

Data Collection and Management and Tools for Compliance

Jill Bicknell, P.E.
EOA, Inc.

December 4, 2013

Outline of Presentation

- Data Collection and Management for Different Types of Inspections
- Inspection Forms
- Internal Agency Procedures for Sharing Data
- Potential Future Requirements

Data Collection Needs

- Varies by inspection type:
 - O&M verification inspections
 - “45-day” (initial) inspections
 - Inspections during construction
- MRP requires reporting of O&M and 45-day inspections but not inspections during construction
- MRP contains same tracking and reporting requirements for O&M and 45-day inspections

Inspection Database

- Data required to be tracked:
 - Name and address of facility/site inspected
 - Description of treatment/HM control location(s)
 - If newly installed, date of installation
 - Party responsible for maintenance
 - Date of inspection
 - Type of inspection (initial, annual, follow-up, spot)
 - Type and size of treatment/HM control
 - Inspection findings/results
 - Enforcement and corrective actions taken
 - Comments/follow-up

O&M Verification Checklist



Municipality: _____

Date: _____

Facility has closed or Facility Information has changed: ☐ yes ☐ no

Model Stormwater Treatment or Hydromodification Management (HM) BMP O&M Verification Inspection Report Form

Reason for Inspection: <input type="checkbox"/> First Inspection (required within 45 days of installation) <input type="checkbox"/> Routine Inspection <input type="checkbox"/> Response to Complaint <input type="checkbox"/> Follow-up		Follow-up Inspection Due: _____																						
NAME OF FACILITY		SITE ADDRESS																						
CONTACT NAME	PHONE	PROJECT TYPE/ACTIVITY	SIC																					
Is the property owner different than the facility owner? <input type="checkbox"/> yes <input type="checkbox"/> no		If yes, complete the following:																						
NAME		CONTACT:	PHONE																					
MAILING ADDRESS		TITLE:																						
Is the BMP Operator different than the facility owner? <input type="checkbox"/> yes <input type="checkbox"/> no		If yes, complete the following:																						
NAME		CONTACT:	PHONE																					
MAILING ADDRESS		TITLE:																						
Needed maintenance noted for the Treatment and/or HM BMPs below shall be completed within 30 days and notification of correction faxed, emailed or mailed to the over sight agency.																								
Treatment BMP Type (Numbers in parentheses correspond to fact sheets in CASQA's New Development Handbook)	No visible problems	Needed Maintenance																						
		Trash or Debris	Pollutants	Rodent Holes	Hazardous Trees/Brush	Erosion or Scouring	Excessive Sediment	Liner Condition (if visible)	Spillway/Berm Damaged, Settled	Damaged Trash Rack or Screen	Inlet/Outlet	Security (fence, gates)	Coating/Paint	Standing Water	Mosquitoes/Other Insects	Flow Spreader/Equalizer	Invasive Weeds or Vegetation	Poor Vegetation Cover < 90%	Pedestrian Path Devegetation/Compaction	Vegetation Too Tall	Odors			
Vegetated Swale (TC-30)																								
Extended Detention Basin (TC-22)																								
Bioretention Facility (TC-32)/Flow-Through Planter																								
Vortex Separator (MP-51)																								
Infiltration Basin (TC-11)																								
Water Quality Inlets –Oil/grit/water Separator (TC-50)																								
Media Filters - Sand Filters (TC-40)																								
Drain Inserts (MP-52)																								
HM Tank or Vault																								
Other																								

COMMENTS Date Treatment/HM BMP Installed (for first inspection only) _____ Maintenance Documentation Reviewed? ☐ yes ☐ no Maintenance required in storm drain system? ☐ yes ☐ no

Data Collection Needs

- MRP requires 45-day inspection to “ensure approved plans have been followed”
- Some agencies have developed separate checklists for 45-day and construction inspections (see examples in folder)
- Need to consider who is doing inspections and what forms they are willing to carry and/or complete

Enforcement

- MRP also requires tracking/reporting of enforcement and corrective action
- There is no time limit for corrective action
 - Countywide Program form requires “needed maintenance” to be completed within 30 days
- Enforcement levels should follow ERP
 - Maintenance agreement should refer to legal authority and potential enforcement actions
 - Maintenance agreement may allow for agency to perform corrections and recover costs
 - Sign-off authority is a powerful tool

Internal Agency Procedures

- An agency's standard operating procedures should cover:
 - How is the collected data stored and distributed internally?
 - Who is conducting the C.3 compliance review, inspections, enforcement and reporting?
 - What is the process for recording, reporting and verifying compliance for a change made during construction?
 - Design or landscaping changes
 - Proprietary product substitution

Typical Procedure (Private Project)

1. Planning Dept. receives project application and stormwater control plan (SWCP)
 2. C.3 compliance review conducted (internal or third party)
 3. Project and SWCP approved
 4. Approved plans go to Engineering and/or Building Departments
 5. Final construction drawings approved and building permit issued
- ❖ Any changes to SWCP must go back to C.3 compliance review (Step 2)

Typical Procedure (continued)

6. Treatment/HM controls in SWCP added to O&M program inventory
7. Maintenance agreement created & signed
8. Plan sheets and maintenance agreement provided to inspection team(s)
9. Treatment/HM controls inspected during construction and/or after completion (inspection data entered into tracking database)
10. Any changes recorded on as-built drawings and provided to O&M inspectors
11. O&M inspections conducted and data entered into tracking database

Future Requirements

- Current MRP expires 11/30/14 and next permit (“MRP 2.0”) is under discussion
- Potential new elements of Provision C.3.h:
 - Requirement for inspections to be better integrated into municipal building approvals and conducted during construction
 - More specific requirements for installation inspections
 - Requirement to note pervious paving condition during O&M inspections and include pervious paving in maintenance agreements

Questions?

Jill Bicknell

408-720-8811 x1

jcbicknell@eoainc.com

Peter Schultze-Allen

510-832-2852 x128

pschultze-allen@eoainc.com