Regulatory Refresher – What Construction Site Inspectors Need to Know about the MRP

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Construction Inspection Workshop
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Outline of Presentation

- Construction Site Inspection Requirements - C.6
- Copper Architectural Features BMP Requirements – C.13
- Inspection of Permanent SW Controls – C.3
- Resources

What is the Municipal Regional Permit (MRP)?

- Regional permit regulating municipal stormwater systems
  - Adopted by Regional Water Board: October 14, 2009
  - Effective date: December 1, 2009
  - Permit renewed every 5 years
- Applies to cities, counties, and districts in:
  - San Mateo, Santa Clara, Alameda, Contra Costa and Counties
  - Fairfield and Suisun City (Solano County)
  - Vallejo (Solano County)

Construction Site Control Program

- Provision C.6 of MRP
- Implement a construction site inspection and control program **at all construction sites**
- Prevent discharges of pollutants and impacts on receiving waters
- When does this apply?
  —*All year long!*

Construction Site Control Program Requirements

- Legal authority
  - to require all construction sites have year round effective BMPs,
  - to inspect sites and
  - require compliance
- Implement Enforcement Response Plan (ERP)
  - Identify enforcement actions and timeframes for problem correction.
  - Violations required to be corrected within 10 business days (or before next rain event) – OR record rationale for longer compliance.
  - Follow procedure for escalating enforcement response.

Construction Site Control Program Requirements

- Plan Approval Process:
  - Verify Plans comply with local ordinance/ requirements
  - Verify sites disturbing ≥ 1 acre filed NOI for Construction General Permit
  - Provide educational materials
- Pre-wet season letter to sites disturbing 1 acre or more

Construction Site Control Program Requirements

- Require appropriate BMPs within 6 categories:
  - Erosion control
  - Run-on and run-off control
  - Sediment control
  - Active treatment systems (as needed)
  - Good site management
  - Non-stormwater management

Construction Site Inspection Requirements

- Monthly inspections (at least) during wet season for sites
  - disturbing ≥ 1 acre, or
  - identified as "high priority"
- What is a high priority site?
  - Identified by your municipality
  - Generally, site disturbing < 1 acre that has
    - steep slope,
    - adjacent to creek,
    - compliance issues, and/or
    - high soil erosion potential (e.g. soil type)

Construction Site Inspection Requirements

- When is the wet season?
  - October 1st – April 30th
- When construction ends during wet season:
  - Continue stormwater inspections until site is fully stabilized
  - If stabilizing with vegetation, assume "fully stabilized" when there is 70% vegetative cover

Construction Site Inspection Requirements

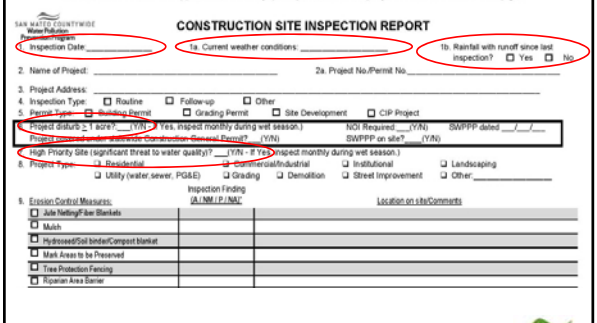
- Inspect public (e.g. Capital Improvement Projects) and private sites
- Inspection Content
  - Compliance w/Permittee's ordinances & permits
  - Adequacy & effectiveness of BMPs
  - Visual observations for actual/potential discharges or illicit connections
  - Education

Construction Site Inspection Record keeping

- Tracking and reporting of data:
  - Weather during inspection and whether it rained since the last inspection
  - Specific problems within six categories of BMPs
  - Length of time to correct violations
  - Enforcement response level
  - Resolution of problems
  - Comments
- Database or spreadsheet of inspection results*
- Inspection tables should match summaries in Annual Report

*Regional Water Board has requested these tables

Stormwater Inspection Forms



FAILURE TO CORRECT VIOLATION(S) within 10 business days (or as specified in this notice) may result in PENALTIES described on page 2!

CONSTRUCTION SITE INSPECTION REPORT

Inspection Date: _____ 1a. Current weather conditions: _____ 1b. Rainfall with runoff since last inspection? ☐ Yes ☐ No

2. Name of Project: _____ 2a. Project No./Permit No. _____

3. Project Address: _____

4. Inspection Type: ☐ Routine ☐ Follow-up ☐ Other

5. Permit Type: ☐ Building Permit ☐ Grading Permit ☐ Site Development ☐ CIP Project

6. Project disturb ≥ 1 acre? ___(Y/N) (Yes, inspect monthly during wet season.) NOI Required ___(Y/N) SWPPP dated ___/___/___

Project covered under statewide Construction General Permit? ___(Y/N) SWPPP on site? ___(Y/N)

High Priority Site (significant threat to water quality)? ___(Y/N - If Yes, inspect monthly during wet season.)

8. Project Type: ☐ Residential ☐ Commercial/Industrial ☐ Institutional ☐ Landscaping

☐ Utility (water,sewer, PG&E) ☐ Grading ☐ Demolition ☐ Street Improvement ☐ Other: _____

9. Erosion Control Measures:	Inspection Finding (A / NM / P / NA)*	Location on site/Comments
☐ Jute Netting/Fiber Blankets		
☐ Mulch		
☐ Hydroseed/Soil binder/Compost blanket		
☐ Mark Areas to be Preserved		
☐ Tree Protection Fencing		
☐ Riparian Area Barrier		

Stormwater Inspection Forms

- Document Illicit Discharges

15. Is there an actual illicit discharge or evidence of illicit discharge to storm drain/discharge point? ☐ Yes ☐ No
16. Comments:_____

Stormwater Inspection Forms

- Document Problems in Six BMP Categories

17. BMPs Implementation:	Adequate	Non-compliant	Describe Specific Problem
Erosion Control	❑	❑	_____
Run-on and Run-off Control	❑	❑	_____
Sediment Control	❑	❑	_____
Active Treatment Systems	❑	❑	_____
Good Site Management	❑	❑	_____
Non Stormwater Management	❑	❑	_____

Stormwater Inspection Forms

- Enforcement Actions
- Resolution of Problem
  - Problems fixed
  - Need More Time
  - Escalate Enforcement
- Comments: rationale for longer compliance time, all escalation in enforcement discussions, relevant information

17. Enforcement/Follow-Up: Date problem first identified:_____ Next follow-up inspection date:_____
Comments:_____
Enforcement: ❑ None/In compliance ❑ Verbal Warning ❑ Notice of Violation ❑ Notice to Comply ❑ Stop Work ❑ Administrative Fine
18. Resolution: ❑ Problem Fixed ❑ Need More Time (explain rationale in comments) ❑ Escalate Enforcement Date resolved: ___/___/___
Was there rain with runoff after problem identified and before resolution? ❑ Yes ❑ No ❑ Items corrected during inspection (see comments)
Comments:_____

Source Control: Copper (Provision C.13)

- Runoff from architectural copper can impact water quality and aquatic life
  - Concerns during installation, treatment and washing
    - "Patination" solution contains acids
    - Rinse water containing acids and copper residue cannot be discharged to the storm drain
    - Covered loading docks
  - Concerns after construction
    - Roof power washing, re-patination, sealing
    - Runoff containing copper residue

Copper Control BMPs

- During Installation
  - Purchase pre-patinated materials or treat with impervious coating
  - Discharge rinse water to landscaping
    - Ensure there is no overflow
    - Block storm drain inlet
  - Collect rinse water in tank
    - Pump to sanitary sewer, or
    - Haul off-site
- During Maintenance
  - Block storm drain inlets
  - Discharge wash water to landscaping or sanitary

Requirements for Architectural Copper

Protect water quality during installation, cleaning, treating, and washing!

Copper from Buildings May Harm Aquatic Life

Use Best Management Practices (BMPs)

During Installation

During Maintenance

Protect the Bay/Ocean and yourself!

Contact Information

Provision C.3 Requirements

Provision C.3 New & Re-Development

- Permanent Stormwater Controls
- Inspect stormwater treatment measures

Provision C.3 Requirements

- Source control measures
  - All projects
  - Reduce pollutant sources
- Site design measures
  - All projects
  - Reduce imperviousness, disconnect from storm drain
  - Use pervious paving

C.3 Requirements

- Stormwater treatment
  - Projects that create and/or replace ≥10,000 sq. ft. of impervious surface or 5,000 sq. ft. for auto service facilities, gas stations, restaurants, and parking
  - Remove pollutants using natural processes
  - Beginning 12/1/11 "treatment" is rainwater harvesting/reuse, infiltration, evapotranspiration, or, **if these are infeasible**, biotreatment (no vaults).

C.3 Requirements

- Hydromodification Management
  - Projects in susceptible areas that create and/or replace 1 acre or more of impervious surface and generate increased flows that may cause erosion in streams
  - Control erosive flows by detaining and slowly releasing stormwater through site design or structural measures

Detention basin

C.3 Inspection Requirements

- BMP O&M Verification
  - Requirements apply to all onsite, joint, and/or offsite treatment and HM controls
  - Municipalities must maintain a database of Regulated Project treatment/HM controls
  - Report on inspections in Annual Report

C.3 Inspection Requirements

- BMP O&M Verification
  - More specific requirements for number of inspections and frequency:
    - Inspection of new BMPs within 45 days of installation
    - Inspection of at least 20% of all BMPs installed
    - Inspection of at least 20% of total vault-based or proprietary systems
    - Inspection of all BMPs at least once every 5 years

C.3 Post Construction BMPs Relationship to C.6 Inspector

- May be the same inspector doing both inspections
- Post construction BMPs used during construction phase
  - Not recommended
  - Likely not designed to handle sediment loading of active construction site

C.3 Post Construction BMPs Relationship to C.6 Inspector

- Post construction BMPs used during construction phase (continued)
  - If installed should be protected
  - If C.3 BMP is unprotected or impacted by sediment require corrective actions
  - Communicate with C.3 inspector – may not be obvious during 45 day inspection BMP impacted by construction sediment

For More Information…

- Municipal Regional Stormwater Permit
  www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/mrp.shtml
- SMCWPPP Construction BMP Resources
  http://flowstobay.org/construction
- CASQA Construction BMP Handbook Portal (available on web by subscription – contact your agency stormwater coordinator for information on how to access the portal)
  www.casqa.org

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