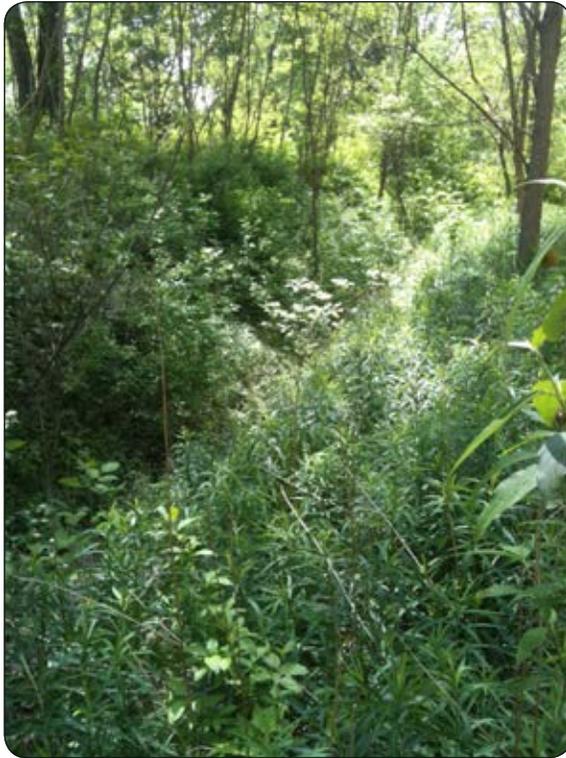


Photo 25

Wetland C -View South at Flag  
C-3



Photo 26

View Northwest at Wetland D  
Sampling Point 1



Photo 27

Soil Test Pit for Wetland D  
Sampling Point 1



Photo 28

View West at Upland D  
Sampling Point 1



Photo 29

Soil Test Pit for Upland D  
Sampling Point