MCMs No. 4 & 5
Construction Site and Post Construction
Stormwater Management
(aka... the during and the after)
Agenda

- Introduction
- Part 1 – MCM 4: Construction Site Stormwater Runoff Control
- Bathroom break
- Part 2 – MCM 5: Post-Construction Stormwater Management (PCSM)
- Summary/questions
MS4/Stormwater Experience

- Municipal Engineer (1996 – Current)
- Stormwater Engineer (2002 – Current)
- National Stormwater Center – Certified NPDES Stormwater Inspector
- Speaker – EPA/IECA Southeast Conference: Large Scale Industrial Adaptive Capture and Reuse
EPA MS4 Program Timeline

1972: NPDES created in Section 402 of the Clean Water Act (CWA) (actually exempted stormwater...too expensive)

1977: Congress amends CWA to enhance NPDES Program

1987: Water Quality Act passed (added non-discrete outfalls)

1990: Updates made to CWA to require Phase I NPDES Permits

1999: US EPA establishes regulations requiring Phase II NPDES permits:
- Regulated small MS4s
- Regulates “small” construction sites
Proposed MS4 General Permit Remand Rule

- Changes to regulations governing small MS4s
- Stems from US Court of Appeals case
- Refines permit to ensure pollutants are reduced to Maximum Extent Practicable (MEP)
- To be published in Federal Register: 12/28/2015
Construction Site Runoff: The During

- Summary/MCM Goal
- Inspection items
- CSSRC/erosion control successes
- CSSRC/erosion control fails
MCM 4: Construction Site Stormwater Runoff Control

- Create a program of procedures providing requirements for construction stormwater permitting, construction inspection, and enforcement of and installation of E&S control measures
- Implement and enforce an ordinance to require the implementation of Erosion and Sediment Control BMPs
- Ensure and verify construction waste is handled and disposed of properly
- Create a system for implementing and logging any public complaints or concerns regarding construction activities
Inspection

- Strategically time inspections, if possible, prior to or during rain
- Review plans/specifications in office
- Review previous materials: previous reports, NOVs, etc.
- Prepare:
  - Inventory equipment
  - Safety gear
  - Permit (copy)
  - Logbook (for notes)
  - Camera
  - Tape measure
  - Credentials
Entry

- Note general items *(time/temperature/conditions/workers on-site/equipment)*
- Review postings (are documents on-site?)
- Observe entry and exit points
- Observe perimeter controls (in place and operational/functioning?)
Document/Plan Review

- Observe if plans and reports are on-site
- Observe current status of items (note: complete/partial/not started)
Site Inspection

- Conduct walking review of site concentrating on Erosion Control BMPs
- Record detailed notes regarding observations
Photographs

- Document conditions to support site inspection notes
Exit Interview

- Any noted concerns or issues?
- Do any BMPs require field adjustments (are any changes in progress?)
Construction Site Runoff Control: Success
Construction Site Runoff Control: Success
Construction Site Runoff Control: Success
Construction Site Runoff Control: Success
Construction Site Runoff Control: Failure
Construction Site Runoff Control: Success
Construction Site Runoff Control: Failure
Construction Site Runoff Control: Failure
Construction Site Runoff Control: Failure
Thoughts on a good BMP to use on either or both of these sites?
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Construction Site Runoff Control: Failure
Construction Site Runoff Control: Failure
Construction Site Runoff Control: Failure
Construction Site Runoff Control: Failure
Construction Site Runoff Control: Success
Construction Site Runoff Control: Success
Construction Site Runoff Control: Success
Construction Site Runoff Control: Failure
Questions?
Thank You!

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