



## CATCH BASIN CLEANING GUIDANCE



***Introduction:*** A catch basin, storm drain inlet or curb inlet, is an opening to the storm drain system that typically includes a grate or curb inlet at street level where storm water enters the catch basin and a sump captures sediment, debris and associated pollutants. Catch basins are able to prevent trash and other floatable materials from traveling within the drainage system by capturing such debris by way of a hooded outlet. In order to maintain the pollutant removal effectiveness of catch basins, these must be periodically cleaned. Periodic cleaning is necessary to prevent storm sewer blockages and minimize the amount of pollutants being discharged into local streams and waterways.

The Rhode Island Pollutant Discharge Elimination System (RIPDES) Stormwater Phase II Regulations require that operators of Small Municipal Separate Stormwater Systems (MS4s) annually inspect catch basins and clean them if necessary.

***Maintenance of Catch Basins:*** Typical maintenance of a catch basin includes the removal of solids such as gravel, sand, oils, and organic material, trash and sediments collected in the sump using a clamshell bucket, a vactor truck and/or manual cleaning.

***Removal and disposal of non-contaminated water from Catch Basins:*** Prior to the removal of any material the catch basin must be visually inspected to ensure the water in the sump has not been contaminated. If necessary, a grab sample of the water should be collected and evaluated for signs of contamination such as visible sheen, discoloration, obvious odor, etc. If there is any doubt of the quality of the water, water should be collected into a containment truck and disposed off-site as waste.

After water in the sump is confirmed to be non-contaminated, a sump pump, or any other pumping mechanism, can be used to remove the majority of water in the sump of the basin without disturbing the solid material below. If a vactor truck is being used for the removal of solids pumps connected to the vactor truck's holding tank should not be used when removing the non-contaminated water.

The clear water may then be directly discharged to one of the following:

- Sanitary sewer system (if allowed by the local sewer authority). If discharge to the sanitary sewer system is prohibited by the sewer use ordinance, the local sewer authority must be contacted for guidance on acceptable disposal options.
- Pervious area near the catch basin, evenly distributed at a maximum rate of 250 gallons/acre/year, such that the clean water naturally infiltrates. This discharge is only allowed if the water is not mixed with the solids at any point.

**Removal and disposal of the Remaining Material:** The remaining solid slurry in the sump should be collected with a vactor truck, clam shell and/or manually, contained and disposed of off-site.

The following options are recommended to properly deal with the slurry generated during the cleaning of catch basins:

- Request permission from the local wastewater treatment plant operator to discharge the slurry waste into the sanitary system. Most treatment plants will require pre-treatment prior to the discharge. All applicable local ordinance provisions must be followed.
- Have the waste transported to locations where drying/infiltration beds are used to separate the solid/liquid waste. This may be performed at a centralized public works facility or at a privately-owned facility where the liquid portion of the waste stream is separated from the solids and the location of the drying beds is adequate to contain both sediment and liquid and prevent the discharge to a watercourse or wetland. Drying beds must meet the minimum separation setbacks listed in Table 5-2 of the December 2010 Rhode Island Stormwater Design and Installation Standards Manual.

**Acceptable Uses for catch basin slurry.** The dried solids can then be reused in the following ways without a requirement of analytical testing of petroleum hydrocarbon content, Toxicity Characteristic Leaching Procedure, and total lead content:

- Landfill cover material (may require screening);
- Road base or any base course application that will be covered with an asphalt or concrete layer;
- Backfill for public works construction projects such as drain pipes, culverts, and other drainage structures;
- Excess sand for resurfacing projects may be mixed with salt and reused for winter storm operations;
- Mixed with new or virgin sand and salt and reapplied during winter storm operations.

**Restrictions:**

- The discharge of decant wastewater and/or any other wastewater associated with catch basin maintenance to a watercourse, wetland, or returned to a catch basin or storm drain system is prohibited.
- Dried solids piles must be enclosed or covered to prevent exposure to wind and/or precipitation.
- Catch basin cleanings may not be used as an unrestricted clean fill that may be placed in areas that will expose the cleanings to human contact.
- RIDEM/ RIPDES Program must be contacted prior to the cleaning and disposal of material from catch basins located at industrial facilities as defined in Rule 31 Rule 31(b)(15)(i)-(ix) and (xi) of the RIPDES Regulations for site specific restrictions and/or recommendations.