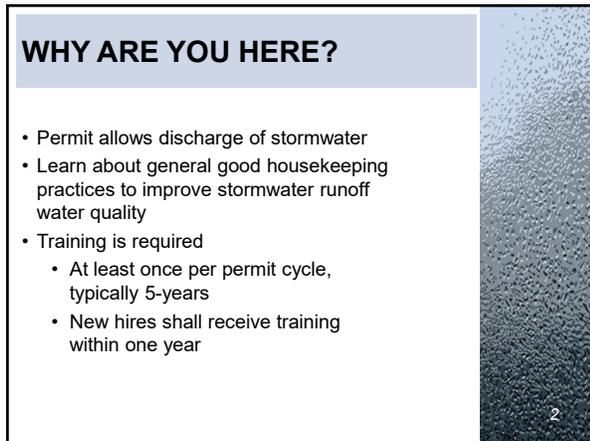
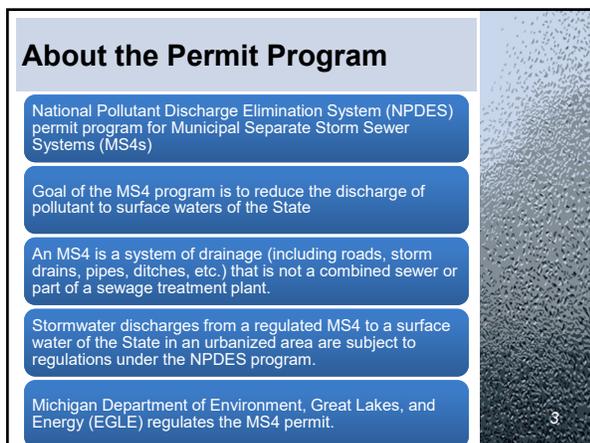




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Why We Care About Pollution Prevention

- Rainwater from storm events flows to surface water bodies
- Keeping pollution out of stormwater protects rivers and lakes

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Activities contributing to "urban" stormwater runoff pollution

- Road maintenance
- Vehicle fleet management
- Fueling and vehicle repair
- Loading, transfer & storage
- Waste management
- Painting and coating
- Cleaning and degreasing
- Facility, park, landscape maintenance

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Common Stormwater Pollutants

 Litter	 Pesticides	 Oils and grease	 Sewage and grey water
 Chemicals from landscaping, pressure washing, auto repair, salvage yards, etc.	 Domestic animal waste	 Improperly disposed household chemicals	 Soil erosion

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Permit Components

1. Inventory of facilities and control measures
(submitted with permit application)
2. Facility specific stormwater management
(topic of next workshop)
3. Structural O&M
4. General O&M
5. Management of vegetated properties
6. Employee Training
7. Contractor Requirements

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Catch Basins and Storm Drains Structural Controls



Best Management Practice

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Catch Basins

Designed to catch pollutants in a sump
Visually inspect before cleaning
Clean when sump is 1/3 full
Collect and properly dispose waste material (liquid and solid)
 drying beds → solid waste landfill
 wastewater treatment plant



Solid/liquid waste defined as "liquid industrial by-product" under Part 121 of NREPA
Refer to EGLE for additional information

EGLE
 ENVIRONMENTAL PROTECTION
 DIVISION
CATCH BASIN CLEANING ACTIVITIES
 GUIDANCE

INTRODUCTION

This document is a guidance document for catch basin cleaning activities. It is intended to provide information to permittees, permittees, and other interested parties. The document is not intended to be a substitute for the permit conditions. The permit conditions are the only enforceable requirements. The permit conditions are the only enforceable requirements. The permit conditions are the only enforceable requirements.

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Spill Prevention

1 Fueling Areas	
<i>Protect Nearby Catch Basins/ Storm Sewers. Have absorbent material available. Train Staff to Use Material</i>	
2 Parking Areas	
<i>Keep Drip Pans Nearby and Accessible. Have Absorbent Material Available.</i>	

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Spill Prevention

3 Material Loading Areas	
<i>Load or Unload Away From Catch Basins/Storm Sewers. Load indoors if possible.</i>	

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Spill Control & Response

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Spill Response

Have a Spill Response Plan in Place with Contact Names and Numbers in Case of a Spill.

Make Spill Control Materials Available and Train Personnel to Use Them.



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Spill Notification

Keep Records of All Spills and Retain Records For 3 Years.

- What Was Spilled and When
- How Much Spilled
- When The Spill Occurred
- How Was it Cleaned Up



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Vehicle Fueling

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Vehicle Fueling

Signage (location of spill kit and spill response)
Have a Fuel Spill Kit Available at All Fueling Stations.
Dispose of Used Absorbent Properly.



Store Small Fuel Containers Under Cover in a Fire-proof Cabinet.

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Vehicle & Equipment Maintenance

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Keep it Neat!

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Vehicle & Equipment Maintenance

Outdoor Maintenance

- Mowers, Tractors, Plows
- Away from Catch Basins, Catch Drippings, Sweep and Dispose.

Indoor Maintenance*

- Trucks and Vehicles
- Catch Drippings, Apply Absorbent, Dispose of Waste Properly.

*Indoor maintenance is preferred over working outdoors

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Vehicle & Equipment Washing

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Vehicle & Equipment Washing

- Never Rinse Wash Water to a Storm Sewer.**
- Rinse Wash Water to a Sanitary Sewer.**
- Use Commercial Wash Facility.**

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Materials Management

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Outdoor Storage



Road Salt	1
Store Under Roof or Tarp	
Mulch or Topsoil	2
Contain with Berm Away From Catch Basin	
Fuel	3
Approved Storage, Protect Catch Basins	

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Indoor Materials Storage Solutions



Order Materials "As Needed" in Small Quantities	1
Store Neatly on Shelving Unit or Pallet	2
Clean up Spills Immediately	3
Haul Waste on a Regular Schedule	4

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Waste Management

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Waste Receptacles

Problem Areas
Dumpster Lid Left Open
Liquids Put in Dumpster
Located Near Catch Basin



Solutions
Close Lid When Not in Use
No Liquids in Trash Dumpsters
Locate Dumpster Away From Catch Basin

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Uncontainerized Wastes

KEEP OUT of Catch Basins

All Wash Water
Concrete Wash and Asphalt
Grass Clippings, Landscape Waste
Over-Applied Fertilizers, Pesticides, and Herbicides



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Municipal Facility Maintenance

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Municipal Facility Maintenance

Facility	Protection Measures
1 Municipal site Garages, Fire/Rescue and Police	1 Wash Water in Sanitary, Keep Dumpster Lids Closed, Proper Material Storage, Spill Kits for Fueling Areas
2 Office site Municipal and Administrative Buildings	2 No Liquid Waste in Dumpster, Keep Lids Closed, No Cleaning Waste in Catch Basin
3 Open space / Park Sport Fields, Playgrounds, Parks	3 Leave buffer when Mowing Around Water Feature, Protect Storm Drains from Clippings, Don't Over-Apply Fertilizer, Pesticides or Herbicides
4 Transportation stations School Bus, Municipal Transportation Yards	4 Spill Kits Available, Drip Pans for Leaks, Keep Dumpster Lids Closed

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Landscaping & Grounds Maintenance

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Landscaping



Mowing 1

Use Mulching Mower, Blow Clippings Back on Grass, Leave Buffer Around Water, Don't Mow When Ground is Wet

Fertilizer and Pesticide Application 2

Apply Only When Necessary, Sweep Up Excess, Follow Application Guidelines

Permits / Certificates 3

Michigan Department of Agriculture (MDA) Pesticide/Herbicide Application Certificate

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Landscaping Wastes



Disposal 1

*Don't Blow Clippings into Street, Catch Basin or Water
Mulch When Possible*

Composting 2

*Compost Leaves and Yard Debris Away From Water and Catch Basins.
Berm Composting Area if Possible*

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Questions?

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Additional Information

- [GCDC Surface Water Management \(gcdcswm.com\)](http://gcdcswm.com)
- www.ClearGeneseeWater.org
- [EGLE - Municipal Program / MS4 Compliance Assistance \(michigan.gov\)](http://michigan.gov)



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end of slideshow



STORMWATER POLLUTION PREVENTION

MS4

Genesee County SWM

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