



A Range of Illicit Discharge Experiences - Mobile Washers to Pools and Many in Between



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Mobile Washers & Power Washing



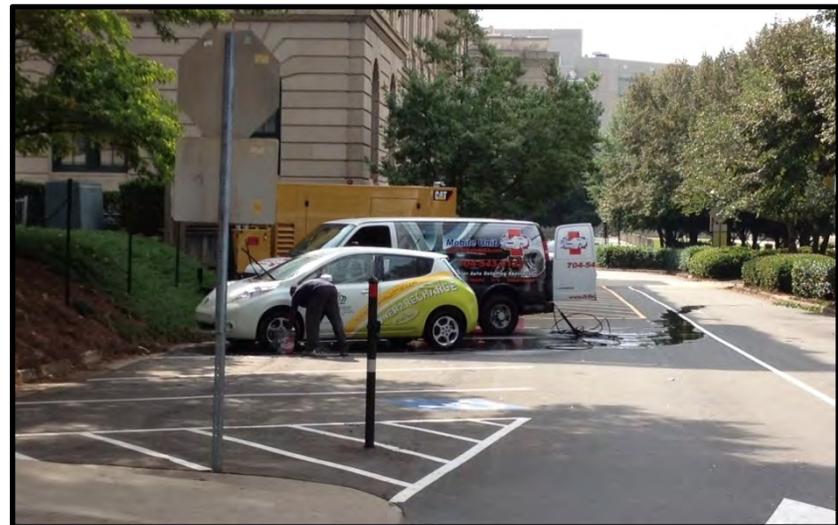
Why is it a problem?

- **Illicit discharges / pollution potential**
- **Frequency of discharges from these sources without use of BMPs**
- **Complaints from citizens to City Council**
- **Business owners who follow the rules complain about lack of enforcement**

Mobile Washers & Power Washing

What did we do?

- **Developed BMP Guidance**
- **Mailings to business owners**
- **Sponsored a workshop**
- **Enforcement blitzes**
- **Developed “Field Notice of Violation”**
- **Weekend enforcement**
- **Addressed issues within City operations**



Mobile Washers & Power Washing Guidance

- **“BMPs for Pressure Washers, Vehicle Detailers and Other Surface Cleaning Operations”**
- **“Acceptable Practices for Disposal of Wash Water”**
- **“Containment, Collection and Filtering Products”**



Mobile Washers & Power Washing Challenges/ Recommendations

- **Workshops**
 - Resource intensive and involved too many people
 - Separate the issues
 - Attendees were mostly pressure washing companies
- **Guidance**
 - Consistency w/ other municipalities
 - Pictorial descriptions are best
 - Work with sewer utility!
 - So many scenarios to consider
- **Enforcement and monitoring**
 - Mobile washers often operate late afternoon & weekends; move around a lot
 - Power washing occurs frequently all over the city
 - Difficult to sustain Zoning & Police involvement w/o City Council attention



Pools

Why are they a problem?

Pollutants

- Chlorine, salt water can kill aquatic life
- Maintenance wastewater (acid washing, grouting, etc.)
- Also volume of discharge

Pool Volumes

- Residential average 20K – 30K gallons; commercial even larger

Number

- > 1,400 in Charlotte & 50 new ones /year; unknown how many residential pools



Pools

What did we do?



- **Developed BMP Guidance**
 - Worked with Health Dept and Sewer Utility
- **Presentations**
 - Health Department's Pool Operator Meetings
- **Mailings**
 - Pool service companies (obtained list from Health Dept and other sources)

Pools Guidance

“BMPs for Swimming Pools and Spas”

- Drain to Yard or Landscaped Area
 - Difficult to contain within yard
- Drain to Storm Drain System
 - Dechlorinate below 0.1 mg/L
 - No salt water to storm drain
 - No filter backwash to storm drain
- Drain to Sanitary Sewer
 - Contact utility first about pool water – conditions apply
 - Some maintenance wastewater ok, some not – contact utility first



Pools

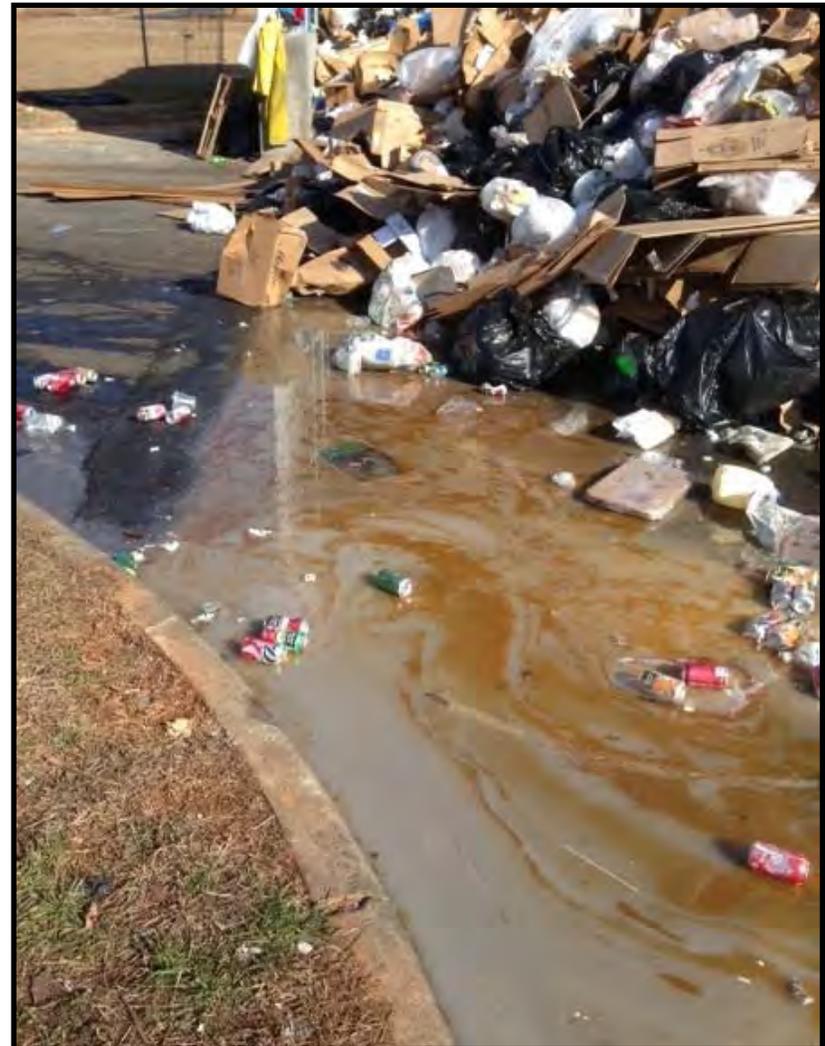
Challenges/Recommendations

- **What to do with salt water?**
 - Sodium level too high and doesn't dissipate
 - No to storm drain, no to sanitary sewer
 - Sodium level would likely harm lawn and plants in yard
 - Pump, haul and treat is costly (est. \$2,000 - \$4,000)
- **Educating residential pool owners**
 - Locations are not known; working with Health Dept and Building Standards to obtain notification about new construction
- **Work with other departments**
 - Health, Sewer Utility, Building Standards

Dumpster Pads

Why are they a problem?

- **Every commercial structure built has a dumpster pad**
- **Dumpsters built over a storm drains**
- **Plugs missing. Most dumpsters leak.**
- **Impacts – high bacteria, BOD**



Dumpster Pads

What did we do?

Building Standards brought up the issue to Stormwater Services

- **Developed a policy paper:**
 - Dumpster pad cannot have a storm drain.
 - Any storm drain must be a minimum of 20' from pad.
 - Dumpster pad can drain to the sanitary sewer provided:
 - It is connected via a grease interceptor
 - The entire pad must be under cover
 - The area surrounding the pad must be sloped away from the pad
 - The pad itself must be sloped toward the interior drain



Dumpster Pads

Challenges/ Recommendations



- **No guidance for cover dimensions**
- **Justification for 20 feet?**
- **Drainage to storm drain anyway?**
- **Authority of guidance?**
- **Build relationship with Mechanical/ Plumbing Code Administrator**

Horizontal Directional Drilling

Why is it a problem?

- Sediment slurry discharges to stormwater drainage system and local creeks
- Damages to underground utilities (sewer, water, gas)



Horizontal Directional Drilling

What did we do?

- Developed BMP guidance
- Training/presentations
 - 811 Contractor meetings
 - Transportation Dept inspectors
- Letters & emails to contractors
- Sent NOVs to contractor doing the work and the prime/hiring contractor



Horizontal Directional Drilling Guidance

- Emphasized entry/exit pits and vacuum collection as the prime BMPs
- Storm drain protection is secondary, back-up BMP
- High degree of oversight & training for sub-contractors, otherwise they might take short cuts



Horizontal Directional Drilling

Challenges/ Recommendations

- **Volume and frequency of work**
- **Contractors from all over the country**
- **Lack of proper equipment by subcontractors**
- **Disposal sites?**
- **Communicate with prime contractors!**





Questions? Input?



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