

# CWA – Stormwater Ask the Inspector Workshop

EPA Region III

Joe Reyna – Environmental Scientist

Luke Wolfgang – Environmental Engineer

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# Stormwater

- Discharges generated by runoff from land and impervious areas during rainfall events
- Have the potential to adversely affect water quality through discharge of pollutants into surface waters of the U.S.
- 3 types of regulated stormwater discharges:
  1. Construction activities
  2. Municipal separate storm sewer systems
  3. Industrial activities

# Stormwater (cont.)

## ➤ Construction activities

- Requires operators of construction sites 1 acre or larger to obtain a permit to discharge

## ➤ Municipal separate storm sewer systems

- Otherwise called MS4s
- Small operators have choice between individual or general permit
- Medium and large operators required to submit permit applications and are issued individual permits

# Stormwater (cont.)

## ➤ Industrial Activities

- Activities at federal facilities are often industrial in nature and exposed to weather
- Contact with materials picks up pollutants and transports them to nearby surface waters
- Federal Facilities can be as diverse as a small city, therefore many industrial activities can trigger the need for a stormwater coverage.



# Stormwater Impacts

- Sediment can cloud the water making it difficult or impossible for aquatic plants to grow. Sediment can also destroy aquatic habitats.
- Excess nutrients can cause algal blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.

# Stormwater Impacts (cont.)

- Common hazardous wastes like insecticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.





# Stormwater Impacts (cont.)

- Remember Shellfish are Filter Feeders!



# Construction Stormwater

- Who conducts inspections at construction sites?
  - EPA and State
  - City and County can also be delegated authority

# Construction Stormwater (cont.)

What will the  
Inspectors be  
looking for while  
inspecting your  
construction  
sites?



# Construction Stormwater (When Inspectors Attack!)

An Inspector will *always* review the SWPPP

- **Site/Project Description**
- **Pollutant Potential Sources**
- **Number of Acres (Disturbed Acres)**
- **General Location of Receiving Waters**
- **Site map**
- **Copy of your permit**

# Construction Stormwater (cont)

## Construction Inspection SWPPP Review (cont)

- **Drainage Patterns and Approximate Slopes**
- **Location of All Major Structural Controls**
- **Equipment Storage Areas**
- **Stormwater Outfalls and Inlets**
- **Drainage Basins/Sedimentation Ponds**
- **Surface Waters Adjacent to or in Close Proximity**

# Construction Stormwater (cont.)

## Are the Best Management Practices Effective?

- **Erosion and Sediment Controls must be designed to retain sediment and process by-products on-site**
- **Must be adequately fit for your Facility's needs**
- **Must be properly maintained**

# Construction Stormwater (cont.)

## Examples of Best Management Practices

- Silt Fencing
- Protect Natural Features
- Construction Phasing
- Site Stabilization
- Vegetative Buffers
- Construction Entrances
- Storm Drain Inlet Protection
- Dirt Stock Piles
- Slopes



# Construction Stormwater (cont.)







**Drains to Bay!**

# Most Common Violations Found at Federal Facility Construction Sites

- Inadequate/Failed BMPs
- BMPs Not Properly Installed
- Poor Record Keeping
  - No records of inspections
- Housekeeping Issues
- Stabilization
- Phasing Out of Sequence
- SWPPP not Implemented/Updated
  - A SWPPP is a Living Document
- Sediment Entering a Receiving Stream
  - Protect your inlets
- Contractor Oversight Issues
- READ YOUR PERMIT!



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# Upgrade BMPs



# Industrial Stormwater

“Am I Subject to the Regulations?”

## ➤ Industrial Activity Analysis

- Permitting determinations are based on categories of industrial activities occurring at Federal Facilities
- Standard Industrial Classification (SIC) codes
- SEE HANDOUT



# Industrial Stormwater cont.

## ➤ Typical Categories of Industrial Activities that occur at Federal Facilities

- Manufacturing Activities
- Marinas/Ship Repair
- Hazardous waste, treatment, or disposal facilities
- Landfills
- Recycling Facilities
- Airports
- Fleet Maintenance
- Treatment works
- Construction activity
- Bulk Storage Facilities
- Steam Generation
- Warehousing

# Industrial Stormwater (cont.)

## “What Are My Options?”

- In general, there are two options for Federal Facilities subject to the Industrial Storm Water regulations:
  1. Obtain Permit Coverage
  2. No Exposure Certification

# Industrial Stormwater (cont.)

- Two Types of Permits

1. Multi-Sector General Permit (MSGP)

\*Industry Specific Requirements and State Specific Requirements

2. Individual NPDES Permit



# Industrial Stormwater (cont.)

## No Exposure Certification

- 5 year certification
- Certify “Under the Penalty of Law”
- Must maintain “no exposure” for entire 5 years period
- Stormwater composed entirely of Stormwater
- Industrial Activities must be indoors.
- (SEE HANDOUT)



# Industrial Stormwater (When Inspectors Attack cont.)

What will the inspector focus in on?

- Notice Of Intent (NOI) - aka “permit application”
- Storm Water Pollution Prevention Plan (SWPPP) – “the crux”
- Site Diagram
- Training
- Inspections/Monitoring
- Record Keeping

# Industrial Stormwater (cont.)

## What does the Inspector look at during a SWPPP Review?

- Facility Background Description
  - Number of acres
  - Description of Outfalls and Receiving Streams
  - Industrial Activity
  
- Site Map
  - Outfall Locations
  - Drainage Patterns/Topographical Features

# Industrial Stormwater (cont.)

## What does the Inspector look at during a SWPPP Review? (cont.)

- Identification of Pollutant Potential Sources
- Best Management Practices (BMPs)
  - Must be linked to pollutant potential sources
  - Can be physical and/or operational
- Training
  - Must be linked to pollutant potential sources
  - Must include the proper management of BMPS

# Industrial Stormwater Cont.

## What does the Inspector look at during a SWPPP Review? (cont.)

### ➤ Inspection/Monitoring

- State Required Monitoring/Annual Comprehensive Site Evaluations

### ➤ Record Keeping

- SWPPP including all attachments, NOI, Inspection Records, Training Rosters, Analytical Results, Certification of Non-Stormwater Discharges

# Industrial Stormwater Cont.

What will the Inspector look at while on-site i.e  
Outside?

- Material storage areas
- Lay-down Yards aka Bone Yards
- Loading/Unloading Areas
- Floor drains inside of buildings
- Outfalls
- Receiving Streams
- Weather

# Common Stormwater Violations at Federal Facilities

- Record Keeping
- House Keeping
  - Tell operators to move it indoors
- Permit, Permit, Permit
  - Read, read, read
- Un-permitted Outfalls/Un-authorized discharges
  - Not all Industrial Activities are covered
  - Walk facility perimeter/fence line
  - Representative Outfalls
  - Go out in the rain



# ASK THE INSPECTORS

