



NPDES

Winter Workshop 2014

STORMWATER QUALITY PROGRAM

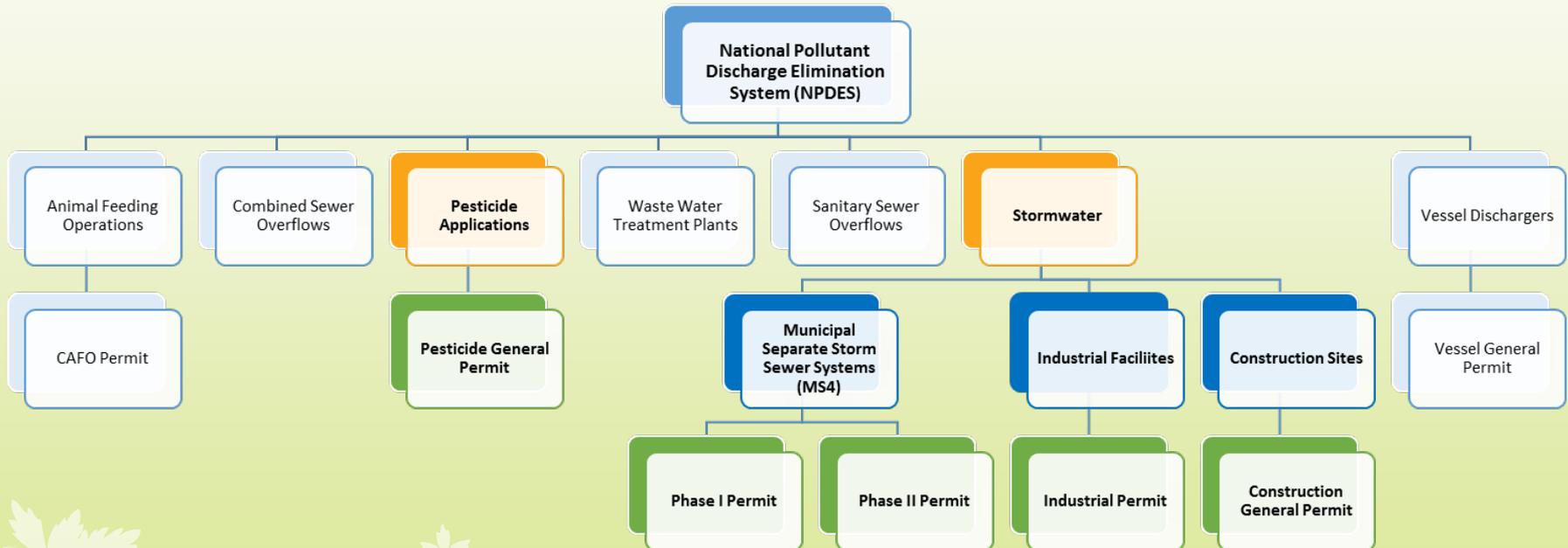




National Pollutant Discharge Elimination System

Section 402 of the Federal Water Pollution Control Act of 1972 a.k.a the Clean Water Act

Discharge of pollutants into the state's surface water is regulated through National Pollutant Discharge Elimination System Permits. DNREC issues these permits under authority delegated by the U.S. Environmental Protection Agency (EPA).





What is the purpose of the NPDES Program?

Goal: To protect the waters of the United States from pollution.

Reason: To restore the waters of the US to their designated uses

Swimmable

Fishable

Potable



Water Facts in Delaware

88% of Delaware's rivers and streams do not fully support swimming use

97% of Delaware's waters do not fully support fish and wildlife use

38 out of 45 watersheds in Delaware have a Total Maximum Daily Load

Fish Advisory – Delaware Atlantic Coastal Waters

Blue fish – No more than 1 meal per month

Blue fish >14 inches – No more than 1 meal per year

Striped Bass: No more than 2 meals per year



www.dnrec.delaware.gov/fw/Fisheries



Why does DeIDOT have to comply?

Storm water from roadways carries with it sediments, metals, oils (hydrocarbons), pesticides, trash, road bed, etc.

Stormwater treated or untreated is discharged to waters of the US. Surface waters support fish and wildlife, recreational activities, and in some communities are a drinking water source.



DeIDOT Stormwater Facts

4018 Outfall Pipes Directly connected to Surface Waters

75,000+ Drainage Structures

5,000+ Miles of drainage pipe and swales

20,000+ acres of impervious highway

531 BMPs treating an impervious area of +/- 5000 acres





How Does DeIDOT Comply with Section 402 of the Clean Water Act?

Groups at DeIDOT that play a role in compliance:

- Design – E&S and BMP design plans.
- Construction - E&S and BMP installation, inspection and maintenance.
- Maintenance – Drainage and annual BMP maintenance.
- Roadside Environmental – Pesticide and Herbicide use and reporting.
- Planning – Subdivision Street Inspection and Acceptance.
- Public Relations – Drainage complaints from residents.
- TMC – Spill reporting on roadways
- Any DeIDOT Employee – Public Education and Outreach



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NPDES PERMIT COMPLIANCE PROGRAMS



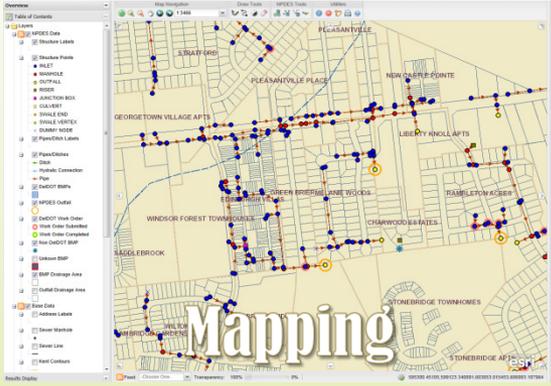
Education & Outreach



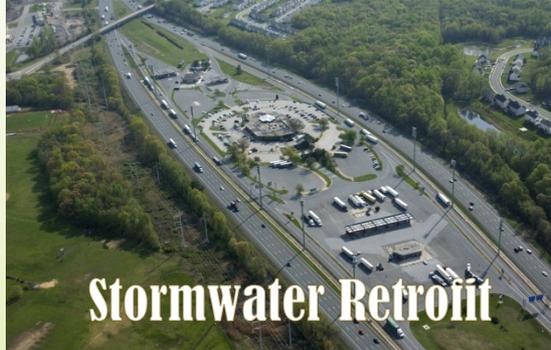
Illicit Discharge Detection and Elimination



Good Housekeeping



Mapping



Stormwater Retrofit



Stormwater Monitoring



Stormwater Management During Construction



Post Construction Stormwater Management



Water Quality Improvement Plans

Public Education and Public Outreach Program

Permit Requirements:

1. Develop and implement a public outreach and education strategy that is:
 - Clear
 - Targeted
 - Measurable

DeIDOT Public Education and Outreach Programs

Adopt-A-Highway



Pollution Prevention

Dogipots



Livable Lawns

If you see something, say something



Illicit Discharge Detection and Elimination

Permit Requirements:

1. Prohibit the discharge of materials other than stormwater to the municipal storm sewer system (MS4)
 - Leaf litter
 - Motor oil
 - Household waste
 - Trash

DeIDOT IDDE Programs

Storm Drain Marking Program



Storm Drain System Inspection and Dry Weather Screening



Door Hanger Notification



Good Housekeeping & Industrial Stormwater

Permit Requirements:

1. Prevent and/or reduce discharges of pollutants associated with DelDOT's' operations:

- Pollutant buildup on roadways.
- Pesticide and herbicide use on the roadside.
- Snow and Ice operations

DelDOT Specific Programs (BMPs)

Street Sweeping and Litter Control



Storm drain Inspection and Maintenance



Enhancing Delaware Highways



Mapping

Permit Requirements:

1. At least once a year revisit and update BMP GIS data layers and storm sewer data.
- Show the location of all outfalls and drainage outlets.
 - Names and location of all waters that receive discharges.

DeIDOT Specific Programs (BMPs)

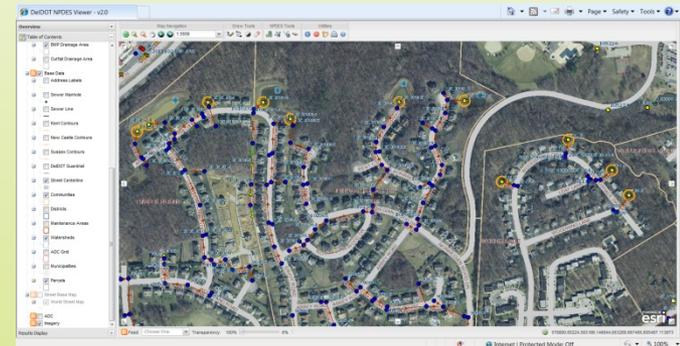
Video Pipe Inspection



Storm drain Inspection and Inventory



Mapviewer Application



Stormwater Monitoring Program

Permit Requirements

1. Pollutant Minimization Plan (PMP) for Polychlorinated Biphenyls (PCBs)
2. Total Maximum Daily Loads (TMDL) Waste Load Allocations (WLA) and Applicable Water Quality Standards
3. Wet Weather Performance Monitoring Plan
4. Dry Weather Screening Plan
5. In-Stream Monitoring

DeIDOT Monitoring BMPs

In Stream Monitoring



Wet Weather Performance



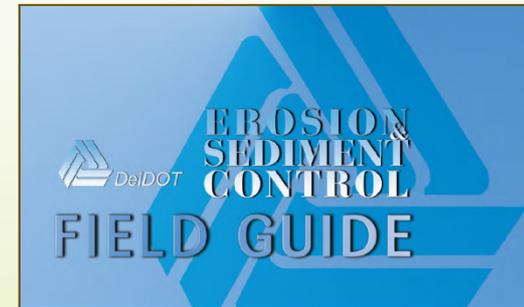
Dry Weather Screening



Stormwater Management During Construction

Permit Requirements:

1. Reduce the discharge of pollutants during construction.
 - Review and approval of Sediment and Stormwater Plans
 - Installation and maintenance of structural and non structural E&S controls
 - Site inspections and enforcement of control measures



DeIDOT E&S BMPs

1. E&S Plan Design
2. E& S Inspection Program (CCR)
3. Enforcement of the plans and specifications on site



Post Construction Stormwater Management

Permit Requirements:

1. Comply with Construction General Permit Program (**Construction**)
2. Comply with Delaware Sediment and Stormwater Regulations (**Design**)
3. Maintain Triennial Delegation Status (**Plan Review, Approval & Maintenance**)

DeIDOT Post Construction BMPs

- Final Inspections
- Construction Checklists
- Final stabilization
- SWM Agreements)
- Annual BMP Inspections
- BMP Maintenance



What Role do you play in helping DeIDOT comply with the Clean Water Act?

Compliance Reviews:

- Triennial Delegation Reviews by DNREC
- MS4 Permit Program Audits and Inspections by EPA
- Permit Reissuance and Stormwater Pollution Prevent and Management Program approval
- Annual Reporting by the NPDES Section with Measurable Goals

Measurable Goal Examples:

- a.) Construction Site Compliance – E&S controls maintained ASAP
- b.) 100% of sites over 5,000 S.F. are inspected
- c.) 100% of BMPs in the inventory have an as-built construction plan and construction checklists
- d.) All staff members receive annual training
- e.) Document effectiveness of E&S BMPs and training programs statistically
- f.) Construction site compliance – E&S controls maintained ASAP



NPDES

THANK YOU

Delaware Department of Transportation SHARE

HOME
 About DeIDOT
 Secretary Message
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 Divisions
 FAQs
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 Public Workshops
 Related Links
 DMV
 DART
 EZPass
 Contact Information
 Office Locations
 Agency Site Map

SERVICES
 Online Services

INFORMATION
 Live Traffic
 Interactive Maps
 Biking in Delaware
 Community Programs and Services
 Doing Business
 FOIA Requests
 Legislation
 Projects
 Publications
 Archaeology
 Red Light Enforcement

Welcome to the DeIDOT Stormwater Quality Website!

The mission of DeIDOT's Stormwater Quality Program is to minimize the amount of pollutants from the roadway drainage system into Delaware's waters of the State of Delaware. Please visit this site for information on what DeIDOT is doing to control stormwater pollution, and what YOU can do to help us!

Hot Topics

Help Save Delaware's Rivers and Bays, One Lawn at a Time!

Did you know that the great-looking lawn many of us want comes at a significant environmental and public health cost? Runoff from fertilizers and pesticides applied to our lawns can have a big impact on local streams, creeks, rivers and bays. DeIDOT is proud to be a sponsor of the Delaware Livable Lawns Program. Check out the program's website for tips on how to make small changes in your lawn care practices so we can all be better stewards of our environment.

[View an article that appeared in Delaware State News about DeIDOT's storm drain inventory and inspection program.](#)

During early January, KCI Technologies and Century Engineering will be in the following neighborhoods conducting a [drainage system inventory](#) and inspection of DeIDOT's storm sewer system:

NPDES Stormwater Quality Program
 National Pollutant Discharge Elimination System

What is the Stormwater System?

- ▶ Description of System
- ▶ Delaware's Watersheds

Why Stormwater is Regulated

- ▶ The NPDES Program
- ▶ NPDES Permit Documents

Stormwater Pollution

- ▶ Where it comes from

What's Being Done by DeIDOT

- ▶ Monitoring Programs
- ▶ Drainage System Inventory
- ▶ Construction Sites
- ▶ Streets and Highways
- ▶ Best Management Practices
- ▶ Public Education and Outreach

Publications

How You Can Help

