Roundtable Discussion
SWANA Mid-Atlantic Chapter

Maryland 12-SW General Permit for Discharges from
Stormwater Associated with Industrial Activities

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Agenda

• 12-SW; General Permit for Discharges from Stormwater Associated with Industrial Activities

• Chesapeake Bay Restoration Requirements

• Sector Specific Requirements
  ▪ Dept. of Public Works and Highway Maintenance Facilities
  ▪ Landfills and Land Application Sites

• Benchmark Monitoring
12-SW: General Information

- Replaced 02-SW
- Effective date January 1, 2014; expires December 31, 2018
- Notice of Intent
- Renewal applications require an updated Stormwater Pollution Prevention Plan (SWP3)
  - June 30, 2014 for facilities not subject to the Chesapeake Bay Restoration Requirements (CBRR)
  - December 31, 2014 for facilities subject to the CBRR
12-SW: Organization of Permit

- Based on EPA’s Multi-Sector General Permit
- Areas of permit which detail compliance requirements:
  - Stormwater Management Requirements
  - Inspections, Monitoring and Report
  - Corrective Actions
  - Appendix D; Sector Specific Monitoring
Control Measures and Effluent Limits

STORMWATER MANAGEMENT
Part 3, B.b. (i-xii)

- **Prescriptive Requirements**
  - Hazardous material management
  - Drain fluids prior to onsite storage of equipment
  - Containment/diversion systems for leaky equipment, materials, and activities
  - Drip pans/absorbent for leaky equipment
  - Cleaning operations performed indoors—must drain to a proper collection system
Part 3, B.b. (i-xii) (cont.)

- **Good Housekeeping**
  - Regular cleaning of exposed areas
  - Garbage and debris
  - Dust generation and track out

- **Maintenance**
  - O&M of equipment and systems
  - Control measures
  - Dumpsters

- **Spill Prevention and Response Procedures**
  - Spill Response, Remediation and Notification
Part 3 B.b. (i-xii) (cont.)

- **E&S Controls**
  - Stabilization of exposed areas
  - Minimize onsite erosion and sedimentation
  - Flow dissipation devices at discharge or outfall locations

- **Runoff Management**
  - Reduce runoff through control measures which divert, reuse, infiltrate or contain SW

- **Salt Storage**

Soilerosion.net; 1/10/14
Training

• Specific control measures; monitoring, inspection, planning, reporting and documentation requirements

• The management of the following activities as applicable:
  – Used oil
  – Spent solvent and paint
  – Disposal of spent abrasives
  – Spill prevention and control
  – Fueling
  – Batteries
  – Used containers
Part 3, B.2.a.

- Visual assessment
- No sheen, discharge of floating solids or persistent foam
- Must take corrective action of conditions persist longer than a half hour
Stormwater Pollution Prevention Plan

STORMWATER MANAGEMENT
Plan similar to 02-SW with the following additions:

- **Site Map**
  - Structures and impervious surfaces
  - Planned restoration or other nutrient reduction control measures
  - Impaired waters and TMDLs, if applicable
  - Historical spills
  - Outfalls and monitoring points
  - Municipal separate stormwater sewer systems and point of entry
  - Locations of run-on to your facility from adjacent property
Plan similar to 02-SW with the following additions:

- **Potential Pollutant Sources**
  - List of potential pollutants—3 year history
  - Pathway of pollutants and corresponding outfalls
  - Non-stormwater discharge evaluation
  - Summary of visual monitoring from previous permit term

- **Summary of Control Measures**
Plan similar to 02-SW with the following additions:

- **Schedules and Procedures**
  - Responsible individual(s) and their role.
    - Good Housekeeping SOP including routine inspection
    - Maintenance SOP including inspections, testing, maintenance and repairs
    - Inspections and Monitoring

- **Benchmark Monitoring**
  - Sample locations
  - Frequency, parameters, schedules, etc.

- **SWP3 Modifications**
  - Corrective Actions
  - Facility Change
12-SW: Stormwater Management

- Documentation and Recordkeeping Requirements
  - Copy of NOI and Correspondence
  - Permit and Plan
  - Plans referenced within the SWP3
  - Spill History log
  - Training records
  - Documentation of maintenance and repairs of control measures
  - Inspection reports
  - Deviations from schedule for monitoring or inspections
  - Corrective actions
  - Exceedances
Compliance Requirements

INSPECTIONS, MONITORING AND REPORTING
12-SW: Inspections, Monitoring and Reporting

Part 5, A. 1-3

- Reduced requirements for inactive/unstaffed locations
- Routine Facility Inspection
  - Quarterly, during stormwater discharge
  - Must be documented and certified that the site is in compliance
  - Corrective Actions must be identified
- CSCE
  - Qualified personnel
  - May count as a routine facility inspection
  - Review of site conditions and records
  - Corrective Actions must be identified
12-SW: Inspections, Monitoring and Reporting

- Quarterly Visual Inspections
  - SW sample collection within first 30 minutes of event
  - Quarterly Visual Monitoring Form must be completed
  - At least one quarter must reflect snowmelt discharge, if applicable
Compliance Requirements

CORRECTIVE ACTIONS
12-SW: Corrective Actions

Conditions Requiring Review, Part 4, A-E

- **To Eliminate a Problem:**
  - Release or illicit discharge
  - Exceedance
  - Inadequate control measures determined by permittee or MDE
  - Internal inspections reveal improper O&M of control measures

- **To Determine if Modifications are Necessary:**
  - Construction or change in design, O&M changes pollutants or volume of pollutants discharged
  - Average of 4 quarterly sampling events exceeds a benchmark
12-SW: Corrective Actions

Reporting Requirements

- Document a triggering or noncompliance event within 24 hours of discovery
- Document corrective action (or lack of need for a corrective action) within 14 days
- 30 days to resolve issue—must keep MDE notified if this cannot be met
- Include in CSCE Report
CHESAPEAKE BAY
RESTORATION REQUIREMENTS
Chesapeake Bay Restoration Requirements

- Applicability
- Restoration goal
- Implementation
- Verification
Chesapeake Bay Restoration Requirements

- **Applicability**
  - Compliance is required if site meets ALL of the following criteria:
    - Located within the Chesapeake Bay Watershed
    - 5 acres or greater in size
    - Located within a Phase I or Phase II MS4 jurisdiction
    - Facility is not owned by or leased from an entity that is permitted as an MS4
Chesapeake Bay Restoration Requirements

- **Restoration goal**
  - Restore 20% of untreated impervious area
    - Baseline = Impervious area as of January 1, 2006

- **Restoration threshold**
  - Treatment of runoff from 1 inch of rainfall through SWM practices or provide alternative means

- **Restoration deadline**
  - Current permit holders = 5 years from permit effective date
  - All other permittees = 4 years from filing date of NOI
Implementation

- Develop restoration plan as part of your SWPPP
- Determine untreated impervious area
  - Measure all site impervious area
  - Measure full SWM area
  - Measure partial SWM area
  - Prorate partial SWM area based upon treatment level
  - Combine full SWM area and prorated area
  - Difference between total imperviousness and the sum of full and partial SWM areas is the untreated area
- Restoration goal = 20% of untreated area.
Chesapeake Bay Restoration Requirements

- Implementation (continued)
  - Determine SWM options
    - Design Manual
    - Alternate practices
  - Document selections
  - Implementation schedule
  - Inspection and maintenance requirements
  - Modify plan as needed to maintain implementation schedule
Chesapeake Bay Restoration Requirements

- Implementation (continued)
  - Example
Chesapeake Bay Restoration Requirements

- Implementation (continued)
  - Restoration goal equals 20% of red area shown
Chesapeake Bay Restoration Requirements

- **Verification**
  - Written documentation after implementation
    - Professional Engineer
    - Certified Professional in Storm Water Quality
    - Registered Architect
    - Registered Landscape Architect
  - Confirmation of the following:
    - Practices satisfy design criteria
    - All BMPs/alternative practices implemented
    - All measures maintained appropriately
    - Signing professional has visited and examined the site
  - Documentation retained in SWPPP
Compliance Requirements

SECTOR SPECIFIC REQUIREMENTS
12-SW: Sector Specific Requirements

- Additional non-numeric limits stipulated by industrial sector
- Prescriptive requirements tailored to industry
- If facility has more than one sector on-site:
  - Identify both SIC codes on NOI
  - Address both sets of Sector requirements within the SWP3
Dept. of Public Works and Highway Maintenance Facilities

- Replaced former “Fleet” sector in draft permit
- Vehicle and equipment maintenance, cleaning, and salt storage
  - Maintenance includes the outdoor parking of vehicles (which are waiting repair)
  - Facilities which have small equipment and not managed by DPW need not apply
Dept. of Public Works and Highway Maintenance Facilities

- Facilities with no vehicle repair are not required to apply for coverage
  - Sites with only fueling and salt storage sites need not apply
- All municipal facilities whose activities fall within a Sector or who are notified by MDE must apply for coverage
Dept. of Public Works and Highway Maintenance Facilities

- Good Housekeeping mirror general permit requirements:
  - Minimize contamination or exposure to SW:
    - Vehicle and equipment storage, cleaning and maintenance areas
    - Fueling Areas
    - Material storage areas

- Additional requirements:
  - Capture activities on map in SWP3
  - Inspections and potential pollutant sources must consider waste disposal, dirt/gravel parking areas, shop floor drains, and fueling areas
12-SW: Sector Specific Requirements

Landfills and Land Application Sites

- **Subsector L1**
  - All landfills with Refuse Disposal Permit

- **Subsector L2**
  - All landfills with Refuse Disposal Permit except closed MSW

- **Subsector L3**
  - All landfills without Refuse Disposal Permit notified by MDE that permit needed (or facility already covered)
Landfills and Land Application Sites

- **Preventative Maintenance:**
  - Leachate collection system
  - Effectiveness of cover

- **Erosion and Sediment Control:**
  - Stockpiles, intermediate and final cover, and inactive areas

- **Additional requirements:**
  - Landfill layout, leachate collection system on map

- **Benchmark monitoring:**
  - Subsector L1 – TSS (100 mg/L)
  - Subsector L2 – L1 requirement, plus Total iron (1.0 mg/L)
Benchmark Monitoring

- Monitor for Sector-Specific Requirements
  - Defined in Appendix A, 12-SW General Permit

- Monitoring Frequency
  - Quarterly Monitoring

- Data Recording Requirements
  - Date, time, location of sampling;
  - Person sampling;
  - Analytical data—laboratory, test methods and dates; and
  - Lab Results.

- Retain Records for 5 years minimum.
Benchmark Monitoring

- **Quarterly Visual Stormwater Assessment**
  - Perform in conjunction with benchmark monitoring.

- **Sector L – Landfills**
  - **Subsector L1**: All Landfills with a refuse disposal permit or Land Application Sites with a marginal land permit.
  - **Subsector L2**: All Landfills with a refuse disposal permit or Land Application Sites with a marginal land permit, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60.
  - **Subsector L3**: All Landfills without a refuse disposal permit or Land Application Sites without a marginal land permit that have been notified by the Department that coverage is needed, or the facility was covered under the 02-SW permit.
Benchmark Monitoring

- **Required Analyses: Sector L - Landfills**

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Parameter</th>
<th>Benchmark</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Total Suspended Solids (TSS)</td>
<td>100 mg/L</td>
<td>1/quarter</td>
</tr>
<tr>
<td>L2</td>
<td>Total Iron</td>
<td>1.0 mg/L</td>
<td>1/quarter</td>
</tr>
</tbody>
</table>

- **MSW Landfills closed with a RCRA cap are exempt from requirements for subsector L2.**
Benchmark Monitoring

- **Department of Public Works Facilities**
  - Sector AD.a – DPW & Highway Maintenance Facilities
  - Sector AD.b – School Bus Maintenance Facilities

- **No benchmark monitoring required for DPW.**
  - Sites with multiple industrial sectors may have different benchmark monitoring requirements at each outfall.
  - Identify industrial activities within each drainage area.
Benchmark Monitoring

- **Substantially Identical Outfalls**
  - Can sample just one outfall if outfalls have similar:
    - industrial activities and control measures;
    - Potential pollutant sources; and
    - Runoff coefficients.
  - **SWPPP must identify:**
    - Outfall location and description;
    - Why the outfalls are expected to discharge substantially identical effluents.
  - **Corrective Action – Must assess the need for action at all substantially Identical Outfalls.**
Benchmark Monitoring

- **Sample Collection**
  - Storm event must result in an actual discharge from the site.
  - Must be 72 hours since the previous measurable storm event.
  - Collection within the first 30 minutes of the storm event
    - If impractical, collect as soon as possible and document the reasoning in the SWPPP.
  - Be prepared – keep laboratory-supplied containers on site.
Benchmark Monitoring

- Average of 4 quarterly samples below the benchmark
  ➔ No monitoring for duration of permit term.
  - Provide written notification to MDE, and modify SWPPP
- Submit Discharge Monitoring Reports online using NetDMR
  - You must apply for access to NetDMR at: www.epa.gov/netdmr
  - Must gain access within 6 months of permit authorization
  - Reports submitted within 28 days of the end of the monitoring period.
Benchmark Monitoring

- **Benchmark Exceedances**
  - A benchmark exceedance is not a permit violation.
  - If the average of 4 quarterly sampling results exceeds the benchmark, a SWPPP review is required. Modifications likely required.
  - Immediate review required for a large exceedance of the benchmark.
  - **Required Documentation:**
    - 1) corrective action taken,
    - (2) a finding that the exceedence was due to natural background pollutant levels, or
    - (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry.