

# Energy Dissipaters

Date Inspected \_\_\_\_\_

| Drainage System Feature | Potential Defect                                  | Conditions When Maintenance Is Needed  | Results Expected When Maintenance Is Performed Or Not Needed                        | <input checked="" type="checkbox"/> |
|-------------------------|---|--|---|-------------------------------------|
| <b>External:</b>        |   |  |   |                                     |
| Rock Pad                | Missing or Moved Rock                             | Only one layer of rock exists above native soil in area five square feet or larger, or any exposure of native soil.  | Rock pad replaced to design standards.  | <input type="checkbox"/>            |
|                         | Erosion   | Soil erosion in or adjacent to rock pad.   | Rock pad replaced to design standards.  | <input type="checkbox"/>            |
| Dispersion Trench       | Pipe Plugged with Sediment                        | Accumulated sediment that exceeds 20% of the design depth.   | Pipe cleaned/flushed so that it matches design.                                     | <input type="checkbox"/>            |
|                         | Not Discharging Water Properly                    | Visual evidence of water discharging at concentrated points along trench (normal condition is a "sheet flow" of water along trench). Intent is to prevent erosion damage.  | Trench redesigned or rebuilt to standards.  | <input type="checkbox"/>            |
|                         | Perforations Plugged.                             | Over 1/2 of perforations in pipe are plugged with debris and sediment.   | Perforated pipe cleaned or replaced.  | <input type="checkbox"/>            |
|                         | Water Flows Out Top of "Distributor" Catch Basin. | Maintenance person observes or receives credible report of water flowing out during any storm less than the design storm or its causing or appears likely to cause damage.   | Facility rebuilt or redesigned to standards.  | <input type="checkbox"/>            |
|                         | Receiving Area Over-Saturated                     | Water in receiving area is causing or has potential of causing landslide problems.   | No danger of landslides.  | <input type="checkbox"/>            |
| <b>Internal:</b>        |   |  |   |                                     |
| Manhole/ Chamber        | Worn or Damaged Post, Baffles, Side of Chamber    | Structure dissipating flow deteriorates to 1/2 of original size or any concentrated worn spot exceeding one square foot, which would make structure unsound.   | Structure replaced to design standards.   | <input type="checkbox"/>            |
| General                 | Trash and Debris                                  | Trash or debris which is located immediately in front of the catch basin opening or is blocking inletting capacity of the basin by more than 10%.  | No trash or debris located immediately in front of catch basin or on grate opening. | <input type="checkbox"/>            |
|                         |   | Trash or debris (in the basin) that exceeds 60% of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of six inches clearance from the debris surface to the invert of the lowest pipe. | No trash or debris in the catch basin.  | <input type="checkbox"/>            |
|                         |   | Trash or debris in any inlet or outlet pipe blocking more than 1/3 of its height.  | Inlet and outlet pipes free of trash or debris.                                     | <input type="checkbox"/>            |

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| General                 | Trash and Debris                           | Dead animals or vegetation that could generate odors that could cause complaints or dangerous gases (e.g., methane).  | No dead animals or vegetation present within the catch basin.              | <input type="checkbox"/>            |
|                         | Sediment                                   | Sediment (in the basin) that exceeds 60% of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of 6 inches clearance from the sediment surface to the invert of the lowest pipe. | No sediment in the catch basin.  | <input type="checkbox"/>            |
|                         | Structure Damage to Frame and/or Top Slab  | Top slab has holes larger than two square inches or cracks wider than 1/4 inch<br><br>(Intent is to make sure no material is running into basin).   | Top slab is free of holes and cracks.                                      | <input type="checkbox"/>            |
|                         |  | Frame not sitting flush on top slab, i.e., separation of more than 3/4 inch of the frame from the top slab. Frame not securely attached.  | Frame is sitting flush on the riser rings or top slab and firmly attached. | <input type="checkbox"/>            |
|                         | Fractures or Cracks in Basin Walls/ Bottom | Maintenance person judges that structure is unsound.  | Basin replaced or repaired to design standards.                            | <input type="checkbox"/>            |
|                         |  | Grout fillet has separated or cracked wider than 1/2 inch and longer than one foot at the joint of any inlet/outlet pipe or any evidence of soil particles entering catch basin through cracks.   | Pipe is regouted and secure at basin wall.                                 | <input type="checkbox"/>            |
|                         | Settlement/ Misalignment                   | If failure of basin has created a safety, function, or design problem.  | Basin replaced or repaired to design standards.                            | <input type="checkbox"/>            |
|                         | Vegetation                                 | Vegetation growing across and blocking more than 10% of the basin opening.  | No vegetation blocking opening to basin.                                   | <input type="checkbox"/>            |
|                         |  | Vegetation growing in inlet/outlet pipe joints that is more than six inches tall and less than six inches apart.  | No vegetation or root growth present.                                      | <input type="checkbox"/>            |
|                         | Contaminants and Pollution                 | Any evidence of oil, gasoline, contaminants or other pollutants (Coordinate removal/cleanup with local water quality response agency).  | No contaminants or pollutants present.                                     | <input type="checkbox"/>            |

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|------------------------------|-------------------------------|---|--|-------------------------------------|
| Catch Basin Cover            | Cover Not in Place            | Cover is missing or only partially in place. Any open catch basin requires maintenance.   | Catch basin cover is closed.   | <input type="checkbox"/>            |
|                              | 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.                       | Mechanism opens with proper tools.                                       | <input type="checkbox"/>            |
|                              | Cover Difficult to Remove     | One maintenance person cannot remove lid after applying normal lifting pressure (Intent is to keep cover from sealing off access to maintenance). | Cover can be removed by one maintenance person.                          | <input type="checkbox"/>            |
| Ladder                       | Ladder Rungs Unsafe           | Ladder is unsafe due to missing rungs, not securely attached to basin wall, misalignment, rust, cracks, or sharp edges.                           | Ladder meets design standards and allows maintenance person safe access. | <input type="checkbox"/>            |
| Metal Grates (If Applicable) | Grate opening Unsafe          | Grate with opening wider than 7/8 inch.   | Grate opening meets design standards.                                    | <input type="checkbox"/>            |
|                              | Trash and Debris              | Trash and debris that is blocking more than 20% of grate surface inletting capacity.  | Grate free of trash and debris.  | <input type="checkbox"/>            |
|                              | Damaged or Missing            | Grate missing or broken member(s) of the grate.   | Grate is in place and meets design standards.                            | <input type="checkbox"/>            |