PDHonline Course C323 (6 PDH)

Stormwater - Understanding the New 2008 MSGP for Stormwater Discharges Associated with Industrial Activity

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Stormwater Permitting in 2008: Latest Information to Keep You Compliant

Presented by:

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Overview – Topics Covered

- Latest Information on EPA Stormwater Permitting Requirements
- Creating Your Facility's Stormwater Pollution Prevention Plan
- Best Management Practices to Keep You Compliant
- Do I Have to Sample or Get a Stormwater Permit?
- Live Question and Answer Session

Late Breaking News

- USEPA revises Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with industrial Activity
- Effective September 29, 2008
- Permit and Authorization to Discharge Expires Midnight September 29, 2013

Stormwater Permitting – Does it apply to me?

- Facility needs to meet two requirements:

1. Discharge to the "Waters of the United States" via a point source

Waters of the United States

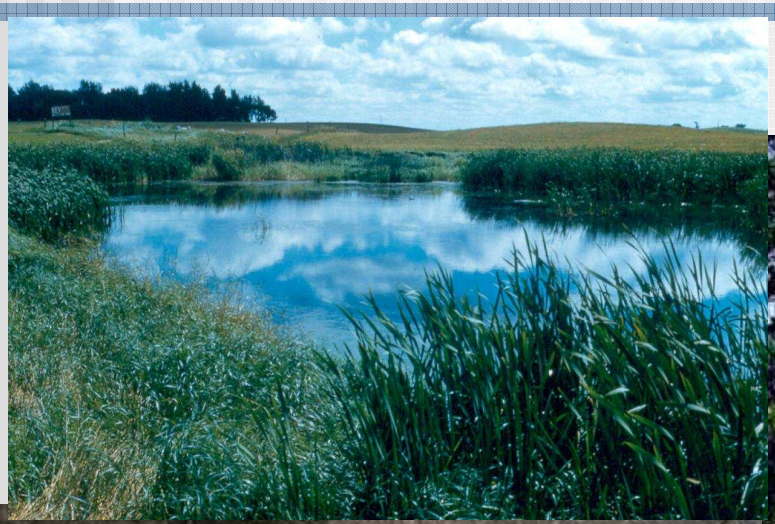
- **Definition**:

  All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide

Examples

- All interstate waters
- Rivers
- Streams
- Mudflats
- Sandflats
- Wetlands
- Sloughs
- Prairie potholes
- Wet Meadows
- Playa lakes
- Natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce

Waters of the United States



Point Source

Definition:

Any "discernible, confined, and discrete conveyance" of pollutants to a water body.

Includes, but is not limited to, "any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged."

Examples

http://www.m

http://www.ci.huntsville.al.us/gis/projects/stormwater_pics/Slope_paved.JPG

http://images.google.com/imgres?imgurl=http://www.[illegible]/PublicWorks/VermillionRiverDischarge.gif&imgrefurl=http://www.[illegible]&h=293&w=390&sz=88&hl=en&start=3&tbnid=WJDdftGCXA62M:&tbnh=92&tbnw=123&prev=/images%3Fq%3Dstormwater%2Bdischarge%2Briver%26svnum%3D10%26hl%3Den%26lr%3D

http://images.google.com/imgres?imgurl=http://www.gardnerturf.com/images/

Stormwater Permitting – Does it apply to me?

- Facility needs to meet two requirements:
  2. Fall into eleven categories or meet Standard Industrial Classification (SIC) Codes 10-50++
     - Primary industrial activity must be included in Sectors listed in Appendix D; or
     - You must be notified by EPA director that you are eligible under Section AD of this permit

Sectors Covered by Permit - Examples

Sector A Timber Products	SIC 2421 – General Sawmills and Planing Mills SIC 2411 – Log Storage and Handling
Sector F Primary Metals	SIC Code 3321-3325 – Iron and Steel Foundries SIC 3398,3399 – Misc. Primary Metal Products
Sector M Auto Salvage Yards	SIC 5015
Sector U Food and Kindred Products	SIC Code 2021-2026 – Dairy Products SIC Code 2051-2052 – Bakery Products

Allowable Stormwater Discharges

- Stormwater Discharges associated with industrial activities
- Need permit under Sector AD
- Discharges not otherwise required to obtain NPDES permit authorization but are commingled with discharges authorized under this permit

Allowable Stormwater Discharges

- Discharges subject to any national stormwater-specific effluent limitations guidelines identified in Table 1-1
  - Runoff from material storage piles at cement mfg facilities
- Discharges subject to New Source Performance Standards (NSPS) identified in Table 1-1
- Allowable non-stormwater discharges

Limitations of Coverage

- *Discharges mixed with non-stormwater*
- *Stormwater discharges - Construction Activity*
- *Discharges currently or previously covered by another permit*
- *Stormwater discharges subject to "non-eligible" Effluent Limitation Guidelines*
- *Stormwater Discharges that adversely impact endangered or threatened species and critical habitat protection*
- *New discharges to Water Quality Impacted Waters*

Stormwater Permit – General Permit

- Notice of Intent (NOI)
  - Request for coverage under the Permit - submitted to the Agency
  - Check with authorized agency/permit to determine when NOI is due
  - Contains:
    - Basic facility information
    - Discharge Information (impaired waters, effluent limitations, watersheds)
    - SIC code and Sectors
    - Endangered Species and Historic Preservation
    - Certification
- Stormwater Pollution Prevention Plan (SWP3)
  - Plan developed to reduce stormwater pollution
  - Check with authorized agency/permit to determine when development and implementation of SWP3 are due

Stormwater Permit – General Permit

Table 1-2. NOI Submittal Deadlines/Discharge Authorization Dates		
Category	**NOI Submission Deadline**	**Discharge Authorization Date[1]**
Existing Dischargers – in operation as of October 30, 2005 and authorized for coverage under MSGP 2000.	No later than January 5, 2009.	30 days after EPA posts your NOI. Your authorization under the MSGP 2000 is automatically continued until you have been granted coverage under this permit or an alternative permit, or coverage is otherwise terminated.
New Dischargers or New Sources - have commenced discharging between October 30, 2005 and January 5, 2009.	As soon as possible but no later than January 5, 2009.	30 days after EPA posts your NOI.
New Dischargers or New Sources - commence discharging after January 5, 2009.	A minimum of 60 days prior to commencing discharge, or a minimum of 30 days if your SWPPP is posted on the Internet during this period and the Internet address (i.e., URL) to your SWPPP is provided on the NOI form.	If you post your SWPPP on the Internet, 30 days after EPA posts your NOI. Otherwise, 60 days after EPA posts your NOI.

Stormwater Permit – General Permit

New Owner/Operator of Existing Discharger - transfer of ownership and/or operation of a facility whose discharge is authorized under this permit	A minimum of 30 days prior to date that the transfer will take place to the new owner/operator.	30 days after EPA posts your NOI.
Other Eligible Dischargers - in operation prior to October 30, 2005, but not covered under the MSGP 2000 or another NPDES permit.	Immediately, to minimize the time discharges from the facility will continue to be unauthorized.	If you post your SWPPP on the Internet, 30 days after EPA posts your NOI. Otherwise, 60 days after EPA posts your NOI.

SWP3 – Main Components

- Pollution Prevention Team
- Site Description
- Summary of Potential Pollutant Sources
- Stormwater Controls
- Schedules and procedures
- Documentation of Permit Eligibility

Stormwater Pollution Prevention Team

- Identify staff members (by name or title)
- Identify their responsibilities
- All members must have ready access to permit and SWP3

Summary of Potential Pollution Sources

- Identifies & describes each separate area at facility where industrial materials/activities are exposed to stormwater
- Description must include:
  - Activities in area
  - Pollutants
  - Potential presence in stormwater

Site Description

- Description of nature of industrial activities
- General location map
- Site map
  - Size
  - Location of structures and impervious surfaces
  - Directions of stromwater
  - Locations of existing structural control measures
  - Receiving waters and monitoring points
  - Conveyances, inlets and outlets
  - Potential pollutants sources
  - Spills and leaks
  - Non-stormwater discharges
  - Location of activities exposed to precipitation
  - Locations of run-on

Summary of Potential Pollutant Sources

- List of industrial activities
- Pollutants
- Spills and leaks
- Non-stormwater discharges
- Salt Storage
- Sampling Data

Summary of Potential Pollution Sources

Drums

Spill

Vehicle Fueling

Sloppy Housekeeping

Air Emissions

Erosion

HRP Associates, Inc.

Stormwater Controls – Best Management Practices (BMPs)

Selection of BMPs should take into consideration:

1) Quantity & nature of pollutants; potential to impact water quality
2) Opportunities to combine water quality protection and local flood control benefits
3) Opportunities to offset the impact of impervious areas on ground water recharge and base flows in local streams

Stormwater Controls

Selection of BMPs should take into consideration:

1) Quantity & nature of pollutants; potential to impact water quality
2) Opportunities to combine water quality protection and local flood control benefits
3) Opportunities to offset the impact of impervious areas on ground water recharge and base flows in local streams
4) Ability to achieve non-numeric effluent guidelines (Part 2.1.2) and effluent limitation guidelines-based limits (Part 2.1.3)

Stormwater Controls

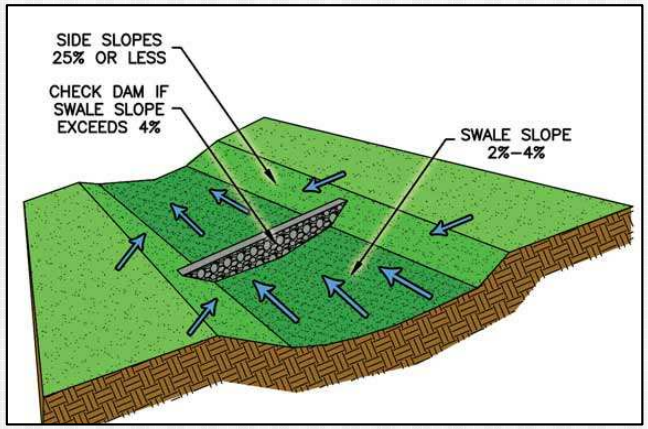
- Structural
  - Sediment and Erosion Control
  - Management of Runoff
  - Examples:
    - Material storage covers/roofs
    - Stormwater detention structures
    - Stormwater retention structures
    - Flow attenuation by use of open vegetated swales
    - Infiltration of runoff on-site

Stormwater Controls

Roofed Storage

Stormwater Retention Pond

Stormwater Swale



Natural Vegetated Swale

Stormwater Controls

- Nonstructural
  - Good Housekeeping
  - Minimizing Exposure
  - Preventive Maintenance
  - Spill Prevention and Response Procedures
  - Routine Facility Inspections
  - Employee Training

Schedule and Procedures

- Pertaining to Control Measures
  - Good housekeeping, maintenance, spill prevention, employee training
  - Pertaining to monitoring and inspection
    - Benchmark monitoring
    - Effluent limitation guidelines monitoring
    - State or Tribal-specific monitoring
    - Impaired Water monitoring
    - Other

Schedule and Procedures

- Pertaining to Control Measures
  - Pertaining to monitoring and inspection
    - Must document:
      - Sample collection locations
      - Identical Outfalls
      - Parameters of Sampling and Frequency
      - Schedules of monitoring periods
      - Numeric control values
      - Procedures for gathering storm event information
      - Additional requirements for substantially identical outfall exception

Schedule and Procedures


http://www.ci.redmond.wa.us/insidecityhall/publicworks/environment/images/drainspect.jpg

) Routine Inspections

- Frequency depends on state; quarterly, monthly, etc.
- Trained personnel inspect all areas where industrial materials/activities are exposed to stormwater
- Evaluate existing stormwater BMPs
- Correct any deficiencies in the SWP3 and implement changes according to time frame specified in permit

Schedule and Procedures

- **Three Types of Inspe**
  - **Routine**
  - **Quarterly visual**
  - **Comprehensive site inspections**

Inspections


http://www.ci.redmond.wa.us/insidecityhall/publicworks/environment/images/drainspect.jpg

- **Routine Inspections**
  - At least quarterly
  - All areas where industrial materials and activities are exposed to stormwater
  - All areas where controls used to meet effluent limits
  - Must be while facility is in operation
  - Must be performed by "Qualified personnel" and member of SWP3 Pollution prevention Team member
  - Once per year while stormwater is discharging

Inspections

- **Quarterly Visual Assessments**

  http://www.[illegible]/publicworks/environment/images/draininspect.jpg

  - At least quarterly
  - Must collect sample and visual assessment of each outfall
  - Visual assessment requirements
    - Clear container
    - First 30 minutes of storm
    - Storm events at least 72 hours from previous
    - Characteristics (color, odor, clarity, etc.)
  - Maintain documentation on-site

Inspections

- **Comprehensive Site Inspection**
  - Annual
  - Must be performed by "Qualified personnel" and member of SWP3 Pollution prevention Team member
  - Includes all areas where industrial activities/materials are exposed to stormwater & areas of historical (3 yrs) spills/leaks
  - Includes review of monitoring data

Inspections

- **Comprehensive Site Inspections**
  - Inspectors look for:
    - Exposed industrial materials, residue, trash
    - Leaks or spills from equipment, drums, barrels, etc.
    - Unauthorized non-stormwater discharges
    - Off-site tracking of industrial materials or sediment by vehicles
    - Tracking or blowing of raw, final or waste materials to exposed areas
    - Control measures needing replacement, maintenance or repair

Additional Documentation

- Copy of NOI
- Copy of acknowledgement letter
- Spill incidents
- Employee training
- Documentation of corrective actions
- Inspection reports
- Descriptions of deviations
- Documentation of benchmark exceedances
- Status changes

Required Monitoring

- Quarterly benchmark monitoring
- Annual Effluent Limitations Guidelines monitoring
- State or Tribal Specific Monitoring
- Impaired Water Monitoring
- Other Monitoring

Quarterly Benchmark Monitoring

- Monitor for benchmark parameters specified in industrial sector
  - If benchmark hardness dependent then 1st benchmark report must include hardness value
  - Grab samples within first 30 minutes

Subsector A1 General Sawmills and Planing Mills	COD	120 mg/l
	TSS	100 mg/l
	Total Zinc	Hardness Dependent

Quarterly Benchmark Monitoring

- Quarterly
- If average of first 4-quarterly samples is less than benchmark then permit obligation is met
- If average exceeds first 4-quarterly samples then review selection, design, installation, and implementation of control measures then
  - Make modifications and continue monitoring (another 4 qtrs)
  - Make determination that no further pollutant reductions technically available and economically practicable and monitor annually

Effluent Guidelines Monitoring

Table 6-1. Required Monitoring for Effluent Limits Based on Effluent Limitations Guidelines

Regulated Activity	Effluent Limit	Monitoring Frequency	Sample Type
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	See Part 8.A.7	1/year	Grab
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	See Part 8.C.4	1/year	Grab
Runoff from asphalt emulsion facilities	See Part 8.D.4	1/year	Grab
Runoff from material storage piles at cement manufacturing facilities	See Part 8.E.5	1/year	Grab
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	See Part 8.J.9	1/year	Grab
Runoff from hazardous waste landfills	See Part 8.K.6	1/year	Grab
Runoff from non-hazardous waste landfills	See Part 8.L.10	1/year	Grab
Runoff from coal storage piles at steam electric generating facilities	See Part 8.O.8	1/year	Grab

Additional Monitoring

- State or Tribal Provisions Monitoring
  - Specified in Part 9 or once per year for entire permit term
- Impaired Water Monitoring
  - All parameters for which waterbody is impaired
  - Without EPA approved or established TMDL - Once per year at each outfall
  - With EPA approved or established TMDL – not required unless EPA informs you it is needed

Reports

- Annual Report
  - Submit to EPA
  - Findings of Comprehensive Site Inspection and any corrective action documentation
- Exceedance Report
  - Numeric Effluent Limits
  - <30 days after lab report receipt
- Additional

Sector Specific Requirements

- Limitations of Coverage
- Additional Technology-Based Effluent Limits
- Additional SWP2 requirements
- Additional inspection requirements
- Benchmarks
- Effluent limitations

Exemptions

- Conditional Exclusion for No Exposure
  - Industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt and/or runoff
  - Qualifying facilities are not required to obtain a general permit
  - Available on facility-wide basis only, **not** applicable to individual outfalls

Non-Stormwater Discharge Certification

- Usually one time certification within SWP3
- Annual Dry Weather Flow Monitoring (required in some states)
  - Perform and document at least one dry weather flow inspection each year after 3 consecutive days of no precipitation
  - If a non-stormwater discharge is present, must determine if allowable or not; contact Agency if it cannot be eliminated

Employee Training

- Suggested trainees:
  - Employees who work in areas where industrial materials/activities are exposed to stormwater
  - Employees who are responsible for implementing activities identified in the SWP3 (e.g. inspectors, sampling personnel, maintenance people)
- Includes:
  - Components and Goals of the SWP3
  - Spill Response Procedures
  - Good Housekeeping Practices
  - Material Management Practices

Common Pitfalls

- **Commercial vehicle washing and detailing** discharges to the storm drainage system
- **Surface cleaning** (pressure washing, steam cleaning, de-greasing, etc.) discharges to the storm drainage system
- Discharges associated with **equipment cleaning**
- Discharges associated with **wet sanding** of auto body fillers
- **Sediment track-out problems** from dirty or unpaved facilities onto public streets
- Outdoor storage of uncovered items such as **oily vehicle parts**
- **Poor waste and/or materials management** resulting in outdoor exposure of pollutants to stormwater contact
- **Poor spill response and leak and spill management** that results in the accumulation of unattended outdoor spills and leaks

Questions????


http://guerrillaconsulting.typepad.com/photos/uncategorized/question_mark.jpg

Thank You

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