
**Municipal Separate Storm Sewer System (MS4)
Program (Non-Traditional) – Stormwater
Pollution Prevention Plan**

SWM Facility Inspection and Maintenance Procedures

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Table	Description
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Introduction

VIMS provides inspections and maintenance of operator-maintained Stormwater Management (SWM) facilities in accordance with the procedures provided below. For SWM facilities that are owned by VIMS but operated and maintained by another entity, VIMS requires that entity follow equivalent or similar procedures and will request summaries or copies of that entity's inspection and maintenance efforts.

Inspection Procedures

1. Inspections will be conducted by the Facilities Management Department or their designated representative.
2. Inspections shall be performed by Professional Engineers or other qualified personnel familiar with stormwater management systems.
3. Each SWM facility shall be inspected at the minimum frequency listed in **Table 1** below.
4. Inspections may occur more frequently than the minimum frequency if deemed necessary by Facilities Management staff or in response to maintenance concerns.
5. All SWM facilities shall be visually inspected following severe storm events to ensure system functionality and identify any needed repairs.
6. Inspections shall be performed using standardized procedures consistent with the Virginia Stormwater Management Handbook and the example inspection forms provided in **Appendix A**.
7. Inspection findings, including observed conditions and recommended maintenance actions, shall be electronically recorded and stored by the Facilities Management Department.
8. Hard copies of completed inspection reports shall be maintained in the corresponding Annual Report.
9. Inspection records shall be retained on file for the duration of the SWM facility's operational life.

Table 1: SWM Facility Inspection Frequency

Facility Type	Minimum Inspection Frequency
Bioretention Basin	Annually
Infiltration Basin	Annually
Stormceptor	Annually
Wet Pond	Annually
Permeable Pavers	Annually
Hydrodynamic Separator	Annually

Maintenance Procedures

1. The Facilities Management Department will be responsible for maintaining operator-maintained SWM facilities
2. Minor maintenance tasks (e.g., debris removal, vegetation management, or minor repairs) shall be performed by Facilities Management staff.
3. Major maintenance activities or significant repairs shall be performed by a certified contractor under the supervision of the Facilities Management Department.
4. The Facilities Management Department will coordinate all required permits and approvals related to maintenance or repair of VIMS-owned stormwater facilities.
5. Maintenance for non-proprietary facilities shall follow standard engineering practices to restore the facility to its original approved design function or equivalent performance standard.
6. Proprietary systems (e.g., Stormceptor or other hydrodynamic separators) shall be maintained in accordance with the manufacturer's specifications by a certified maintenance provider or other qualified personnel.
7. Upon completion of maintenance or repair activities, the facility shall be re-inspected using the appropriate checklist to verify proper function.
8. All major maintenance or repair activities shall be electronically recorded by the Facilities Management Department.
9. Hard copies of maintenance and repair records shall be included in the corresponding Annual Report.

10. Maintenance records shall be retained until the SWM facility is no longer in operation.

Measurable Goals

VIMS's measurable goal is to maintain compliance with VSMP post-construction stormwater management requirements by ensuring all SWM facilities are properly inspected and maintained.

The number of SWM facilities inspected annually shall serve as the measurable indicator for evaluating the effectiveness of these procedures.

Appendix A: SWM Facility Inspection & Maintenance Checklists

P-FIL-05 BIORETENTION PRACTICES: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Facility Location:

- ☐ Surface
☐ Underground

Hydraulic Configuration:

- ☐ On-line facility
☐ Off-line facility

Filtration Media:

- ☐ No filtration (e.g., dry well, permeable pavement, infiltration facility, etc.)
☐ Sand
☐ Bioretention Soil
☐ Peat
☐ Other: _____

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
☐ Sedimentation chamber
☐ Plunge pool
☐ Stone diaphragm
☐ Grass filter strip
☐ Grass channel
☐ Other: _____

Ideally, Bioretention facilities should be inspected and cleaned up annually, preferably during the Spring. During the first 6 months following construction of a bioretention facility, the site should be inspected at least twice after storm events that exceed 1/2-inch of rainfall. Watering is needed once a week during the first 2 months following installation, and then as needed during the first growing season (April-October), depending upon rainfall. If vegetation needs to be replaced, one-time spot fertilization may be needed, preferably using an organic rather than a chemical fertilizer. Each facility should have a customized routine maintenance schedule addressing issues such as the following: grass mowing, weeding, trash removal, mulch raking and maintenance, erosion repair, reinforcement plantings, tree and shrub pruning, and sediment removal.

Element of BMP	Potential Problem	Problem? Y / N	Investigated? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as necessary	Owner or professional	
	There is excessive trash and debris				Remove immediately	Owner or professional	
	There is evidence of erosion and / or bare or exposed soil				Stabilize immediately	Owner or professional	
	There are excessive landscape waste or yard clippings				Remove immediately and recycle or compost	Owner or professional	
	Oil, grease or other unauthorized substances are entering the facility				Identify and control the source of this pollution. It may be necessary to erect fences, signs, etc	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repair? Y / N	How to fix problem	Who Will Address Problem	Comments
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	Excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
Pre-Treatment (continued)	There is evidence of clogging (standing water, noticeable odors, water stains, algae or floating aquatic vegetation, or oil/grease)				Identify and eliminate the source of the problem. If necessary, remove and clean or replace the clogged material.	Professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	There is dead vegetation or exposed soil in the grass filter				Restabilize and revegetate as necessary	Owner or professional	
Inlets	Check for sediment build-up at curb cuts, gravel diaphragms or pavement edges that prevent flow from getting into the bed, and check for bypassing.				Remove sediment and correct any other problems that block inflow.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion at or around the inlet				Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	Inflow is hindered by trees and/or shrubs.				Remove woody vegetation from points of inflow and directly above underdrains. (Trees and shrubs may be located closer to the perimeter.)	Owner or professional	
Side Slopes (Annually, after major storms)	There is evidence of rill or gully erosion or bare soil				Identify the source of erosion damage and prevent it from recurring. Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	There is excess sediment accumulation				Remove immediately	Owner or professional	
	Side slopes support nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.	Professional	
Vegetation (monthly)	Plant composition is consistent with the approved plans and any stakes or wires are in good condition.				Determine if existing plant materials are at least consistent with general Bioretention design criteria and replace inconsistent species.	Professional	
	There should be 75-90% cover (mulch plus vegetation), and the mulch cover				Supplement vegetation and mulch as needed.		

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
	should be 2-3 inches deep.						

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Remediate? Y / N	How to fix problem	Who Will Address Problem	Comments
Vegetation (monthly) (continued)	There is evidence of hydrocarbons or other deleterious materials, resulting in unsatisfactory plant growth or mortality,				Replace contaminated mulch. If problem persists, test soils for hydrocarbons and other toxic substances. If excess levels are found, the soils, plants and mulch may all need to be replaced in accordance with the approved construction plans.	Professional	
	Invasive species or weeds make up at least 10% of the facility's vegetation				Remove invasive species and excessive weeds immediately and replace vegetation as needed.	Owner or professional	
	The grass is too high				Mow within a week. Grass species should be selected that have dense cover, are relatively slow growing, and require the least mowing and chemical inputs. Grass should be from 6-10 inches high.	Owner or professional	
	Vegetation is diseased, dying or dead				Remove and replace. Increase watering, but avoid using chemical fertilizers, unless absolutely necessary.	Professional	
	Winter-killed or salt-killed vegetation is present.				Replace with hardier species.	Owner or professional	
Filter Media (Annually)	The filter media is too low, too compacted, or the composition is inconsistent with design specifications				Raise the level, loosen and amend or replace the media, as needed, to be consistent with the state design criteria for Bioretention (85-88% sand 8-12% soil fines 3-5% organic matter in form of leaf compost). Other remediation options are described in the maintenance section of the state design criteria for Bioretention	Professional	
	The mulch is older than 3 years or is otherwise in poor condition				The mulch must be replaced every 2-3 years	Professional	
	There is evidence that chemicals, fertilizers, and/or oil/grease are present				Remove undesirable chemicals from media and facility immediately, and replace mulch or media as needed	Professional	
	There is excessive trash, debris, or sediment.				Remove trash and debris immediately. Check plant health and, without damaging plants, manually remove the sediment, especially if the depth exceeds 20% of the facility's design depth.	Owner or professional	
	There is evidence of concentrated flows, erosion or exposed soil				Identify the source of erosion damage and prevent it from recurring. Repair the erosion damage and reseed or otherwise restabilize with vegetation.	Professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Remediate? Y / N	How to fix problem	Who Will Address Problem	Comments
Filter Media (Annually) (continued)	The filter bed is clogged and/or filled inappropriately				Redistribute the soil substrate and remove sediment within 2 weeks.	Professional	
	The topsoil is in poor condition (e.g., the pH level is not 6-7, the composition is inappropriate, etc.)				Ensure a 3-inch surface depth of topsoil consistent with the state design criteria for Bioretention (loamy sand or sandy loam texture, with less than 5% clay content, and organic matter content of at least 2%). If the pH is less than 6.5, spread limestone.	Professional	
Underdrain/ Proper Drainage	The perforated pipe is not conveying water as designed				Determine if the pipe is clogged with debris or if woody roots have pierced the pipe. Immediately clean out or replace the pipe, as necessary.	Professional	
	The underlying soil interface is clogged (there is evidence on the surface of soil crusting, standing water, the facility does not dewater between storms, or water ponds on the surface of basin for more than 48 hours after an event).				Measure the draw-down rate of the observation well for three days following a storm event in excess of 1/2 inches in depth. After three days, if there is standing water on top but not in the underdrain, this indicates a clogged soil layer. If standing water is both on the surface and in the underdrain, then the underdrain is probably clogged. This should be promptly investigated and remediated to restore proper filtration. Grading changes may be needed or underdrain repairs made. The filter media may need to be raked, excavated and cleaned or replaced to correct the problem. Holes that are not consistent with the design and allow water to flow directly through a planter to the ground must be plugged.	Professional	
Planters	The planter is unable to receive or detain stormwater prior to infiltration. Water does not drain from the reservoir within 3-4 hours of after a storm event.				Identify and correct sources of clogging. Topsoil and sand/peat layer may need to be amended with sand or replaced all together.	Owner or professional	
	The planter has structural deficiencies, including rot, cracks, and failure, or the planter is unable to contain the filter media or vegetation				Make needed repairs immediately.	Owner or professional	
Outlet/ Overflow Spillway	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Outlet/ Overflow Spillway (continued)	There is excessive trash, debris, or sediment at the outlet				Remove immediately, and keep the contributing area free of trash and debris.	Owner or professional	
	Any grates present are in good condition				Repair or replace as necessary	Owner or professional	
Observation Well	Is the observation well still capped?				Repair, as necessary.	Professional	
Overall	Access to the Infiltration facility or its components is adequate				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	There is evidence of standing water				Fill in low spots and stabilize; correct flow problems causing ponding.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools and establish vegetation; treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> .	Owner or professional	
	Complaints from local residents				Correct real problems	Owner or professional	
	Encroachment on the bioretention area or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	

CDS Inspection & Maintenance Form

Project / Site Name: _____

Date of Inspection: ____ / ____ / ____

Location / Address: _____

CDS Model / ID: _____

Inspector Name / Affiliation: _____

Weather / Conditions: _____

1. Visual & Structural Checks

Item	Pass / Fail / N/A	Comments / Observations
Manhole covers in place & secure		
No cracks, leaks, or structural damage		
Inlet/outlet free of debris		
Deflector screen visible and unobstructed		
Oil baffle intact		
Surrounding area free of erosion/scour		

2. Sediment, Trash, Hydrocarbon, Accumulation

Item	Measurement / Depth	Threshold	Action Required?	Comments
Sediment depth (water surface to pile)		≥ 75% sump depth	Cleanout	
Oil/hydrocarbon layer thickness		Visible layer	Cleanout	
Trash/debris volume		Appreciable	Remove	
Absorbent media condition		Discolored/saturated	Replace	

3. Maintenance / Cleaning Actions

Action	Performed (Y/N)	Date	Who	Comments
Sediment removal (vacuum or pump out)				
Debris/trash removal				
Absorbent pad/media replacement				
Clean screen and baffle surfaces				
Flush/rinse chamber				
Inspect & reseal manhole covers				

4. General Observations & Follow-Up Items

- Notes on unusual conditions (e.g. evidence of vandalism, clogging, sediment hot-spot, traffic damage)
- Recommendation for increased inspection frequency (if site conditions demand more frequent checks)
- Required next inspection date
- Signature / inspector certification

5. Cumulative Log / History (for repeated inspections)

Inspection Date	Sediment Depth(ft / in)	Oil Layer	Trash Volume	Cleaned?	Comments / Notes

6. Inspector / Owner Acknowledgement

Inspector Name / Signature: _____ Date: ____ / ____ / ____

Owner / Facility Manager: _____ Date: ____ / ____ / ____

Notes: Inspections are recommended at least twice a year (Spring, Fall), with more frequent inspections if the site is susceptible to rapid sediment accumulation.

P-FIL-04 INFILTRATION PRACTICES: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Facility Location:

- ☐ Surface
☐ Underground

Hydraulic Configuration:

- ☐ On-line facility
☐ Off-line facility

Filtration Media:

- ☐ No filtration (e.g., dry well, permeable pavement, infiltration facility, etc.)
☐ Sand
☐ Bioretention Soil
☐ Peat
☐ Other: _____

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
☐ Sedimentation chamber
☐ Plunge pool
☐ Stone diaphragm
☐ Grass filter strip
☐ Grass channel
☐ Other: _____

Ideally, infiltration facilities should be inspected annually. Spill Prevention measures should be used around infiltration facilities when handling substances that contaminate stormwater. Releases of pollutants should be corrected as soon as identified.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	There is excessive trash and debris				Remove immediately	Owner or professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	Vegetative cover is adequate				Supplement as needed	Owner or professional	
	There are excessive landscape waste or yard clippings				Remove immediately and recycle or compost	Owner or professional	
Pre-Treatment Facility	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Pre-Treatment Facility (continued)	There is evidence of erosion and/or exposed soil				Stabilize immediately	Owner or professional	
	There is evidence of clogging (standing water, noticeable odors, water stains, algae or floating aquatic vegetation)				Identify and eliminate the source of the problem. If necessary, remove and clean or replace the clogged material.	Professional	
	There is dead vegetation or exposed soil in the grass filter				Restabilize and revegetate as necessary	Owner or professional	
Inlets	Inlets provide a stable conveyance into facility				Stabilize immediately, as needed.	Owner or professional	
	There is excessive trash/debris/sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion at or around the inlet				Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
Embankment, Flow Diversion Structures (e.g., Dikes, Berms, etc.) and Side Slopes	There is evidence of erosion or bare soil				Identify the source of erosion damage and prevent it from recurring. Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	There is excess sediment accumulation				Remove immediately	Owner or professional	
	Water is not detained in the infiltration basin				Check for a breach in the containment structure and repair immediately.	Professional	
	Side slopes support nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.	Professional	
Maintaining Facility Capacity and Proper Drainage	Look for weedy growth on the stone surface indicating sediment accumulation and potential clogging				Identify and control sources of sediment and debris. Remove sediment and debris in excess of 4" in depth every 2-5 years (or sooner if performance is affected).	Professional	
	Measure the draw-down rate of the observation well for three days following a storm event in excess of 1/2 inches in depth. If standing water is still observed after three days, this is a clear sign that clogging is a problem.				Immediately clear debris from the underdrain. Replace the underdrain if necessary. If needed, regrade and till to restore infiltration capacity (the need for this can be prevented by preventing upstream erosion and subsequent sediment transport to the facility).	Professional	
	There is excessive trash/debris				Remove immediately	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Vegetation	Grass within the practice is overgrown				Grass must be mowed to a height of 4"-9" and grass clippings removed (ideally recycled or composted).	Owner or professional	
	Pioneer trees are sprouting in the base of the facility				Remove trees to prevent roots from puncturing the filter fabric, allowing sediment to enter		
	Vegetation forms an overhead canopy that may drop leaf litter, fruit and other vegetative materials that may cause clogging.				Prune or remove vegetation as necessary	Owner or professional	
Observation Well	Is each observation well still capped?				Repair, as necessary.	Professional	
Outlet	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	
	Evidence of flow bypassing facility				Repair immediately	Professional	
	There is excessive trash, debris, or sediment at the outlet				Remove immediately	Owner or professional	
Overflow or Emergency Spillway	The pipe or spillway is not effectively conveying excess water to an adequate receiving system				Clear sediment and debris whenever 25% or more of the conveyance capacity is blocked. When damaged pipe is discovered, it must be repaired or replaced immediately. Identify and control sources of erosion damage. Replace or reinforce stone armament whenever only one layer of stone remains.	Professional	
Structural Components	Evidence of structural deterioration				Repair as necessary	Professional	
	Evidence of spalling or cracking of structural components				Repair or replace, as necessary	Professional	
	Grates are in good condition				Repair or replace, as necessary	Owner or professional	
Overall	Access to the Infiltration facility or its components is adequate				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that manholes, valves and/or locks can be opened and operated.	Professional and, perhaps, the locality	
	There is evidence of standing water				Fill in low spots and stabilize; correct flow problems causing ponding	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overall (continued)	Mosquito proliferation				Eliminate standing water and establish vegetation; treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> .	Owner or professional	
	Complaints from local residents				Correct real problems	Owner or professional	
	Encroachment on the infiltration area or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	

P-FIL-08 PERMEABLE PAVEMENT: O&M CHECKLIST

Inspection Date _____

Project _____

Site Plan/Permit _____

Number _____

Location _____

Date BMP Placed in _____

Service _____

Date of Last _____

Inspection _____ Inspector _____

Owner/Owner's
Representative _____

As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Ideally, each permeable pavement installation should be inspected in the Spring of each year, especially at large-scale installations.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or bare or exposed soil				Stabilize immediately.	Owner or professional	
	There is excessive landscape waste and yard clippings				Remove immediately.	Owner or professional	
Adjacent Vegetation	Trees and shrubs are within 5 feet of the pavement surface				Check that tree roots have not penetrated the pavement and leaf residue has not clogged the pavement. Vegetation that limits access or interferes with the permeable pavement operation must be pruned or removed.	Owner or Professional	
Inlets, Pre-Treatment Cells and Flow Diversion Structures	There is excessive trash, debris or sediment accumulation				Remove immediately	Owner or Professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	Evidence of clogging				Clean out sediment or debris. Remove and wash or replace stone, as needed	Professional	
Pavement Surface	Mosquito proliferation				Eliminate standing water and establish vegetation; treat for	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
					mosquitoes as needed. If sprays are considered, then use a licensed pest controller to apply an approved mosquito larvicide (<i>only if absolutely necessary</i>).		
Pavement Surface	There is evidence of erosion and / or bare or exposed soil in grid paver areas				Stabilize immediately. Mow, irrigate and apply organic (not chemical) fertilizer, as needed to keep grass healthy and dense enough to provide filtering while protecting the underlying soil. Remove any grass clippings.	Owner or professional	
	There is loose material (e.g., bark, sand, etc.) stored on the pavement surface				Remove immediately and vacuum sweep the area to prevent clogging the pavement pores.	Professional	
	Pavement is stained and/or clogged or water is ponded, indicating the pavement is not draining properly. Measure the drawdown rate in the observation well for three (3) days following a storm event that exceeds 1/2-inch of rain. If standing water is still observed in the well after three days, this is a clear sign that the pavement is clogged. There are significant amounts of sediment have accumulated between the pavers.				The surface must be kept clean and free of leaves, debris, and sediment by vacuum sweeping (without brooms or water spray) immediately and, otherwise, at a frequency consistent with the use and loadings encountered (at a minimum, annual dry-weather sweeping in the Spring). Where paving blocks are installed, the sweeper must be calibrated so it does <i>not</i> pick up the stones between the paver blocks. Following the vacuum sweeping, test pavement sections by pouring water from 5 gallon buckets, to ensure proper drainage.	Professional	
Structural Integrity	There is evidence of surface deterioration, such as slumping, cracking, spalling or broken pavers.				Repair or replace affected areas, as necessary.	Professional	
Observation Wells	Is each observation well still capped?				Repair, as necessary.	Professional	
Outlet	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	

Stormceptor Inspection & Maintenance Form

Project / Site Name: _____

Date of Inspection: ____ / ____ / ____

Location / Address: _____

Stormceptor Model / ID: _____

Inspector Name / Affiliation: _____

Weather / Conditions: _____

1. Safety / Access

Item	Condition / Notes	Action Required (Y/N)	Comments
Confined space protocols followed	☐ Yes ☐ No		
Safety grate over riser opening intact	☐ Good ☐ Damaged / Missing		
Ladder / rung access (if provided)	☐ Good ☐ Damaged / Missing		
Access hatches / covers sealed and sound	☐ Good ☐ Damaged / Loose		

2. Visual Surface Inspection

Item	Condition / Notes	Action Required (Y/N)	Comments
Inlet area free of debris	☐ Clear ☐ Obstructed		
Outlet / overflow weirs clear	☐ Clear ☐ Obstructed		
Surrounding drainage inlets / piping	☐ Good ☐ Damaged		
Erosion or scour observed	☐ None ☐ Present		
Dumping / trash accumulation	☐ None ☐ Present		

3. Internal Inspection

Item	Condition / Notes	Action Required (Y/N)	Comments
Sediment depth	_____ in		
Oil / hydrocarbon depth	_____ in		
Oil level alarm status	☐ Normal ☐ Alarm		
Free oil sheen observed	☐ None ☐ Present		
Floatables / debris inside unit	☐ None ☐ Present		

4. Maintenance / Cleaning Actions

Step	Action Taken	Notes / Observations
Pump / remove free oil	☐ Done	
Decant water for proper disposal	☐ Done	
Vacuum sediment from bottom	☐ Done	
Flush internal surfaces	☐ Done	
Refill with water (if required)	☐ Done	

5. Post Maintenance Checks

Item	Condition / Notes	Comments
Insect internal components for damage		
Check seals and gaskets replaced		
Verify access covers secure		
Record sediment / oil volumes removed		
Note any additional repairs		

6. Inspector / Owner Acknowledgement

Inspector Name / Signature: _____ Date: ____ / ____ / ____

Owner / Facility Manager: _____ Date: ____ / ____ / ____

Notes: Follow sediment and oil removal thresholds and confined space safety per Section 12 of Contech Stormceptor STC Maintenance Guide. Dispose of materials per local and state regulations

P-BAS-02 WET PONDS: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Pond characteristics and functions
 (check all that apply)

- ☐ Water quality treatment
- ☐ Extended detention included
- ☐ Channel protection
- ☐ Ties into groundwater
- ☐ Single cell pond
- ☐ Multiple-cell pond system
- ☐ Pond with one or more wetland cells

Hydraulic Configuration:

- ☐ On-line facility
- ☐ Off-line facility

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
- ☐ Vegetated buffer area
- ☐ Grass filter strip
- ☐ Grass channel
- ☐ Other: _____

During the first 6 months following construction, the pond should be inspected twice after storm events that exceed 1/2 inch of rainfall. The aquatic benches should be planted with emergent wetland species, consistent with the Wet Pond design specifications. Bare or eroding areas in the CDA or around the pond buffer should be stabilized immediately with grass cover. Trees planted in the buffer need to be watered every 3 days for the first month, and then weekly during the remainder of the first growing season (April-October), depending on rainfall. Due to typical vegetation survival problems, it is typical to plan and budget for a round of reinforcement planting during the second growing season after construction. Wet Ponds should be inspected and cleaned up annually.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as needed	Owner	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or bare or exposed soil				Stabilize immediately.	Owner or professional	
	There are excessive landscape waste and yard clippings				Remove immediately and recycle or compost	Owner or professional	
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or exposed soil.				Immediately identify and correct the cause of the erosion and stabilize the eroded or bare area.	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Pre-Treatment (continued)	Sediment deposits are 50% or more of forebay capacity.				Dredge the sediment to restore the design capacity; sediment should be dredged from forebays at least every 5-7 years, and earlier if performance is being affected.	Professional	
	The sediment marker is not vertical.				Adjust the sediment depth marker to a vertical alignment	Professional	
	There is evidence of clogging				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications	Professional	
	There is dead vegetation				Revegetate, as needed	Owner or professional	
Inlet	The inlet provides a stable conveyance into the pond				Stabilize immediately, as needed, and clear blockages.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion/undercutting at or around the inlet				Repair erosion damage and restabilize	Owner or professional	
	There is cracking, bulging, erosion or sloughing of the forebay dam.				Repair and restabilize immediately.	Professional	
	There is woody growth on the forebay dam.				Remove within 2 weeks of discovery.	Professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.	Professional	
	There is more than 1 inch of settlement.				Add fill material and compact the soil to the design grade	Owner or Professional	
	The inlet alignment is incorrect.				Correct immediately.	Owner or Professional	
Vegetation	Plant composition is consistent with the approved plans				Determine if existing plant materials are consistent with the general Wet Pond design criteria, and replace inconsistent species.	Professional	
	Invasive species are present.				Remove invasive species immediately and replace vegetation as needed.	Professional	
	Trees planted in the buffer and on wetland islands and peninsulas need watering during the first growing season				Consider watering every 3 days for first month, and then weekly during first year (April – October), depending on rainfall.	Owner or professional	
	Grass around the facility is overgrown				Mow (at least twice a year) to a height of 4"-9" high and remove grass clippings	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Vegetation (continued)	Vegetation is dead or reinforcement planting is needed.				Remove and replace dead or dying vegetation.	Professional	
Permanent Pool and Side Slopes	There is excessive trash and/or debris.				Remove immediately	Owner or professional	
	There is evidence of sparse vegetative cover, erosion or slumping side slopes.				Repair and stabilize physical damage, and reseed or plant additional vegetation.	Owner or professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Remove burrowing animals humanely from the area.		
	There is significant sediment accumulation.				Conduct a bathymetric study to determine the impact to design volumes, and dredge if necessary.	Professional	
Riser/Principle Spillway and Low-Flow Orifice(s)	There is adequate access to the riser for maintenance.				Establish adequate access	Professional and, perhaps, the locality	
	Pieces of the riser are deteriorating, misaligned, broken or missing.				Repair immediately.	Professional	
	Adjustable control valves are accessible and operational.				Repair, as needed.	Professional	
	Reverse-slope pipes and flashboard risers are in good condition.				Repair, as needed.	Professional	
	There is evidence of clogging				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specs.	Professional	
	Seepage into conduit				Seal the conduit	Professional	
	There is excessive trash, debris, or other obstructions in the trash rack.				Remove immediately.	Owner or professional	
Dam/ Embankment and Abutments	There is sparse veg. cover, settlement, cracking, bulging, misalignment, erosion rills deeper than 2 inches, or sloughing of the dam.				Repair and restabilize immediately, especially after major storms.	Professional	
	There are soft spots, seepage, boggy areas or sinkholes present.				Reinforce, fill and stabilize immediately.		
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.		
	There is woody vegetation on the embankment.				Removal of woody species near or on the embankment and maintenance access areas should be done when discovered, but at least every 2 years.		

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overflow/ Emergency Spillway	There is woody growth on the spillway.				Removal of woody species near or on the emergency spillway should be done when discovered, but at least every 2 years.	Owner or professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There is evidence of erosion/backcutting				Repair erosion damage and reseed	Owner or professional	
	There are soft spots, seepage or sinkholes.				Reinforce, fill and stabilize immediately.	Owner or professional	
	Only one layer of stone armoring exists above the native soil.				Reinforce rip-rap or other armoring materials.	Professional	
Outlet	The outlet provides a stable conveyance from the pond.				Stabilize immediately, as needed, and clear blockages.	Owner or professional	
	There is woody growth within 5 feet of the outlet pipe barrel.				Prune vegetation back to leave a clear discharge area.	Owner or Professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There are excessive sediment deposits at the outlet.				Remove sediment.	Professional	
	Discharge is causing undercutting, erosion or displaced rip-rap at or around the outlet.				Repair, reinforce or replace rip rap as needed, and restabilize.	Professional	
Overall	Access to the facility or its components is adequate.				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	Fences are inadequate				Collapsed fences must be restored to an upright position. Jagged edges and damaged fences must be repaired or replaced.	Professional	
	Water levels in one or more cells are abnormally high or low.				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications.	Professional	
	Complaints from local residents				Correct real problems.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools and stock the basin with mosquito fish to provide natural mosquito & midge control. Treat for mosquitoes as needed. If spraying, then use mosquito larvicide, (e.g., Bacillus thurendensis or Altoside formulations) <i>only if absolutely necessary</i> .	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overall (continued)	Encroachment on the pond or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	
	Safety signage is not adequate.				Provide sufficient, legible safety signage.	Owner or professional	