Pollution Prevention/Good Housekeeping for Municipal Operations

Licking County & Others MS4

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Agenda

- Sign In
- Introduction
- Stormwater Management Program Overview
- Stormwater Pollution Prevention Plan
- Video: Best Management Practices
- Discussion
- Quiz
- Questions
- Adjourn

Why are we here?

- Licking County has a contortium of small MS4 communities/entities working in partnership
- MSSSS (MS4) = Municipal Separate Storm Sewer System
- MS4 includes all conveyances of stormwater
 - roads with drainage systems
 - municipal streets
 - catch basins or storm drains
 - curbs and gutters
 - man-made channels
- National Pollutant Discharge Elimination System (NPDES) Phase II permit required to discharge stormwater

Licking County & Others Permit

- Co-permittees with coverage under the "Licking County and Others" MS4 permit include:
- LCEO, LC Hwy. Dept., LCSWCD, LCPC, Health Dept., Recycling, Commissioners Office, SWLCWS
- 3 villages (Buckeye Lake, Granville, and Hebron)
- 7 townships (Etna, Granville, Licking, Madison, Newark, Newton, and Union)

SWMP – Stormwater Management Program

- Ohio EPA requires permittees and co-permittees to create a Stormwater Management Program outlining how the permittees will maintain or improve water quality within their jurisdiction
- SWMPs are structured to include six Minimum Control Measures (MCMs) designed to reduce the discharge of pollutants into receiving water bodies

Six Minimum Control Measures:

- MCM #I Public Education & Outreach
- MCM #2 Public Participation & Involvement
- MCM #3 Illicit Discharge Detection & Elimination
- MCM #4 Construction Site Runoff Control
- MCM #5 Post-Construction Stormwater

 Management
- MCM #6 Pollution Prevention/Good Housekeeping

MCM #6 Requirements

- Implement an O&M program to prevent or reduce pollutant runoff from municipal operations
 - Controls for:
 - Streets and municipal parking lots
 - Maintenance and storage yards
 - Waste transfer stations
 - Fleet or maintenance shops
 - Salt and sand storage locations
 - Procedures for proper disposal of waste removed from your MS4 and/or municipal operation

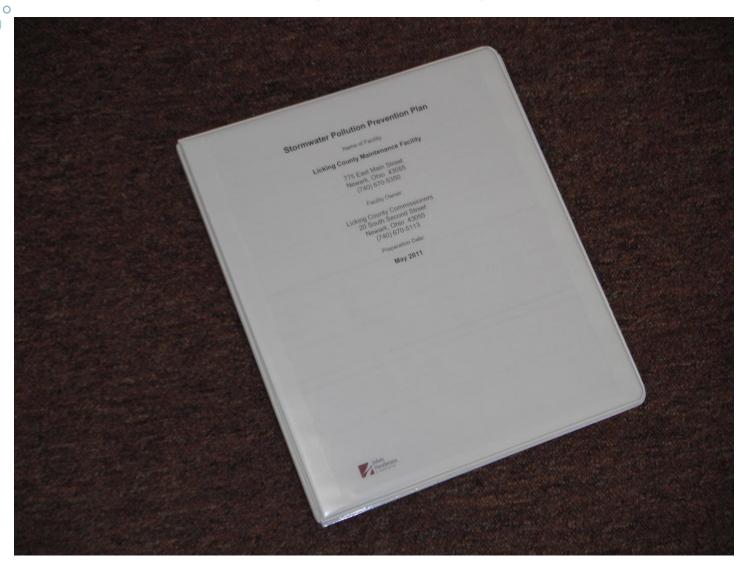
MCM #6 Requirements

- Conduct employee training on stormwater pollution prevention at least once per year
 - Target audience:
 - Municipal facility operations
 - Fleet & building maintenance
 - Stormwater system maintenance
 - New construction & land disturbance
 - Park & open space maintenance

MCM #6 Training Requirement

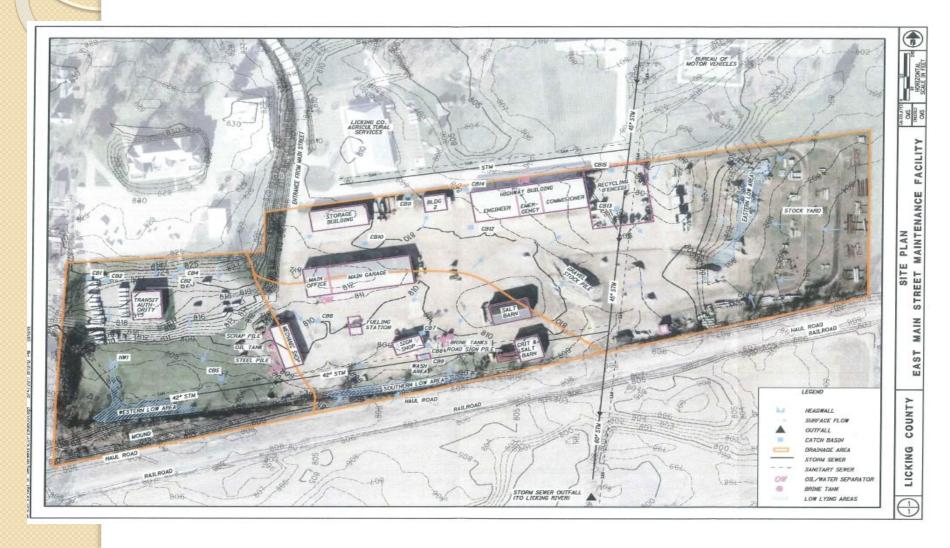
- Best Management Practices (BMPs):
 - Good Housekeeping & Spill Prevention
 - Vehicle & Equipment Washing
 - Vehicle & Equipment Maintenance
 - Spill Reporting & Response
 - Street Maintenance (including storm sewers & ditches)
 - Outdoor Storage of Materials & Wastes
 - Landscaping & Lawn Care
 - Illicit Discharge Detection

Stormwater Pollution Prevention Plan (SWPPP)



SWPPP

3.0 Description of Municipal Facility Operations Location Map, Site Map:



- 4.0 Potential Pollutant Sources
- Chemicals/materials
 - Brine Solution
 - Fuel
 - Oils
 - Paint
 - Road Salt
- Exposed materials stored new/used
- Waste materials used oils, trash

4.4 Summary of Potential Pollutant Sources

4.3 Summary of Potential Pollutant Sources

g A w ta	single walled tanks rotected from traffic stockpiled under roof in 3 valled structures. bove ground, double valled, multi-chambered ank aside building in closed ontainers	5,800 gallons and 6,100 gallons 2,000 tons 4,000 gallons diesel, 1,000 gallons gasoline, 50 gallons kerosene small amounts	Southern Low Area Eastern Low Area Storm & Southern Low Area Sanitary Sewer
g A w ta	valled structures. Above ground, double valled, multi-chambered ank aside building in closed ontainers	4,000 gallons diesel, 1,000 gallons gasoline, 50 gallons kerosene small amounts	Storm & Southern Low Area Sanitary Sewer
& In co	ralled, multi-chambered ank side building in closed ontainers	1,000 gallons gasoline, 50 gallons kerosene small amounts	Southern Low Area Sanitary Sewer
Garage O	ontainers overhead Drum inside		Sewer
bı		55 gallons	Sanitary
arage D			Sewer '
- 1	rum inside building	55 gallons	Sanitary Sewer
	losed container paint tes inside building	250 gallons	CB 9 to Storm Sewer
2000	losed containers inside uilding	250 gallons / 250 gallons	Sanitary Sewer
	losed Tank next to uilding	250 gallons	Western Low Area
	ncovered Box next to uilding	3 cubic yards	Western Low Area
	overed commercial umpster with lids	3 cubic yards	CB6 to Storm Sewer
ay tra	ailers with lids - parked	20,000 square feet	Eastern Low area
Area n/	'a	n/a	CB9 to Storm Sewer
	f E	Empty compartmental trailers with lids – parked outside	Empty compartmental 20,000 square feet trailers with lids – parked outside



5.0 Stormwater Control Measures

- Spill prevention, control, & cleanup
 - Spill incident report (Appendix A)
- Eliminate illicit and non-stormwater discharge
- Employee training
 - Annual training/refresher

6.0 Reporting/Record Keeping

- Annual site inspection
 - Non-stormwater discharge inspection
 - Stormwater discharge visual inspection
- Reporting procedures
 - Inspection forms in Appendix A
 - Reports kept on file with this Plan



BMPs Shown in Video

- Vehicle and equipment washing
- Vehicle and equipment maintenance
- Good housekeeping and spill prevention
- Spill reporting and response
- Street maintenance
- Outdoor storage of materials and waste
- Landscaping and lawn care
- Illicit discharge detection

Discussion

- Materials that might cause pollution:
 - Fuels
 - Salt
 - Brine
 - Lubricants
 - Paints
 - Solvents
 - Aggregates

Vehicle & Equipment Washing

- Wash vehicles & equipment inside
 - Must go to sanitary sewer
- Wash vehicles at a commercial facility
- When commercial or inside facilities are not available – wash on an impervious area where all runoff goes to the sanitary sewer
 - Wash area should be roofed and clean water kept off of wash pad

Vehicle & Equipment Maintenance

- Stay with vehicle during fueling
- Move leaking equipment inside
- Use drip pans when equipment cannot be moved indoors immediately
- Perform vehicle maintenance inside

Where did this come from?



Only takes a small amount of oil or fuel to make a big sheen!



Good Housekeeping

- Keep work area neat and orderly
 - Don't let scrap accumulate
 - Sweep up regularly
 - Clean up drips & spills promptly
- Keep Unused containers tightly closed
 - Keep lids on containers unless using them
 - Make sure all containers are labeled correctly
- Use a drip pan temporarily until repairs can be made

Spill Reporting & Response

- NEVER hose down a spill!
- Clean up spills quickly before they get away
 - Do a thorough job, leave no residue behind
- Protect storm drains from spills
 - Place absorbent sock between spill & drain
- Dispose of cleanup waste properly
 - Recycle or send to appropriate landfill facility

Street Maintenance

- Debris from street sweeping and catch basin cleaning must go to a sanitary landfill.
- Waste water leaching from this material must go to the sanitary sewer system.
- Protect storm drain inlets during street maintenance.

Dumpsters & Recycling









Salt storage







Landscaping & Lawn Care

- Use pesticides according to label
- Obtain proper training and licensing prior to pesticide use
- Use pesticides & fertilizers only as needed
- Leave a buffer next to open water (ponds & streams) as labeled
- Compost or otherwise properly dispose of clippings & yard waste

Illicit Discharge Detection

- Be alert to illicit discharges to the storm system
- Discolored or inappropriate pipe discharges
- Bad-smelling discharges
- Potential for soil erosion to the storm system
- Report illicit discharges so they may be remedied

Illicit Discharge Detection

Appendix F: Illicit Discharge Report Form

Licking County & Others MS4 Stormwater Program

ILLICIT DISCHARGE REPORT FORM

Report Environmental Emergencies to Onio EPA: (800) 282-9378
Date:
Name:
Email:
Phone:
What type of incident do you wish to report? (Check all that apply)
() Dumping Down a Storm Drain
() Suspicious Discharge from a Pipe into a Stream
() Unusual Color of Water in Stream
() Strange Smells in Stream
() Suspicious Suds or other Substances Floating on Water
() Death of Aquatic Creatures
Where did the incident take place? Address (If Applicable):
Date of the incident: Time of the incident:
Please send this form along with any additional information and photographs to
Urban Conservation Technician Licking County Soil & Water Conservation District 771 East Main St., Suite 100 Newark, OH 43055 information@lickingswcd.com 740 670-5330

Additional Considerations

- Outdoor Equipment Operations
 - Capture leaks
- Outdoor Materials Storage
 - Liquid Tanks (secondary containment?)
 - Materials that will not wash away
- Waste Handling & Disposal
 - Trash in dumpster (lid closed!)
 - Recycle oils, antifreeze, solvents, batteries

- Activities Most Likely to have a spill:
 - Fueling
 - Oil changes
 - Winter deicing (salt & brine)
- Spill Kits
 - Location?
 - Contents?

- Dumpster
 - Kept closed?
- Vehicle washing
 - Where does it drain?
- General housekeeping
 - Good enough?



If a piece of equipment has to be washed or steam cleaned outdoors, how should this be done?

- on a fully contained impervious pad
- over bare dirt so it will be absorbed
- over a storm drain inlet
- d) in or next to a drainage ditch

When using an outdoor solid waste receptacle, which of the following are required?

- leave lids or covers closed while not in use
- b) move the receptacles indoors
- locate the receptacles on bare ground
- d) all of the above

Which of the following materials or operations outdoors can cause stormwater pollution?

- a spill or leak of diesel fuel
- an open container of paint
- a metal grinding operation
- a broken hydraulic line
- all of the above

Which of the following are <u>not</u> considered Good Housekeeping practices?

- sweeping up outdoor work areas
- keeping unused containers closed and sealed
- protecting materials from exposure to the weather
- secondary containment structures

If materials are stored outdoors, they may be temporarily covered with a waterproof tarp under what circumstances?

- the tarp is regularly checked for tears or loosening
- the tarp is at least twice as large as the material being covered
- the material is stored as far as possible from vehicle traffic
- d) the material is in open containers

Under what conditions is it OK to hose down a spill?

- if the material is non-hazardous
- b) if it is raining
- if your supervisor approves it
- d) if it is done immediately after the spill
- none of the above

If a lawnmower has to be greased outdoors, which of the following would help to protect stormwater?

- perform the operation during dry weather
- b) spread a drop cloth underneath the equipment
- wear safety glasses and rubber gloves
- d) all of the above

If a dump truck has a leaking hydraulic line, what should be done?

- a) drain it immediately or move indoors
- b) notify the stormwater coordinator
- put a water-proof tarp over it temporarily
- d) lock and tag it out

Even if you cannot immediately clean up a spill due to the hazards involved, which of the following must be done to help protect stormwater?

- notify the emergency coordinator or stormwater coordinator
- b) evaculate the facility
- shut down all operations
- locate the applicable MSDS for the spilled material

What are the practices that protect stormwater called?

- a) EPAs
- b) MSDSs
- SOPs
- d) BMPs

A spill or leak should be cleaned up promptly because...

- absorbents work better on fresh spills
- spills can be spread by wind or vehicle traffic
- it is usually more convenient to do the cleanup quickly
- the spill will evaporate if not cleaned up quickly

Under what conditions can tools or equipment be cleaned over a storm drain inlet or in a drainage ditch?

- a) during dry weather
- if your supervisor approves it
- after consulting the Stormwater Pollution
 Prevention Plan
- if the tool or equipment are cleaned up with water only – no detergents or solvents
- none of the above

Under what conditions should accumulated rainwater be drained from a secondary containment structure?

- the rainwater is clean and uncontaminated
- b) during dry weather only
- it is less than half full
- d) all of the above

If a vehicle has a ruptured hydraulic hose and is leaking fluid, which of the following would be most appropriate?

- a) cover it with a tarp
- move it indoors
- wash it down with soapy water
- d) none of the above

If a fertilizer spreader caused some fertilizer to fall on a paved area, what would be the best way to deal with it?

- hose it into the storm drain
- b) notify the EPA
- sweep or blow it back onto a vegetated area
- d) ignore it

Thank you!

Licking County Soil and Water Conservation District

740-670-5330 urbantech@lickingswcd.com