

# O&M (C.3.h) Inspections

## What's required now

## What's coming in MRP 2.0

Kristin Kerr  
EOA, Inc.

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# Outline of Presentation

- O&M Verification Inspection Requirements in the Municipal Regional Permit (MRP) 1.0
- Possible new requirements in MRP 2.0
- Maintenance Assurance
- O&M Verification Inspection Plans
- Tracking and Reporting O&M Inspections



# Bay Area MRP 1.0

- Consolidates six Phase 1 municipal permits into one regional permit (76 permittees):
  - San Mateo, Santa Clara, Alameda, and Contra Costa Counties, Fairfield-Suisun and Vallejo (Solano Co.)



- Effective date: Dec. 1, 2009
- Provision C.3 covers requirements for new development and redevelopment projects, and inspection and reporting requirements



# Permanent Facilities that Require O&M Inspections

- Provision C.3.h of the MRP requires agencies to conduct inspections to verify operation & maintenance (O&M) of:
  - Stormwater treatment measures, and
  - Hydromodification management measures
- Applies to measures associated with a Regulated Development Project



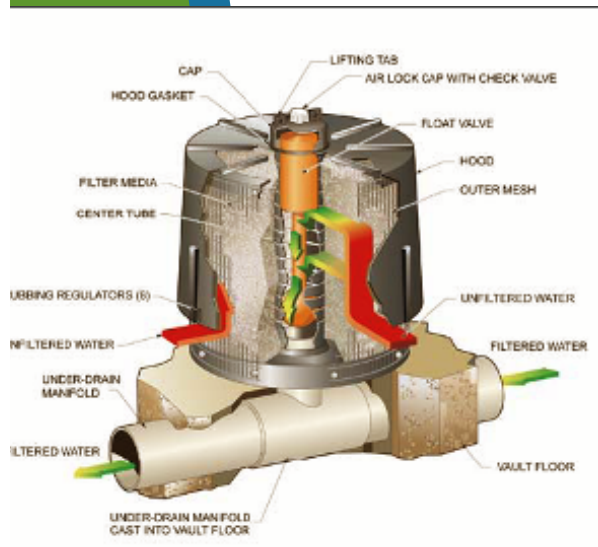
# Stormwater Treatment Measures

- Low impact development (LID) treatment systems (biotreatment, infiltration, rainwater harvesting systems)

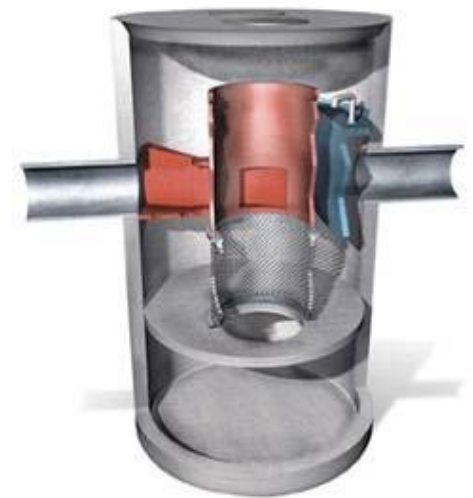
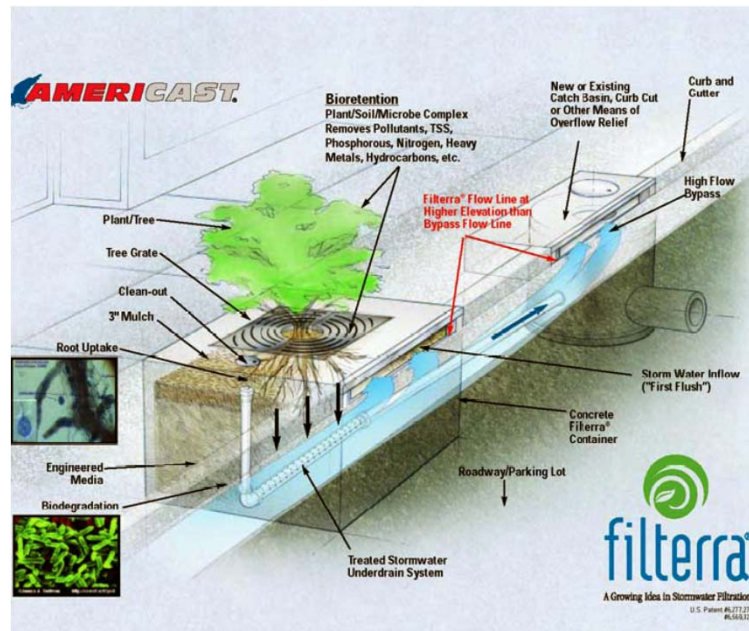


# Stormwater Treatment Measures

- Vault-based systems (hydrodynamic separators, media filters, proprietary tree well filters)



Media Filter Cartridge



Hydrodynamic Separator



# Hydromodification Management (HM) Facilities

- Basin, tank, pipe, or vault with specially designed outlet to slowly release water.



# MRP 1.0 O&M Requirements (Provision C.3.h)

- Agencies subject to the MRP must:
  - Require facility owners to conduct ongoing maintenance (e.g. , maintenance agreement).
  - Prepare and implement plan for annual O&M verification inspections, including new installations.
  - Conduct O&M verification inspections; provide enforcement as needed.
  - Track and report on inspections.



# What about Municipality-owned Facilities?

- O&M inspection requirements do not distinguish between municipal and non-municipal facilities
- Inspect, track and report on facilities at municipal Regulated Projects that your municipality is responsible for maintaining

# Maintenance Assurance

- Provision C.3.h requires property owner to assure ongoing operation and maintenance
- Permittees' O&M Verification Program must include legally enforceable mechanism(s):
  - Conditions of approval
  - Signed statement accepting responsibility (e.g., maintenance agreement)
  - Conditions in sales or lease agreements
  - Home owner association CC&Rs
  - Recordation in property deed



# Maintenance Agreement

- Identifies responsible party
- Grants access to municipal inspectors, Water Board staff, and Vector Control District staff
- Lists self-inspection and reporting requirements
- Includes O&M Plan for each treatment/HM facility (templates available in C.3 Technical Guidance, Appendix G)
- Includes site map and locations of each facility
- Describes enforcement and penalties



# O&M Verification Inspection Plan

- Each fiscal year, inspect:
  - All newly installed stormwater treatment and HM facilities within 45 days of installation
  - 20% of the total number of installed stormwater treatment and HM facilities
  - 20% of all installed vault-based systems
- All installed treatment/HM facilities must be inspected at least once every 5 years
- No current requirement to inspect during construction



# Lessons Learned from NOVs

- Round up when calculating 20 % of treatment/HM facilities per year, AND when calculating 20 % of vault systems.
  - If your agency has fewer than 5 facilities, be sure to inspect at least one per year.
- Annual Reporting year is July 1 - June 30
  - Inspections must be completed during this time period
  - Exception is when a treatment/HM facility is installed in late May/June



# MRP 2.0 C.3.h Requirements (In the Admin Draft)

- Pervious Pavements (PP)
  - Require facility owners to build PP with standard details.
  - Start inspecting PP on new Regulated Projects
    - PP over a certain size (1,000 sq ft of contiguous surface has been proposed.)
    - PP only on roadways, driveways and parking lots
    - And PP on sidewalks in the public right of way.
  - Track and Report PP inspections in the Annual Report.



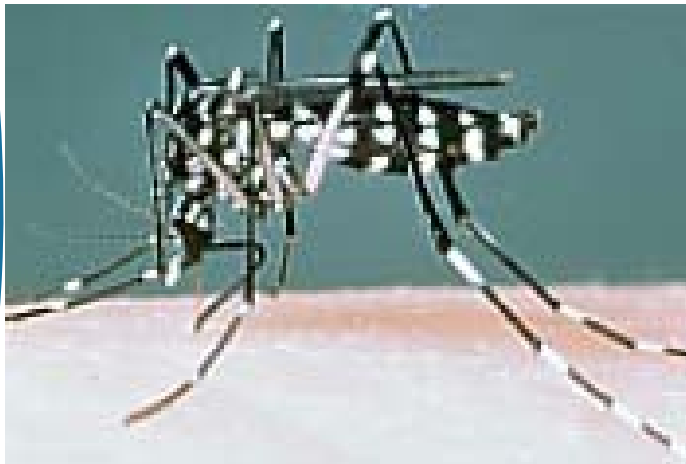
# MRP 2.0 C.3.h Requirements (In the Admin Draft) continued...

- Inspections
  - 20%/year change from requirement to goal
  - Vault-based system reports from maintenance contractors may count towards 20% goal
- Enforcement
  - Property owners with maintenance issues may be required to correct items in a timely manner



# Vector Control District Coordination

- List of newly-installed facilities must be submitted each year:
  - To the County Mosquito and Vector Control District and Regional Water Board
  - Submitted before October 1



- Countywide Program makes the submittal based on info in your Annual Report

# Tracking & Reporting Requirements

- O&M Verification Inspection Checklist
- Annual Report O&M Inspection Table
- Each agency should have an internal tracking table
  - NOT submitted with Annual Report
  - Can be requested by Regional Board at any time



# O&M Verification Checklist



## Standard Stormwater Treatment BMP Inspection Data Collection Form

Date: \_\_\_\_\_ Time: \_\_\_\_\_ File Number: \_\_\_\_\_  
 Municipality \_\_\_\_\_ Agency or Department: \_\_\_\_\_  
 Inspectors \_\_\_\_\_

I. REASON FOR INSPECTION		
<input type="checkbox"/> Initial	<input type="checkbox"/> Follow-up	<input type="checkbox"/> Other _____
<input type="checkbox"/> Routine	<input type="checkbox"/> Response to Complaint	Inspection Frequency: _____
II. PROJECT INFORMATION		
1. ID # or Assessor Parcel Number: _____		2. Date of Installation _____
3. Project Type: <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Multi-use <input type="checkbox"/> Road <input type="checkbox"/> Institutional <input type="checkbox"/> Other		
4. Facility Name: _____		
Site Address: _____		
Contact Name: _____ Phone: _____		
5. If the property owner is different than the contact name, fill out information below:		
Owner Name: _____		Title: _____
Owner's Address: _____		Phone: _____
6. If the BMP operator is different than the contact name, fill out information below:		
Name: _____		Title: _____
Address: _____		Phone: _____
7. Maintenance Documentation: <input type="checkbox"/> Reviewed <input type="checkbox"/> Not Reviewed <input type="checkbox"/> Not Available <input type="checkbox"/> Other: _____		
8. Party responsible for O&M Documentation: <input type="checkbox"/> Property owner <input type="checkbox"/> BMP Operator <input type="checkbox"/> Contractor		
<input type="checkbox"/> Other: _____		
III. BMP TYPE AND INSPECTION RESULTS (Use Codes from "Potential Inspection Results with Definitions" sheet)		
<b>1. Biofiltration</b>	<b>Structural</b>	<b>Infiltration</b>
<input type="checkbox"/> Vegetated Swale _____	<input type="checkbox"/> Drain Insert _____	<input type="checkbox"/> Infiltration Basin _____
<input type="checkbox"/> Vegetated Buffer Strip _____	<input type="checkbox"/> Porous Pavement _____	<input type="checkbox"/> Infiltration Trench _____
<input type="checkbox"/> Bioretention _____	<input type="checkbox"/> Media Filter _____	<input type="checkbox"/> Exfiltration Trench _____



# Annual Report Form

## C.3.h Reporting Table

### C.3.h.iv. ► Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

Fill in table below or attach your own table including the same information. **Guidance:** The table is intended to help permittees meet two requirements of the MRP. The table is intended to (1) report on the inspections of installed stormwater treatment systems, and (2) provide a list of all newly installed treatment measures and HM controls to vector control agencies on an annual basis before the wet season, i.e., October 1. Countywide programs (or in some cases, individual permittees) will submit these tables to vector control agencies to fulfill this requirement. The facility name, address, responsible party and type of treatment/HM control should be provided for all facilities installed during this fiscal year. If a newly installed facility has not yet had an inspection because the 45-day time frame for inspecting the newly-installed facility extends into the next fiscal year include the facility in the table, so that it will be reported to the applicable vector control district. In those cases, indicate in columns pertaining to inspection information that the 45-day inspection will be reported in the subsequent fiscal year. Do not leave any cells blank.

An agency may choose to report inspections conducted in early FY 13-14 for facilities installed in late FY 12-13.

Name of Facility/Site Inspected	Address of Facility/Site Inspected	Newly Installed? (YES/NO) <sup>41</sup>	Party Responsible <sup>42</sup> For Maintenance	Date of Inspection	Type of Inspection <sup>43</sup>	Type of Treatment/HM Control(s) Inspected <sup>44</sup>	Inspection Findings or Results <sup>45</sup>	Enforcement Action Taken <sup>46</sup>	Comments/Follow-up



# Annual Report Form

- Name of facility/site inspected
- Address
- If newly installed
- Party responsible for maintenance
- Date of inspection
- Type of inspection (initial, annual, follow-up, spot)
- Type of stormwater treatment/HM control
- Inspection findings/results
- Enforcement actions taken
- Comments/Follow-up



# Data Tracking

- Similar to AR Data Except.....
  - Name of facility/site inspected
  - Address – specific description of location of treatment/HM controls
  - If newly installed – date of installation
  - Party responsible for maintenance
  - Date of inspection
  - Type of inspection (initial, annual, follow-up, spot)
  - Type of stormwater treatment/HM control – type and size
  - Inspection findings/results
  - Enforcement actions taken
  - Comments/Follow-up – corrective actions



# For More Information...

- SCVURPPP New Development Webpage:  
[http://www.scvurppp-w2k.com/new\\_dev.shtml](http://www.scvurppp-w2k.com/new_dev.shtml)
  - O&M Verification Inspection Plan Template
  - O&M Verification Inspection Checklist
  - Model Maintenance Agreement
- SF Bay Municipal Regional Stormwater Permit (Google it!)



# Questions?

Kristin Kerr

510-832-2852 x122

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

Peter Schultze-Allen

510-832-2852 x128

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

