

Inspection and Maintenance Checklist Catch Basin Inserts

Property Address: _____

Property Owner: _____

Facility Name/Designator _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---|--|---------------------------|--|--|
| Sediment Accumulation | When sediment forms a cap over the insert media of the insert and/or unit. | | | Sediment cap is removed on the insert media and its unit. |
| Trash & Debris Accumulation | Trash and debris accumulates on insert unit creating a blockage/restriction. | | | Trash and debris removed from insert unit. Runoff freely flows into catch basin. |
| Media Insert Not Removing Oil | Effluent water from media insert has a visible sheen. | | | Effluent water from media insert is free of oils and has no visible sheen. |
| Media Insert Water Saturated | Catch basin insert is saturated with water and no longer has the capacity to absorb. | | | Media insert replaced. |
| Media Insert Oil Saturated | Media oil saturated due to petroleum spill that drains into catch basin. | | | Media insert replaced. |
| Media Insert Use Beyond Normal Product Life | Media has been used beyond the typical average life of media insert product. | | | Media insert replaced. Remove and replace media at regular intervals, depending on insert product. |

¹ Re-inspection of a previously-noted maintenance issue

Catch Basin Inserts Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

Inspection and Maintenance Checklist Conveyance Systems (Pipes & Ditches)

Property Address: _____

Property Owner: _____

Treatment Measure No: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---------------------|---|---------------------------|--|--|
| Pipes | | | | |
| Sediment and Debris | Accumulated sediment exceeds 20% of the diameter of the pipe or 20% of the openings in a debris barrier. | | | All sediment and debris removed from the pipe and/or debris barrier. |
| Vegetation | Vegetation that reduces free movement of water through pipes. | | | All vegetation removed so water flows freely through pipes. |
| Damaged Pipe | <ul style="list-style-type: none"> • Protective coating is damaged or rust is causing more than 50% deterioration to any part of pipe. • Any dent that decreases the flow area by more than 20% or puncture that impacts performance. | | | Pipe is repaired or replaced. |

¹ Re-inspection of a previously-noted maintenance issue.

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---|---|---------------------------|--|--|
| Debris Barrier | <ul style="list-style-type: none"> Debris barrier is missing or not attached to pipe. Bars are bent by more than 3 inches. Bars are loose or rust is causing 50% deterioration to any part of the barrier. | | | Barrier is replaced or repaired to design standards. Barrier is firmly attached to pipe. Bars are in place with no bends more than 3/4 inch. |
| Open Ditches | | | | |
| Trash and Debris | <ul style="list-style-type: none"> Trash and debris accumulated in basin. Visual evidence of dumping. | | | Trash and debris is cleared from ditches. |
| Sediment | Accumulated sediment that exceeds 20% of the design depth. | | | Sediment removed and discarded of properly. Ditch cleansed of all excessive standards sediment and debris so that it matches design. |
| Vegetation | Excessive vegetation that reduces free movement of water through ditches. | | | Water flows freely through ditches. |
| Erosion Damage to Slopes and Channel Bottom | Eroded damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion. | | | Slopes should be stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction. |
| Rock Lining Out of Place or Missing (If Applicable) | Native soil is visible beneath the rock lining. | | | Rock lining replaced to design standards. |

Inspection and Maintenance Checklist Drywells

Property Address: _____

Property Owner: _____

Facility Name/Designator _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|----------------------------|--|---------------------------|--|---|
| Debris and Sediment | Accumulated debris or sediment depth exceeds 2 feet or impedes flow from inlet pipes. | | | All sediment and debris removed from storage area. Runoff freely flows into and out of basin. |
| Damaged Pipes | Inlet piping damaged or broken and in need of repair. | | | Pipe repaired and/or replaced. |
| Structure | Cracks wider than 1/2-inch or maintenance/inspection personnel determine that the vault is not structurally sound. | | | Vault replaced or repaired to design specifications and is structurally sound. No cracks more than 1/2-inch wide. |
| Contaminants and Pollution | Any evidence of oil, gasoline, contaminants, or pollutants. | | | Oil and contaminants removed and properly disposed. No contaminants or pollutants present. |
| Drainage | Facility does not drain within 72 hours. | | | Evaluate infiltration capacity of the drywell and surrounding soil/rock layers. May require decommissioning and replacement of drywell. |
| Vegetation | Root systems entering drywell. | | | Remove large root systems and remove (if needed) nearby vegetation to prevent root systems from damaging structural components or blocking outflow. |
| Cover | Cover is missing or only partially in place. Cover is difficult to remove with normal lifting pressure. | | | Repair or replace cover. Manhole is closed and can be removed and reinstalled by one person to facilitate maintenance access. |

¹ Re-inspection of a previously-noted maintenance issue

Drywells Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------|--|----------------------------------|---|---|
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water in areas accessible to mosquitoes) | | | Standing water no longer exists or is inaccessible to mosquitoes. |

Inspection and Maintenance Checklist Energy Dissipators

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|------------------|--|---------------------------|--|---|
| Trash and Debris | <ul style="list-style-type: none"> • Trash and debris accumulated on rock pad. • Visual evidence of dumping. | | | <ul style="list-style-type: none"> • Trash and debris cleared from site. |
| Rock Pad | Native soil is visible below rock pad. | | | Rock pad replaced to design standards. |
| Erosion | Soil erosion adjacent to rock pad that exceeds 6 inches. Visual evidence of water discharging at concentrated points. | | | Rock pad replaced to design standards or redesigned to better control high flows. |
| Sediment | Discharge pipe is more than 20% full of sediment or debris. | | | Removal and proper disposal of sediment and debris. |
| Damaged Pipes | Any part of the discharge pipe is crushed or deformed more than 20% or any other failure of the piping. | | | Pipe repaired or replaced. |

¹ Re-inspection of a previously-noted maintenance issue.

Inspection and Maintenance Checklist Vegetated Filter Strips

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------------|--|---------------------------|--|--|
| Sediment Accumulation on Grass | Sediment depth exceeds 2 inches. | | | Sediment deposits on grass removed. |
| Vegetation | <ul style="list-style-type: none"> • Planted vegetation becomes excessively tall. • Presence of poisonous or nuisance vegetation or noxious weeds. | | | <ul style="list-style-type: none"> • Vegetation mowed per specifications or maintenance plan, so that flow is not impeded. Vegetation should never be mowed lower than the design flow depth. Remove clippings from the area and dispose appropriately. • Management of poisonous or noxious vegetation. |
| Trash & Debris Accumulation | Trash and debris accumulated on the filter strip. | | | Trash and debris removed from filter strip. |
| Erosion/ Scouring | Eroded or scoured areas due to flow channelization, or higher flows. | | | No erosion or scouring in filter strip bottom. For ruts or bare areas less than 12 inches wide, repair the damaged area by filling with crushed gravel. The grass will creep in over the rock in time. If bare areas are large, generally greater than 12 inches wide, the filter strip should be re-graded and re-seeded. For smaller bare areas, overseed when bare spots are evident. |
| Flow spreader | Flow spreader uneven or clogged so that flows are not entirely uniformly distributed through entire filter width. | | | Spreader leveled and cleaned so that flows are spread evenly over entire filter width. |

¹ Re-inspection of a previously-noted maintenance issue.

Inspection and Maintenance Report and Checklist Grassy Swale

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------|---|---------------------------|---|--|
| Sediment Accumulation | Sediment depth exceeds 2 inches. | | | Sediment deposits on vegetated treatment area of the swale removed. |
| Standing Water | Water stands in the swale between storms and does not drain freely. | | | There should be no areas of standing water once inflow has ceased. Any of the following may apply: sediment or trash blockages removed, improved grade from head to foot of swale, removed clogged check dams, added underdrains or converted to a wet swale. |
| Flow spreader (if any) | Flow spreader uneven or clogged so that flows are not uniformly distributed through entire swale width. | | | Spreader leveled and cleaned so that flows are spread evenly over entire swale width. |
| Constant Baseflow | Small quantities of water continually flow through the swale, even when it has been dry for weeks, and an eroded, muddy channel has formed in the swale bottom. | | | No eroded, muddy channel on the bottom. A low-flow pea-gravel path may be added the length of the swale. Any broken or incorrect irrigation components repaired or replaced. |
| Poor Vegetation Coverage | Planted vegetation is sparse or bare or eroded patches occur in more than 10% of the swale bottom. | | | Vegetation coverage in more than 90% of the swale bottom. Cause of problem determined and condition corrected. Sparse areas re-planted with plugs of vegetation from the upper slope: plant in the swale bottom at 8-inch intervals, or re-seed into loosened, fertile soil. |

¹ Re-inspection of a previously noted maintenance issue.

Grassy Swale Inspection Checklist

Property Address: _____

Inspection Date.: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed and if needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|-------------------------------|--|---------------------------|---|--|
| Vegetation | <ul style="list-style-type: none"> • Planted vegetation becomes excessively tall. • Presence of poisonous or nuisance vegetation or noxious weeds. | | | <ul style="list-style-type: none"> • Vegetation mowed per specifications or maintenance plan, so that flow is not impeded. Vegetation should never be mowed lower than the design flow depth. Remove clippings from the area and dispose appropriately. • Management of poisonous or noxious vegetation. |
| Inlet/Outlet | Inlet/outlet areas clogged with sediment and/or debris. | | | Material removed so that there is no clogging or blockage in the inlet and outlet areas. |
| Trash and Debris Accumulation | Trash and debris accumulated in the swale. | | | Trash and debris removed from swale. |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes). | | | Water drainage rates are restored to design standards. Standing water no longer exists or is inaccessible to mosquitoes. |
| Erosion/ Scouring | Eroded or scoured swale bottom due to flow channelization, or higher flows. | | | No erosion or scouring in swale bottom. For ruts or bare areas less than 12 inches wide, repair the damaged area by filling with crushed gravel. If bare areas are large, generally greater than 12 inches wide, the swale should be re-graded and re-seeded. For smaller bare areas, overseed when bare spots are evident, or take plugs of grass from the upper slope and plant in the swale bottom at 8-inch intervals. |

Inspection and Maintenance Checklist Green Roofs (or Roof Gardens)

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note when it will be done) | Results Expected When Maintenance Is Performed |
|------------------------------|--|---------------------------|---|--|
| Vegetation | <ul style="list-style-type: none"> Planted vegetation becomes excessively tall. Presence of poisonous or nuisance vegetation or noxious weeds. | | | <ul style="list-style-type: none"> Vegetation mowed or trimmed per specifications or maintenance plan. Remove clippings from the area and dispose appropriately. Management of poisonous or noxious vegetation. |
| Poor Vegetation Coverage | When planted vegetation is sparse or bare or eroded patches occur in more than 10% of the roof garden. | | | Vegetation coverage is more than 90% of the roof garden. The reason why growth of planted vegetation is poor has been determined and the condition corrected. |
| Membrane and Roof Structure | Membrane or roof structure is compromised by either roots and/or water damage. | | | Membrane and roof are repaired and/or replaced as needed. Many membrane companies now have warranties to guarantee the life of the membrane. |
| Drainage Inlets | Inlets to roof drainage system clogged with sediment and/or debris. | | | Material removed so that there is no clogging or blockage in the inlet and outlet areas. Repair or replace drain inlet pipe. |
| Automated Irrigation Systems | Irrigation system leaking or malfunctioning. | | | Irrigation system repaired or replaced partially or entirely if necessary. (Test automated systems to ensure proper operation). |
| Standing Water | When water stands in the green roof between storms and does not drain freely. | | | There should be no areas of standing water once inflow has ceased. Any of the following may apply: sediment or trash blockages removed, improved grade of the roof, removed clogged check dams, added underdrains or converted to a blue roof. |

¹ Re-inspection of a previously-noted maintenance issue.

Green Roofs Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note when it will be done) | Results Expected When Maintenance Is Performed |
|-----------------------------|---|---------------------------|---|--|
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes) | | | Water drainage rates are restored to design standards. Standing water no longer exists or is inaccessible to mosquitoes. |
| Trash & Debris Accumulation | Trash and debris accumulated on the roof. | | | Trash, debris and fallen leaves removed from surrounding roof area. |
| Erosion/ Scouring | Eroded or scoured areas due to wind or water. | | | No erosion or scouring on green roof. Supplement soil substrate/growth medium and control any existing erosion. |

Inspection and Maintenance Checklist Infiltration Swale/Bio-infiltration Basin

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|------------------------------------|--|---------------------------|--|--|
| Trash & Debris | <ul style="list-style-type: none"> Trash and debris accumulated in basin Visual evidence of dumping | | | Trash and debris cleared from site. |
| Contaminants and Pollution | Any evidence of oil, gasoline, contaminants or other pollutants | | | Oil and contaminants removed and properly disposed. No contaminants or pollutants present. |
| Vegetation | <ul style="list-style-type: none"> Planted vegetation becomes excessively tall. Presence of poisonous or nuisance vegetation or noxious weeds. | | | <ul style="list-style-type: none"> Vegetation mowed per specifications or maintenance plan, so that flow is not impeded. Vegetation should never be mowed lower than the design flow depth. Remove clippings from the area and dispose appropriately. Management of poisonous or noxious vegetation. |
| Tree/Brush Growth and Hazard Trees | <ul style="list-style-type: none"> Growth does not allow maintenance access or interferes with maintenance activity Dead, diseased, or dying trees | | | <ul style="list-style-type: none"> Trees do not hinder maintenance activities. Remove hazard trees as approved by the City. (Use a certified Arborist to determine health of tree or removal requirements) |
| Erosion | Eroded over 2 in. deep where cause of damage is still present or where there is potential for continued erosion. | | | Cause of erosion is managed appropriately. Areas remulched to fill in void areas. |

¹ Re-inspection of a previously-noted maintenance issue.

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------|--|---------------------------|--|--|
| Sediment | Accumulated sediment affects inletting or outletting condition of the facility. | | | Sediment removed and area reseeded if necessary to control erosion. |
| Damaged Pipes | Any part of the piping that is crushed or deformed more than 20% or any other failure to the piping. | | | Pipe repaired or replaced. |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes). | | | Water drainage rates are restored to design standards. Standing water no longer exists or is inaccessible to mosquitoes. |

Inspection and Maintenance Checklist Infiltration Trench

Property Address: _____

Property Owner: _____

Facility Name/Designator _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|----------------------------|--|---------------------------|--|---|
| Trash & Debris | <ul style="list-style-type: none"> Trash and debris accumulated in trench Visual evidence of dumping | | | Trash and debris cleared from site. |
| Sediment | Visual accumulation of sediment or sediment affects performance of the facility. | | | Sediment removed and properly disposed. May require removal, washing, and reinstallation of rock reservoirs. |
| Contaminants and Pollution | Any evidence of oil, gasoline, contaminants or other pollutants | | | Oil and contaminants removed and properly disposed. No contaminants or pollutants present. |
| Vegetation | <ul style="list-style-type: none"> Planted vegetation becomes excessively tall. Presence of poisonous or nuisance vegetation or noxious weeds. | | | <ul style="list-style-type: none"> Vegetation mowed per specifications or maintenance plan, so that flow is not impeded. Remove clippings from the area and dispose appropriately. Management of poisonous or noxious vegetation. |
| Drainage | Facility does not drain within 72 hours. | | | Evaluate infiltration capacity of the facility and surrounding soil/rock layers. Replace rock reservoirs as necessary. May require tilling of subgrade below reservoir prior to backfill. |

¹ Re-inspection of a previously-noted maintenance issue

Infiltration Trench Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------|--|---------------------------|--|---|
| Damaged Pipes | Any part of the piping that is crushed or deformed more than 20% or any other failure to the piping. | | | Pipe repaired or replaced. |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water in areas accessible to mosquitoes) | | | Standing water no longer exists or is inaccessible to mosquitoes. |

Inspection and Maintenance Checklist Media Filter (e.g., Stormfilter)

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|------------------------------------|---|---------------------------|--|---|
| Below Ground Vault | | | | |
| Sediment Accumulation on Media | Sediment depth exceeds 1/4-inch. | | | No sediment deposit which would impede permeability of the compost media. |
| Sediment Accumulation in Vault | Sediment depth exceeds 6-inches in first chamber. | | | No sediment deposits in vault bottom of first chamber. |
| Trash & Debris Accumulation | Trash and debris accumulated on compost filter bed. | | | Trash and debris removed from compost filter bed. |
| Sediment in Drain Pipes/Clean-Outs | When drain pipes and/or clean-outs become full with sediment and/or debris. | | | Sediment and debris removed. |
| Damaged Pipes | Any part of the pipes that are crushed or damaged due to corrosion and/or settlement. | | | Pipe repaired and/or replaced. |
| Access Cover Damaged/Not Working | Cover cannot be opened, corrosion/deformation of cover. | | | Cover repaired to proper working specifications or replaced. |

¹ Re-inspection of a previously-noted maintenance issue

Media Filters Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--|---|---------------------------|--|--|
| Vault Structure Damage – Includes Cracks in Walls, Bottom, Damage to Frame and/or Top Slab | <ul style="list-style-type: none"> Cracks wider than ½-inch or evidence of soil particles entering the structure through the cracks, or maintenance/inspection personnel determine that the vault is not structurally sound. Cracks wider than ½-inch at the joint of any inlet/outlet pipe or evidence of soil particles entering though the cracks. | | | <ul style="list-style-type: none"> Vault replaced or repairs made so that vault meets design specifications and is structurally sound. Vault repaired so that no cracks exist wider than ¼-inch at the joint of the inlet/outlet pipe. |
| Baffles | Baffles corroding, cracking, warping and/or showing signs of failure as determined by maintenance/inspection staff. | | | Baffles repaired or replaced to specifications. |
| 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. | | | Ladder replaced or repaired to specifications, and is safe to use as determined by inspection personnel. |
| Media Cartridges | | | | |
| Filter Media | Drawdown of water through the media takes longer than 1 hour and/overflow occurs frequently. | | | Media cartridges replaced. |
| Short Circuiting | Flows do not properly enter filter cartridges. | | | Filter cartridges replaced. |

Inspection and Maintenance Checklist Oil/Water Separators

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---|--|---------------------------|--|--|
| Monitoring | Inspection of discharge water for obvious signs of poor water quality. | | | Effluent discharge from vault should be clear without thick visible sheen. |
| Sediment Accumulation | Sediment depth in bottom of vault exceeds 6-inches in depth. | | | No sediment deposits on vault bottom or plate media (if applicable) that would impede flow through the vault and reduce separation efficiency. |
| Trash & Debris Accumulation | Trash and debris accumulation in vault, or pipe inlet/outlet, floatables and non-floatables. | | | Trash and debris removed from vault and inlet/outlet piping. |
| Oil Accumulation | Oil accumulations that exceed 1-inch at the surface of the water. | | | Extract oil from vault using vactoring methods. Coalescing plates (if applicable) are cleaned by thoroughly rinsing and flushing with water. There should be no visible oil depth on water. Disposal in accordance with state and local rules and regulations. |
| Damaged Pipes | Inlet or outlet piping damaged or broken and in need of repair. | | | Pipe repaired and/or replaced. |
| Damaged Coalescing Plates (if applicable) | Plate media broken, deformed, cracked and/or showing signs of failure. | | | An entire portion of the media pack or the entire plate pack is replaced depending on severity of failure. |
| Access Cover Damaged/Not Working | Cover cannot be opened, corrosion/deformation of cover. | | | Cover repaired to proper working specifications or replaced. |

¹ Re-inspection of a previously-noted maintenance issue.

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---|---|---------------------------|--|---|
| Vault Structure (walls, bottom, frame, and/or slab) | Cracks wider than 1/2-inch and any evidence of soil particles entering the structure through the cracks, or maintenance/inspection personnel determines that the vault is not structurally sound. | | | Vault replaced or repaired to design specifications and is structurally sound. No cracks more than 1/2-inch wide at the joint of the inlet/outlet pipe. |
| Baffles | Baffles or walls corroding, cracking, warping and/or showing signs of failure as determined by maintenance/inspection staff. | | | Baffles repaired or replaced to specifications. |
| 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. | | | Ladder replaced or repaired to specifications, and is safe to use as determined by inspection personnel. |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water in areas accessible to mosquitoes). Most likely through unsealed areas or openings. | | | Standing water no longer exists or openings are sealed to make water inaccessible to mosquitoes. |

Inspection and Maintenance Report and Checklist Ponds (Detention Pond, Infiltration Pond, Evaporation Pond, etc)

Property Address: _____

Property Owner: _____

Facility Name/Designator _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|------------------------------------|--|---------------------------|--|---|
| General | | | | |
| Trash & Debris | <ul style="list-style-type: none"> Trash or debris accumulated in basin. Visual evidence of dumping. | | | Trash and debris cleared from site and removed from pond. |
| Contaminants and Pollution | Any evidence of oil, gasoline, contaminants or other pollutants. | | | Oil removed using oil absorbent pads and properly disposed. No contaminants or pollutants present. |
| Vegetation | <ul style="list-style-type: none"> Planted vegetation becomes excessively tall. Presence of poisonous or nuisance vegetation or noxious weeds. | | | <ul style="list-style-type: none"> Vegetation mowed per specifications or maintenance plan, so that flow is not impeded. Remove clippings from the area and dispose appropriately. Management of poisonous or noxious vegetation. |
| Tree/Brush Growth and Hazard Trees | <ul style="list-style-type: none"> Growth does not allow maintenance access or interferes with maintenance activity. Dead, diseased, or dying trees. | | | <ul style="list-style-type: none"> Trees do not hinder maintenance activities. Remove hazard trees as approved by the City. (Use a certified Arborist to determine health of tree or removal requirements) |
| Fencing and Gates | Any defect in or damage to the fence or gate that permits easy entry to a facility. | | | Fencing and gate are restored to design specifications. |

¹ Re-inspection of a previously-noted maintenance issue

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---|--|---------------------------|--|--|
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes; overgrowth of cattails). | | | Water drainage rates are restored to design standards. Standing water no longer exists or is inaccessible to mosquitoes. Cattails removed or shaded out by nearby trees. |
| Storage Area | | | | |
| Erosion | Erosion of the pond's side slopes and/or scouring of the pond's bottom that exceeds 6-inches, or where continued erosion is prevalent. | | | Slopes stabilized using proper erosion control measures and repair methods. |
| Sediment | Accumulated sediment exceeds depth of sediment zone or affects inletting or outletting condition of the facility. | | | Sediment cleaned out to designed basin shape and depth; basin reseeded if necessary to control erosion. |
| Liner (If Applicable) | Liner is visible and has more than three 1/4-inch holes in it. | | | Liner repaired or replaced. Liner is fully covered. |
| Debris Barrier | <ul style="list-style-type: none"> • Bars are missing or loose. • Bars are bent out of shape more than 3 inches. • Trash or debris plugging more than 20% of the openings in the barrier. | | | Bars are repaired or replaced to allow proper functioning of barrier. Trash and debris removed from barrier. |
| Emergency Overflow/ Spillway and Berms | | | | |
| Settlement | Berm settlement 4 inches lower than the design elevation. | | | Dike is built back to the design elevation. |
| Overflow/ Spillway | Rock is missing and soil is exposed at top of spillway or outside slope. | | | Rocks and pad depth are restored to design standards. |

**Inspection and Maintenance Checklist
Porous Pavement
(e.g., turf block, modular blocks, granular pavement, porous asphalt, pervious concrete)**

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------------------|--|----------------------------------|---|--|
| Debris, Organic Matter, and Sediment | Porous pavement clogging due to debris, organic matter and sediment. | | | Vacuum sweep porous asphalt or concrete systems (with proper disposal of removed materials), followed by high pressure hosing to free pores on the surface and result in no clogging. |
| Contaminants and Pollution | Any evidence of oil, gasoline, contaminants or other pollutants | | | No contaminants or pollutants present. Spills must be vacuumed immediately and followed by jet washing. |
| Erosion | Soil from adjacent areas washed onto pavement. | | | Landscaped areas that are well maintained should prevent soil from eroding onto pavement. |
| Overflow Devices (Pipes) | Trash and debris accumulated on overflow devices. | | | Trash and debris removed from overflow devices. |
| Vegetation | When the planted vegetation becomes excessively tall; when nuisance weeds and other vegetation start to take over. | | | Vegetation mowed per specifications or maintenance plan, or nuisance vegetation removed so that flow is not impeded. Clippings removed from the porous pavement and disposed of appropriately. |
| Structural Components | Cracked or moving edge restraints. Cracked or settled pavement | | | Repair or replace cracked or shifted components per manufacturer specifications. Prevent large root systems from damaging structural components. |
| Filter Medium | Aggregate loss in pavers from settling or power washing. | | | Replace paver pore space with aggregate from original design. |

¹ Re-inspection of a previously-noted maintenance issue

Inspection and Maintenance Checklist Sedimentation Manholes/Catch Basins

Property Address: _____

Property Owner: _____

Facility Name/Designator _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|-----------------------------------|---|---------------------------|--|---|
| Debris and Sediment | Accumulated debris or sediment depth exceeds 12 inches or impedes flow from inlet or outlet pipes. | | | All sediment and debris removed from storage area. Runoff freely flows into and out of basin. |
| Damaged Pipes | Inlet or outlet piping damaged or broken and in need of repair. | | | Pipe repaired and/or replaced. |
| Joints Between Basin/Pipe Section | Any openings or voids allowing material to be transported into facility. | | | All joints between basin/pipe sections are sealed. |
| Structure | Cracks wider than 1/2-inch and any evidence of soil particles entering the structure through the cracks, or maintenance/inspection personnel determines that the vault is not structurally sound. | | | Vault replaced or repaired to design specifications and is structurally sound. No cracks more than 1/2-inch wide at the joint of the inlet/outlet pipe. |
| Contaminants and Pollution | Any evidence of oil, gasoline, contaminants, or pollutants. | | | Oil and contaminants removed and properly disposed. No contaminants or pollutants present. |
| Cover | Cover is missing or only partially in place. Cover is difficult to remove with normal lifting pressure. | | | Repair or replace cover. Manhole is closed and can be removed and reinstalled by one person to facilitate maintenance access. |

¹ Re-inspection of a previously-noted maintenance issue

Sedimentation Manholes/Catch Basin Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------------|--|---------------------------|--|---|
| Ladder | Ladder is unsafe due to missing rungs, misalignment, not securely attached to structure wall, rust, or cracks. | | | Ladder meets design standards. Allows safe maintenance access. |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water in areas accessible to mosquitoes) | | | Standing water no longer exists or is inaccessible to mosquitoes. |

Inspection and Maintenance Checklist Vaults, Tanks, and Pipes

Property Address: _____

Property Owner: _____

Facility Name/Designator: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|----------------------------------|--|---------------------------|--|---|
| Storage Area | | | | |
| Plugged Air Vents | One-half of the cross section of a vent is blocked at any point or the vent is damaged. | | | Vents open and functioning. |
| Debris and Sediment | Accumulated sediment depth exceeds 10% if the of the storage depth for ½ length of storage vault or any point depth exceeds 15% of storage depth. ² | | | All sediment and debris removed from storage area. |
| Joints Between Tank/Pipe Section | Any openings or voids allowing material to be transported into facility. | | | All joints between tank/pipe sections are sealed. |
| Tank Pipe | Any part of tank/pipe is bent out of shape more than 10% of its design shape. | | | Tank/pipe repaired or replaced to design. Review by engineer to determine structural stability. |

¹ Re-inspection of a previously-noted maintenance issue

² Example: 72-inch storage tank would require cleaning when sediment reaches depth of 7 inches for more than ½ of tank length.

Vaults, Tanks and Pipes Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|---|---|---------------------------|--|---|
| Vault Structure (walls, bottom, frame, and/or slab) | Cracks wider than 1/2-inch and any evidence of soil particles entering the structure through the cracks, or maintenance/inspection personnel determines that the vault is not structurally sound. | | | Vault replaced or repaired to design specifications and is structurally sound. No cracks more than 1/2-inch wide at the joint of the inlet/outlet pipe. |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water in areas accessible to mosquitoes) | | | Standing water no longer exists or is inaccessible to mosquitoes. |
| Manhole | | | | |
| Cover | Cover is missing or only partially in place. Cover is difficult to remove with normal lifting pressure. | | | Repair or replace cover. Manhole is closed and can be removed and reinstalled by one person to facilitate maintenance access. |
| Locking Mechanism | 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). | | | Mechanism opens with proper tools. |
| Ladder | Ladder is unsafe due to missing rungs, misalignment, not securely attached to structure wall, rust, or cracks. | | | Ladder meets design standards. Allows safe maintenance access. |

Inspection and Maintenance Checklist Wet Ponds

Property Address: _____

Property Owner: _____

Treatment Measure No: _____ Date of Inspection: _____ Type of Inspection: Pre-rainy season Monthly Quarterly
 Annual Re-inspection¹

Inspector(s): _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|--------------------|--|---------------------------|--|--|
| Water level | First cell is empty, doesn't hold water. | | | Line the first cell to maintain at least 4 feet of water. Although the second cell may drain, the first cell must remain full to control turbulence of the incoming flow and reduce sediment resuspension. |
| Trash & Debris | Trash and debris accumulated in pond. | | | Trash and debris removed from pond. |
| Sediment | Accumulated sediment exceeds depth of sediment zone or affects inletting or outletting condition of the facility. | | | Sediment cleaned out to designed basin shape and depth; basin reseeded if necessary to control erosion. |
| Oil Sheen on Water | Prevalent and visible oil sheen. | | | Oil removed from water using oil-absorbent pads or vactor truck. Source of oil located and corrected. If chronic low levels of oil persist, plant wetland plants such as <i>Juncus effusus</i> (soft rush) which can uptake small concentrations of oil. |
| Erosion | Erosion of the pond's side slopes and/or scouring of the pond's bottom that exceeds 6-inches, or where continued erosion is prevalent. | | | Slopes stabilized using proper erosion control measures and repair methods. |
| Settlement | Berm settlement 4 inches lower than the design elevation. | | | Dike is built back to the design elevation. |

¹ Re-inspection of a previously-noted maintenance issue

Wet Ponds Inspection Checklist

Property Address: _____

Inspection Date: _____

Facility Name/Designator: _____

| Defect | Conditions When Maintenance Is Needed | Maintenance Needed? (Y/N) | Comments (Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done) | Results Expected When Maintenance Is Performed |
|------------------------------------|--|---------------------------|--|--|
| Internal Berm | Berm dividing cells should be level. | | | Berm surface is leveled so that water flows evenly over entire length of berm. |
| Overflow/ Spillway | Rock is missing and soil is exposed at top of spillway or outside slope. | | | Rocks and pad depth are restored to design standards. |
| Tree/Brush Growth and Hazard Trees | <ul style="list-style-type: none"> • Growth does not allow maintenance access or interferes with maintenance activity. • Dead, diseased, or dying trees. | | | <ul style="list-style-type: none"> • Trees do not hinder maintenance activities. • Remove hazard trees as approved by the City. (Use a certified Arborist to determine health of tree or removal requirements) |
| Mosquito Vector Breeding | Suitable habitats exist for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes; presence of excessive cattails or other vegetation precluding access for vector control purposes.) | | | Standing water no longer exists or is inaccessible to mosquitoes. Vegetation controlled using IPM techniques. |
| Liner (If Applicable) | Liner is visible and has more than three 1/4-inch holes in it. | | | Liner repaired or replaced. Liner is fully covered. |
| Debris Barrier | <ul style="list-style-type: none"> • Bars are missing or loose. • Bars are bent out of shape more than 3 inches. • Trash or debris plugging more than 20% of the openings in the barrier. | | | Bars are repaired or replaced to allow proper functioning of barrier. Trash and debris removed from barrier. |
| Fencing and Gates | Any defect in or damage to the fence or gate that permits easy entry to a facility. | | | Fencing and gate are restored to design specifications. |