Upper Chichester Township Stormwater Management Program In Conjunction with the Pennsylvania DEP MS-4 Program



The Problem

We all see the water flowing into our storm drains during storm or snowmelt. What most residents don't realize, is that the water flowing into our Municipal Separate Storm Sewer Systems (MS4's) is arriving dirtier and in greater quantities than ever before.

The problem occurs when precipitation lands on an impervious surface such as a paved street, rooftop, or

driveway. Instead of the water slowly soaking into the soil and becoming purified, the water flows over these impervious surfaces and picks up pollutants. Oil and grease from roadways, pesticides from lawns, sediment from construction sites, and litter are all picked up by the water and conveyed directly to a storm drain with the impurities in tow.



The Result

- Increased volumes of polluted water reaching our storm sewers impair the waterways, thereby discouraging use of the resource.
- Pollutants contaminate drinking water supplies, and interfere with the habitat for fish, aquatic organisms, and wildlife.
- High volumes of water undercut streambeds and cause erosion, leading to an overall downfall in the health of a stream.

The Solution

Upper Chichester Township is part of a statewide campaign to combat storm sewer pollution. The Pennsylvania Department for Environmental Protection has developed the following six guidelines (Minimum Control Measures) for program development in order to help communities like Upper Chichester Township maintain a complete stormwater program. Please click below for the EPA requirements and further explanations:

Public Education and Outreach

Distributing educational materials and performing outreach to inform citizens about the impacts polluted storm water runoff discharges can have on water quality.

Controls include: Creating brochures or fact sheets for public distribution.

Instituting educational programs for school-age children.

Public Participation/Involvement

Providing opportunities for citizens to participate directly in program development and implementation.

Controls include: Organization of community clean-ups, storm drain stenciling,

outfall monitoring, and citizen watch groups.

Illicit Discharge Detection and Elimination

Developing a system to detect and eliminate illicit discharges to the storm sewer system.

Controls include: Promoting recycling programs for commonly dumped wastes.

Locating and testing suspected problem areas for pollution. Informing the public of the hazards of illegal discharges.

Construction Site Runoff Control

Developing, implementing, and enforcing an erosion and sediment control program for construction activities.

Controls include: Appropriate site plan review and inspection of new construction.

Require implementation of State and County erosion control

regulations.

Post Construction Runoff Control

Creating a program to address storm water runoff from newly developed or redeveloped areas.

Controls include: Require protection of environmentally sensitive areas (e.g.

wetlands).

Require recharge of runoff from new impervious surfaces.

Pollution Prevention/Good Housekeeping

This program's goal is to reduce pollutant runoff from municipal operations.

Controls include: Regular street sweeping.

Reduction in the use of pesticides or street salt.

Frequent catch-basin cleaning.

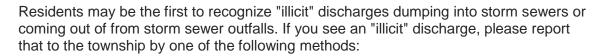
Storm Drain Stenciling

Upper Chichester Township has started to mark some of the storm drains in the Township with the "No Dumping / Drains to Waterways" stencils. These storm drain stencils educate the public that anything you dump into the storm drain ends up directly in a creek or other public waterway. If you would like volunteer and help with storm drain stenciling: please call the Township at 484-483-7215 or e-mail us at jbroomall@upperchitwp.org



What Residents can help watch for:

- Sediment leaving a construction site in stormwater
- Spills, hazardous materials (Chemical, Gas, Oil)
- Illegal dumping activity into streams or storm sewers
- Dry weather flows observed to be contaminated or polluted from outfall pipes into streams (72 hours after a rain storm)
- Observed pollution event or pollutants in stream
- Clogged, leaking or overflowing sanitary sewer lines
- Inadequately treated effluent from a sewage treatment plant



Issues Observed	Primary Contact Info.	Additional Contact Info.
DEP 24-Hour Water Quality	484-250-5900 or 1-800-541-2050	Anytime, including evenings
Hotline		and weekends
Spills and other Emergencies	PA DEP 484-250-5900	PA Emergency Mgt. Agency
Hotline		800-424-7362
Off-site discharge of sediment	Delaware Co. Conservation	Send photo, full address, and
	District 610-892-9484	directions
Clogged, leaking, overflowing	Upper Chichester Township	After hours call Delaware Co.
sewer lines	484-483-7215	Dept. of Emergency Services
		610-565-8700; if sewage is
		entering water courses, also call
		DEP
Dry weather storm sewer	Upper Chichester Township	After hours call 911
flows that are observed to be	484-483-7215	
polluted or contaminated		
Fish kills, illegal fishing	PA Fish & Boat Commission	For fish kills, also call DEP
	717-626-0228	484-250-5991 or 5900
Broken water mains	CWA 610-876-8181	24-hour



Related Publications and Resources

<u>Pennsylvania Department of Environmental Protection</u> - Contains information on Pennsylvania's storm water management program including the Best Management Practices manual.

http://www.dep.pa.gov/Pages/default.aspx#.V1haFdUrJhE

<u>Pennsylvania Department of Environmental Protection Southeast Regional Office</u> - Provides information on Southeast Pennsylvania's storm water management program and procedures for reporting an environmental incident.

http://www.dep.pa.gov/About/Regional/SoutheastRegion/Pages/default.aspx#.V1hW http://www.dep.pa.gov/About/Regional/SoutheastRegion/Pages/default.aspx#.V1hW

<u>Delaware County Conservation District</u> - The mission of the Conservation District is to ensure the wise use of Delaware County's natural resources and to protect and restore the natural environment through the conservation of its soil, water, and related resources. The Conservation District with the direction and participation of the District Board will support, promote, and execute programs, regulations, and individual efforts, which are consistent with this goal. We will work with individuals, governmental units, and the regulated sector of society to prevent environmental degradation and advocate remediation of past environmental damage. Services will be provided in an expeditious, thorough, and considerate manner. Voluntary compliance will be the preferred method of administering all regulatory programs assigned to us, but we will follow through with the most appropriate enforcement action when violations cannot be resolved cooperatively. https://www.delcocd.org/

<u>Pennsylvania Department of Environmental Protection Best Management Practices</u> (BMP) Manual - http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305</u>

<u>Turn your home into a Stormwater Pollution Solution!</u> - The EPA homeowner's guide to healthy habits for clean water.

http://www.epa.gov/npdes/pubs/solution to pollution.pdf

<u>Stormwater Discharges from MS4s</u> - General information about stormwater discharges from municipal separate storm sewers.

https://www.epa.gov/npdes/stormwater-discharges-municipal-sources#overview

<u>Stormwater Manager's Resource Center</u> - The SMRC provides tools and techniques necessary to protect watersheds and to enhance and restore local water resources. <u>www.stormwatercenter.net/</u>

<u>Low Impact Development Center</u> - Information on protecting the environment and water resources through integrated site design techniques. <u>www.lowimpactdevelopment.org</u>

<u>Strategies: Community Responses to Runoff Pollution</u> - This interactive web document explores some of the most effective strategies that communities are using around the nation to control urban runoff pollution.

http://www.nrdc.org/water/pollution/storm/stoinx.asp

<u>NPDES Permit Program Basics</u> - This website contains basic information on the major features and elements of the NPDES permit program. http://cfpub.epa.gov/npdes/home.cfm?program id=45

<u>National Menu of Storm Water Best Management Practices (BMPs)</u> - This interactive web document gives an overview of all BMPs for guidance and reference purposes. https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

<u>After the Storm!</u> - A Citizen's Guide to Stormwater https://www3.epa.gov/npdes/pubs/after the storm.pdf

<u>Protect Your Water Quality from Urban Runoff</u> - Clean water is everybody's business! http://www.epa.gov/npdes/pubs/nps urban-facts final.pdf

<u>What Happens After the Flush?</u> - How a house works! http://www.epa.gov/npdes/pubs/what happens after the flush.pdf

<u>Water Efficient Landscaping</u> - Preventing Pollution and Using Resources Wisely http://www.epa.gov/npdes/pubs/waterefflciencv.pdf

<u>Stormwater and the Construction Industry</u> - Maintain Your BMPs! http://www.epa.gov/npdes/pubs/posterside1.pdf

<u>How Do I Get Stormwater Permit Coverage for My Construction Site?</u> - A Construction Site Operator's Guide to EPA's Stormwater Permit Program http://www.epa.gov/npdes/pubs/sw-cgp-brochure.pdf