BMP Compliance Inspections: What to Expect

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Overview

- MSD Inspections
- BMP Owner Maintenance Requirements
- BMP Compliance Enforcement
- BMP Education
Why is BMP Maintenance Important

EPA – “Too frequently, however, BMP maintenance is not completed, particularly when the BMP is privately owned. Improper maintenance decreases the efficiency of BMPs and can also detract from the aesthetic qualities of the practice.”
Why Does MSD inspect?

To ensure BMP O&M with Maintenance Agreement

Maintenance Agreement between MSD and Property owner

“1. To build and construct stormwater management facilities, including Best Management Practices (BMP)... The stormwater management facilities are to be perpetually located within the dimensioned and reserved area.

2. To maintain and operate the stormwater management facilities in conformity with the approved stormwater management design, maintenance and operation plan.

3. To maintain all pipes and drains in good working order and maintain all walls, dikes, vegetation, filter media, and any other requisite appurtenances and improvements for the retention and management of stormwater in good repair....

4. This agreement is irrevocable and shall continue forever”
MSD Design Rules and Regulations

- Plans require a Storm Water Facility Management Report (Plan)...this is the BMP owners manual, like the one with your car
MSD Inspections
What are we looking for?

- Facility is:
  - Maintained per Plan
  - Still in place per Maintenance Agreement
  - Operable
MSD Inspections - Frequency & Load

- MSD has authority to inspect under MSD Ordinance 12559
- MSD inspections conducted on 3 yr. frequency
- ~300 Water Quality BMPs items to complete by end of 2013 calendar year
- Non Water Quality BMPs – 5 yr. frequency, ~2000 items; Next inspections anticipated to begin in FY 2015 – inventory completed in 2010
- Results stored in MSD database
- Number of inspections reported to State
MSD Inspection Checklist

- Inspector should contact site contact
- Inspection checklist based on type of BMP
- Ratings 0, 1, 2, 3; Overall Rating
- Photos of site are taken
MSD BMP Inspection Scoring

Rating system is 0 - 3

- **0 = Good condition**
  
  **Description:** Well maintained, no action required.

- **1 = Moderate condition.**
  
  A potential problem that can be addressed in the future

  **Description:** Although maintenance may not be required at this time, a potential problem exists that will most likely need to be addressed in the future. This can include items like minor erosion, concrete cracks/spalling, or minor sediment accumulation. This item should be revisited at the next inspection. Moving up the next inspection date should be considered.

  (insert photos of 0 and 1)
MSD BMP Inspection Scoring

- Examples of 0 – Good Condition
MSD BMP Inspection Scoring

- Examples of 1 – Moderate Condition
MSD BMP Inspection Scoring

- **2 = Degraded condition.**
  
  Routine maintenance and repair needed.

  **Description:** Inspection items that must be addressed through routine maintenance. This can include items like vegetation management, erosion repair, or debris/trash removal.
3 = Serious condition.

Immediate need for repair or replacement.

Description: This item needs immediate attention because failure is imminent or has already occurred. This could include items such as structural failure of a feature (outlet works, forebay, etc), significant erosion, or significant sediment accumulation. This score should be given to an item that can significantly affect the function of the facility.
MSD BMP Inspection Scoring

- Examples of 3 - Serious Condition
MSD BMP Inspection Scoring

- Examples of 3 - Serious Condition
Owner Responsibilities
Inspections & Annual Maintenance Report

- Routine inspections and maintenance conducted per facility Plan
- Annual Maintenance Report submittal
  - Documentation of maintenance conducted
    - Completed inspection forms and/or maintenance log
    - Narrative description of corrective actions taken, if applicable
    - Photographs of site
- Currently due March 31st of the next year
BMP Compliance Enforcement

- **Informal Enforcement**
  - Typically for minor maintenance issues
    - Written Notification (Letter)
    - Telephone Notification
    - Meetings

- **Formal Enforcement**
  - Typically for failure of property owner to comply with informal enforcement responses
    - Notice of Violation
    - Administrative Order
    - Legal Action
    - Recovery of Costs
Lessons from the Field…
Common Compliance Issues/Considerations

- Consider access for maintenance and inspections
- Coordination of construction and post-construction BMP installation
  - Don’t start installation until pervious areas stabilized
Lessons from the Field...

- Signage to ensure proper operation

GOOD...

NOT SO GOOD....

Porous Pavement
Without Signage – 1 yr later

Porous Pavement
With Signage – 1 yr later
Lessons from the Field...

Owner Inspection Frequency and Cleaning

- Varies dependent on drainage area and size of drainage area
- Nearby construction not stabilized
- Suggest quarterly 1st year to attain benchmark of performance
BMP Compliance Education

- Web site – BMP Toolbox Updates
- Presentations for Trustee Boards and HOAs
- BMP Ownership & Maintenance Brochure
  Includes info on:
  - What is a BMP
  - Types of BMPs
  - Do’s & Don’ts
  - Private BMP Owner Responsibilities
    - Maintenance
    - Inspections
    - Annual Report
Maintenance Responsibilities

MSD compliance contact information

To ensure the maintenance of privately owned stormwater management facilities, MSD requires an Annual BMP Maintenance Report to be submitted to the District for all commercial and residential homeowner association maintained facilities. This Annual Report should provide documentation that maintenance was performed in accordance with the Stormwater Management Facilities Report (SWMFR) submitted to and approved by MSD for the development project. The Annual Report typically consists of a completed inspection checklist and/or maintenance log, narrative description of corrective action measures taken, photographs, and any other documentation appropriate for demonstrating compliance with the BMP Maintenance Agreement and the SWMFR.

The Annual BMP Maintenance Report should be submitted to MSD before March 31 of each year. A MSD inspector will also periodically inspect the BMP. The Annual Report should be sent to:
ABC’s of Post-Construction Stormwater BMP Ownership
A Few Keys to Staying in Compliance

- **A**lways receive a copy of the Stormwater Management Facilities Report (Plan) and submit **A**nnual Maintenance Report.

- **B**udget for maintenance, routine and non-routine.

- **C**heck-up on your BMP.
Questions?

Post-construction BMP
Maintenance & Inspection Contact:

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