



Preventing Stormwater Pollution What We Can Do


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*Prepared in Cooperation with the North Central Texas
Regional Stormwater Management Program*



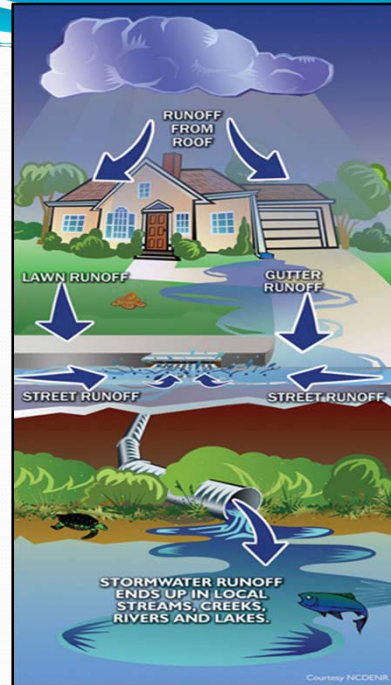
Training Goals

- Understand the City of Durham ordinance as it applies to your business practices
- Understand the terms “stormwater” and “illicit discharge,” why these terms are important and why you should care
- Understand what you can do to prevent stormwater pollution during HVAC cleaning and surface washing
- Answer any questions you may have



What is Stormwater?

- When it rains, water that does not soak into the ground becomes **runoff**
- **Runoff** can enter a storm drainage system which ends up in local streams, creeks, rivers, and lakes



Why is Stormwater Runoff Important?

- Stormwater runoff can pick up debris, chemicals, dirt, and other pollutants
- Stormwater runoff is **NOT** treated before it is discharged into local streams, creeks, rivers, and lakes



Lakeland, FL

What is an Illicit Discharge?

- Any discharge to the storm sewer system that is not made entirely of stormwater
- Exceptions include:
 - Water line flushing
 - Runoff or return flow from landscape irrigation
 - Discharges from potable water sources
 - Diverted stream flows
 - Rising ground waters and springs
 - Uncontaminated ground water infiltration
 - Uncontaminated pumped ground water
 - Foundation and footing drains
 - Air conditioning condensation
 - Water from crawl space pumps
 - Individual residential vehicle washing
 - Flows from wetlands and riparian habitats
 - Dechlorinated swimming pool discharges
 - Discharges or flows from fire fighting activities
 - Etc.

Why are Illicit Discharges Important?

- Illicit discharges often include pathogens, nutrients, toxic pollutants, etc.
- Illicit discharges = pollution
- Anything that enters a storm sewer system flows untreated to a local waterway



Irving



Why Should You Care?

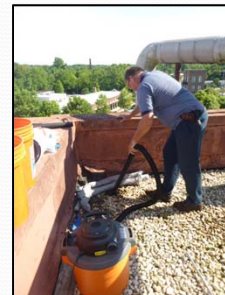
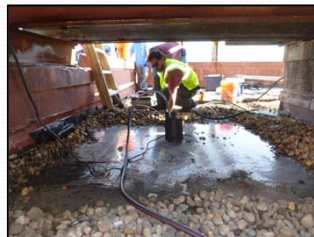
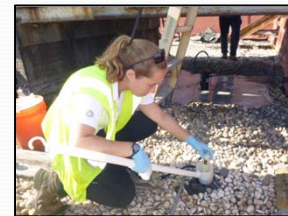
- We use local waterways for swimming, fishing, boating, and as a source of drinking water
- The City of Durham ordinance requires “only rain down the drain”
- Results of sampling indicate high levels of contaminants = illicit discharges

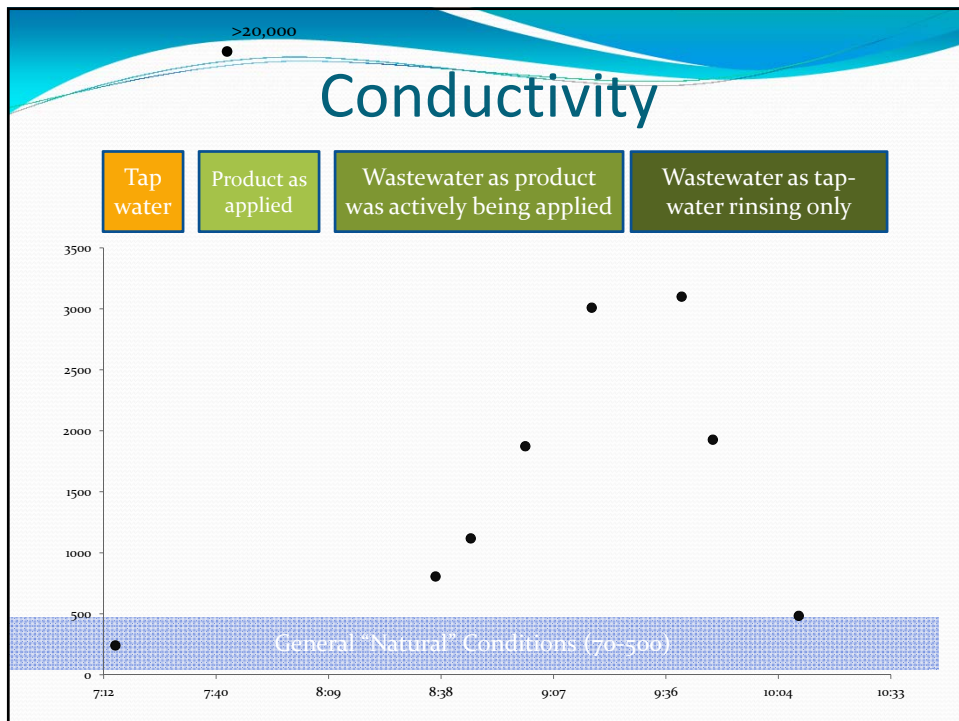
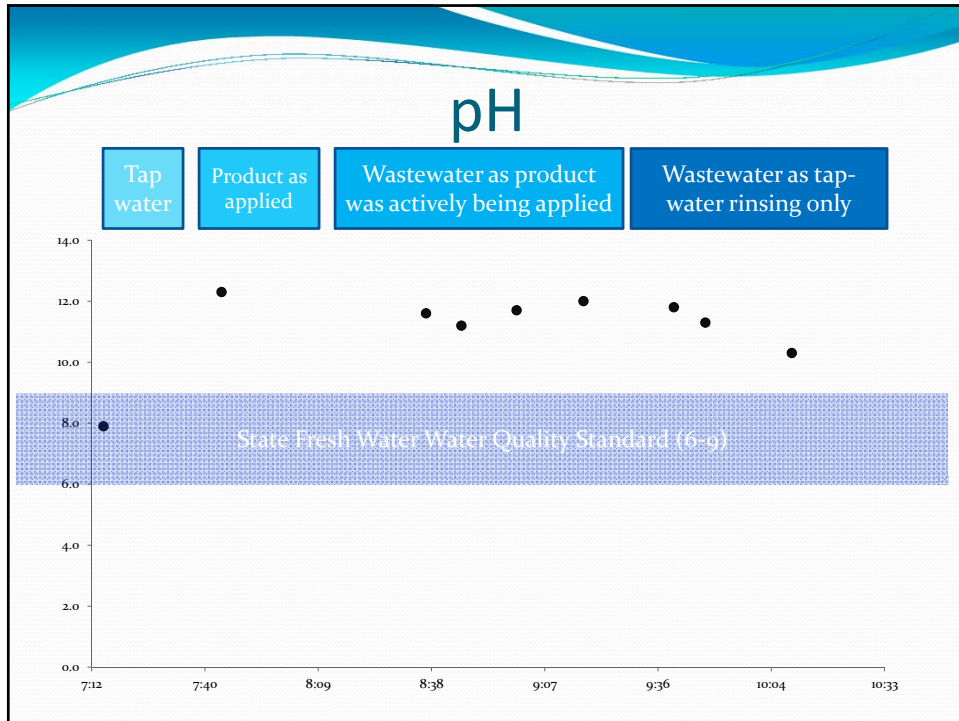


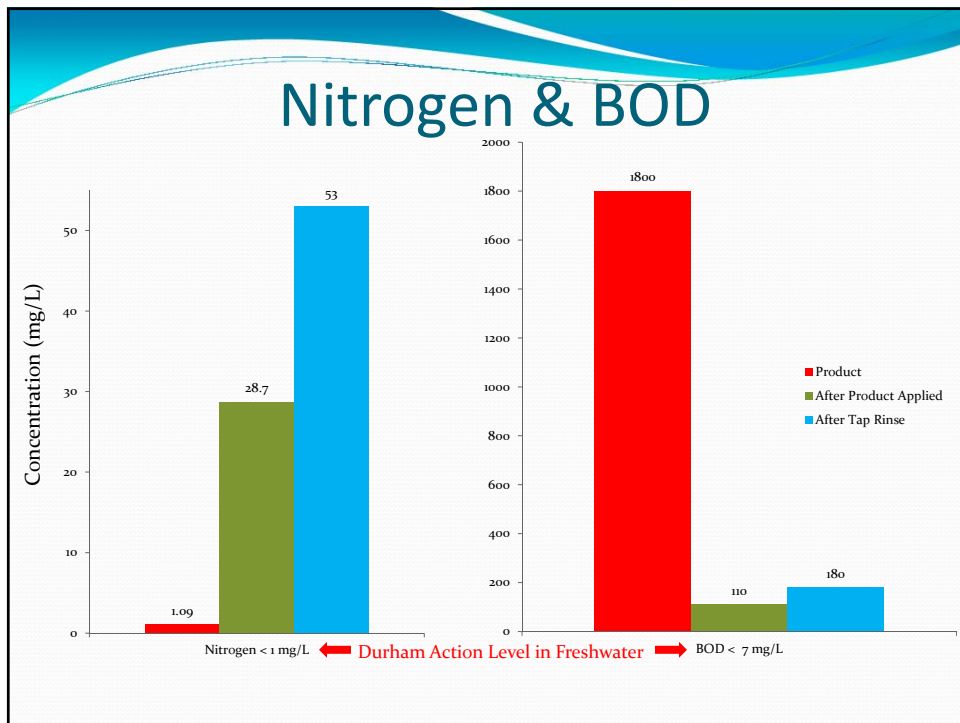
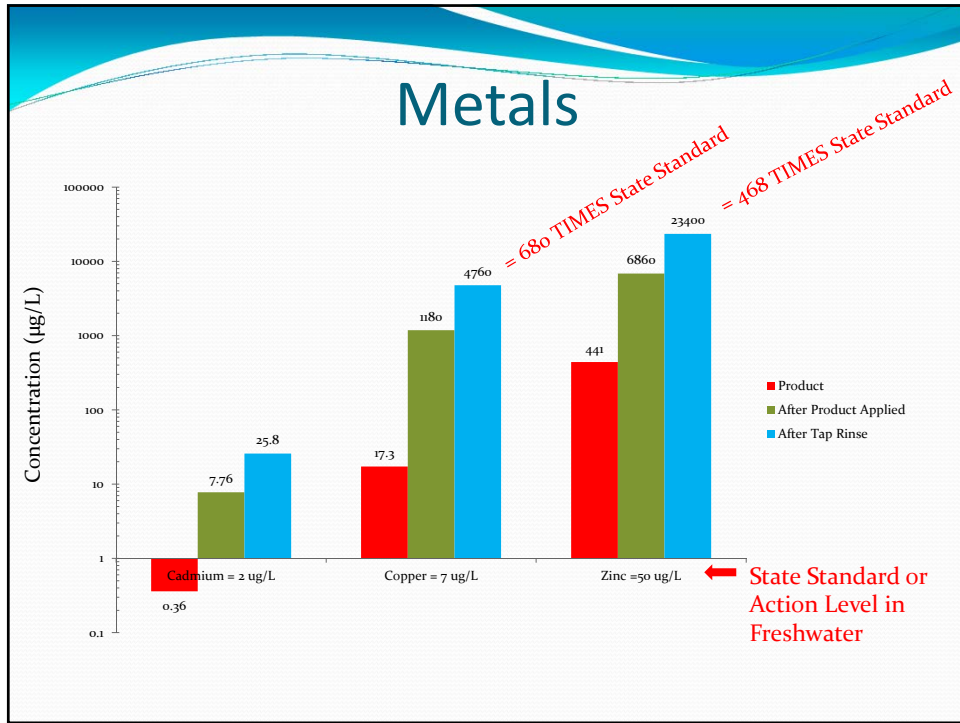
Wayne County, MI

Measuring Coil Cleaning Wastewater

- Sample event with Comfort Engineers in June 2014
- Large, dirty unit cleaned with a corrosive coil cleaner (very high pH)
- Field testing of pH and conductivity throughout product application and rinsing process
- Samples analyzed by private laboratory for metals, nitrogen, phosphorus, TSS and BOD







What Should You Do?

1. Plan
 - Locate the drains (roof/storm)
 - Inspect equipment
2. Contain
 - Block the drains (no water should enter)
 - Check drains during cleaning
3. Collect
 - Use a pump to collect waste water
 - Pump waste water directly to sanitary sewer (IF applicable- Check pre-treatment requirements)
4. Dispose
 - Dispose of waste water to sanitary sewer

Pretreatment requirements:

- Wastewater with pH less than 5.0 or more than 12.0 or wastewater having any corrosive property capable of causing damage to the Publicly Owned Treatment Works or equipment.

Disposal Requirements:

- Know where you are disposing (City vs. County)
 - If unsure, contact us to check!
- Wastewater should be disposed of via a private line. DO NOT open a City of Durham manhole.

You Must Report When:

- Wastewater enters the storm drainage system
- Wastewater enters surface water (creek, stream, lake, etc.)
- You dispose of wastewater into the sanitary sewer system that does not meet pretreatment requirements



Ways to Report

- Call 919-560-SWIM
- Email stormwaterquality@durhamnc.gov
- Fill out the online form at durhamnc.gov/stormwater
- Include the following information:
 - Specific location
 - Date and time
 - Description of the pollution
 - Email a picture or video if you can

For Pretreatment questions or to report an illicit discharge to the sanitary sewer, call the Pretreatment Coordinator: 919-560-4386 x 35556

Our Next Steps

- Finalizing study plan
- Anticipated in Spring (more normal conditions)
- Work with Comfort Engineers to sample at 3 to 4 more locations
- Test wastewater from cleaning using chemicals with lower pH and higher pH, and water only
- Looking at HVAC units with more and less build up

Thank you!

Questions?

