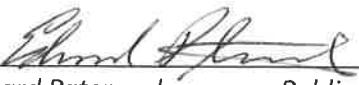


Standard Operating Procedures <i>Town of Dracut</i> <i>Department of Public Works</i> Catch Basin Inspection and Cleaning Approved by: The Stormwater Committee	SOP Number: 3	Issue Date: June 30, 2019
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Edward Patenaude Public Works Director


Tina Douk Stormwater Manager

Purpose:

Catch basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe. Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of suspended solids, nutrients, and bacteria to receiving waters.

During regular cleaning and inspection procedures, data can be gathered related to the condition of the physical basin structure and its frame and grate and the quality of stormwater conveyed by the structure. Observations such as the following can indicate sources of pollution within the storm drain system:

- Oil sheen
- Discoloration
- Trash and debris

Both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear "blocky". Bacterial sheen is not a pollutant but should be noted.

Observations such as the following can indicate a potential connection of a sanitary sewer to the storm drain system, which is an illicit discharge.

- Indications of sanitary sewage, including fecal matter or sewage odors
- Foaming, such as from detergent
- Optical enhancers, fluorescent dye added to laundry detergent

Each catch basin should be cleaned and inspected at least annually. Catch basins in high-use areas may require more frequent cleaning. Catch Basins will be tracked annually for inspections and cleanings. Catch Basins that are at 50% capacity or more will be scheduled for more frequent cleanings. Performing street sweeping on an appropriate schedule will reduce the amount of sediment, debris, and organic matter entering the catch basins, which will in turn reduce the frequency with which structures need to be cleaned.

Cleaning Procedure

Catch basin inspection cleaning procedures should address both the grate opening and the basin's sump. Document any and all observations about the condition of the catch basin structure and water quality on the Catch Basin Inspection Form (attached).

Catch basin inspection and cleaning procedures include the following:

1. Work upstream to downstream.
2. Clean sediment and trash off grate.
3. Visually inspect the outside of the grate.
4. Visually inspect the inside of the catch basin to determine cleaning needs.
5. Inspect catch basin for structural integrity.
6. Determine the most appropriate equipment and method for cleaning each catch basin.
 - a. Manually use a shovel to remove accumulated sediments, or
 - b. Use a clam shell to remove accumulated sediments, or
 - c. Use a high pressure washer to clean any remaining material out of the catch basin while capturing the slurry with a vacuum.
 - d. If necessary, after the catch basin is clean, use the rodder of the vacuum truck to clean downstream pipe and pull back sediment that might have entered downstream pipe.
7. If contamination is suspected, chemical analysis will be required to determine if the materials comply with the Massachusetts DEP Hazardous Waste Regulations, 310 CMR 30.000. Chemical analysis required will depend on suspected contaminants. Note the identification number of the catch basin on the sample label, and note sample collection on the Catch Basin Inspection Form. (<http://www.mass.gov/dep/service/regulations/310cmr30.pdf>).
8. Properly dispose of collected sediments. See following section for guidance.
9. If fluids collected during catch basin cleaning are not being handled and disposed of by a third party, dispose of these fluids to a sanitary sewer system, with permission of the system operator.
10. If illicit discharges are observed or suspected, notify the Stormwater Manager, Tina Douk at 978-735-6871 or Tdouk@dracutma.gov. At the end of each day, document location and number of catch basins cleaned, amount of waste collected, and disposal method for all screenings.
11. Report additional maintenance or repair needs to the appropriate Department.

Disposal of Screenings

Catch basin cleanings from storm water-only drainage systems may be disposed at any landfill that is permitted by MassDEP to accept solid waste. MassDEP does not routinely require stormwater-only catch basin cleanings to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means.

Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed to prevent pollution.

Record Keeping and Documentation

1. Catch Basin Inspection Form
2. Maintain a master list of all CB's in the Town of Dracut. The master list is located at: The Department of Public Works – 833 Hildreth St. Dracut, MA 01826
3. Measures – weight of solid debris removed and total number of catch basins cleaned.
1. Contracts/PO's of contracted company cleaning and disposal manifests. This information is located at: The Department of Public Works – 833 Hildreth St. Dracut, MA 01826.

Job No.: _____

Inspector: _____

Date: _____

Town of Dracut

Catch Basin I.D.				Final Discharge from Structure? Yes <input type="checkbox"/> No <input type="checkbox"/>		If Yes, Discharge to Outfall No: _____	
Catch Basin Label:		Stencil <input type="checkbox"/>	Ground Inset <input type="checkbox"/>	Sign <input type="checkbox"/>	None <input type="checkbox"/>	Other _____	
Basin Material:	Concrete <input type="checkbox"/>	Catch Basin Condition:	Good <input type="checkbox"/>	Fair <input type="checkbox"/>	Poor <input type="checkbox"/>		Crumbling <input type="checkbox"/>
	Corrugated metal <input type="checkbox"/>				Fair <input type="checkbox"/>		Crumbling <input type="checkbox"/>
Pipe Material:	Stone <input type="checkbox"/>	Pipe Measurements:	Is there a Hood: Yes <input type="checkbox"/> No <input type="checkbox"/>		Inlet Dia. (in): d= _____		
	Brick <input type="checkbox"/>		Fair <input type="checkbox"/>		Crumbling <input type="checkbox"/>	Outlet Dia. (in): D= _____	
Other: _____							
Required Maintenance/ Problems (check all that apply):				<input type="checkbox"/> Cannot Remove Cover <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Remove Trash & Debris <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Brick/Mortar Required Other: _____			
Catch Basin Grate Type :		Sediment Buildup Depth :		Description of Flow:		Street Name/ Structure Location:	
Bar: <input type="checkbox"/>	Cascade: <input type="checkbox"/>	0-6 (in): <input type="checkbox"/>	6-12 (in): <input type="checkbox"/>	12-18 (in): <input type="checkbox"/>	18-24 (in): <input type="checkbox"/>	24 + (in): <input type="checkbox"/>	Heavy <input type="checkbox"/> Moderate <input type="checkbox"/> Slight <input type="checkbox"/> Trickling <input type="checkbox"/>
Other: _____							
Properly Aligned: Yes <input type="checkbox"/> No <input type="checkbox"/>							
*If the outlet is submerged check yes and indicate approximate height of water above the outlet invert. h above invert (in): _____						Yes <input type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> Flow <input type="checkbox"/> Standing Water (check one or both)		Observations:				Circle those present:	
		Color: _____				Foam	Oil Sheen
		Odor: _____				Sanitary Waste	Bacterial Sheen
Weather Conditions :		Dry > 24 hours <input type="checkbox"/>	Wet <input type="checkbox"/>			Orange Staining	Floatables
Sample of Screenings Collected for Analysis? Yes <input type="checkbox"/> No <input type="checkbox"/>						Excessive sediment	Pet Waste
Comments:						Other: _____	Optical Enhancers

