



More About Stormwater

About Stormwater Phase II:

The United States Environmental Protection Agency's (EPA) Storm Water Regulations were established as part of the Clean Water Act of 1972. CWA Section 402(p)(6) requires storm water program regulations. This requirement resulted in:

- Interim Phase II Final Rule (1995)
- Phase II Proposed Rule (1998)
- Phase II Final Rule (1999)

The Phase II Final Rule was signed on October 29, 1999. The Final Rule was published in the Federal Register on December 8, 1999. The Rule and fact sheets are available at: www.epa.gov/npdes

Storm Water Phase II is an initiative of the EPA that helps control pollutants entering waters of the Commonwealth. The Storm Water Phase II program consists of six minimum controls. Those controls are Public Education & Outreach, Public Involvement & Participation, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post Control Stormwater Management in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations.

As part of the Storm Water Phase II Program, the City of Madisonville is responsible for regulating the MS4 System located within the corporate limits of the City with oversight from the Kentucky Division of Water. A Municipal Separate Storm Sewer System (MS4) means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains) designed or used for collecting or conveying stormwater that is owned or operated by the city and discharges to waters of the Commonwealth. Sanitary sewers are not included in the definition of the municipal separate storm sewer system.

Below the following Ordinances were created in order to comply with the Phase II requirements.

Chapter 53: Illicit Discharges and Connections

What is Illicit Discharge?

Illicit discharge is any direct or indirect non-stormwater discharge to the storm drain system whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by the city.

Federal regulations define an illicit discharge as “...any discharge to a MS4 that is not composed entirely of stormwater...” with some exceptions. These exceptions include discharges from NPDES-permitted industrial sources and discharges from fire-fighting activities. Illicit discharges are considered illicit because MS4s are not designed to accept, process, or discharge such non-stormwater wastes.

Sources of Illicit Discharges Include:

* Sanitary wastewater * Effluent from septic tanks * Car wash wastewaters * Improper oil disposal * Radiator flushing disposal * Laundry wastewaters * Spills from roadway accidents * Improper disposal of Auto and Household toxins*

Why Are Illicit Discharge Detection and Elimination Efforts Necessary?

Discharges from MS4s often include wastes and wastewater from non-stormwater sources. A study conducted in 1987 in Sacramento, California, found that almost one-half of the water discharged from a local MS4 was not directly attributable to precipitation runoff. A significant portion of these dry weather flows was from illicit and/or inappropriate discharges and connections to the MS4.

Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxins, oil and grease, solvents, nutrients, viruses, and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

No

t All Non-Stormwater Discharges Are Considered Illicit Discharges. Examples of Exempt Discharges Include:

* **Water line flushing** * **Landscape irrigation** * **Diverted stream flows** * **Rising ground waters**

* **Uncontaminated ground water infiltration** * **Uncontaminated pumped ground water** *

Discharges from potable water sources * Foundation drains * Air conditioning condensation *

Irrigation water * Springs * Water from crawl space pumps * Footing drains * Lawn watering *

Individual residential car washing * Flows from riparian habitats and wetlands * De-chlorinated

swimming pool discharges * Street wash water*

What is Madisonville Doing?

By Madisonville Code of Ordinances Chapter 53, illicit discharge is illegal, punishable by fines up to \$250. The City has developed a Standing Operating Procedure for Illicit Discharge Detection and Elimination (IDDE) working on this to find, stop and eliminate all illicit discharges encountered. To report a spill or an illicit discharge, contact the Engineering Department at 270-824-2120 or use the Go Madisonville website.

Chapter 60: Erosion Prevention & Sediment Control

Erosion is the wearing away of the ground surface as a result of the movement of wind, water, ice, and/or vehicles and equipment associated with land disturbance activities. Construction activities can increase the amount of soil exposed on a property, which can lead to sediment runoff into adjacent streets, streams, and storm sewers. Excess sediment can fill rivers, lakes, and destroy aquatic habitats. Construction and development are positive for the community, but proper management of pollutants commonly discharged from construction sites is important to keep pollutants from harming local lakes and streams.

To help minimize the amount of sediment runoff, developers of new and redeveloped property may be required to submit an Erosion Prevention and Sediment (EPSC) Plan if:

- Level 1. Site construction of one disturbed acre or greater is required to file for a permit accompanied by a Grading Plan and Erosion Prevention and Sediment Control Plan, and a SWPPP Plan as well as a Kentucky Division of Water Notice of Intent (NOI).
- Level 2: Utility companies shall apply for a general permit from the city for land disturbance operations less than one acre; this permit must be renewed every three (3) years.

The requirements for the EPSC plan and associated permits are outlined in Chapter 160: Erosion Prevention and Sediment Control (EPSC).

Permits:

Before construction is started within the city limits of Madisonville, the City of Madisonville Engineering Department requires construction sites that disturb one (1) acre or more to file an application for a Grading and Paving Permit.

The Kentucky Division of Water (KDOW) also requires construction sites that disturb one (1) acre or more of land to file for a Kentucky Pollution Discharge Elimination System (KPDES) Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity Under the KPDES General Permit.

Automatic coverage of construction sites under this permit will no longer be applicable. The Kentucky Division of Water state that the permittee shall submit web-based NOI forms at a minimum seven (7) days prior to land disturbance activities or paper NOI forms thirty (30) days prior to land disturbance activities. Proof of site coverage shall be included with the City's permit.

<https://dep.gateway.ky.gov/eForms/Account/Home.aspx>

For existing construction sites covered under the KYR10 General Permit, coverage will expire on November 30, 2019. If a site has not achieved final stabilization by this date, a new NOI shall be submitted to the Kentucky Division of Water and the Storm Water Pollution Prevention Plan shall be modified to fit the conditions of the KYR100000 Permit.

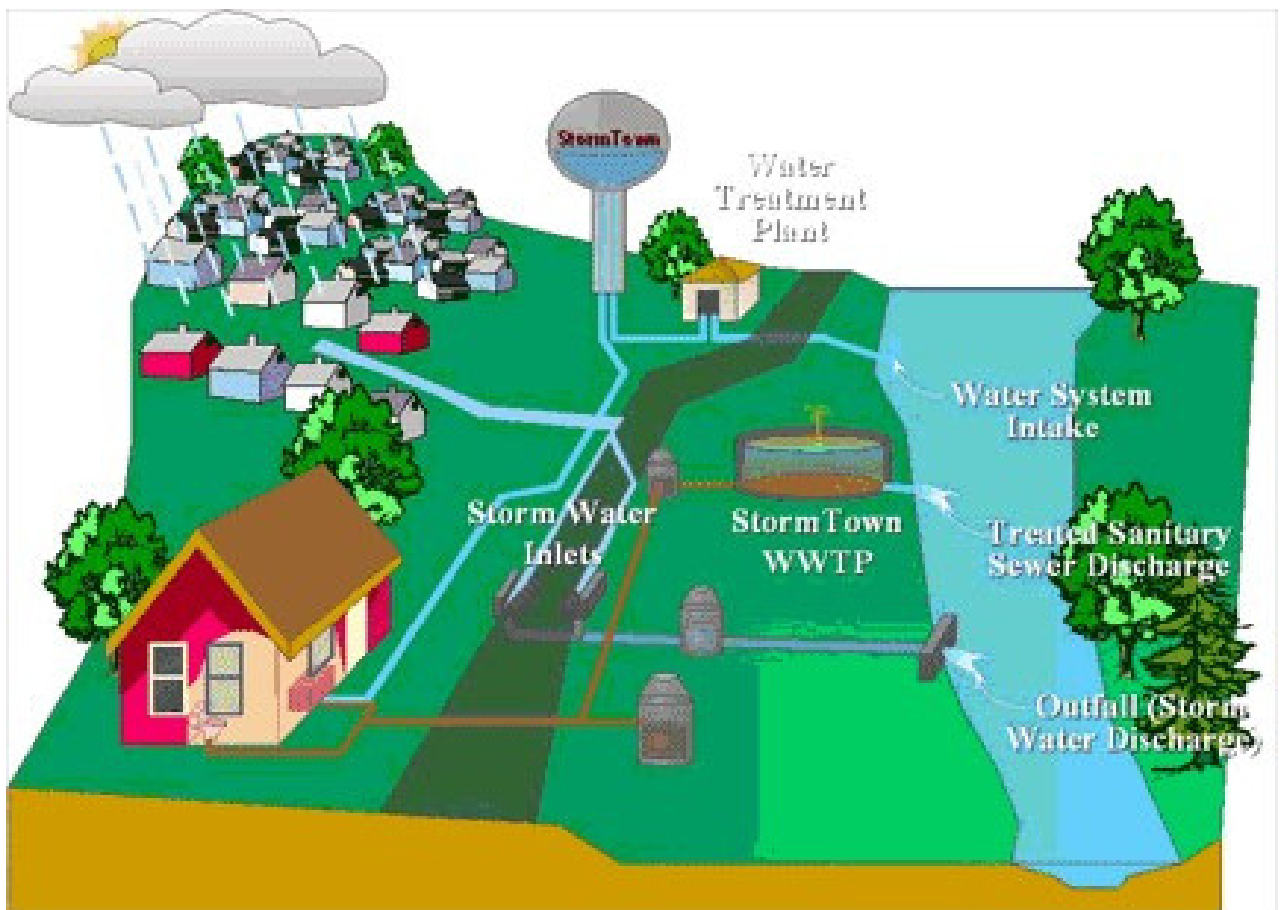
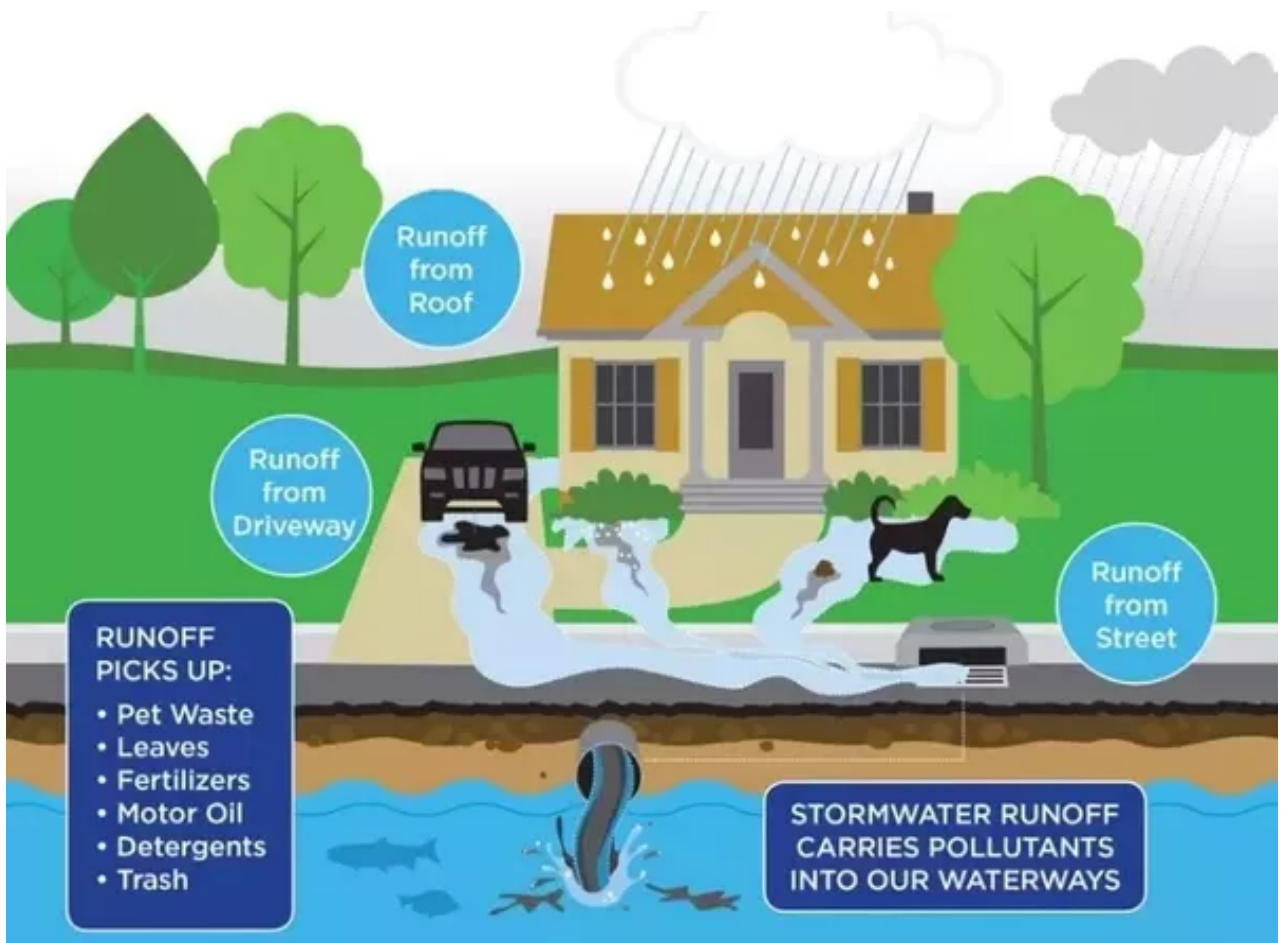
Inspections:

Plans approved by the city for stripping, grading, excavating, and filling work shall be maintained on site throughout the duration of the work. After EPSC measures have been installed, the permittee shall contact the city and request a preconstruction inspection. The city shall make inspections as deemed necessary to ensure the EPSC measures are being properly implemented and maintained during construction. If minimum requirements for the EPSC are not met, the permittee may be notified and enforcement actions shall be taken. The permittee or his/her agent shall make regular inspections of all control measures to determine the overall effectiveness of the EPSC plan and the need for additional control measures. The minimum frequency of these inspections shall be once every seven (7) calendar days and before and after storm events of one-half (1/2) inch of precipitation or more. All inspections shall be documented in written form and kept on the construction site. Reports should be available for the city or state inspectors to review upon request during a site inspection. The city shall be permitted to enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed herein.

For work in the City of Madisonville, a Construction Site Inspection Form has been developed by the Madisonville Engineering Department for the contractor's use.

Construction Site Completion:

When construction activity is completed, some erosion control devices are no longer needed, and vegetative cover is established, the permittee shall file for a Notice of Termination (NOT) with the KDOW. A final inspection by the City of Madisonville Engineering Department may be required.



When it **rains**, what goes down the **storm drain**?

