

# **Construction Site Stormwater Inspections – Regulatory Basics**

**Kristin Kerr, P.E., QSD/P  
EOA, Inc.**

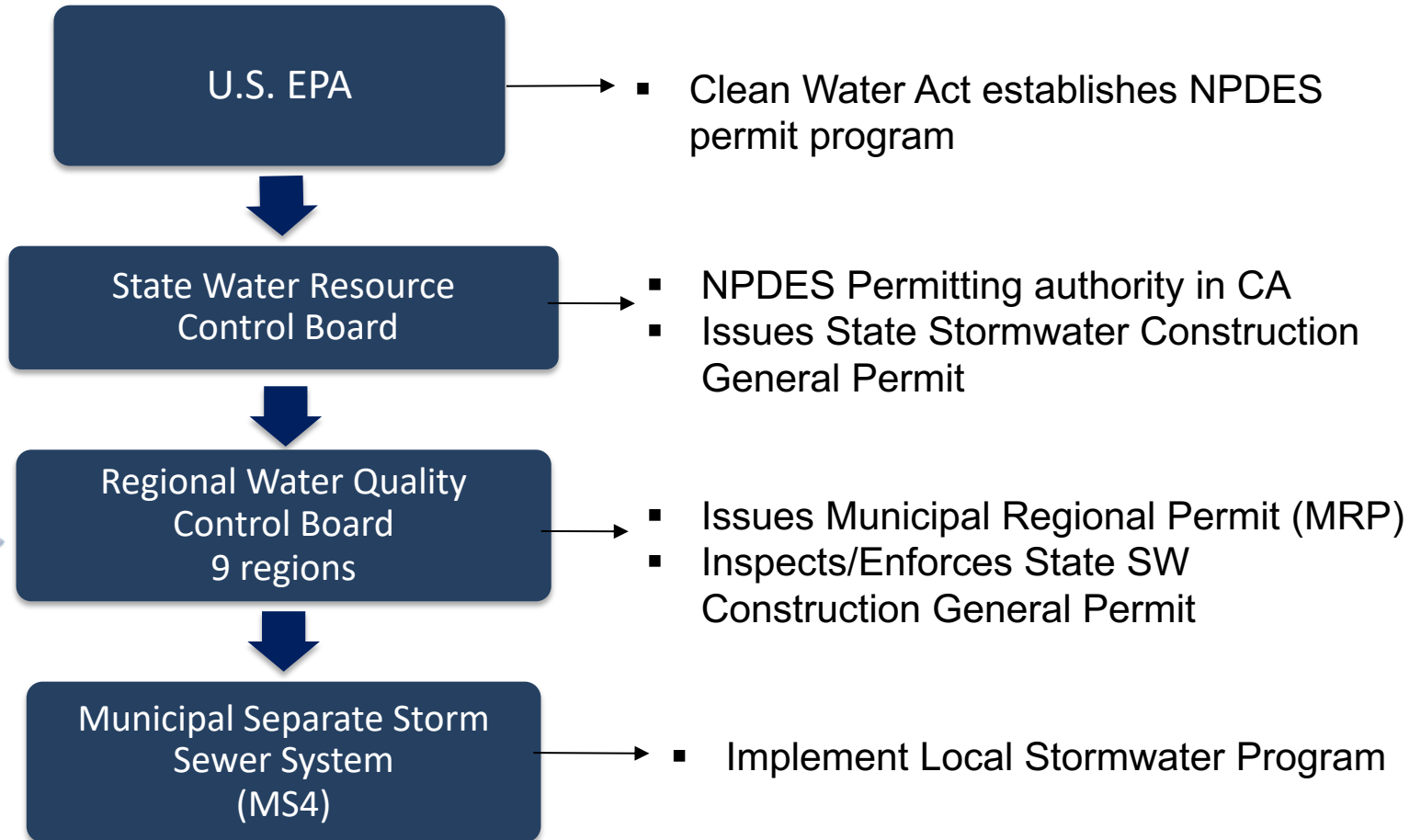
**March 16, 2021**

# Topics Covered

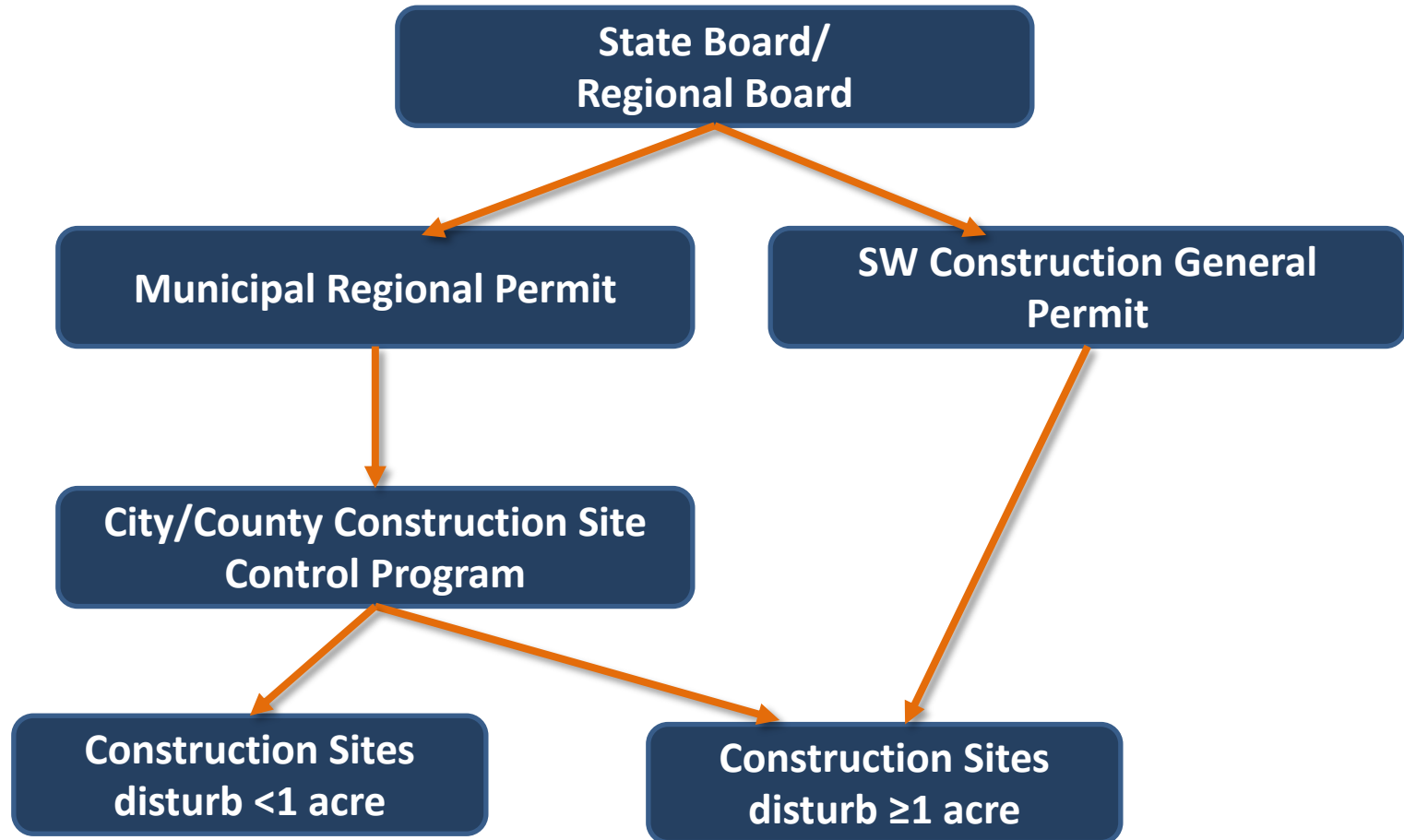
- **Regulatory Basics**
- **Construction General Permit**
- **Municipal Regional Permit**
- **Resources**



# Stormwater Regulations



# Construction Site Regulations



# Construction General Permit

- **Applies to projects that disturb  $\geq 1$  acre**

- Best
- Conc
- Conc
- Storm
- (SWP
- Rep
- QSP



# Construction General Permit

- **MRP requirements:**
  - Verify owners of construction sites that disturb  $\geq 1$  acre file NOI
  - Inspect sites that disturb  $\geq 1$  acre each month during wet season

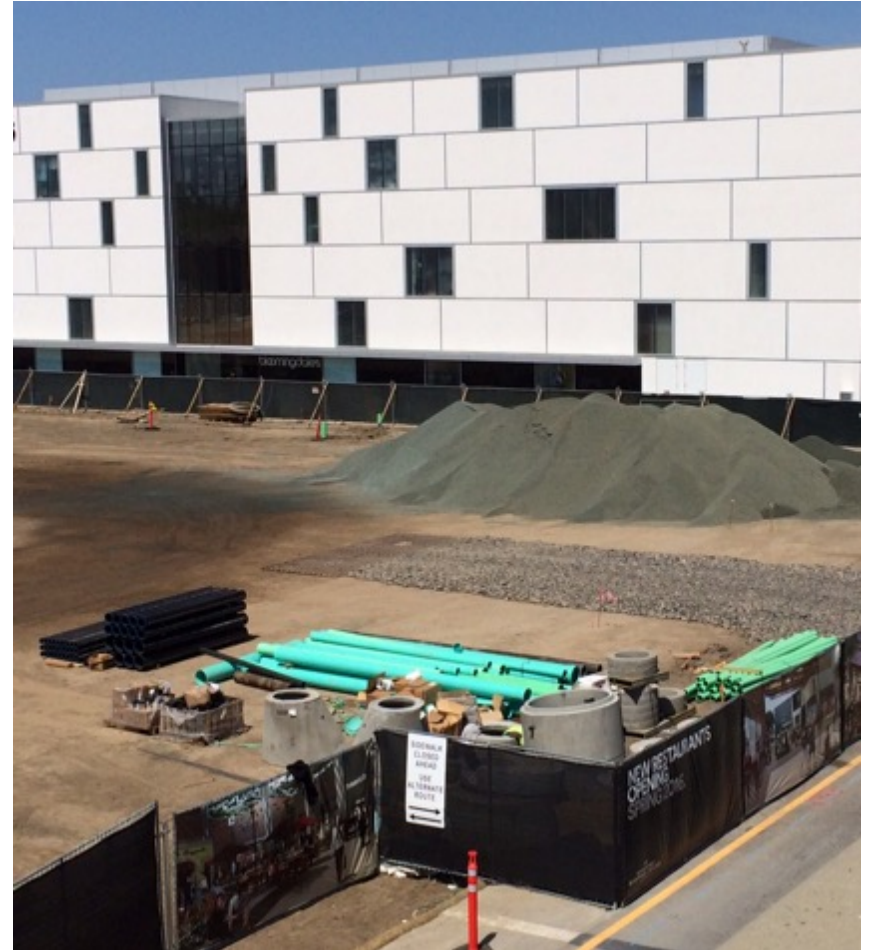






# Construction General Permit

- **Tips for Municipalities:**
  - Overall site compliance reflects on your inspection program
  - Public projects  $\geq 1$  acre must file for coverage under the CGP





# Municipal Regional Permit

- 76 Permittees

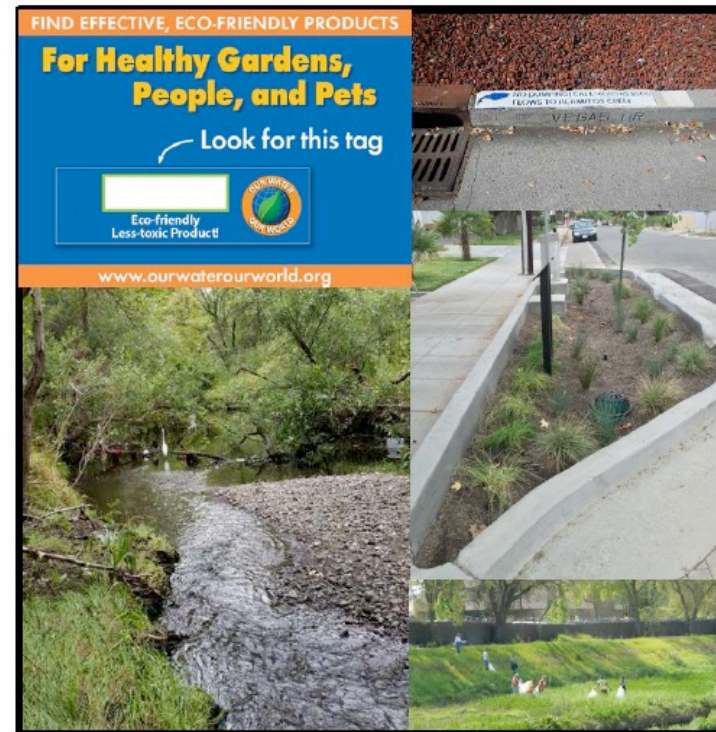


# Municipal Regional Permit

- First adopted  
October 14, 2009
- Permit renewed  
every 5 years
- MRP 2.0 Effective  
January 1, 2016
- MRP 3.0 in  
discussion

## San Francisco Bay Region Municipal Regional Stormwater NPDES Permit

Order No. R2-2015-0049  
NPDES Permit No. CAS612008  
November 19, 2015



# MRP Permit Provisions

- C1 Compliance with Discharge Prohibitions
  - C2 Municipal Maintenance
  - C3 New Development and Redevelopment
  - C4 Industrial and Commercial Discharge
  - C5 Illicit Discharge Detection and Elimination
  - C6 Construction Site Controls
  - C7 Public Information and Outreach
  - C8 Water Quality Monitoring
- 
- C9 Pesticide Toxicity Control
  - C10 – Trash Reduction
  - C11 – Mercury Load Reduction
  - C12 – PCBs
  - C13 – Copper
  - C14 – PBDE and Legacy Pesticides
  - C15 – Exempted & Conditionally Exempted Discharges

# Construction Site Control Program (MRP Provision C6)

- Prevent discharges of pollutants and impacts on receiving waters
- Require appropriate BMPs in 6 categories
  - at **ALL** construction sites (private and public)  
**ALL** year long



# Construction Site Control Program (MRP Provision C6)

- **Legal authority**
  - Site Inspection
  - BMP Requirements
  - Enforcement Actions





# Construction Site Control Program (MRP Provision C6)

- **Plan approval process**
  - Review erosion/sediment control plans or SWPPPs
  - Verify sites  $\geq 1$  acre have filed for NOI



# Construction Site Control Program (MRP Provision C6)

- **Appropriate BMPs**

- Site specific
- Phase appropriate
- Seasonally appropriate



# Construction Site Control Program (MRP Provision C6)

- **Six BMP categories**

- Erosion Control
- Sediment Control
- Good Site Management
- Non-Stormwater Management
- Run-on and Run-off Control
- Active Treatment Systems (ATS)

# Minimum Inspection Requirements

- **Pre-wet season letter by September 1st**
- **Monthly inspections during wet season**
  - October 1<sup>st</sup> – April 30<sup>th</sup>





# Minimum Inspection Requirements

- **Applies to following sites (public & private)**
  - Disturbing  $\geq 1$  acre
  - Hillside projects disturbing  $\geq 5,000$  sq ft
  - Identified as “high priority” by municipality





# Inspection Recordkeeping and Reporting

- Complete inspection form for every required inspection

- Track inspection

- Specific data
- Can be required
- Inspection summaries

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

 **SAN MATEO COUNTYWIDE Water Pollution Prevention Program** **CONSTRUCTION SITE INSPECTION REPORT**  
Clean Water. Healthy Community.

1. Inspection Date: \_\_\_\_\_ 1a. Current weather conditions: \_\_\_\_\_

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  $\geq$  1 acre? ☐ (Y/N - If Yes, inspect monthly during wet season.) NOT Required: ☐ (Y/N) SWPPP dated \_\_\_\_/\_\_\_\_/\_\_\_\_  
Project covered under statewide Construction General Permit? ☐ (Y/N) SWPPP on site? ☐ (Y/N)

7. High Priority Site (significant threat to water quality)? ☐ 7.a. Hillside Project? ☐ (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: \_\_\_\_\_

**Inspection Finding (A / NM / P / NA)\***

9. **Erosion Control Measures:** **Location on site/Comments**

<input type="checkbox"/> Jute Netting/Fiber Blankets		
<input type="checkbox"/> Mulch		
<input type="checkbox"/> Hydroseed/Soil binder/Compost blanket		
<input type="checkbox"/> Mark Areas to be Preserved		
<input type="checkbox"/> Tree Protection Fencing		
<input type="checkbox"/> Riparian Area Barrier		

10. **Sediment Control Measures:**

<input type="checkbox"/> Stabilized construction entrance		
<input type="checkbox"/> Street Sweeping		
<input type="checkbox"/> Dust Control		
<input type="checkbox"/> Wattles / Fiber Rolls / Compost Socks		
<input type="checkbox"/> Silt Fences / Compost Berms		
<input type="checkbox"/> Sedimentation Basin		
<input type="checkbox"/> Check Dams		
<input type="checkbox"/> Inlet Filters (Gravel bags)		
<input type="checkbox"/> Earth Dikes / Drainage Swales		

11. **Run-on and Runoff Control**

<input type="checkbox"/> Earth Fillets / Permeable Pavement		
-------------------------------------------------------------	--	--

Site Name	Inspection Date	Inspector
Panoramic Views	9/30/2015	Kristin Kerr
Panoramic Views	10/15/2015	Jill Bicknell
Panoramic Views	11/15/2015	Jill Bicknell
Panoramic Views	11/15/2015	Jill Bicknell

icit  
harge

x

# Enforcement Response Plan

- **Guidance for inspectors to take consistent actions to bring sites into compliance**
- **Identify enforcement tools**
- **Identify roles and responsibilities**
- **Enforcement procedures**
- **Appropriate time periods for corrective actions**

Each city has it's  
own ERP

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

# Enforcement Response Plan

## ■ Corrective Actions

- Active discharge – cease immediately
- Corrective actions w/in 10 business days or before next rain event (longer if rationale is documented)



# Enforcement Response Plan

- **Verify corrective actions**

- Problem fixed by end of inspection
- Follow-up inspection
- Site submits photographs



# Source Control: Copper (Provision C.13.a)

- Runoff from architectural copper can impact water quality and aquatic life
  - Concerns during installation, treatment and washing
- When issuing building permits require BMPs
- Annually report permitting and enforcement





## Requirements for Architectural Copper

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

### Copper from Buildings May Harm Aquatic Life

Copper can harm aquatic life in San Francisco Bay. Water that comes into contact with architectural copper may contribute to impacts, especially during installation, cleaning, treating, or washing. Patination solutions that are used to obtain the desired shade of green or brown typically contain acids. After treatment, when the copper is rinsed to remove these acids, the rinse water is a source of pollutants. Municipalities prohibit discharges to the storm drain of water used in the installation, cleaning, treating and washing of architectural copper.



*Building with copper flashing, gutter and drainpipe.*

### Use Best Management Practices (BMPs)

The following Best Management Practices (BMPs) must be implemented to prevent prohibited discharges to storm drains.

#### *During Installation*

- If possible, purchase copper materials that have been pre-patinated at the factory.
- If patination is done on-site, implement one or more of the following BMPs:
  - Discharge the rinse water to landscaping. Ensure that the rinse water does not flow to the street or storm drain. Block off storm drain inlet if needed.
  - Collect rinse water in a tank and pump to the sanitary sewer. Contact your local sanitary sewer agency before discharging to the sanitary sewer.
  - Collect the rinse water in a tank and haul off-site for proper disposal.
- Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. This will also maintain the desired color for a longer time, requiring less maintenance.



*Storm drain inlet is blocked to prevent prohibited discharge. The water must be pumped and disposed of properly.*

#### *During Maintenance*

Implement the following BMPs during routine maintenance activities, such as power washing the roof, re-patination or re-application of impervious coating:

- Block storm drain inlets as needed to prevent runoff from entering storm drains.
- Discharge the wash water to landscaping or to the sanitary sewer (with permission from the local sanitary sewer agency). If this is not an option, haul the wash water off-site for proper disposal.

### Protect the Bay/Ocean and yourself!

If you are responsible for a discharge to the storm drain of non-stormwater generated by installing, cleaning, treating or washing copper architectural features, you are in violation of the municipal stormwater ordinance and may be subject to a fine.



*Photo credit: Don Edwards National Wildlife Sanctuary*

### Contact Information

The San Mateo Countywide Water Pollution Prevention Program lists municipal stormwater contacts at [www.flowstobay.org](http://www.flowstobay.org) (click on "Business", then "New Development", then "local permitting agency").

FINAL February 29, 2012

# Resources

- **SMCWPPP Website:** [www.flowstobay.org](http://www.flowstobay.org)
  - BMP Plan Sheet
  - BMP brochures
  - Workshop Powerpoint presentations

# Resources

- **CASQA Construction BMP Handbook Portal – [www.casqa.org](http://www.casqa.org)**
  - contact your agency SW coordinator for information on how to access web subscription

# Contact Information

**Kristin Kerr**

**[kakerr@eoainc.com](mailto:kakerr@eoainc.com)**

**510-832-2852 x122**

**Peter Schultze-Allen**

**[pschultze-allen@eoainc.com](mailto:pschultze-allen@eoainc.com)**

**510-832-2852 x128**