

How Can I Learn More?

For more information on storm water related topics, visit

Ohio Environmental Protection Agency Web site
www.epa.state.oh.us/dsw



U.S. Environmental Protection Agency Web sites
www.epa.gov/npdes/stormwater or www.epa.gov/nps



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Photo courtesy of Phil Samuell

The City of Mount Vernon Storm Water Management Plan

Why a Storm Water Management Plan?

The City of Mount Vernon is regulated as a “Small MS4” by the Ohio Environmental Protection Agency (OEPA). MS4 is an acronym for Municipal Separate Storm Sewer System. An MS4 is defined as “a conveyance or system of conveyances owned by a state, city, town, or other public entity that discharges to waters of the U.S. and is designed or used for collecting or conveying storm water, not a combined sewer, not part of a Publicly Owned Treatment Works (POTW).”

MS4s must obtain coverage under Ohio EPA’s National Pollution Discharge Elimination System (NPDES) General Permit for authorization to discharge storm water. This permit originates from the 1972 Clean Water Act (CWA), and subsequent revisions, which have the goal to preserve, protect and improve our country’s waters from polluted storm water runoff.

MS4s are required to prepare a Storm Water Management Plan (SWMP). The City prepared a detailed SWMP in 2007 as part of the first generation of the General Permit. In 2009, a second generation of the General Permit was put in place by the OEPA. The new General Permit includes changes that the City, as an MS4, is required to address. In 2010, the City began a project to develop a revised Storm Water Management Plan (SWMP) to replace the 2007 plan.

How Can I get a Copy of the “SWMP”?

This flyer provides a general overview of what an MS4 Storm Water Management Plan is and why the City has prepared one. A copy of the Storm Water Management Plan (SWMP) is available at the City Engineer’s office. A copy has also been posted on the City’s website, www.mountvernonohio.org.

What Will I Find in the “SWMP”?

The SWMP requires controls on storm water discharges (also known as non-point source pollutants). Non-point source pollutants have been shown to be the most significant cause of impairment to water resources. Per the General Permit, the SWMP includes six specific minimum control measures (MCMs):

1. Public Education and Outreach
2. Public Involvement / Participation
3. Illicit Discharge Detection and Elimination (IDDE)
4. Construction Site Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention / Good Housekeeping for Municipal Operations

These MCMs are intended to guide preservation, protection and improvement of Mount Vernon’s water resources.

MCM 1 and MCM 2: Measures such as providing outreach and educating the public help to gain public support. Obviously, an active, engaged community is important to the success of a SWMP because it allows for public support and understanding, and gives citizens partial responsibility for the City’s program.

MCM 3: “Illicit discharges” are defined as discharges into a storm drain system that is not composed entirely of storm water. They are a problem because, unlike wastewater which flows to a wastewater treatment plant, storm water generally flows to waterways without any additional treatment. Illicit discharges often include pollutants. Recognizing the adverse effects illicit discharges can have on receiving waters allows the City to detect and eliminate illicit discharges by gaining a thorough awareness

of the entire storm water sewer system. This is the purpose of MCM 3.

MCM 4: Construction site storm water management in areas with construction from new development or redevelopment is necessary to keep polluted storm water runoff from entering the MS4 conveyances that discharge into the City’s receiving waters, untreated. MCM 4 addresses these challenges.

MCM 5: Similarly, post-construction storm water management in areas undergoing new development or redevelopment is necessary to keep runoff from entering the storm sewers that discharge into the City’s receiving waters untreated. The construction site runoff control program is managed through MCM 5.

MCM 6: The pollution prevention and good housekeeping measures that are part of MCM 6 are intended to improve or protect receiving water quality by providing guidance and operational procedures to better manage the potential for pollution from our City’s municipal facilities operations.

Stormwater and the Construction Industry

Protect Natural Features

- Bad: [Image of construction site with exposed earth]
- Good: [Image of construction site with protective silt fencing]
- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Practice erosion control measures, such as mulching, or other methods to prevent erosion or construction activity by seeding or otherwise stabilizing these areas.

Construction Phasing

- Bad: [Image of construction site with exposed earth]
- Good: [Image of construction site with protective silt fencing]
- Sequence construction activities so that the soil is not exposed for long periods of time.
- Mulch or straw grade in small areas.
- Install any sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the soil has been graded to its final contour.

Vegetative Buffers

- Bad: [Image of construction site with exposed earth]
- Good: [Image of construction site with vegetative buffers]
- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by seeding or replanting periodically to ensure their effectiveness.

Silt Fencing

- Bad: [Image of silt fence with gaps]
- Good: [Image of silt fence with proper installation]
- Inspect and maintain all fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the silt fence to the stakes.
- Every place silt fence is in the middle of a roadway or over them as a check dam.
- Make sure silt fence is not flowing toward the silt fence.

Site Stabilization

- Bad: [Image of exposed soil]
- Good: [Image of stabilized soil with mulch]
- Mow, seed, or otherwise stabilize all exposed areas as soon as final construction has been completed.

Construction Entrances

- Bad: [Image of construction entrance with no barrier]
- Good: [Image of construction entrance with barrier]
- Remove mud and dirt from the tires of construction vehicles before they enter a gravel driveway.
- Properly store equipment BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become hard to walk.

Slopes

- Bad: [Image of eroded slope]
- Good: [Image of stabilized slope]
- Rough grade or restore slopes.
- Back up long slopes with sediment barrier, or other dirt, to direct stormwater away from slopes.

Dirt Stockpiles

- Bad: [Image of dirt stockpile]
- Good: [Image of covered dirt stockpile]
- Cover or seal all dirt stockpiles.

Storm Drain Inlet Protection

- Bad: [Image of storm drain inlet with no protection]
- Good: [Image of storm drain inlet with protection]
- The curb or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the trash does not accumulate (usually 1 to 2 inches in diameter).
- If you own inlet filters, maintain them regularly.

Maintain your BMPs!

www.epa.gov/npdes/menuofbmps