

Ask the Inspector Workshop – Your Industrial Stormwater Challenges at Federal Facilities

EPA Region III
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- Welcome to “Your Industrial Stormwater Challenges at Federal Facilities.”
- Travel budgets are tight and we may have to do more web based trainings in the future.
- This training will illustrate the most common Industrial Stormwater inspection concerns at Federal Facilities.
- Game Rules

Main Topics for Training

- Stormwater – Industrial Regs Overview
- Case Studies with Photos
- Lists of Most Common Violations found at Federal Facilities

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.
- Three (3) types of regulated stormwater discharges:
 1. Construction activities
 2. Municipal separate storm sewer systems
 3. **Industrial activities (Training Focus)**

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 (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



Fish kill after a rain event.



Waste in receiving waters



This is what we want to see!
Healthy, swimmable, fishable receiving
waters.

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

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.



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 & Sampling Results
- 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 *(With applicable corrective actions)

➤ Record Keeping

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

Paperwork

- It is very important
- Your proof to the inspector that you are following your permit
- Inspections, sampling data, maps, BMP lists, outfall listings, potential pollutants, lists of industrial activities, and training logs

- **HOWEVER**

However

- Inspectors are most focused on the impact of your industrial activities on human health and the environment
- I will spend most of my inspection time outside
- Inspectors are more focused on the implementation of a Plan than the Plan itself

Impact



- **Always** look inside manholes and check oil/water separators.
- Facility stated they were unaware this was happening.
- Facility was caught off guard with the oil the inspector found.
- Know your facility's impact or potential pollutant sources.



Dry Weather Flow. Unauthorized discharge from a cafeteria.

If it is not raining you must ask what is that flow and where is it coming from.

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
- BMPs
- Weather

What Inspectors Hear on Inspections

- I've been working here for 35 years, and I have NEVER seen that happen.
- That's not my job.
- Those drums weren't there yesterday.
- I would have cleaned that up...but I didn't know you were coming.
- It rarely rains, and if it does we NEVER have a discharge!
- I do routine self inspections, but I do not have time to write inspection reports.
- Our BMPs NEVER Fail.
- Why do I need stormwater training?

What Inspectors Find on Inspections

- Floor Drains leading to Storm drains
- Unknown drums
- Dry weather flows (nonstormwater discharges)
- Poorly maintained BMPs
- Spills
- Unidentified outfalls
- Untrained staff pouring pollutants into the storm drains.



Leaking drums



How many violations can you see?
Don't let this happen to your facility.
A silt fence is not the best BMP for this situation.



Know what your facility looks like from the rear. How much TSS do you think is entering the River? Where are the BMPs? Very important to walk around entire property line. Know your environmental impact. Identify all outfalls.



We always find lost drums at Fedfacs.





Leaking drums of hazardous waste located near a storm drain. How many violations do you see in this photo?



Hazardous waste stored under cover as BMP. However, the haz waste is moved by forklift and stored adjacent to floor drainage system.



Hazardous waste stored adjacent to storm drain. Is this the Best location for haz waste storage? We have found leaking roll offs at several Fedfacts.

Sampling & Benchmarks

- Goal is to be below your permit limits or benchmark numbers
- Data should show values going lower not higher over time
- If values are high you must upgrade your BMPs
- Identify sources contributing to your high values

BMP not Working and Facility is Busting All Their Benchmarks



This BMP is not good enough. Failing TSS, metals, & oil & grease.



Hazardous waste entering the floor drain system. Know where your floor drains discharge. We have found floor drains discharging into the storm drain outside the building.



Left: Lead acid batteries stored outside. Casings were cracked and leaked acid. Not storing universal waste properly. Potential stormwater concerns.

Right: Dried yellow paint poured into storm drain. This is not the proper way to dispose of paint.

Concern: RCRA program and CWA can overlap. Who's job is it? This is a very common problem. Cross train staff to id problems. 36



Hazardous waste stored inside warehouse is leaking out and entering storm drain. If your sampling data is coming out high find out why. You must investigate.



Gasoline contaminated hazardous waste stored outside in an open bin. The bin was filled with stormwater and leaking!

If This is Your Outfall Identify Your Source(s)



Oily sheen entering storm drain.



Leaking electrical transformers stored outside. Many Federal Facilities store oil-filled transformers outside. Some transformers have PCBs. Must be managed properly to prevent release of oil. SPCC, Stormwater, and TSCA concerns. We have seen this on several FedFac multimedia inspections.

Ask Yourself

- What is failing & why?
- Is it a poor Plan?
- Is it poor training?
- Is it poor execution?
- Budget shortfalls
- Employee indifference
- BMP Failures?

Do Not Wait for an Inspector to Identify Your Compliance Problems

- Always be prepared for an inspection
- Have a back up point of contact (just in case you are out of the Office during an inspection)
- Have all your paperwork readily available
- Know your facility's industrial activities
- Conduct your own routine inspections and document your findings and corrective actions

Common Stormwater Violations at Federal Facilities

- Record Keeping (lack of)
- House Keeping (Poor)
 - Tell operators to move it indoors (if possible)
- Permit, Permit, Permit (No one reads it)
 - Read, read, read
- Un-permitted Outfalls/Un-authorized discharges
 - Not all Industrial Activities are covered
 - Walk facility perimeter/fence line
 - Train staff and yourself to identify and quickly remediate problems.
 - Poor BMPs and high effluent values
 - Go out in the RAIN!!!

The Results of a Poorly Managed Stormwater Program



Yikes!

Questions??? ASK THE INSPECTOR

