# Stormwater Department Role in Emergency Situations

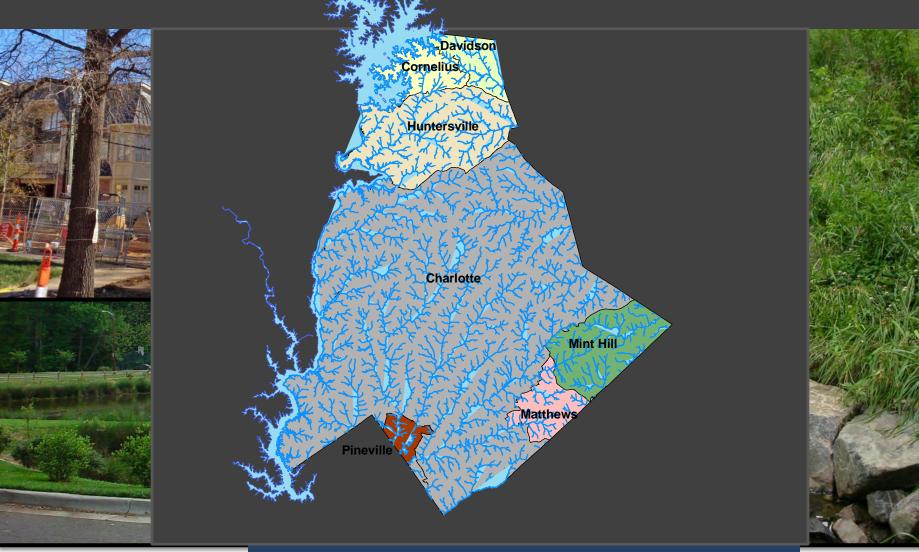




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## **Charlotte-Mecklenburg Storm Water Services**





Charlotte's population: 850,000

Mecklenburg County's population: >1 million

3,800 miles of pipe & 2,400 miles of open drainage channels



# **Charlotte-Mecklenburg Storm Water Services**





Water Quality Team
17 city staff and 30 county staff



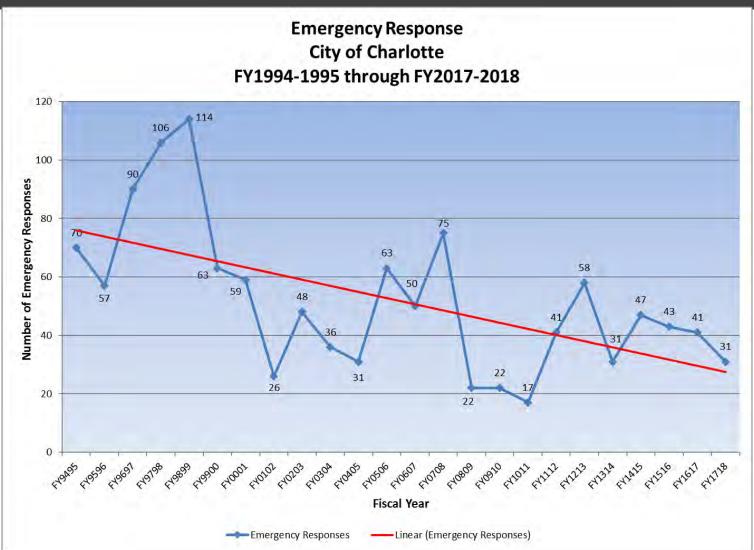
### Background

- 1974 Mecklenburg County signed an Memorandum of Understanding (MOU) with NCDEQ
  - At the time, Mecklenburg County was 1 of 2 (Wake County) in state.
- Emergency Response started in a Mecklenburg County department called Environmental Protection which included Air Quality, Groundwater, Solid Waste and Water Quality.
- In 2001, organizational changes occurred and the Mecklenburg County Water Quality team took over.





## Background



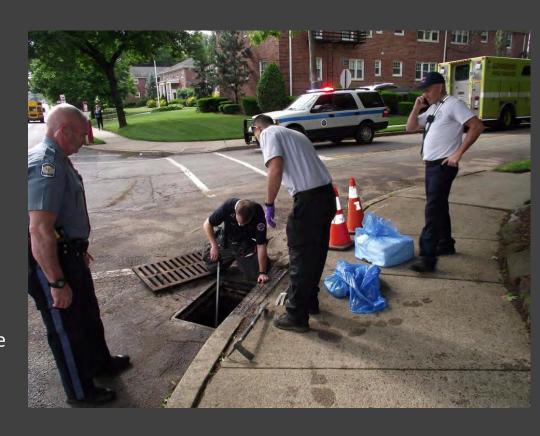




### Why Get Involved in ER?

#### Pollution Control Ordinance

- NPDES Stormwater Permit
- Spills don't always happen during business hours and minimizing their impact requires 24 response.
- Provide Support for State and Federal Agencies
- Support the Fire Department
  - Help them focus on safety, containment and preparation for the next event.







### **Our Role**

### **Support the Charlotte Fire Department (CFD).**

- CFD always maintains command.
- HAZMAT's priority is public safety and containment of hazards.
  - HAZMAT often asks for advice on how and where to place booms.
- We provide support.
  - We support containment and clean up of pollutants that may impact stormwater and/or waters of the state.









### **Our Role**

#### Contractor Management

- Ensure the cleanup starts quickly and is completed properly.
- Requires frequent communication, direction, and oversight.

#### Incident Follow up

- Communicate with state and federal agencies.
   Issue NOVs when appropriate.
- Documentation of the incident and impacts.
- Ensure that restoration is completed as applicable.

#### Represent environmental concerns when there are several priorities

- Public Safety
- Reopening roads and highways
- Preparation for another event
- Response time







## No Responsible Party for Cleanup

#### Private property

Cleanup is the property owner's responsibility.

#### Public Right of Way

 Cleanup is responsibility of CDOT unless spill has reached the storm drain or surface waters.



### Responsible party is non-responsive or not responding quick enough

- Active discharge, imminent threat.
- Initiate and pay for a response and then find the responsible party.

### Annual budget for unforeseen incidents

- \$20,000 (City) and \$5,000 (County)
- Over last 5 years, \$8,400 was highest and \$0 was lowest spent by the City from this budget.





## **Examples**

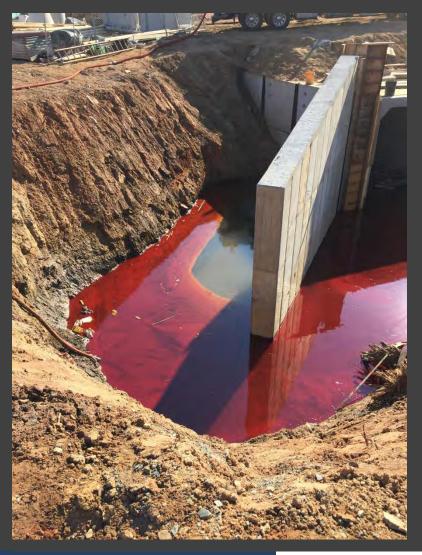
#### 2018 Diesel Fuel Spill

150 gallons of off-road diesel. Unidentified spiller.
 Clean up: \$35,000

#### **2017 Diesel Fuel Spill**

 5,000 gallons of off-road diesel from a roof generator tank. Clean up: \$38,000+









## Examples

- **Eggs:** 200 gallons of liquid eggs on the local interstate.
- Watermelons: 50,000 pounds of watermelons mixed with antifreeze and oil on the local interstate.
- **Rotten meat:** Over pressurized anaerobic digester tank discharged rotten meat directly into the creek.

• Quarry Slurry: Large discharge directly into the creek.









## **Examples**

- Saddle tank puncture
  - most typical incident.
- 2014 PCB Spill
  - in the sanitary











Charlotte Water has spent > \$10 million on remediation from the PCB spill.



# So ... how is the program run?



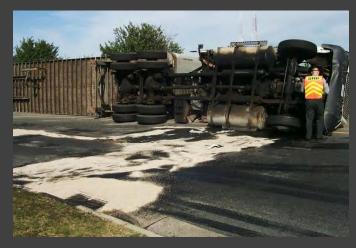


#### Establish Partnership

- Open forum meeting with the HAZMAT chief every couple years.
- HAZMAT Chief contacts Lead ER Staff a few times a month.
- HAZMAT crew staff work great with stormwater staff.

#### Establish list of qualified cleanup contractors

- Call back within 10 minutes
- Onsite with equipment within 1 hr. (nonpeak traffic) and 1 ½ hr .(peak traffic).
- Contractors are removed from the list for lack of response, lack of appropriate equipment, or cherry picking events.









### **Establish a Notification System**

- 311
  - Weekend message is for emergencies to call 911.
- Water Watchers Mobile App
  - Immediate response for Emergencies only.
     Judgement call by Storm Water Services staff.
- 911
  - Fire Department contacts the Storm Water ER phone through 911 dispatch.
- Triple Back up!
  - CFD calls the ER phone.
  - If no answer, CFD calls the Lead ER staff person.
  - If no answer, CFD calls the Flood Information and Notification System ER phone (connects to floodplain management staff).





Triple redundancy for notification is highly recommended.



#### Supervisors on call

• Communication for expenditures, back up, and/or to consult about whether immediate response is necessary.

#### **Compensation for ER Assignment**

- Staff are on call 24 hours/ a day for 1 week at a time.
- Each staff person is assigned 1-3 weeks/ year.
- Schedules are set up in November for the following calendar year.
- Assignments are based on seniority. Live draft with staff.
- Flexible for staff to switch weeks/ work more weeks or less as desired.
- Provide good compensation:
  - Hourly Staff: 1 hr. for each day on-call + 1:1 hr. comp time for response.
  - Salary Staff: 8 hrs. for each day on-call + 1:1.5 hrs. overtime.

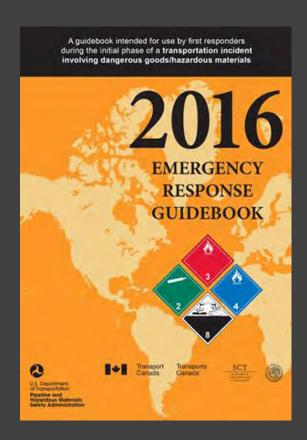




#### **Staff Resources**

- ER Cell Phone
- The "ER Bag"
  - Kiddie pool, flashlight, laminated copy of contractor list, ER Guidebook, strobe lights on vehicle, reflective vests and safety boots.
- Emergency Response Phone Numbers
  - Water and Sewer Utilities
  - CDOT
  - NDEQ and NCDOT
  - EPA / National Spill Response Center
  - Duke Energy
  - Piedmont Natural Gas

#### Training!







## **Resources and Program Details**



#### **Staff Training**

- One time 40 hr. HAZWOPER course
- Annual 8 hr. refresher training and 1 hour training by lead ER staff person.
- On-the-job training until staff is capable. Depends on the staff person how long that takes.
- Staff needs to be confident. A lot of stress during these accidents.
- Provide forum for staff to share stories and learn from each other.





# Resources and Program Details

### Be prepared for after events

- Media Response
- Assessment of impacts
- Coordination with the state and EPA.
- Communication with local wildlife rescue organizations
- Reimbursement process







# **Questions?**

