Stormwater Self Inspections
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ESI Training and Networking Event
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NORTH CAROLINA
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• Customized permit assistance and coordination
• Application tracking and timeline development
• Express permit and scoping meeting coordination
• Technical assistance
NPDES Industrial Stormwater

Permitting is based on the presence of three criteria at a facility:

- **Industrial activity** as noted in 40 CFR 122.26(b)(14)(i)-(xi)
- **Exposure of materials to stormwater**
- **Point-source discharge of stormwater** that includes pipes, ditches/swales, driveways and other points of concentrated flow
No Exposure Certification

• 40 CFR Part 122.26 prohibits point-source discharges of stormwater associated with industrial activity w/o a NPDES permit
• However, 40 CFR 122.26(g) notes that discharges that are composed entirely of stormwater are not regulated stormwater discharges associated with industrial activity if there is no exposure of industrial materials and activities to rain, snow, snowmelt and/or runoff.
• Must apply for coverage and get approval from DEQ
• Before 2008 approval was granted without a site inspection – Coverage numbers < ~NCGNE0500
• Approval lasted for 5 years; changed ~ August 2010 when the expiration date was removed
  • Requires facility to self-certify every year
No Exposure Defined

- No exposure is defined as all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.
- Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products.
Cover Exemptions

• A storm-resistant shelter is not required for the following industrial materials and activities:
  • Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. “Sealed” means banded or otherwise secured and without operational taps or valves;
  • Adequately maintained vehicles used in materials handling; and
  • Final products, other than products that would be mobilized in stormwater discharges (e.g., rock salt).
Do you know your drainage?

- Need to know how stormwater drains from your site
- If discharging to a MS4 do you know nearest location where you can access water for visual inspection?
- Emergency response if waste hauler, shipment carriers have leaks from their vehicles
This outfall not evaluated during inspection.

Rock fill w/ GW infiltration

There is a trench that runs along the XX Trucking Company next door to ZZZ. Water would flow as sheet flow under property ~ 5-6 feet and discharge into XX’s trench.

Flow is underground through this area and discharge off site below the overflow dam for the sedimentation basin. Flow moves around this mound and into sedimentation basin.

X – from underground piped SW
X – from Sed basin

Sed. basin

Gravel area

1

2-7

10

17

11-13

9

16

15

14
Do you know your drainage?

- Think about access issues
  - Do you need permission to access the discharge location if on another owner's property?
  - Are there safety concerns – drop inlets in/near street, steep grades, overgrown vegetation, exposure to poison ivy, wildlife, etc.
Are there dry-weather flows in your stormwater system?

- Are you discharging water during dry weather?
- What is the source of the water?
- Is it a deemed permitted flow?
- Look in all drop inlets, connector boxes, and outfall locations.
Are pipes protruding from your building?

• What type of water is being discharged?

• Is it a deemed permitted discharge by NCAC 15A 2H .0106(f)?

• Uncontaminated groundwater, foundation drains, air-conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushings, water from footing drains, irrigation waters, flows from riparian habitats and wetlands.

• Discharges resulting from fire-fighting or fire-fighting training, or emergency shower or eyewash as a result of use in the event of an emergency.
Storm-resistant shelters

- Completely roofed and walled buildings or structures
- Structures with only a top cover but no side coverings, provided the material under the structure is not otherwise subject to any run-on and subsequent runoff of stormwater
- Berm/curb the area or slope the land inward to prevent spills from running out of the area
Dumpsters and Compacters

- Openings need to be covered/closed at all times
- Drain plugs should be installed
- No holes or other openings to allow discharges
- No leaks from compacter hydraulic system
- No residual waste from additions to the compacter or dumpster
Outside Storage

The following can be stored outside if not contaminated and in good condition

- Clean wooden pallets
- Painted/coated metal racks
- All other metal should be covered with tarps or plastic wrapped
Air Pollution Abatement Equipment

- Manage operations to avoid buildup of dust or other deposits on exhaust vents and roof stacks
- Contain and frequently collect and recover scrap, dust, and other wastes at the generating process
- Ensure spills during waste removal are quickly cleaned up
- Take steps to prevent mobilization of sawdust and other particulate wastes by the wind
Electrical Transformers

- Do you have transformers on site?
- Who owns them?
- Do they contain PCBs?
- Could they contaminate stormwater if they failed; regulated by EPA under TSCA not DEQ?
- Are they excluded from the Scope of your EMS?
Stormwater Benchmark Revisions

• DWR recently revised a number of water quality standards (Dissolved vs. total metals) and will affect the benchmark concentrations that are used in industrial stormwater permits
• Benchmarks will be changed as general permits are renewed
• Some metals are hardness dependent
• As per conversation with Stormwater permitting in March 2017 concentrations should match those proposed in 2010
### Stormwater Benchmark Revisions - 2010

#### Estimated Revised NC Stormwater Benchmark Values – Freshwater Streams

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>Aquatic Life WQ Standards (Freshwater)</th>
<th>EPA Stream Default Partition Translator</th>
<th>Calculated Revised Stormwater Benchmark</th>
<th>Current NC SW Benchmark</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Dissolved</td>
<td></td>
<td>Total Recoverable</td>
<td>Total Recoverable</td>
</tr>
<tr>
<td>Arsenic (a)</td>
<td>150</td>
<td>340</td>
<td>1.000</td>
<td>340</td>
</tr>
<tr>
<td>Beryllium</td>
<td>6.5</td>
<td>65</td>
<td>1.000</td>
<td>65</td>
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</table>

#### Hardness Dependent Metals

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>Chronic [µg/l]</th>
<th>Acute [µg/l]</th>
<th>Current NC SW Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (b)</td>
<td>0.15</td>
<td>0.82</td>
<td>3.2</td>
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<tr>
<td>Cadmium (b) – Trout</td>
<td>0.15</td>
<td>0.51</td>
<td>2.0</td>
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<tr>
<td>Chromium III (b)</td>
<td>24</td>
<td>183</td>
<td>905</td>
</tr>
<tr>
<td>Chromium VI</td>
<td>11</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Chromium, Total</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Copper (b)</td>
<td>2.7</td>
<td>3.6</td>
<td>10.5</td>
</tr>
<tr>
<td>Lead (b)</td>
<td>0.54</td>
<td>14</td>
<td>75</td>
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<tr>
<td>Nickel (b)</td>
<td>16</td>
<td>145</td>
<td>335</td>
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<tr>
<td>Silver (b)</td>
<td>N/A</td>
<td>0.296</td>
<td>0.30</td>
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<tr>
<td>Zinc (b)</td>
<td>36</td>
<td>36</td>
<td>126</td>
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General Permit Renewals

- The DEMLR Permitting Unit has indicated that they will automatically renew any permittees under a general industrial stormwater permit as long as permit fees are current.
- They will be sending letters to permittees with this information. Therefore, you will need to verify that your permit contact information is correct in the database.
- The letters will also be requesting information regarding your stormwater outfall locations to prepare for the NPDES electronic reporting requirements. For more information please refer to this website.
- To verify your permit contact information please access this website.
Example of Permit Contact Information

Results

You will want to verify that all information returned from this query is correct. However, the “Permit Contact person” information is what will be used to correspond with you regarding permit renewal. If you have questions regarding updating incorrect information please contact me or the stormwater permitting group.
Questions?