

NPDES LESSONS LEARNED

SARA ESPOSITO & ~~STEVE WRIGHT~~
MARCH 14, 2023



DeIDOT NPDES Compliance

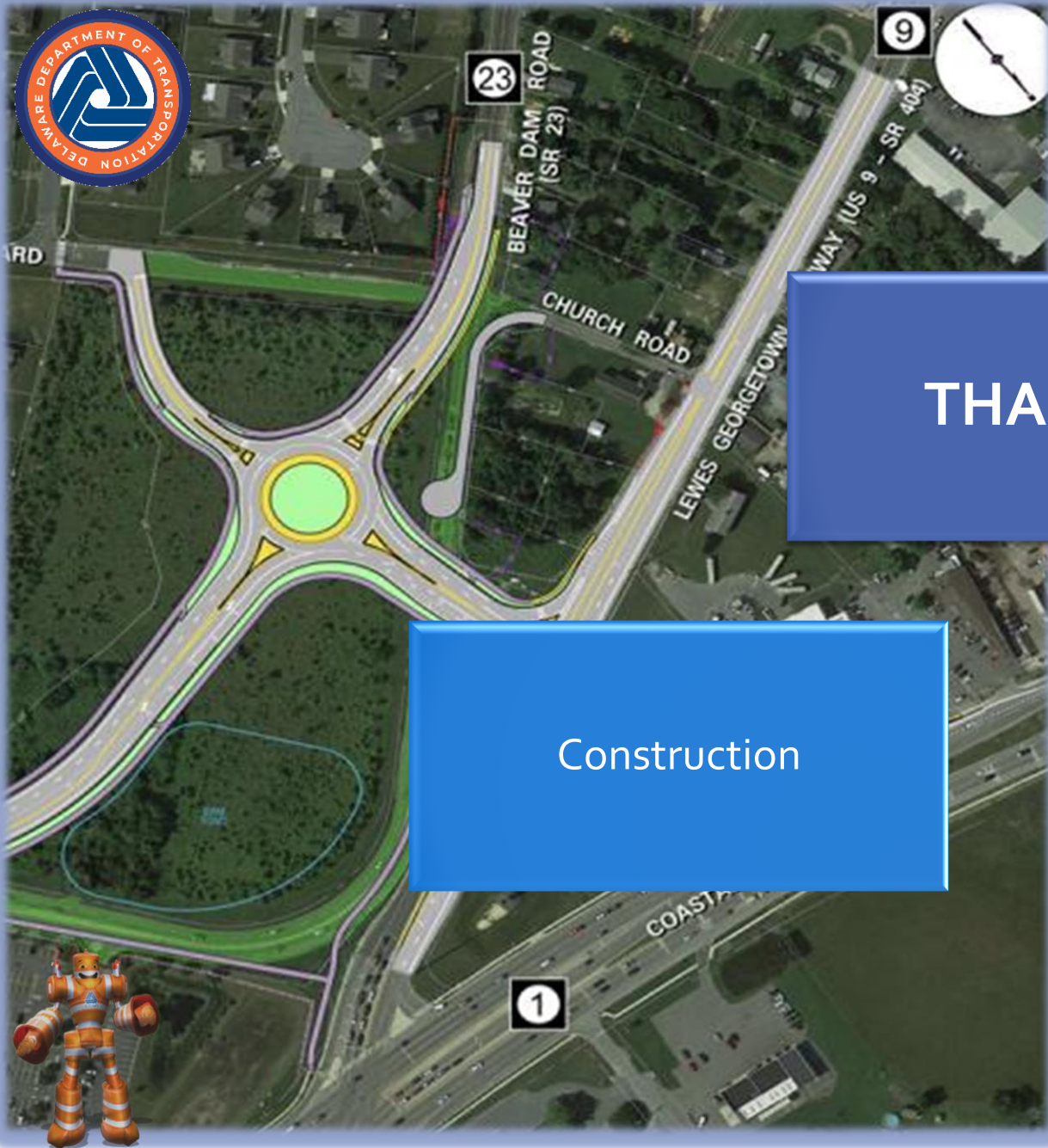
Division of
Transportation Solutions
Water Resources

Division of
Maintenance &
Operations
NPDES Program

*Stormwater BMPs: Design Approval
& Construction Review
Erosion & Sediment Control During
Construction*

*Post Construction BMPs
Stormwater Infrastructure Mapping
Industrial Maintenance Yard Permits
Phase I & Phase II MS4 Permits
Other "Post Construction"
Environmental (SPCC, EPCRA, Waste
Disposal, etc)*





THANKS!

Construction

Maintenance Districts





Team

- Brian Urbanek
Assistant Director Statewide
Support Services
- Sara Esposito
Program Manager II (NPDES
Program Manager)
- Dan Taylor
Engineer V (NPDES Engineer)
- Kerin Hume
Environmental Scientist IV
(NPDES Scientist)

NPDES@delaware.gov

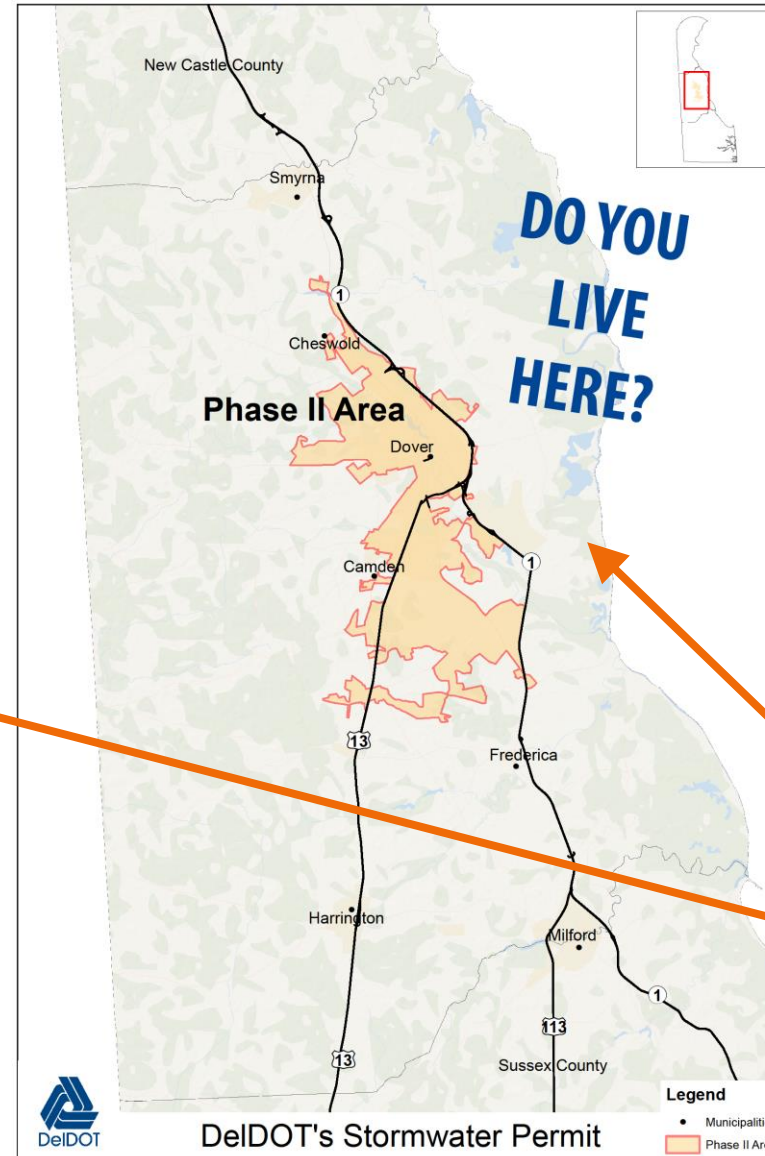
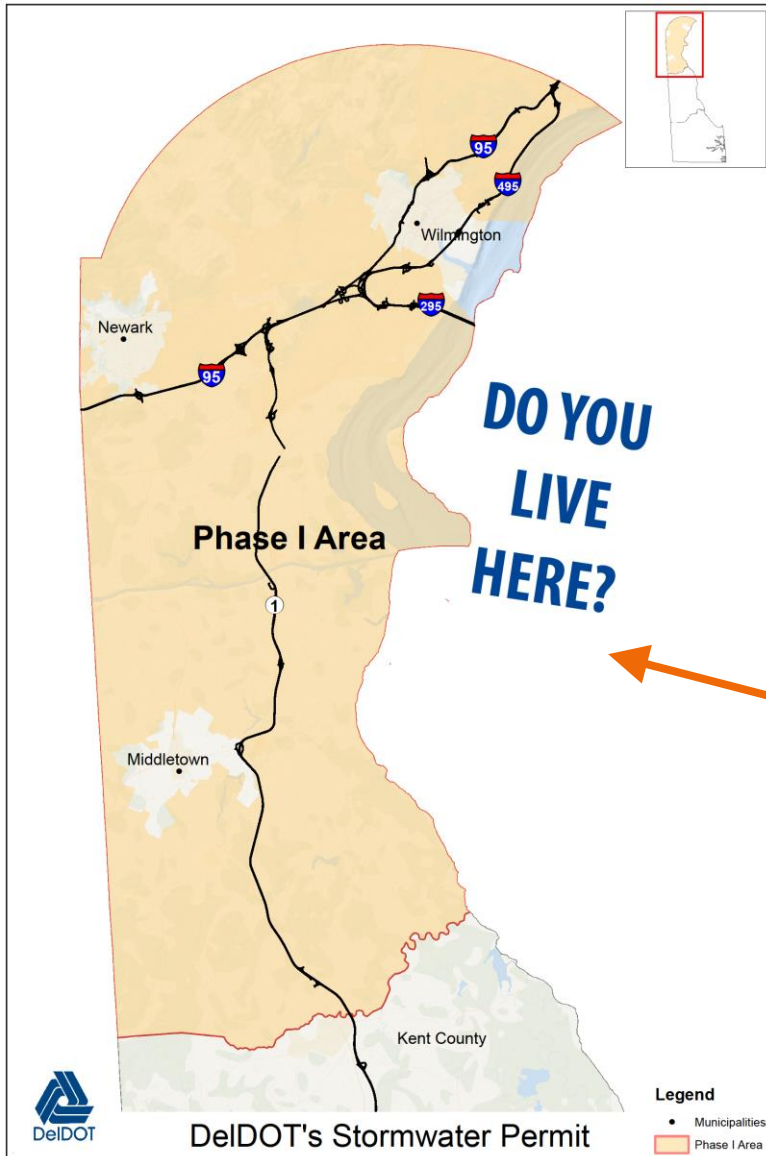
NPDES National Pollutant Discharge Elimination System

- NPDES program developed under the Clean Water Act
- NPDES permits limit the potential pollutants in stormwater in an effort to protect the waterways that receive the runoff
 - Many different types of NPDES permits:
 - Animal feeding operations
 - Wastewater
 - Commercial vessels (ships)
 - Construction
 - Industrial
 - Municipally Separate Storm Sewer System (MS4)





MS4Permits

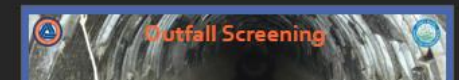
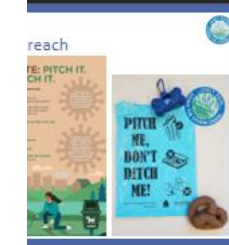
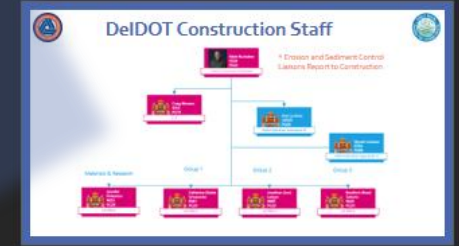




Phase II Audit

- Notified August 30th
- Conducted in October
- 2 Virtual Days & 1 Field Day
- Developed Powerpoint Presentations that Showed our Progress for Virtual Sessions
 - Focused discussions
 - Minimized "probing"

**LESSON LEARNED:
FOCUS AUDITORS
ATTENTION**

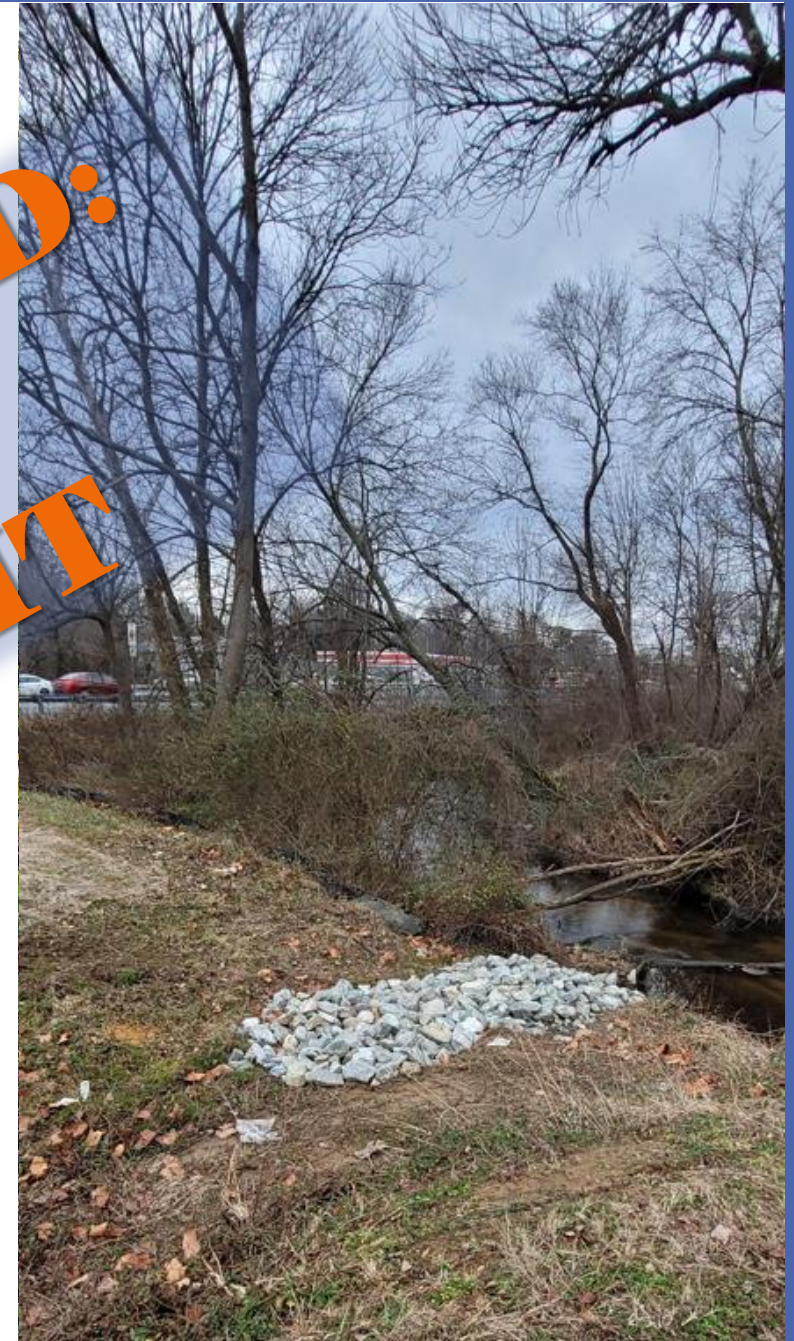




Phase II Audit

- Audit Review Letter Received January 5th.
- All aspects has “no observed deficiencies or other items to address” except...
- Post Construction BMPs had “DNREC comments prioritizing inspection and repair of BMPs that discharge directly to streams and other water bodies”.
 - DelDOT’s response included that because BMPs are inspected annually and entered into Maximo quarterly prioritizing does not make sense for inspection and minor maintenance; however, our future major maintenance efforts will look into proximity to waterbodies.
- DNREC approved approach on February 16th

**LESSON LEARNED:
FIGHT FOR
WHAT'S RIGHT**





Phase II Audit

- Special Thanks to Area 7 & Area 21 for prepping the Magnolia Maintenance Yard and the Stormwater BMPs for Inspection.
- The Magnolia Maintenance Yard is a Large Yard and didn't have any audit action items... This is due in part to years of improvements both by the Yard and Facilities investments in indoor washing and paving.





**LESSON LEARNED:
BEING PROACTIVE
PAYS OFF!**





MS4 Permits

- Public Education & Outreach about Clean Water
- Illicit Discharge Detection
- Good Housekeeping
- Construction & Post Construction Stormwater Management
- Water Quality Improvement Plans





MS4 Permits

Public Education & Outreach about Clean Water



KEEP YOUR LAWN GREEN FOR A CHANCE TO WIN SOME GREEN.

There are two chances to win during the year.



SPRING

Time to Test

Win up to \$150.



1. Visit DelawareLivableLawns.org to sign up for a free soil test kit.
2. Test your soil and return your sample by July 1 for a chance to win a \$100 Visa® gift card.
3. Tag Delaware Livable Lawns on Facebook to receive an extra \$50 if you win.





FALL

Time to Fertilize

Win up to \$250.

1. Use your spring soil test results to fertilize your lawn.
2. Submit your information to Delaware Livable Lawns by November 15 for a chance to win a \$200 Visa® gift card.
3. Tag Delaware Livable Lawns on Facebook to receive an extra \$50 if you win.

GET A BETTER LAWN. BUILD A BETTER PLANET. WIN SOME \$\$\$.





MS4 Permits

Illicit Discharge Detection & Elimination





See it, Report it!

- Call **302.STOPPIT**
(anonymously)

- Contact me:
Sara Esposito
NPDES Program Manager
302.760.2346
sara.esposito@delaware.gov

- Team at: npdes@delaware.gov



Water Pollution is a Crime. Don't Stand For It. STOPPIT

If you see pollution going into or out of the storm sewer system, report it!

Prevent Pollution







Vehicle Fluids Household Waste

Pet Waste Yard Waste

Call or text (302) STOPPIT

Email hotline@302stoppit.org or visit www.302stoppit.org

City of Wilmington residents can also use the Report It/ Resolve It App








STATE OF DELAWARE
 DEPARTMENT OF TRANSPORTATION
 800 BAY ROAD
 P.O. BOX 770
 DOVER, DELAWARE 19903

NICOLE MAJESKI
 SECRETARY

NOTICE TO UTILITY PROVIDERS

The Delaware Department of Transportation (DelDOT) is responsible for maintaining not only roadways, but also the extensive storm drain and pipe network within State rights-of-way. The Federal National Pollutant Discharge Elimination Act of 1972, requires DelDOT to control the amount of pollutants entering the drainage system. Part of this charge is the detection and elimination of *illegal discharges* or connections to the system that may contain pollutants or are otherwise not treated at any sort of treatment facility. Left uncorrected, any pollutants entering streams, as storm drainage is not treated at any sort of treatment facility. Left uncorrected, any pollutants entering streams, as storm drainage is not treated at any sort of treatment facility.

DelDOT routinely comes across illegal discharges or connections to the system that may contain pollutants or are otherwise not treated at any sort of treatment facility. Left uncorrected, any pollutants entering streams, as storm drainage is not treated at any sort of treatment facility.

Typical
 pages. We
 and sediment

Ero-
 Thank you for

Example 1: Utility work with bare dirt caused sedimentation in the roadway and into the stormdrain system. Inlet protection should be provided in or around the downstream catchbasin(s) until the area can be stabilized with seed and mulch.



STATE OF DELAWARE
 DEPARTMENT OF TRANSPORTATION
 800 BAY ROAD
 P.O. BOX 770
 DOVER, DELAWARE 19903

NICOLE MAJESKI
 SECRETARY

May 10, 2022

NOTICE OF ILLEGAL DISCHARGE

The Delaware Department of Transportation (DelDOT) is responsible for maintaining not only roadways, but also the extensive storm drain and pipe networks located within State rights-of-way. The Federal National Pollutant Discharge Elimination System (NPDES) Program, which is a component of the Clean Water Act of 1972, requires DelDOT to control the amount of pollutants entering the drainage system. Part of this charge is the detection and elimination of *illegal discharges* or connections to the system that may contain pollutants or are otherwise not treated at any sort of treatment facility. Left uncorrected, any pollutants entering streams, as storm drainage is not treated at any sort of treatment facility.

DelDOT has contracted with the engineering firm KCI Technologies, Inc. to survey and inspect the drainage system and to check for illegal discharges or connections. Please review the following checked items that pertain to the property located at 1226 E. Newport Pike, Wilmington, DE 19894, tax parcel 07-047.20-217:











**LESSON LEARNED:
IT'S NOT ALWAYS
THE OBVIOUS ONE**





MS4 Permits

Good Housekeeping











**LESSON LEARNED:
SEPARATING ISN'T
JUST FOR LAUNDRY**





MS4 Permits

Construction & Post Construction Stormwater





Construction → Post Construction Stormwater

- Provide Forebays with Depth (Ideally Min. 2')
- Maintenance Required at 50% Full
- Should Not Back Up into Pipe
- Provide Maintenance Road to All Pond Structures
- Provide Riprap ALL THE WAY to Stable Ground
- Minimize # of Significant Pipe Ends (Combine to One Point of Discharge)
 - Into Ponds
 - Into Swales
 - Underdrain Outlets
- Coordinate Any Large Open Areas for Reforestation or Pollinator to Reduce Mow
- Coordinate Any Shared Use Pond Agreements
- As-Builts at Initial Inspection – Approved by Steve Wright

**LESSON LEARNED:
SAVE BLUEBEAM
COMMENTS**





MS4 Permits

Water Quality Improvement Plans





Robscott Manor Stream Restoration





Questions?



Sara Esposito

Sara.Esposito@delaware.gov

302-760-2346