



## Objectives

- Provide an overview of NPDES construction stormwater requirements;
- Learn what EPA looks for during a stormwater compliance inspection;
- Discuss EPA construction site inspection targeting and follow-up actions.

## Regulatory History

- In 1948, Congress passed the first version of the FEDERAL WATER POLLUTION CONTROL ACT ... the Clean Water Act (CWA Section 402)
- In 1972, a significant amendment to the FEDERAL WATER POLLUTION CONTROL ACT established the ... NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES).

## Regulatory History

- The focus of NPDES was primarily POINT SOURCES of pollution such as;
  - Sewage Treatment Plants
  - Process Wastewater from Industrial or Manufacturing facilities
- After 1972, EPA studies showed that a major contribution of surface water pollution was from: NON-POINT SOURCES
  - STORMWATER RUNOFF from:
    - Urban
    - Rural
    - Commercial and
    - Industrial areas

# Regulatory History

- In 1987: Amendments to the CWA
  - Established framework for regulating Storm Water as a Point Source
- In 1990: EPA Published Final Regulations
  - Established permit requirements for Storm Water Discharges associated with industrial (including construction) activities
- In 1992: California's General Permit was Adopted
  - Established requirements for discharges associated with construction activities
- In 2008: Latest General Permit was issued
  - <http://cfpub.epa.gov/npdes/stormwater>

## What do the NPDES Regulations Mean?

- No oil
- No concrete wastes
- No Septic Wastes
- No Sediment
- ... Only rain in the drain



## Are polluted waters really a problem?

- According to an EPA study, forty percent of all U.S. waters are not fishable or swimmable.
- “Even a partial accounting shows that hundreds of millions of dollars are lost each year ... due to urban stormwater pollution”

» National Council



## What is the purpose of construction stormwater regulations/permits?

- Reduce Potential Environmental and Human Health Impacts
- Prevent or minimize negative impacts from construction activity both during and after construction is complete.

## Who needs a permit?

- Every site that disturbs more than one acre needs a NPDES permit.
- Covered construction activity includes clearing, grading and excavating.
- Federal language indicates a site also needs a permit if part of a ***common plan of development or sale*** that ultimately disturbs more than one acre, regardless of the size of any of the individually-owned or developed sites.

A “**larger common plan of development or sale**” is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

- Example: if a developer buys a 20-acre lot and builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures sometime in the future, this would be considered a larger common plan of development or sale. If the land is parceled off and sold, and construction occurs on plots that are less than one acre by separate, independent builders, this activity would be subject to stormwater permitting requirements if the smaller plots were included on the original site plan.
- The larger common plan of development or sale also applies to other types of land development such as industrial parks or well fields.

## What is a SPPP?

- A SPPP is a ***site-specific, dynamic plan*** designed to control the discharge of pollutants from construction sites to storm drains, waterways, and other “Waters of the United States.”
- A complete SPPP includes **erosion control** and **waste control** components.
- Must be available on site at all times for inspection.
- Documents inspections and stabilization activities.

## Other Key Documents Reviewed During Inspection

- Request For Authorization (RFA)
- Site Plan
- Visual Site Inspection Records
- Corrective Action Records
- Annual Reports & Certifications

*7 out of 10 enforcement actions include documentation violations*

## What does EPA look for at Construction Site Inspections?

- Was a Request For Authorization (RFA) submitted before starting work?
- Was CGP coverage obtained before starting work?
- Was a Storm Water Pollution Prevention Plan (SPPP), both sediment and erosion control and waste control portions, prepared before starting work?
- Is there a signed copy of SPPP on site and is SPPP updated regularly?
- Does SPPP accurately reflect current conditions at the site?
- Is SPPP being implemented throughout the project?
- Have contractors been trained properly?
- Are Best Management Practices (BMPs) being correctly installed and maintained?
- Are inspections performed regularly and are problems corrected in a timely fashion?
- Are complete records of SPPP activities being maintained?
- Are turbid water and other pollutants being discharged from the site ?

## Some Examples of Violations Observed

- New owners (of site previously permitted by another owner) and operators fail to apply for CGP.
- Failure to properly develop and implement an effective SPPP.
- SPPP is deficient - no waste control component.
- Facility is not doing or recording site inspections.
- Facility is not submitting reports or certifications required by the permit.
- Owners/Operators are not submitting Notices of Termination after final stabilization or change in ownership.
- BMPs are in disrepair or not installed per the SPPP requirements.
- No effective erosion control and minimal sediment control measures
- Poor run-off control practices at construction sites, drainage facilities and maintenance areas.
- Failure to control erosion and runoff.

## Typical problem areas



- Silt fences require regular and routine maintenance.
- They get knocked down.
- Filled with sediment
- Silt fence not keyed into the soil.
- Stormwater flow has washed out silt fence.

## Hay Bales/Silt Fences



During inspection a silt fence on a steep slope was in disrepair.

- Same site after inspection, hay bales placed in front of silt fence to prevent washout.





## Pipe stream crossing



During Unplanned  
Inspection

Post  
Inspection



- Before and after unplanned inspection.
- Construction site did not have a permit (site > 1 acre)

## Poor Inlet Protection



- Silt fence around storm inlet knocked down.
- Sediment that accumulated in storm water line will be washed into stream during heavy rain events.

## Good Inlet Protection



- The same inlet after protected with a silt fence and frame for structural support.

## Inlet Protection



**Bad**

**Good**

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

## Unprotected Storm Drain



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