

STORMWATER TRAINING

Town of Lewisboro
March 5, 2009

Overview of Training

1. Stormwater and brief discussion of stormwater permitting.
2. Illicit discharge, detection and elimination (IDDE)
3. Municipal Good Housekeeping and Pollution Prevention-"BMP's"
4. Video
5. Recording keeping
6. Questions

Stormwater

Stormwater is rainwater, surface runoff, snowmelt and drainage.

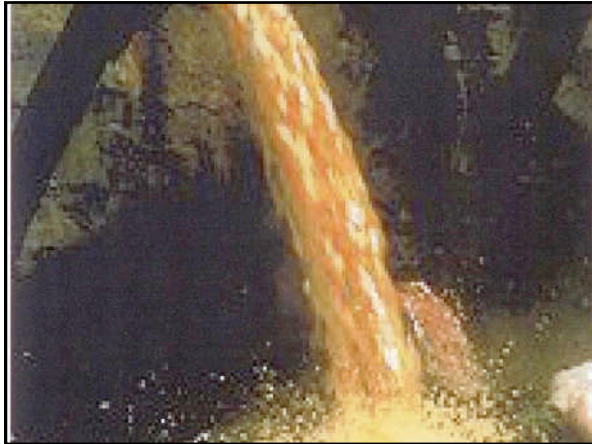
Studies were conducted which found that stormwater which generally discharges, untreated, to water resources carried substantial pollutants to those resources. Some examples of pollutants are:

- "Floatables"-debris, trash, litter
- Bacteria, pathogens
- Suspended solids-sediment
- Nutrients-nitrogen, phosphorous
- Thermal
- Toxic-lead, fuel oil, antifreeze
- Can damage lakes and fill in wetlands resulting in flooding









Stormwater Program

- In 2003, the Federal Government (EPA) through the Clean Water Act required stormwater discharges to be regulated.
- In New York, the EPA program is administered by the New York State Department of Environmental Conservation (NYSDEC).
- The Town of Lewisboro has been designated as an "MS4" community by the NYSDEC.
- MS4 is "Municipal Separate Storm Sewer System" which means that stormwater is collected in a separate system of curbs, catch basins, culverts, swales, ditches, ponds, wetlands, lakes and watercourses.
- In order to discharge this stormwater to waters of the state of New York and the United States, the Town of Lewisboro was required to obtain a stormwater permit (SPDES) from NYSDEC.
- The Town also was required to adopt municipal stormwater and illicit discharge ordinances.

Municipal Separate Storm Sewer System

- A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains:
 1. Owned or operated by the Town;
 2. Designed or used for collecting or conveying stormwater;
 3. Which is not a combined sewer; and
 4. Which is not part of a Publicly Owned Treatment Works (POTW).

Stormwater Regulations

Federal

- Section 303(d) of the Federal Clean Water Act
- Section 402 of the Federal Clean Water Act
- NPDES permits

New York State

- General Permit for Construction Activity (GP-0-008-01)
- General Permit for Municipal Separate Stormwater Systems (MS4) GP-0-008-02
- General Permit for Industrial Activities (GP-0-06-002)

Town of Lewisboro

- Town Stormwater and Illicit Discharge Ordinances

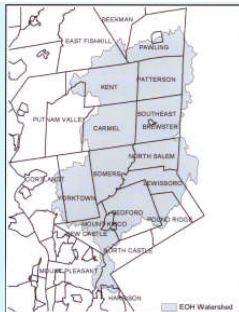
Stormwater Permit

The MS4 stormwater permit consists of two parts:

- A notice of intent (NOI) which indicates that the Town will be discharging stormwater.
- A stormwater management plan (SWMP) is required to contain "six minimum control measures" which provide the mechanisms in which the town will reduce the discharge of pollutants to the "maximum extent possible" (MEP), protect water quality and satisfy the water quality requirements of the Clean Water Act.
- Add: Heightened East of Hudson (EOH) watershed requirements: phosphorous.

The Construction stormwater permit must be obtained for land disturbances greater than 5,000 SF (EOH area) and one acre (remaining area of town).

Watershed Map



Minimum Control Measures

- 1. Public Education and Outreach
- 2. Public Participation and Outreach
- 3. Illicit Discharge Detection and Elimination
- 4. Construction Site Runoff
- 5. Post-Construction Runoff Control
- 6. Pollution Prevention/Good Housekeeping

Town Departments have been conducting stormwater management. We need to continue to perform the functions and keep good records to ensure compliance!

Our focus today:

- MCM #3: Illicit discharge detection and elimination
- MCM #6: Pollution prevention/good housekeeping

Illicit Discharge

Illicit Discharge. Any direct or indirect non-stormwater discharge to the MS4, except as exempted as follows:

"water line flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from fire fighting activities, and any other water source not containing pollutants".

Pollution Prevention and Good Housekeeping

"Design and implement an operation and maintenance program to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal operations and facilities". Best Management Practices- BMP's:

- Street and Bridge Maintenance
- Winter Road Maintenance
- Stormwater System Maintenance
- Vehicle and Fleet Maintenance
- Parks and Open Space Maintenance
- Municipal Building Maintenance
- Solid Waste Management
- Streambank and Hydrologic Habitat Maintenance

Video-Storm Watch

Municipal Stormwater Pollution Prevention

Reporting Requirements

- IDDE
 - Where, nature of discharge, corrective measures taken.
- Municipal housekeeping
 - acres of parking lots swept
 - miles of streets swept
 - feet (miles) of swales cleaned
 - catch basins inspected and where necessary cleaned.
 - post-construction control stormwater management practices inspected and where necessary cleaned.
 - pounds of phosphorous applied in chemical fertilizer
 - pounds of nitrogen applied in chemical fertilizer
 - pounds of pesticides/herbicides applied as pure product

illicit Discharge Detection and Elimination			
Fill in as appropriate for each sample collection date (you may require pre-approval)			
Facility:	Examiner's Name & Title:		Permit ID: NYDEP
Collection Date:	Date/Time Collected:		Date/Time Completed:
Operator/Viewer:	Qualifying Interest?		Result/Assess
Result/Assess:	Yes	No	Result/Assess
Parameter	Parameter Description	Parameter Characteristics	
Color	Does the stormwater appear to be colored?	Describe:	
Clarity	Is the movement clear or transparent?	Which of the following best describes the clarity of the movement? Clear Milky Opaque	
Oil Spills	Can you see a surface effect or films on the water surface?	Which best describes the phase?	
Color	Does the sample have an odor?	Describe:	
Flushing Solids	Is there something floating on the surface of the sample?	Describe:	
Suspended Solids	Is there something suspended in the water column of the sample?	Describe:	
Sediment Solids	Is there something settled on the bottom of the sample?	Describe:	
Foam	Is there foam or material floating on the top of the sample surface?	Describe:	
Detail any concerns, corrective action taken and any other indicators of pollution present in the sample:			
Reported By:			

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Operations Manual

- NYSDEC Municipal Pollution Prevention and Good Housekeeping Program Assistance.

Contact

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Questions?
