



**CALVERT
COUNTY**
Maryland

Calvert County Stormwater Management Ordinance

Calvert County Public Works

Purpose

Public Works is here today to discuss the addition of the Illicit Discharge Detection and Elimination (IDDE) section to the current Stormwater Management Ordinance and request a public hearing be held for public comment.



Public Education & Outreach



**Public Involvement/
Participation**



**Illicit Discharge Detection
Elimination**

6 Minimum Control Measures



**Construction Site
Runoff Control**



**Post Construction
Runoff Control**



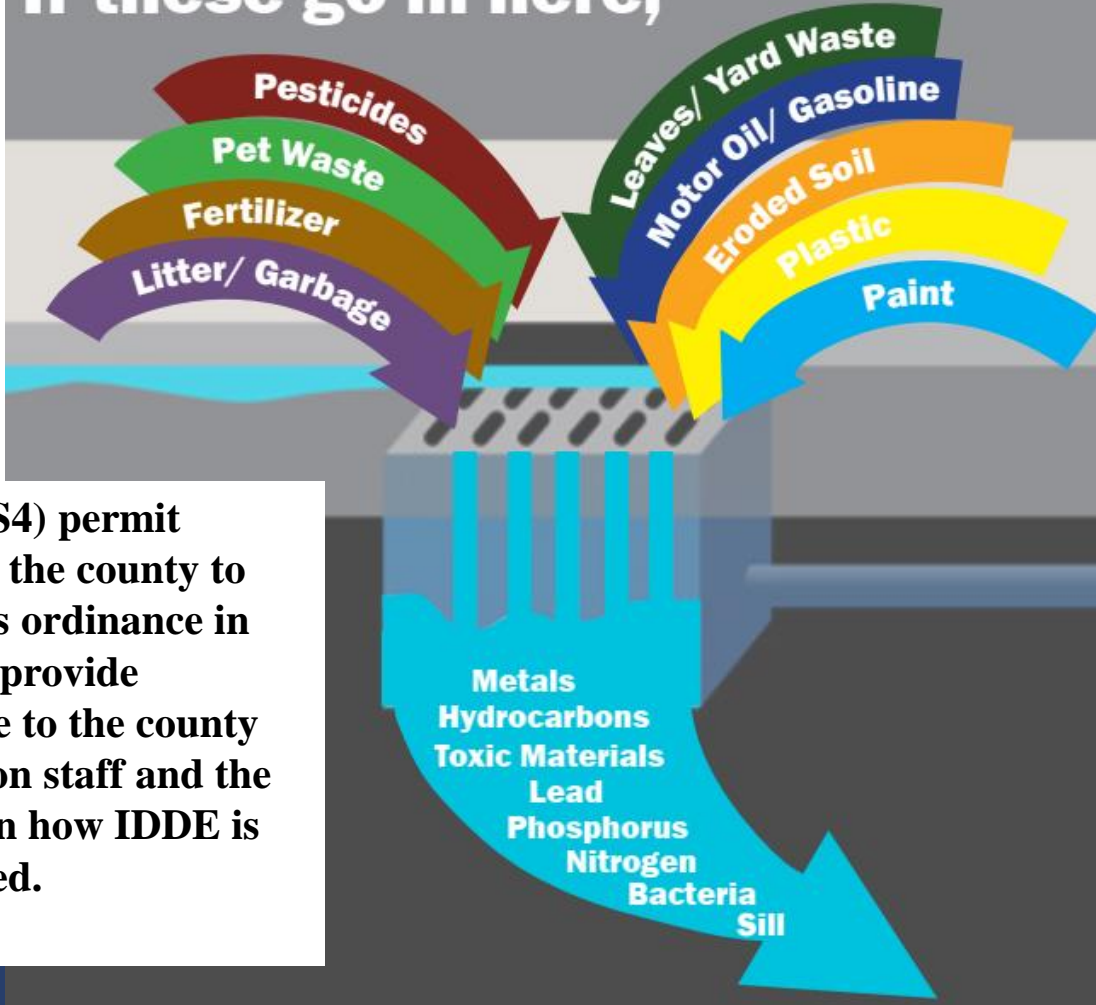
**Pollution Prevention/
Good Housekeeping
for Municipal Operations**

What is an Illicit Discharge? Why is an Ordinance required?

- Any direct or indirect non-storm water discharge to the Municipal Separate Storm Sewer System (MS4).
- The Ordinance will establish policy and methods to control pollutants entering the storm sewer system to comply with National Pollutant Discharge Elimination System (NPDES).

- Our (MS4) permit requires the county to have this ordinance in place to provide guidance to the county inspection staff and the public on how IDDE is controlled.

If these go in here,



How to detect an Illicit Discharge

- A storm drain with measurable flow during dry weather containing pollutants and/or pathogens.
- Has a unique discharge frequency, composition, and mode of entry into an MS4 system.
- Originates from “generating sites”, or specific sources areas.
 - **IMPORTANT:** Not all dry-weather storm drain flows are classified “Illicit discharges”...
 - Because they do not all contain pollutants/ pathogens.
 - Field testing/ water quality sampling is needed to identify or confirm an illicit discharge.



Illicit Discharge Modes of entry



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Direct

Discharge directly connected to storm drain by a pipe.

- Sewage cross-connections
- Industrial/commercial cross-connections
- Straight pipe

Illicit Discharge Modes of entry

Indirect



Discharge enters via storm drain inlets or infiltrating into a pipe.

- Groundwater seepage
- Spills entering inlet
- Direct dumping inlet
- Outdoor washing
- Non-target irrigation (landscaping)

Key components of an IDDE



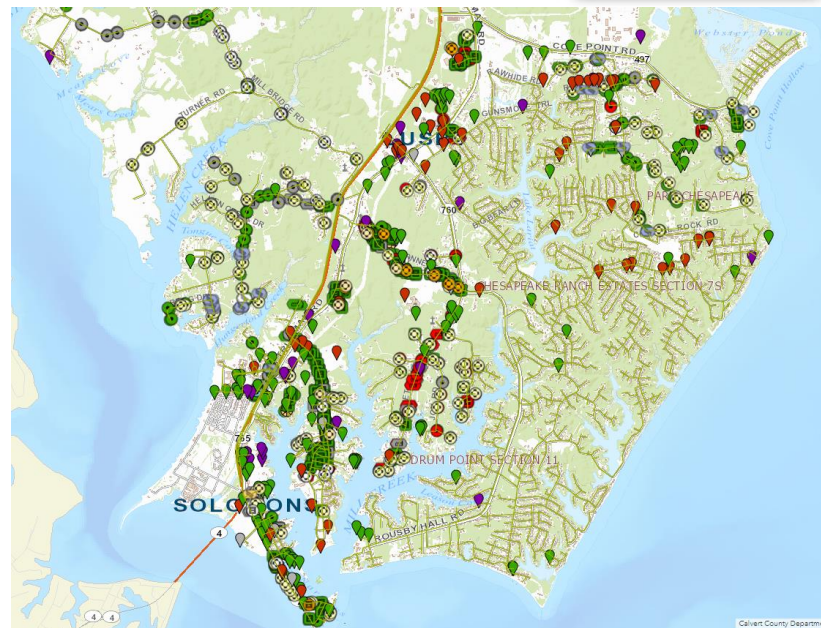
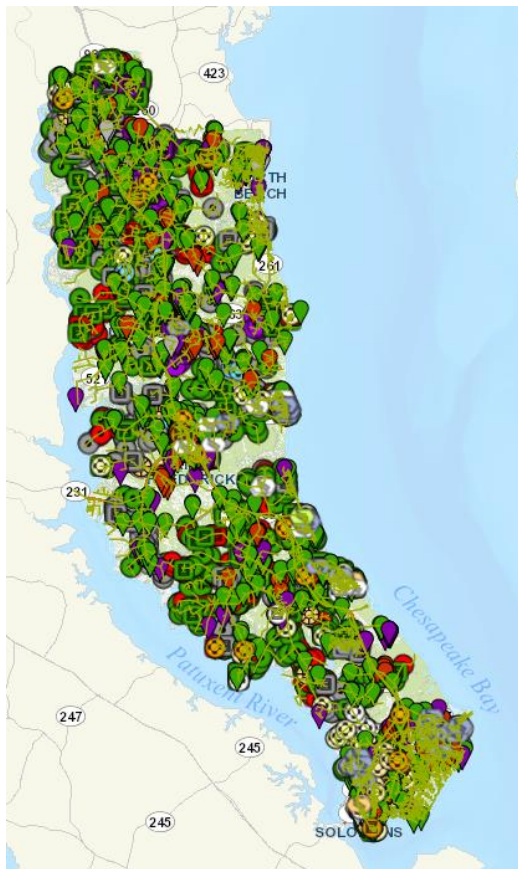
1. Stormwater mapping
2. Ordinances
3. Detection procedures
4. Corrective action
5. Public education
6. Recordkeeping
7. Staff training



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Stormwater mapping

Calvert County DPW uses GIS and CAD programs to keep up-to-date maps of the storm drain infrastructure, along with multiple layers.



Revised Article X

Illicit Discharge and Connection

Calvert County Stormwater Management Ordinance

This section of the ordinance address the following:

§ 123-26. Prohibition of Illegal Discharge

§ 123-27. Prohibition of Illegal Connections

§ 123-28. Waste Disposal Prohibitions

§ 123-29. Watercourse Protection

**§ 123-30. Industrial or Construction Activity
Discharge**

§ 123-31. Control of Water Quality

§ 123-32. Requirements of Remediate

§ 123-33. Notification of Spills

**§ 123-34. Inspection and Monitoring of
Discharge**

§ 123-35. Enforcement

§ 123-36. Violations Deemed a Public Nuisance

**§ 123-37. Acts Potentially Resulting in a
Violation of the Federal Clean Water Act**

§ 123-38. Suspension of MS4 Access



Detection Procedures includes the following

- Notification of Spills
- Reporting during routine inspections
- Outfall Reconnaissance Inventory (ORI) will be conducted, at a minimum, once per permit term
- Monthly inspections for NPDES permit
- Quarterly inspections for Stormwater permit
- If an Illicit Discharge is found, the Source Identification process begins which includes tracking, field investigation, smoke test, dye test, etc.

Corrective Action

- Once the source is identified the responsible party for it will be notified that corrective action must be taken. Within the notification, the responsible party will be requested to provide a method to correct the illicit discharge and a time frame to have it completed. These corrective actions will most likely involve infrastructure modification.

Public Education

- As part of our MS4 program the county works with the Maryland Extension office to educate the public through several public outreach events.
- Some of these events include the benefits of recycled rainwater, what illicit discharges could be and how to prevent them, how fertilizers and pesticides could harm the environment if used improperly.

Record Keeping

- The NPDES Phase II Permit requires Calvert County to keep records of all stormwater program activities and IDDE records for a minimum of five (5) years.
- Calvert County will maintain a database of illicit discharges and investigation reports, citizen complaints, outfall inspections, and corrective actions.
- All paper copies will be stored in a file designated for illicit discharges and located in the Calvert County DPW office. Electronic copies will be available on demand.



Staff Training

- The MS4 Permit requires Calvert County to provide biennial training (once a year) to applicable field personnel in recognition and reporting of illicit discharges.
- Training has been provided through Stormwater One for eight of the DPW staff.



Recommendation

Public Works recommends the Board of County Commissioners hold a public hearing in 10 days for public comment on the revision to the Stormwater Management Ordinance.