



Standard Stormwater Treatment BMP Inspection Data Collection Form

Date: _____ Time: _____ File Number: _____
 Municipality _____ Agency or Department: _____
 Inspectors _____

I. REASON FOR INSPECTION

- Initial Follow-up Other _____
 Routine Response to Complaint Inspection Frequency: _____

II. PROJECT INFORMATION

1. ID # or Assessor Parcel Number: _____ 2. Year of Installation _____
3. Project Type: Residential Commercial Industrial Multi-use Road Institutional 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: Reviewed Not Reviewed Not Available Other: _____
8. Party responsible for O&M Documentation: Property owner BMP Operator Contractor
 Other: _____

III. BMP TYPE AND INSPECTION RESULTS (Use Codes from "Potential Inspection Results with Definitions" sheet)

- | | | |
|--|---|---|
| 1. Biofiltration
<input type="checkbox"/> Vegetated Swale _____
<input type="checkbox"/> Vegetated Buffer Strip _____
<input type="checkbox"/> Bioretention _____
<input type="checkbox"/> Roof Gardens _____
<input type="checkbox"/> Planter Boxes _____
Detention
<input type="checkbox"/> Extended Detention Basin _____
<input type="checkbox"/> Wet Pond _____
<input type="checkbox"/> Wetland _____ | Structural
<input type="checkbox"/> Drain Insert _____
<input type="checkbox"/> Porous Pavement _____
<input type="checkbox"/> Media Filter _____
<input type="checkbox"/> Hydrodynamic Separator _____
<input type="checkbox"/> Vortex Separator _____
<input type="checkbox"/> Water Quality Inlet _____
<input type="checkbox"/> Underground Detention Systems _____
<input type="checkbox"/> Wet Vault _____ | Infiltration
<input type="checkbox"/> Infiltration Basin _____
<input type="checkbox"/> Infiltration Trench _____
<input type="checkbox"/> Exfiltration Trench _____
<input type="checkbox"/> Retention/Irrigation _____
Other (describe): _____
<input type="checkbox"/> _____
<input type="checkbox"/> _____ |
|--|---|---|
2. Is maintenance needed at this time? Yes No 3. ***Mosquitoes or Mosquito Larvae Present?** Yes No
4. Comments/Notes: _____

IV. FOLLOW-UP AND ENFORCEMENT ACTIONS (Add additional information on back)

1. Describe corrective actions needed: _____

2. Describe materials distributed (brochures, BMPs, etc.): _____
3. Describe Enforcement Action:
 None Verbal Notice Warning Notice
 Administrative Action Administrative Action with Penalty/Fine Civil Action
 Criminal Action Referral for Enforcement _____
4. Follow-up required? Yes No Comments _____
5. Priority for reinspection: High Medium Low
6. Return inspection needed? Yes No Comments _____
7. Required Compliance Date: _____ Date Corrected: _____

Facility Representative: _____ **Inspector:** _____

Standard Stormwater Treatment BMP Inspection Data Collection Form

Background Data for BMP Type

The *Standard Stormwater Treatment BMP Inspection Data Collection Form* (Inspection Form) lists twenty stormwater treatment BMP types (see Section III). Inspectors, data entry staff and others who use the Inspection Form can refer to the California Stormwater Quality Association (CASQA) and SCVURPPP Fact Sheets for background information. The CASQA Fact Sheets are numbered (see below) and are located in the CASQA *Stormwater BMP Handbook for New Development and Redevelopment*, as well as SCVURPPP's *C3. Stormwater Handbook*. The SCVURPPP Fact Sheets are also located in the *C3. Stormwater Handbook*. Both Handbooks are available online.

CASQA Reference Number

Bioretention TC-32
Drain Insert MP-52
Extended Detention Basin TC-22
Infiltration Basin TC-11
Infiltration Trench TC-10
Media Filter TC-40 and MP-40
Retention/Irrigation TC-12
Vegetated Buffer Strip TC-31
Vegetated Swale TC-30
Vortex Separator MP-51
Water Quality Inlet TC-50
Wet Pond TC-20
Wetland MP-20
Wet Vault MP-50

SCVURPPP Fact Sheets (no identification numbers)

Exfiltration Trench
Hydrodynamic Separator
Planter Boxes
Porous Pavement
Roof Gardens
Underground Detention Systems

Potential Inspection Results with Definitions

If mosquitoes or mosquito larvae are observed within a BMP, report condition to: Santa Clara County Vector Control District, 976 Lenzen Ave., San Jose, CA 95126; phone: 408-792-5010; fax: 408-298-6356; email: timothy.mulligan@deh.co.scl.ca.us; website: www.sccvector.org

ID	Inspection Results	Definitions
I. All BMP Types		
1	No Visible/Apparent Problems	No visible or apparent problems with BMP function. BMP appears to be well-maintained
2	Significant Engineering/Design Flaws	BMP observed to have significant engineering/design flaws which lessen its effectiveness as a stormwater treatment measure.
3	Unauthorized Modifications	Any modification that lessens the effectiveness of the BMP; any modification not authorized by the City, designated agency or other regulatory agency.
4	BMP Destroyed or Eliminated	BMP destroyed, removed or eliminated from property.
5	Trash/Debris Accumulation or Dumping	Trash & debris accumulates within and/or on BMP; trash & debris interferes with proper BMP function; visual evidence of trash/debris dumping.
6	Evidence of Contaminants & Pollution	Evidence or presence of oil, gasoline, contaminants or other pollutants.
7	BMP Access Obstructed	Access to BMP obstructed or limited.
8	Obnoxious Odors	Unpleasant odors within/from the BMP.
9	Fencing - Missing or Broken Bars	Any defect in or damage to the fence or gate that permits easy entry to a facility.
10	BMP Cannot Be Located	BMP cannot be located for inspection.
II. Biofiltration (Bioretention, Vegetated Buffer Strip, Vegetated Swale, Roof Gardens, Planter Boxes)		
A. General		
11	Uneven or Clogged Flow Spreader	Flow spreader uneven or clogged so that flows are not uniformly distributed across the BMP.
12	Leaking or Malfunctioning Irrigation System	Irrigation system leaking or malfunctioning.
B. Sediment and Erosion Problems		
13	Sediment Accumulation	Sediment depth exceeds 2 inches on more than 10% of the vegetated treatment area; or sediment interferes with BMP performance.
14	Erosion/Scouring	Eroded or scoured areas due to flow channelization, higher flows, wind or water.
C. Vegetation Maintenance Issues		
15	Poor Vegetation Coverage	Planted vegetation is sparse or bare or eroded patches occur in more than 10 % of the BMP. Growth of planted vegetation is poor because sunlight does not reach swale.
16	Invasive/Nuisance Vegetation or Weeds	Planted vegetation is excessively tall; nuisance weeds, invasive or noxious vegetation are overgrown; vegetation reduces free movement of water through BMP.
17	Tree/Brush Growth	Growth does not allow maintenance access or interferes with maintenance activity.
D. Drainage Problems		
18	Standing Water/Excessive Ponding/Soggy Soil	Water is observed within the BMP (between storms) and appears not to drain freely or soil is excessively soggy. Excessive ponding of water within vegetated swale or other BMP.
19	Mosquito Habitat	Suitable habitat exists for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes).
20	Clogged or Obstructed Inlets/Outlets	Inlet/outlet clogged or obstructed with sediment and/or debris.
21	Constant Baseflow/Damage	Small quantities of water flow through the vegetated swale, even when it has been dry for weeks, and an eroded, muddy channel has formed in the swale bottom; constant baseflow from irrigation runoff..
III. Detention and Infiltration (Extended Detention Basin, Wet Pond, Wetland, Exfiltration Trench, Infiltration Basin, Infiltration Trench, Retention/Irrigation)		
A. Vegetation Maintenance Issues		
22	Invasive/Nuisance Vegetation or Weeds	Invasive, nuisance vegetation or weeds are present.
23	Tree/Brush Growth & Hazard Trees	Growth does not allow maintenance access or interferes with maintenance activity; dead, diseased or dying trees; tree growth on berms or emergency spillway >4 feet in height or covering more than 10 % of spillway.
B. Sediment and Erosion Problems		
24	Sediment Accumulation	Detention BMPs- sediment on pool bottom preventing water flow in/out of the facility. Infiltration BMPs -Sediment in storage areas, rock filters, and pre-settling ponds and vaults preventing infiltration.
25	Erosion	Eroded damage over two inches deep; potential for continued erosion; any erosion on a compacted berm embankment; soil from adjacent areas washes into/on BMP; continued erosion is prevalent.
C. Animal Pests		
26	Rodent Holes	If facility acts as a dam or berm, any evidence of rodent holes, or any evidence of water piping through dam or berm via rodent holes.
27	Insects (Wasps, Hornets, Bees)	Insects (wasps, hornets, bees) interfere with maintenance activities. Excessive or nuisance levels.
D. Drainage Problems		
28	Standing Water/Excessive Ponding/Soggy Soil	Water is observed within the BMP (between storms) and appears not to drain freely or soil is excessively soggy. Excessive ponding of water within vegetated swale or other BMP.
29	Mosquito Habitat	Suitable habitat exists for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes).
30	Empty Cell	First cell of wet pond does not hold water.
31	Unlevel Berm Surface	Unlevel internal berm dividing wet pond cells

Potential Inspection Results with Definitions

ID	Inspection Results	Definitions
III. Detention and Infiltration (Extended Detention Basin, Wet Pond, Wetland, Exfiltration Trench, Infiltration Basin, Infiltration Trench, Retention/Irrigation) continued		
E. Unique to Certain BMPs		
32	Uneven or Clogged Flow Spreader	Flow spreader uneven or clogged so that flows are not uniformly distributed across the BMP.
33	Oil Sheen on Water (Wet ponds)	Prevalent and visible oil sheen.
34	Damaged/Missing Bars (Debris Barriers)	Bars are missing, loose, bent out of shape, or deteriorating due to excessive rust.
35	Leaking or Malfunctioning Irrigation System	Irrigation system leaking or malfunctioning.
36	Embankment Settlement Lower Than Design Elevation	Embankment settlement four inches lower than the design elevation.
IV. Structural, Non-landscaped Based (Drain Insert, Hydrodynamic Separator, Media Filter, Porous Pavement, Vortex Separator, Wet Vault, Water Quality Inlet, Underground Detention Systems)		
A. General		
37	Mosquito Habitat	Suitable habitat exists for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes).
38	Access Cover Damaged/Difficult to Remove/Not in Place	Cover cannot be opened, corrosion/deformation of cover; maintenance person cannot remove cover using normal lifting pressure; cover is missing or only partially in place.
39	Deteriorating Paint or Protective Coating	Part or parts that have a rusting or scaling condition and have affected structural adequacy.
40	Locking Mechanism Not Working	Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than 1/2 inch of thread (may not apply to self-locking lids).
B. Ineffective Filter Material, Liners and/or Membranes		
41	Sediment Accumulation	Sediment depth exceeds acceptable levels (varies between BMPs)
42	Ineffective Media Insert/Filter Media	Media inset/filter media ineffective in doing intended function and needs to be replaced; filter is beyond the typical average life of product.
43	Rock Lining Out of Place/Missing (Sand Filters)	Soil beneath the rock lining is visible.
44	Visible Liner with Holes or Damaged	Liner is visible and has more than three 1/4-inch holes in it or is damaged.
45	Compromised Membrane or Roof Structure	Membrane or roof structure is compromised by either roots and/or water discharge.
46	Short Circuiting	Flows do not properly enter filter cartridges (media filters); seepage/flows occur along the vault walls and corners (sand filters); Sand eroding near inflow area (sand filters); flows become concentrated over one section of the sand filter rather than disperse (sand filters).
C. Pipe or Pipe Joint Problems		
47	Damaged Pipes	Any part of the piping that is crushed, deformed, damaged, in need of repair or any other failure to the piping; protective coating is damaged.
48	Missing Debris Barrier/Not Attached to Pipe	Entire barrier is missing or is not attached to pipe.
49	Sediment in Drain Pipes/Cleanouts	Drain pipes and/or cleanouts are full of sediment and/or debris.
50	Joints Between Tanks/Pipe Section	Any openings or voids allowing material to be transported into facility.
51	Tank Pipe Bent Out of Shape	Any part of tank/pipe is bent out of shape more than 10 % of its design shape.
D. Underground Vaults/Containers, Chambers, Tanks Issues		
52	Sediment Accumulation	Sediment depth exceeds acceptable levels (varies between BMPs), 20 % of the diameter of the pipe/design depth or interferes with proper BMP function.
53	Vault Structure Damage	Vault structures which are observed to have cracks in walls, bottom damage to frame and/or top slab.
54	Damaged Baffles and/or Weir	Baffles which are corroded, cracked, warped and/or showing signs of failure as determined by maintenance person. Weir is observed to be damaged by maintenance person.
55	Access Ladder Damage	Ladder is corroded or deteriorated, not functioning properly, not securely attached to structural wall, missing rungs, has cracks and/or is misaligned.
56	Oil Accumulation (Water Quality Inlet, Vortex Separator)	Oil accumulations that exceed 1-inch at the surface of the water.
57	Blocked, Damaged or Plugged Air Vents	One-half of the cross section of a vent is blocked at any point or the vent is damaged.
E. Unique to Certain BMPs		
58	Damaged Coalescing Plates (Water Quality Inlet)	Plate media broken, deformed, cracked and/or showing signs of failure.
59	Clogged Porous Pavement	By visual inspection, little or no water flows through pavement during heavy rain storms, usually causing ponding; clogging due to debris, organic matter and sediment.
60	Damaged Internal Walls (Sand Filter Media)	Internal walls are corroded, cracked, warped and/or showing signs of failure as determined by maintenance person.
61	Prolonged Flows (Sand Filter Media)	Sand is saturated for prolonged periods of time (several weeks) and does not dry out between storms due to continuous base flow or prolonged flows from detention facilities.
V. Other		
62	Other	Inspection results which are not defined by one of the listed fields.