

# Auto Services Workshop at the U.S. National Arboretum



# Auto Services Workshop at the Arboretum

June 8, 2017

## AGENDA

- |             |   |
|-------------|---|
| 9:00 am     | Arrival and Networking  |
| 9:15-10:15  | Tour of Hickey Run Outfall<br><b>Scott Aker</b> , USDA, U.S. National Arboretum<br><b>Jacob Zangrilli</b> , Inspection and Enforcement Division, DOEE   |
| 10:15-10:30 | Welcome and Introductions<br><b>Mary Lynn Wilhere</b> , Urban Sustainability Administration, DOEE<br><b>Director Richard Olsen</b> , USDA, U.S. National Arboretum  |
| 10:30-10:45 | Break   |
| 10:45-11:05 | RCRA C: Hazardous Waste and Used Oil Management<br>The regulations may be complicated, but compliance is easy. Learn about common regulated wastes, how to properly manage them, and how to save money.<br><b>Victoria North</b> , Toxics Substances Division, DOEE |

## **AGENDA (Continued)**

- 11:05-11:25      Stormwater Pollution Prevention for Your Bottom Line  
Source reduction can give your shop a competitive edge by working to prevent waste, reduce toxicity, increase efficiency, and save you money. Learn about low-cost options for material management, alternative products, and recycling processes that will help prevent stormwater pollution.  
**Clara Elias**, Watershed Protection Division, DOEE



**Vickie North,  
Hazardous Materials,  
DOEE**



# RCRA C Hazardous Waste Environmental Compliance and Technical Assistance Session for Auto Service Professionals

Victoria North  
Toxic Substances Division  
Hazardous Waste Branch  
[victoria.north@dc.gov](mailto:victoria.north@dc.gov)  
202 535 1909



- This information was prepared specifically for auto and small engine repair professionals and may not be appropriate for other facilities.
- This information is highly condensed and does not include all regulatory requirements. It CANNOT be used as training material.
- This information includes best practices which may exceed the regulatory requirements.
- DOEE cannot attest to the accuracy of information provided at the links in the presentation. Providing these links does not constitute an endorsement by DOEE or any of its employees.

# What can get you in trouble?

- Failing to get an EPA ID #
  - (also called an EPA Handler ID # or an EPA Generator ID#).
- Failing to identify hazardous wastes (HW).
- Failing to properly manage hazardous wastes (HW), universal waste (UW), or used oil.
- Failing to properly dispose of hazardous wastes (HW), universal waste (UW), or used oil.
- Failing to keep paperwork to show you did everything right.

# Penalties!

- No EPA ID # is a \$2,000 fine.
- Not properly managing regulated wastes has fines ranging from \$500 to \$2,000 per infraction.
- Not submitting the annual renewal fee is a \$500 fine.
- Not submitting the annual self-certification of compliance is a \$500 fine.
- Clean up expenses caused by not properly managing or disposing of regulated wastes cost many thousands of dollars.
- Failure to properly manage regulated wastes puts you, your staff, your family, and the environment at risk.



# How to stay out of trouble:

## 1 - Get an EPA ID #.

- All generators of hazardous waste, universal waste, or used oil in the District must have an EPA ID #.
  - An EPA ID # looks like this: DCR 000 500 109.
- To get an EPA ID # fill out EPA Form 8700-12 and submit it, with the registration fee, to the DOEE Hazardous Waste Branch.

## 2 - Identify all the items in your facility that will be hazardous waste if you can't use them.

## 3 - Properly manage and dispose of hazardous waste, universal waste, and used oil.

## 4 - Train your staff to follow the rules.

## 5 - Keep your paperwork to prove you did everything right!

# Commonly found wastes at auto shops which are regulated under the RCRA C hazardous waste (HW) regulations

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- Used oil
- Some parts washer solutions (HW) (ignitable)
- Some paints and paint thinners (HW) (ignitable)
- Lead wheel weights (HW) (toxic)
- Some concentrated cleaning products (HW) (corrosive)
- Battery acid (HW) (corrosive)
- Most aerosol products (HW) (ignitable)
- Spoiled gasoline (HW) (ignitable)
- Car or forklift batteries (UW)
- Fluorescent lamps (UW)
- Mercury tilt switches (UW)

# It might be a hazardous waste if...

- If it says 'danger' on it
- If it says 'flammable' on it
- If it says 'toxic' on it
- If it says 'poison' on it
- If it says 'warning' on it
- If it has a picture of a skull and cross bones on it
- If it has a picture of a fire on it
- If it is an acid
- If it is a base
- If it is a solvent



These items should be evaluated to see if they must be managed as hazardous waste.

Note: This list is not exhaustive, it is intended to initiate the evaluation process.

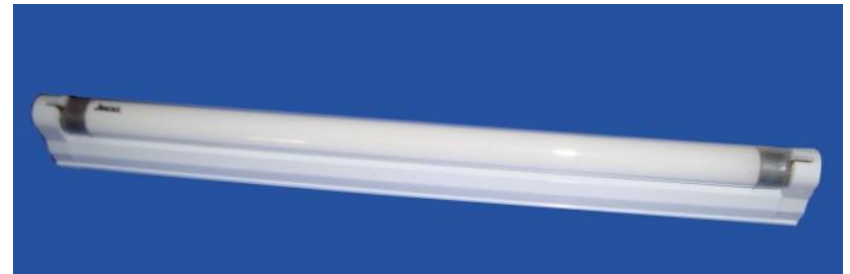
# The regulation defines RCRA C regulated hazardous wastes as:

- Listed wastes
- Characteristic wastes
  - Ignitable (flash point below 140°F or 60°C)
  - Corrosive (pH  $\leq$ 2 or pH  $\geq$ 12.5)
  - Reactive
  - Toxic
- Anything the Administrator or the Director says is hazardous waste
- Anything you say is hazardous waste

# Other RCRA C regulated wastes

Universal waste is a subcategory of hazardous waste.

- Spent fluorescent lamps (intact only, broken or crushed lamps are usually hazardous waste)
- Some batteries
- Some pesticides
- Mercury thermostats
- Mercury tilt switches



Used oil is also regulated



# How to figure out if the item is a hazardous waste

1 - Decide if it is a waste. Remember, the regulations only apply to waste, not to products you are currently using.

2 - Determine if the waste meets or exceeds one of the criteria in the regulation (see slides 8 & 9).

- Review a current safety data sheet (SDS) for the product, the flash point and pH will be listed. Also, many SDSs now state if the item will be regulated when it becomes a waste.
- Ask the vendor for the flashpoint, pH, and ingredients.
- Submit a sample for testing

3 - Any waste which meets or exceeds one of the criteria, is a hazardous waste.

# How to manage your - hazardous waste items

- Identify it
- Label it
- Date it
- Close it
- Inspect it
- Dispose of it (correctly)
- Train staff

# How to manage your - hazardous waste items (continued)

- Identify it
  - Make a determination on all waste to identify all which require management under the regulation. See slide 10 for instructions.
- Label it
  - With the contents if it is not waste
  - “Hazardous Waste” if it is hazardous waste
  - Universal waste allows several variants (see slides 13 and 14)
- Date it - with the accumulation start date
- Close it – keep it in a closed container
- Inspect it – conduct weekly inspections, and keep a log
- Dispose of it (correctly). Arrange for appropriate disposal using a licensed contractor on a schedule. You will get a manifest. Keep the manifest for your records.
  - Using small bottles helps
- Train staff
  - As of October 23, 2015, secondary containment is no longer required for liquid hazardous waste except at TSDFs. Secondary containment is still required for used oil.



# How to manage your - universal waste lamps

- Contain it – put spent lamps in a drum, box, or carton
  - Label it - “Universal Waste - Lamps” or “Waste Lamps” or “Used Lamps.”
    - You can’t call them tubes or bulbs, only lamps.
  - Date it - with the accumulation start date
  - Close it – keep it in a closed container
  - Dispose of it (correctly). - You may store universal waste at your site for up to 1 year.
    - Arrange for appropriate disposal by a licensed contractor on a schedule
  - Train staff
- 
- Incandescent lamps and LED lights are not universal waste
  - Remember that broken or crushed lamps are never universal waste; they are usually hazardous waste.



# How to manage your - universal waste batteries

- Label it - "Universal Waste Battery(ies)" or "Waste Battery(ies)" or "Used Battery(ies)."
- Date it - with the accumulation start date
- Dispose of it (correctly). - You may store universal waste at your site for up to 1 year.
  - Arrange for appropriate disposal by a licensed contractor on a schedule
- Train staff
- Alkaline batteries are not universal waste

# How to manage your - used oil

- Label it - “Used Oil”
- Close it – Keep the container closed
- Contain it – Use secondary containment
- Train staff
- You cannot burn used oil in the District
- Cooking oil is not regulated by DOEE. It is regulated by DOH.

# Other regulatory bodies

- DOEE
  - Water Quality Division
  - Lead Program
  - Air Quality Program
- OSHA
- WASA / DC Water
- Fire Marshall
- DOT
- others

# Reminders:

- Each site must maintain current information on file with the DOEE Hazardous Waste Branch
  - Remember to send in a revised 8700-12 when the contact person changes, the mailing address changes, the waste streams change, or the generator status changes.
  - It's free to update the information!
- The annual fee is due every March 1<sup>st</sup>.
- The annual self-certification of compliance is due every March 1<sup>st</sup>.

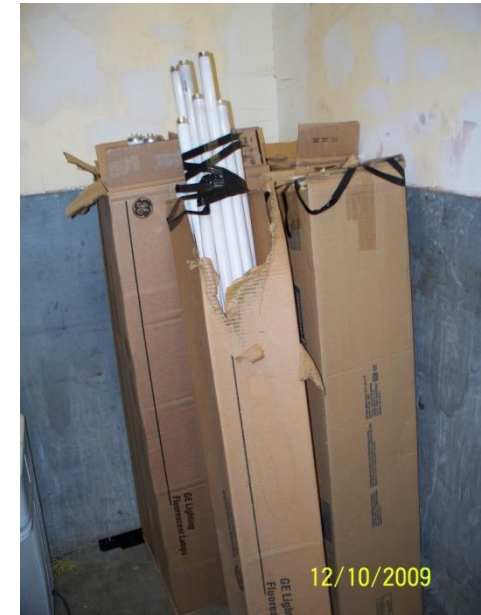
# Reminders:

As of October 23, 2015, the annual fee for conditionally exempt small quantity generators (CESQGs) will be \$250 unless the generator has less than 8 employees. For CESQGs with less than 8 employees, the fee is \$100.

This was added to the regulations to assist smaller businesses. In order to qualify for the \$100 CESQG fee, you must have less than 8 employees company wide.

# Examples

# What NOT to do



Universal waste lamps must be

- in boxes
- which are closed
- are labeled
- and are dated



# What NOT to do

Labels must be meaningful!

Hazardous waste must bear the words “Hazardous Waste” and the date it was determined to be a waste.



# Secondary containment for - above ground storage tanks



# Secondary containment for - large containers



These are suitable for use outdoors. There are different styles available.

# Secondary containment for - large containers (continued)

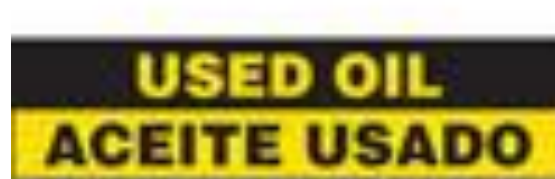
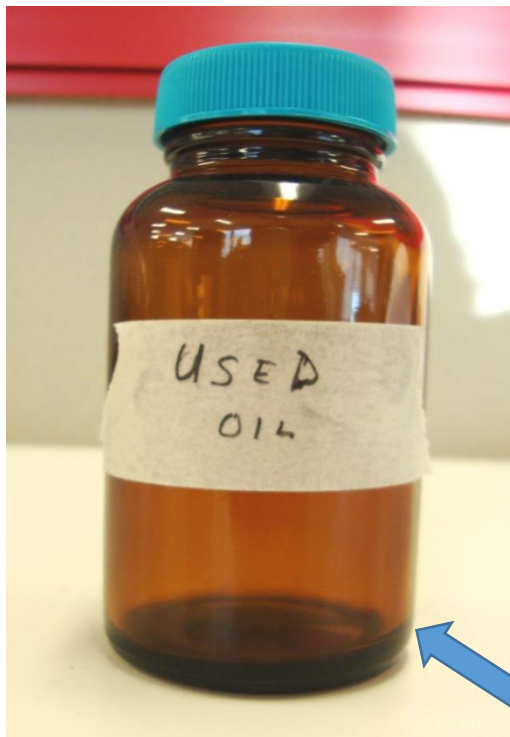
These are not suitable for use outdoors.  
A variety of configurations are available, pick one that works in your space.



# Used oil labels

## examples

Handmade and hand written labels are ok!

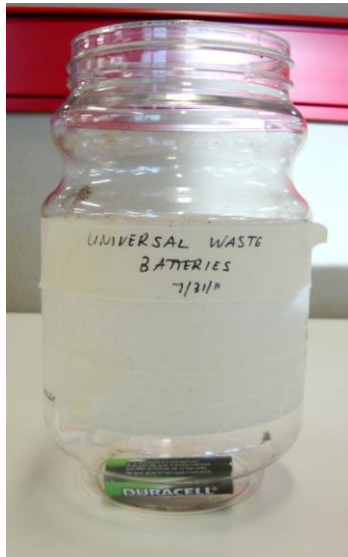


Don't forget that used oil must be in secondary containment, this example is not in secondary containment.



# Universal waste battery labels - examples

Handmade and hand written labels are ok!



It may be easier to put small batteries in a container and label and date the container rather than labeling and dating each individual battery.



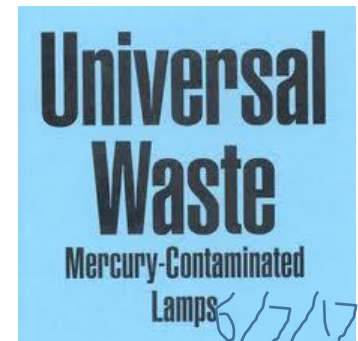
Remember to write the date on both of the above labels

# Universal waste lamp labels - examples

Handmade and hand written labels are ok!



Make sure the date is included



Remember to write the date on both of the above labels



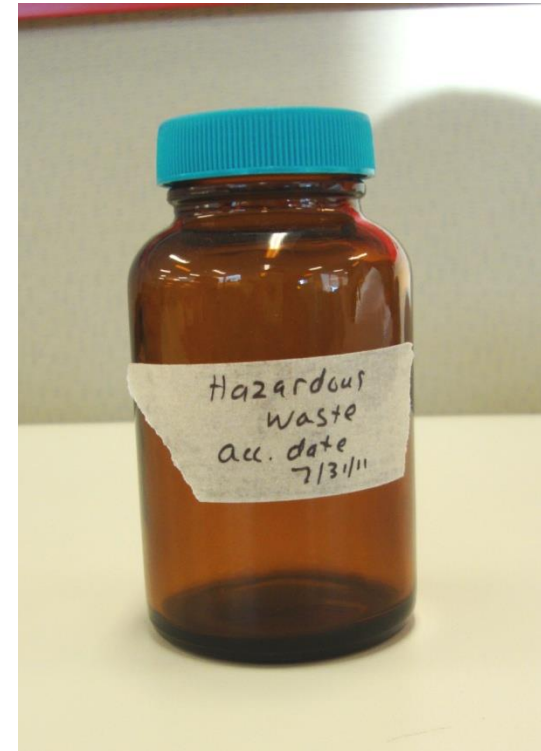
# Hazardous waste labels

## - examples

Handmade and hand written  
labels are ok!



Remember to write the date on  
the labels





Containers of used oil must be closed.

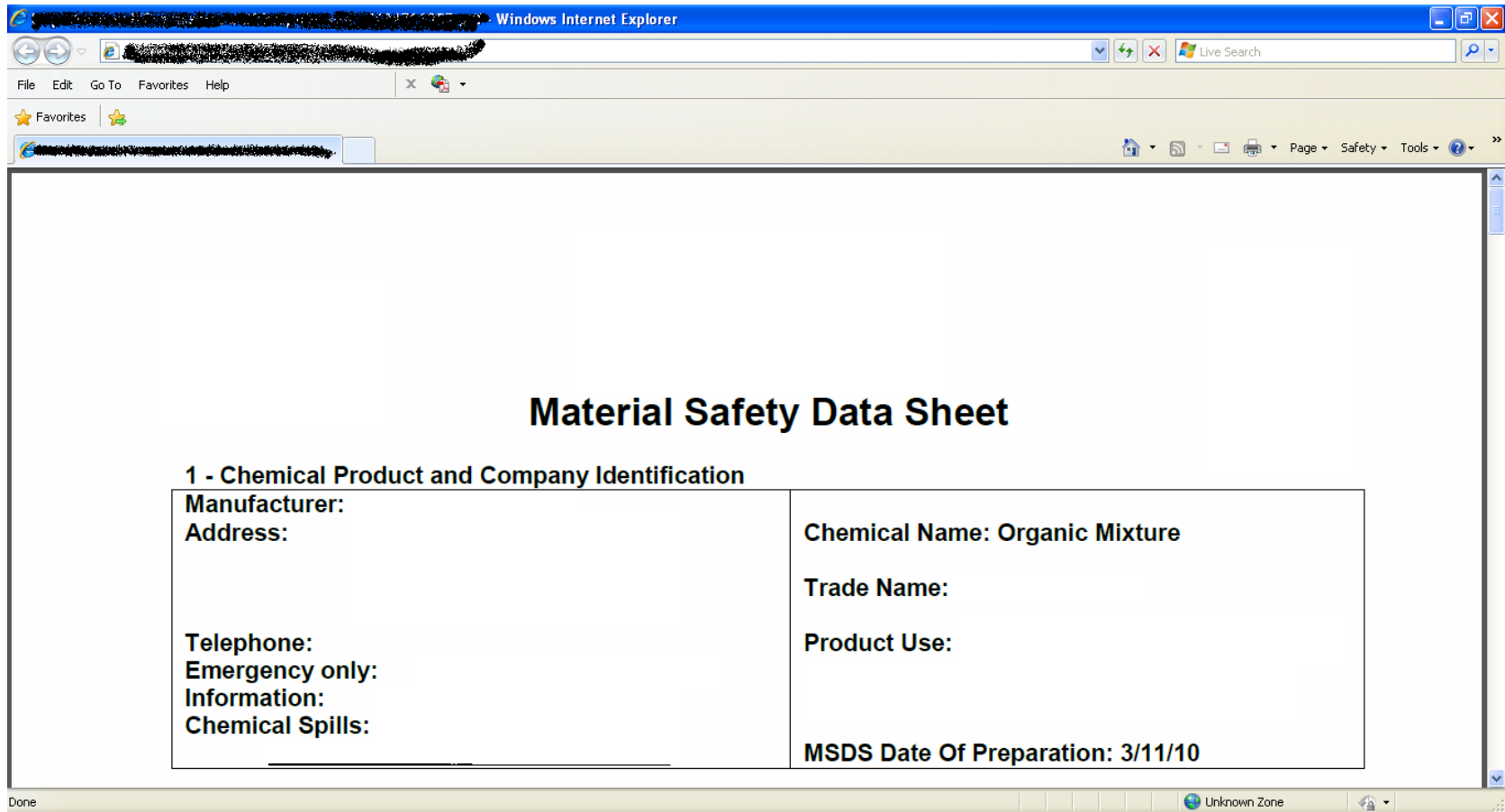
A self-closing funnel may be used with above ground storage tanks or 55-gallon drums of used oil only.



This funnel is not self-closing

# Where is the info on an SDS?

This is what the front page of a (material) safety data sheet (MSDS or SDS) looks like:



The screenshot shows a Windows Internet Explorer browser window. The address bar contains a URL that has been redacted with black ink. The browser's menu bar includes File, Edit, Go To, Favorites, and Help. The Favorites bar is visible below the menu bar. The main content area displays a form titled "Material Safety Data Sheet". Below the title is a section labeled "1 - Chemical Product and Company Identification". This section is divided into two columns. The left column contains labels for "Manufacturer:", "Address:", "Telephone:", "Emergency only:", "Information:", and "Chemical Spills:". The right column contains labels for "Chemical Name: Organic Mixture", "Trade Name:", "Product Use:", and "MSDS Date Of Preparation: 3/11/10". The browser's status bar at the bottom shows "Done" and "Unknown Zone".

**Material Safety Data Sheet**

**1 - Chemical Product and Company Identification**

<b>Manufacturer:</b> <b>Address:</b>	<b>Chemical Name: Organic Mixture</b>
<b>Telephone:</b> <b>Emergency only:</b> <b>Information:</b> <b>Chemical Spills:</b>	<b>Trade Name:</b> <b>Product Use:</b>
	<b>MSDS Date Of Preparation: 3/11/10</b>

# Where is the info on an SDS?

pH and flashpoint area ALWAYS called out.

## 9 – Physical and Chemical Properties

Appearance:	Light amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	122°F (49°C) Tag Closed Cup (concentrate)	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition	Not established

## 3 HAZARDS IDENTIFICATION

### 3.1 Fire and Explosion

Flash point:	Tag open cup 44° Celsius (minimum)
Flammable/explosion limits:	(Low) 0.6% (High) 8.0% (Solvent portion)
Extinguishing media:	CO <sup>2</sup> , dry chemical, foam

# Where is the info on an SDS?

Check the 'disposal considerations' for useful information.

## 13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

# Resources

Questions can be answered by contacting DOEE Hazardous Waste Branch at: (202) 671-3308

District Regulations and Law may be viewed online at: <http://doee.dc.gov/node/14732>

EPA Form 8700-12 can be found here:

[http://doee.dc.gov/sites/default/files/dc/sites/ddoe/page\\_content/attachments/8700-12%2C%20just%20the%20form%2C%202015\\_0.pdf](http://doee.dc.gov/sites/default/files/dc/sites/ddoe/page_content/attachments/8700-12%2C%20just%20the%20form%2C%202015_0.pdf)

Guide: How to Determine if Solvents That Can No Longer Be Used in the Workplace Are Hazardous Waste <https://www.epa.gov/hwgenerators/guide-how-determine-if-solvents-can-no-longer-be-used-workplace-are-hazardous-waste>

Department of Energy and Environment website: [www.doee.dc.gov](http://www.doee.dc.gov)

EPA Regulations may be viewed online at: <https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-regulations#haz>

EPA assistance document for managing hazardous waste for vehicle maintenance providers: <https://www.epa.gov/sites/production/files/2015-01/documents/vehicle.pdf>



Clara Elias  
Watershed  
Protection  
Division  
DOEE





pollution

# Prevention for Your Bottom Line

June 8, 2017

# AGENDA

1. Overview
2. Permitting Requirements
3. Pollution Prevention Expectations
4. ~~4.~~
5. Assistance Program
6. Review



A photograph of a street in Washington, D.C., with the U.S. Capitol dome visible in the background. The scene is foggy or rainy, and the street is wet. In the foreground, there are traffic lights and signs. The text "When rain falls in the District..." is overlaid on the top half of the image.

**When rain falls in the District...**

**... it runs off hard surfaces & becomes  
stormwater runoff.**

**Stormwater picks up pollution  
as it runs downhill, and ...**



**...washes it into stormdrains  
like this one...**



Or this one.







**For 2/3 of the District, stormwater empties directly into our streams & rivers with little to no treatment.**

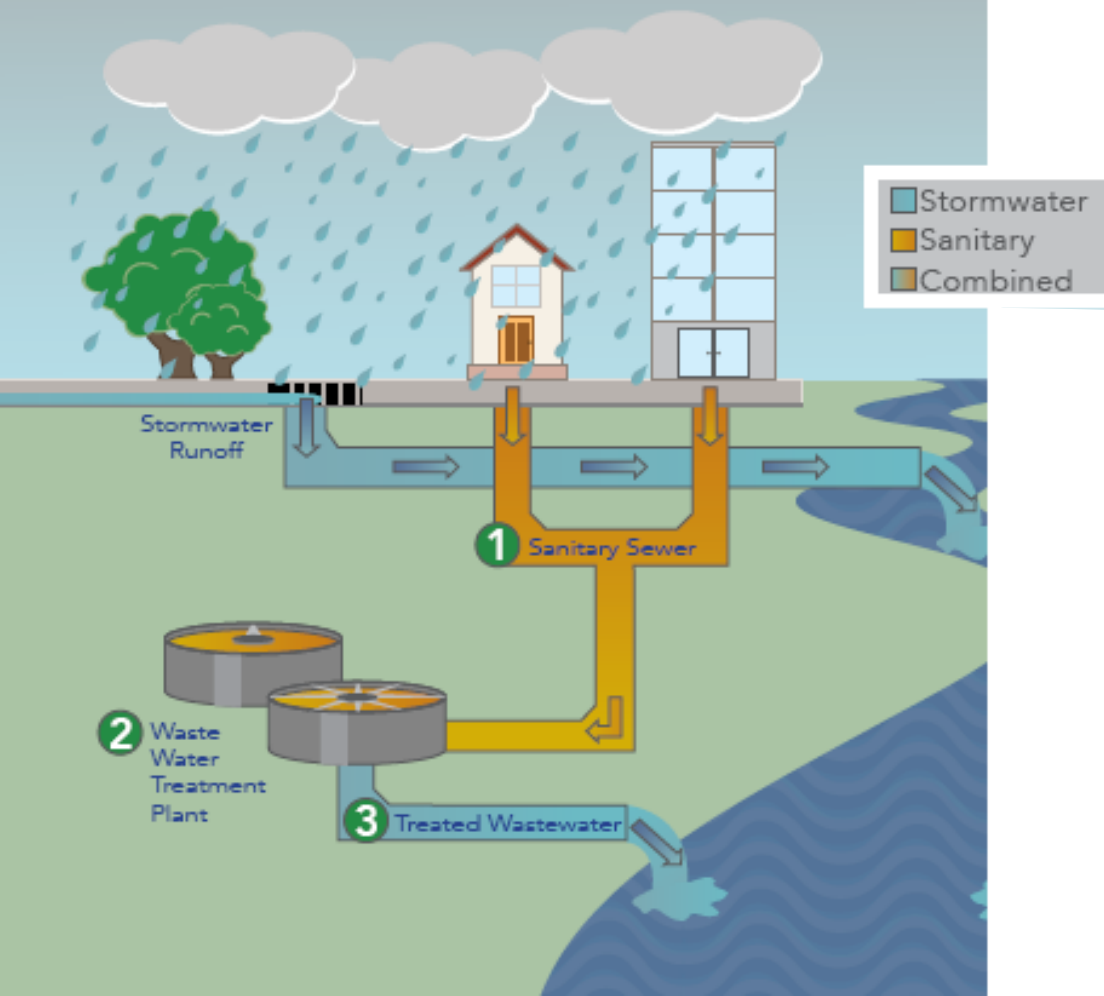




# MS4

## MUNICIPAL SEPARATE STORM SEWER SYSTEM

This system uses separate pipes for sanitary sewage and stormwater flow.





# MS4

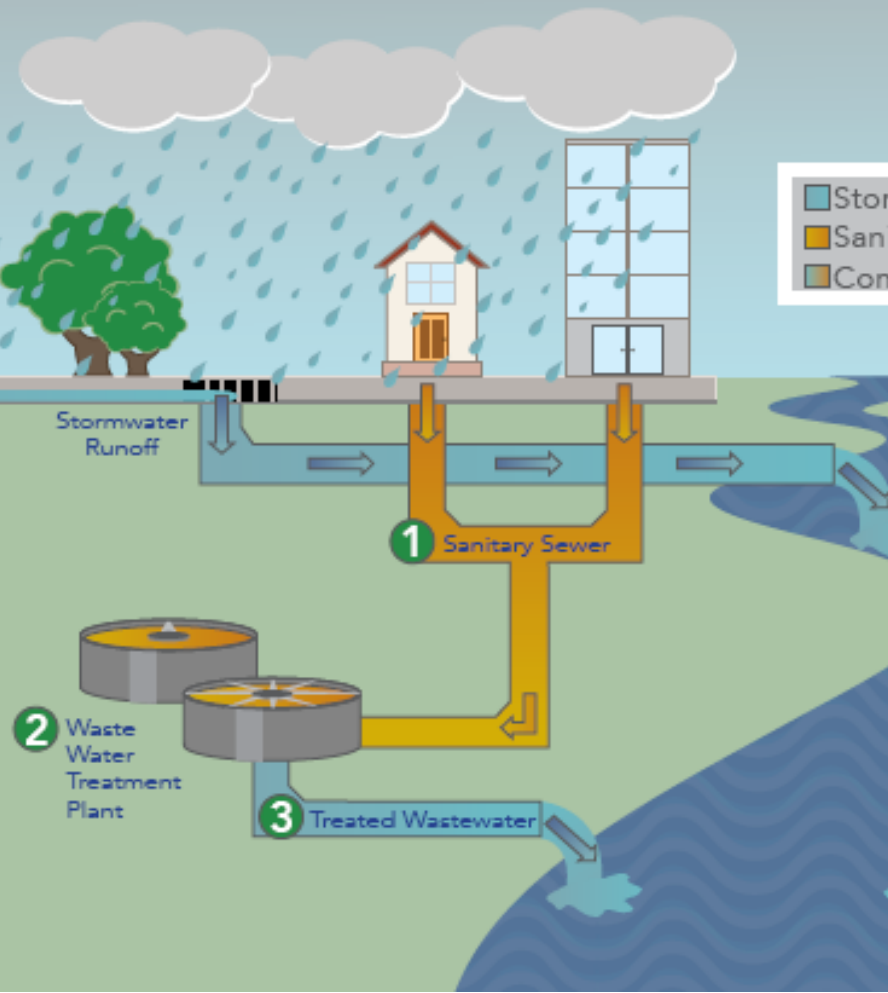
## MUNICIPAL SEPARATE STORM SEWER SYSTEM



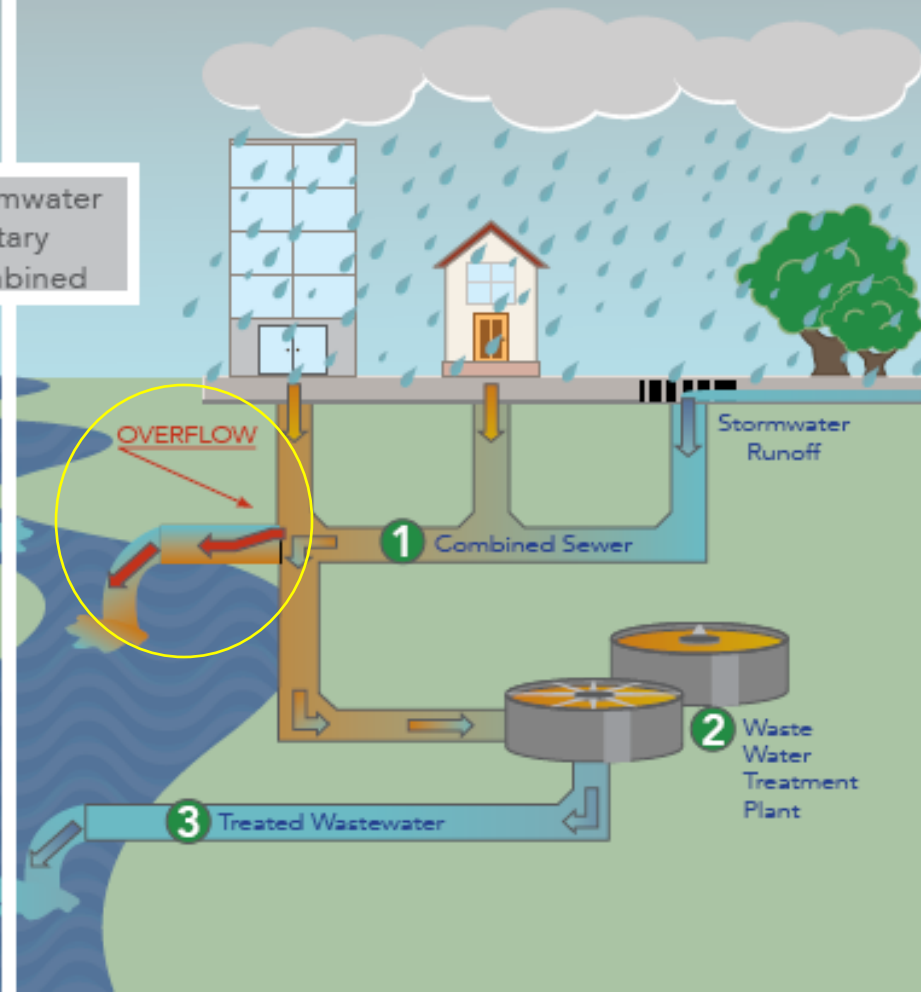
# CSS

## COMBINED SEWER SYSTEM

This system uses separate pipes for sanitary sewage and stormwater flow.

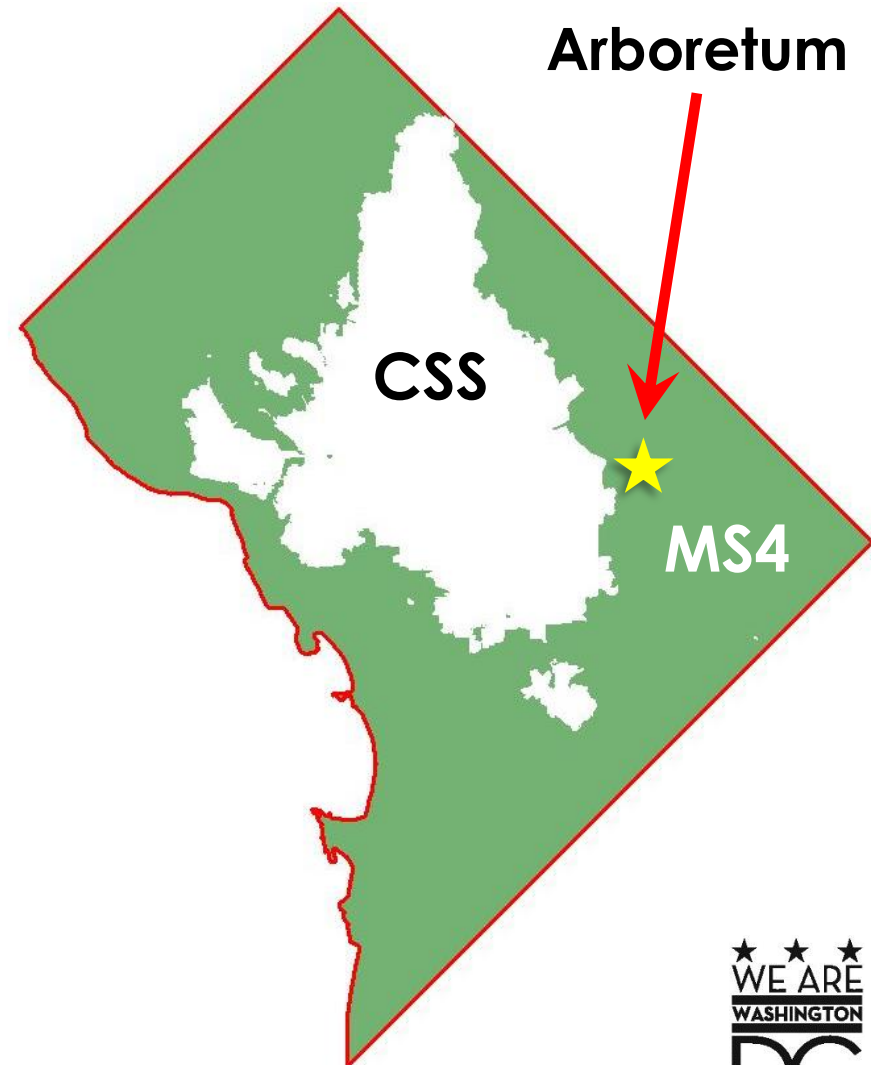


This system uses the same pipes for sanitary sewage and stormwater flow.



# 2 Types of Sewers

- **Municipal Separate Storm Sewer System (MS4)**
- **Combined Sewer System (CSS)**





# ... through the Anacostia & Potomac Rivers and...





# ... out into the Chesapeake Bay

Cleaning up the Chesapeake Bay and its rivers and streams makes environmental and economic sense.

Economists say a saved Bay is worth nearly **\$130 billion**—an increase of

**\$22 Billion**  
per year  
for generations.

Our house will be worth more.

Clean waters will attract more recreation.

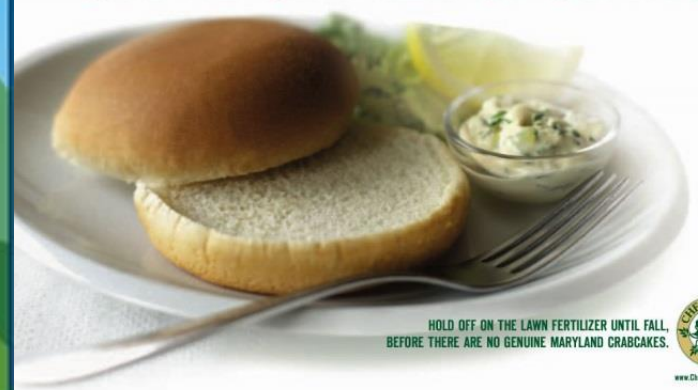
Our farms and waters will be more productive.



CHESAPEAKE BAY  
FOUNDATION

*Saving a National Treasure*

## PROTECT THE CRABCAKE POPULATION



HOLD OFF ON THE LAWN FERTILIZER UNTIL FALL,  
BEFORE THERE ARE NO GENUINE MARYLAND CRABCAKES.



[www.ChesapeakeClub.org](http://www.ChesapeakeClub.org)



# Common Pollutants

**Stormwater pollution is anything other than stormwater that gets into our stormwater or stormdrains, including:**

- Vehicle & equipment fluids
- Paints & solvents
- Salt & brine
- Pesticides & fertilizers
- Pet waste
- Trash
- Soaps & wash water
- Petroleum & oil
- Rust
- Dirt





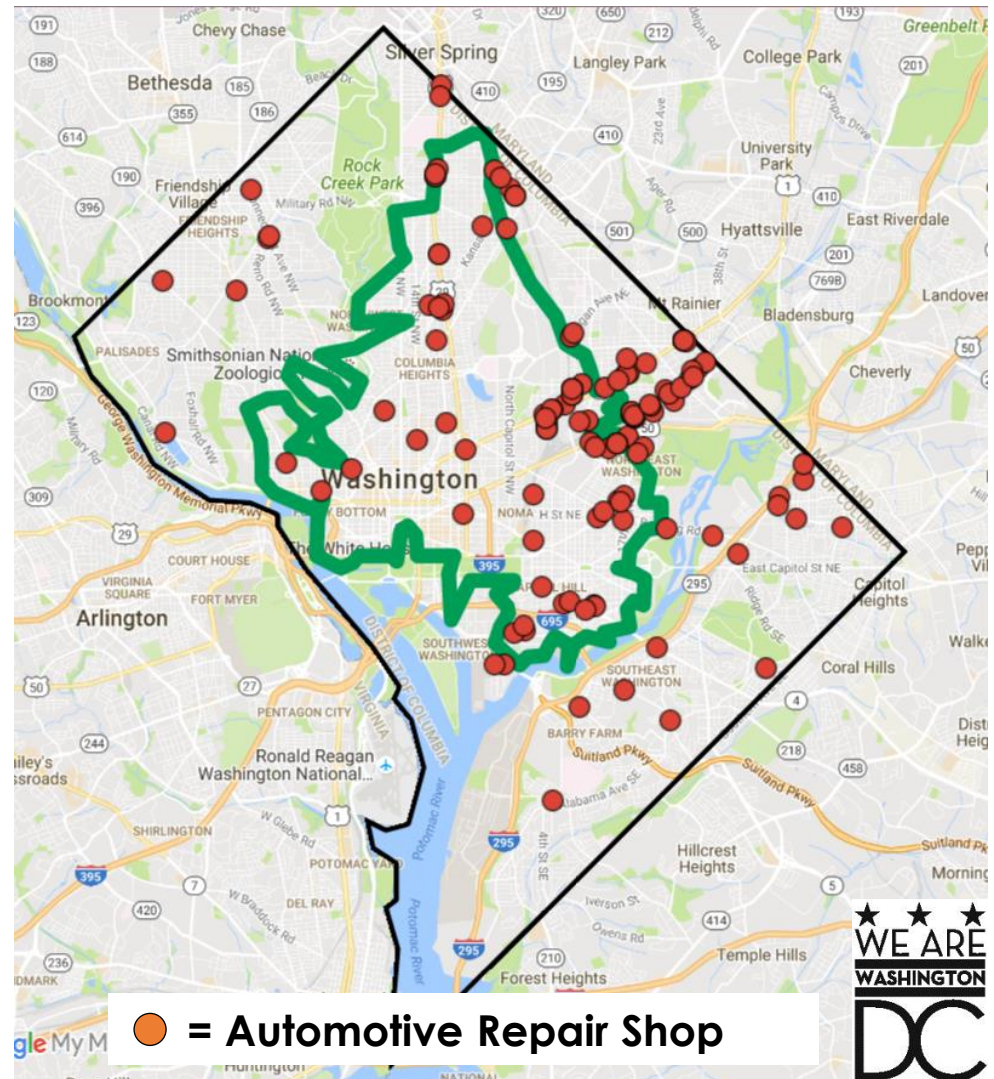
# A Drop a Day Adds Up

1 drop/second  
=  
~2,000 gallons/year



# Stormwater & Auto Repair Shops

**2/3** of the District's  
Automotive Repair Shops  
are in the MS4



# 2. Stormwater Regulations

## Clean Water Act 1972



- Sets water quality standards for waterways
- Regulates releases of pollution through permits

### **Type of permit depends on:**

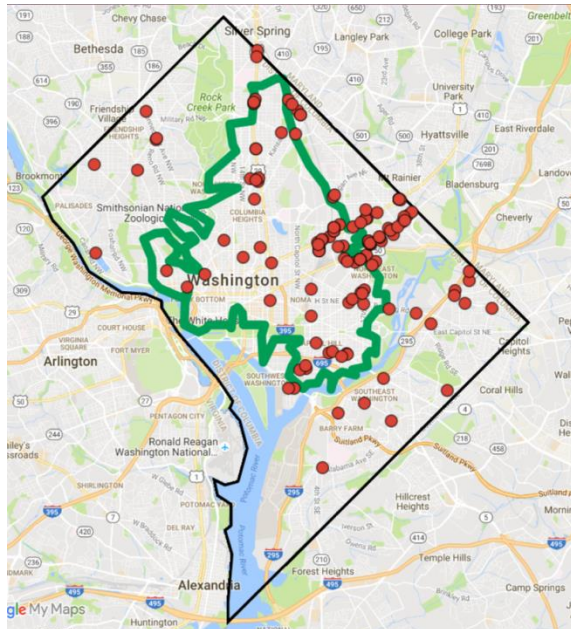
- 1) Location: CSS or MS4
- 2) Type of activities



# Permit Coverage

Sewer	Activity	
	Division I	Division E
	<i>Automotive Repair Shops</i>	<i>Transportation Service Facilities for Motor Vehicles*</i>
MS4	District MS4 Permit	Multi-Sector General Permit from EPA
CSS	DC Water Permit	Industrial Discharge Permit from DC Water

\* Service buses, taxis, fleet & other forms of passenger transportation



Find your sewer type at:  
[geospatial.dcgis.dc.gov/watershedfinder](https://geospatial.dcgis.dc.gov/watershedfinder)

# 3. Expectations

## Stormwater Pollution Prevention Plans (SWPPPs)

Every shop should have one.

**What are SWPPPs?** Your facility's game plan for clean water – how it is taking action to prevent pollution

- Your operations & customers activities

### 4 Primary Objectives

1. Assure compliance
2. Identify potential sources of pollution
3. Outline schedules, procedures, & responsibilities
4. Track efforts



# Housekeeping

## Bad Housekeeping Practices



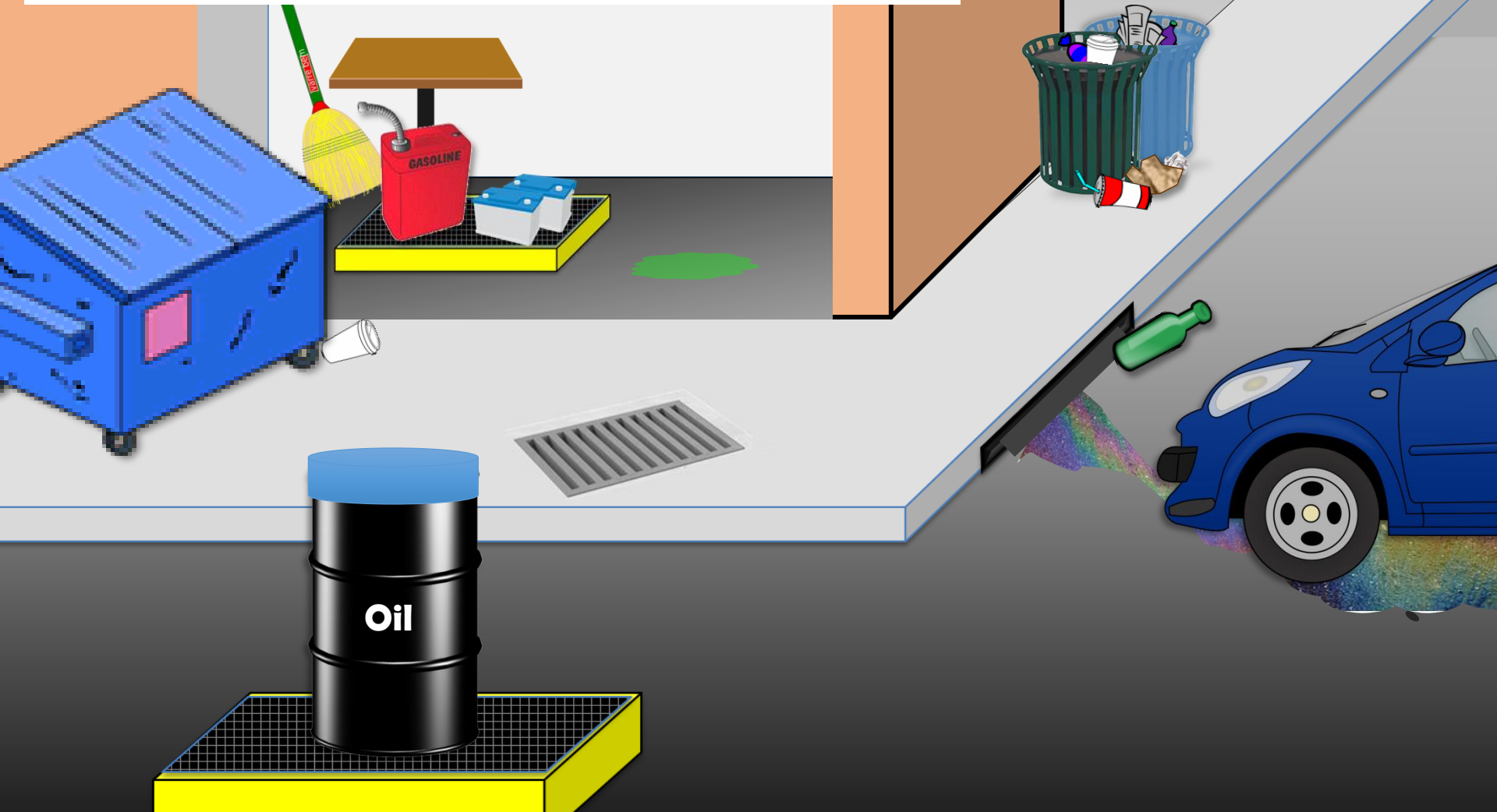
# Nothing But Water –

- Don't dump/sweep/wash pollutants down the drain
- Never hose down your work area
- Wash cars at a car wash



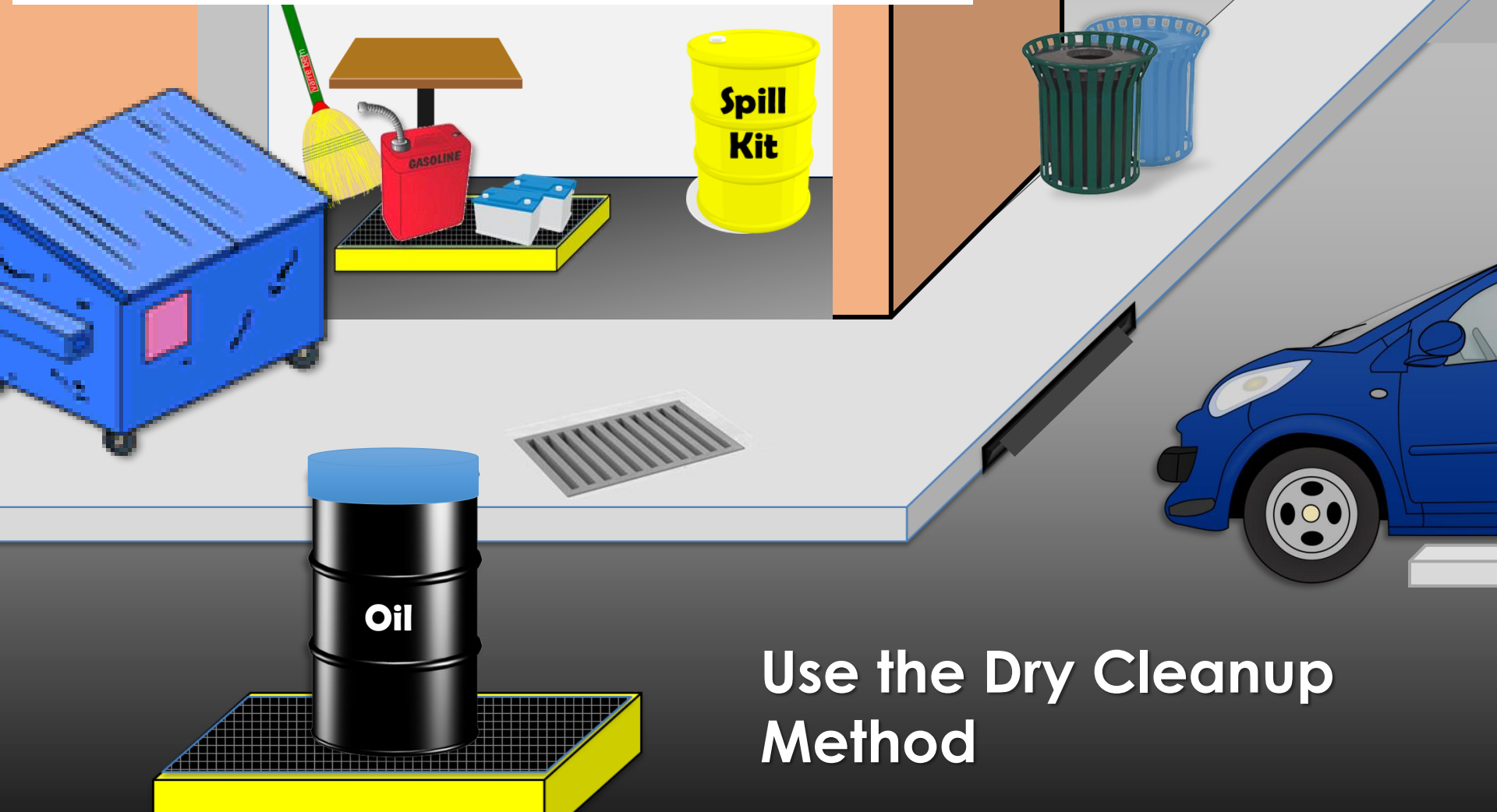
## Cover & Elevate –

- Keep materials covered & elevated
- Keep lids securely on solid waste storage containers
- Label storage & waste containers



## Keep It Clean & Tidy –

- Prevent & clean up spills, leaks, & drips
- Put things away & keep containers closed
- Refill & transfer materials inside
- Pick up litter



**Use the Dry Cleanup Method**

# Spill Contacts

- **Spills to the Storm Drain: Call 911** – *Spills or dumping of liquids that gets into a storm drain, or if a spill cannot be controlled*
- **Overflowing Sidewalk Litter Cans: 311\***
- **Illegal Dumping: 311\*** – *Dumping of solid waste*

\* Call 311 or visit [311.dc.gov](https://311.dc.gov)





# Structural BMPs



Berms



Trench drains



Curbs



Filter Systems



Swales & rain gardens



Stormdrains

**INSPECT & MAINTAIN  
REGULARLY**

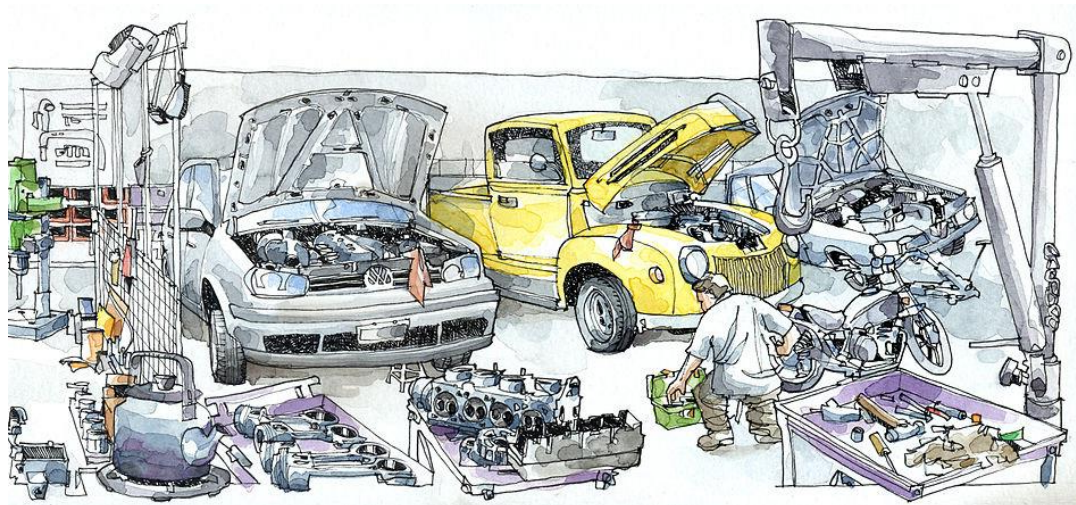
# 4. Technical Assistance Program

Clear guidance on land, air, & water pollution prevention from DOEE.

- **Goal:** Reduce pollution & save you money
- **Eligibility:** Any District Automotive Repair
- **Cost:** Free!!



EPA Pollution Prevention Source Reduction Grant

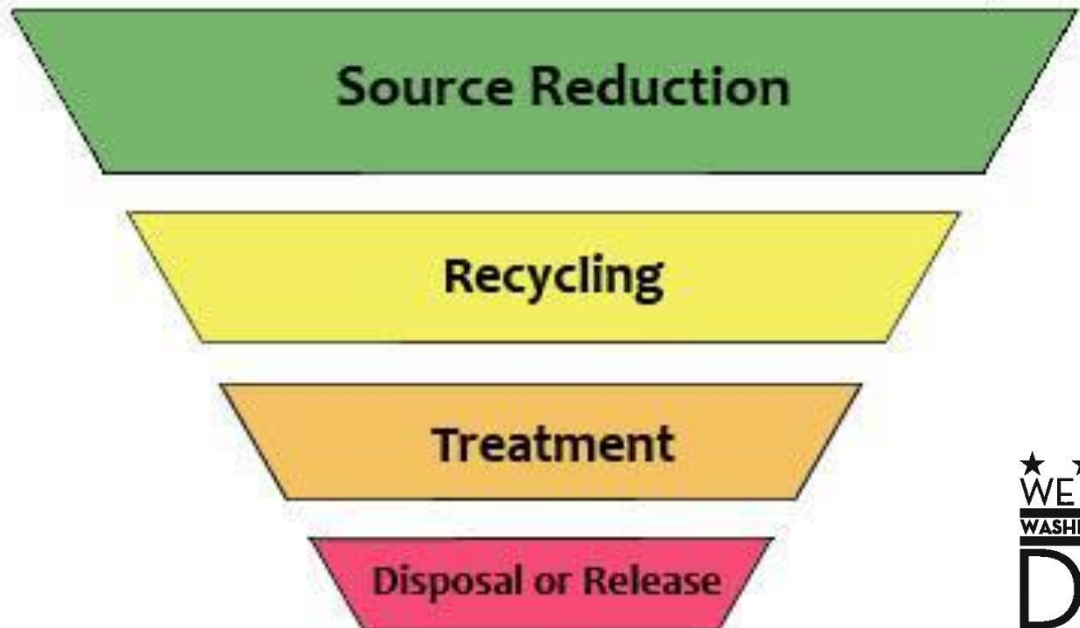




# Pollution Prevention (P2)

**Any practice that reduces, eliminates, or prevents pollution at its source.**

- Less waste to control, treat, or dispose
- Fewer hazards to public health & the environment
- EPA P2 Hierarchy: **Environmental Protection Hierarchy**



# Source Reduction

## 1. Less Toxic Products

**Paint gun cleaner:** Lacquer thinner to water-based

- \$700/year to \$30/year = **Saved \$643/year**

## 2. Longer Lasting Products

**Brake Cleaner:** General degreasers to Eco-brake cleaner

- \$2,000/year to \$475/year = **Saved \$1,525/year**



# Recycling

1. **Motor Oil**
2. **Antifreeze:** Recycled antifreeze is ½ the cost of new product & reduces hazardous waste
3. **Car Batteries**
4. **Other Waste:** bottles, cans, cardboard, paper, et al.



# Onsite Visits

- Develop a tailored plan to reduce pollution at your facility
- Hands-on assistance & problem solving
- Service provided in English, Spanish, & Amharic
- Third party to ensure anonymity



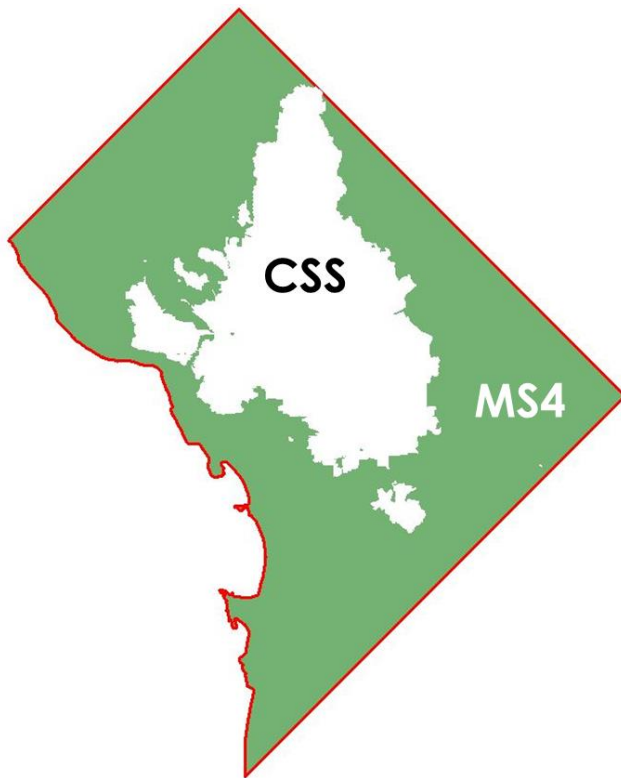
# Additional Assistance

- Certification program
- Quarterly newsletters with case studies
- Workshops



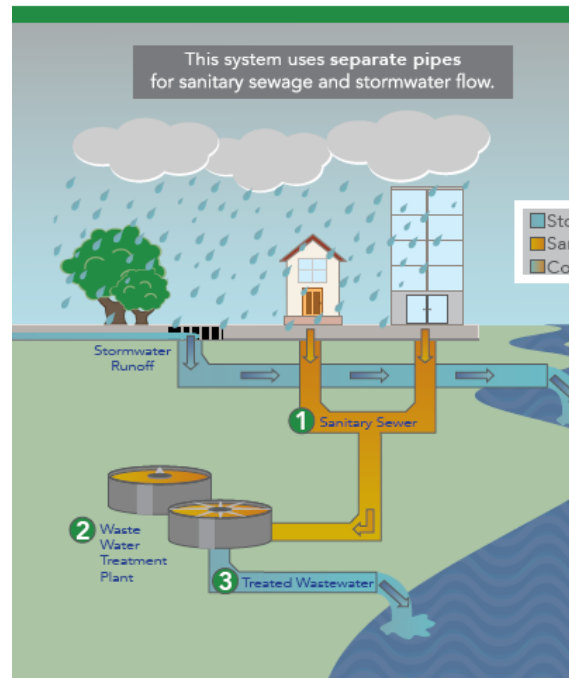
# 5. Review

Stormwater runs off hard surfaces, picks up pollution, & in 2/3 of the District it runs directly into our streams & rivers

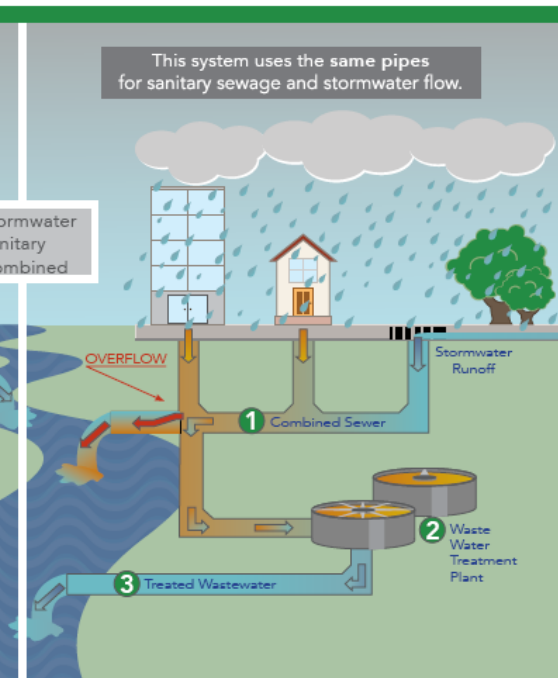


## 2 Types of Sewer Systems

### MS4 MUNICIPAL SEPARATE STORM SEWER SYSTEM



### CSS COMBINED SEWER SYSTEM





# Permitting

Stormwater is regulated by the EPA because pollution impacts our environment & our communities.

The type of permit regulating your facility depends on its location & activities.





# Expectations

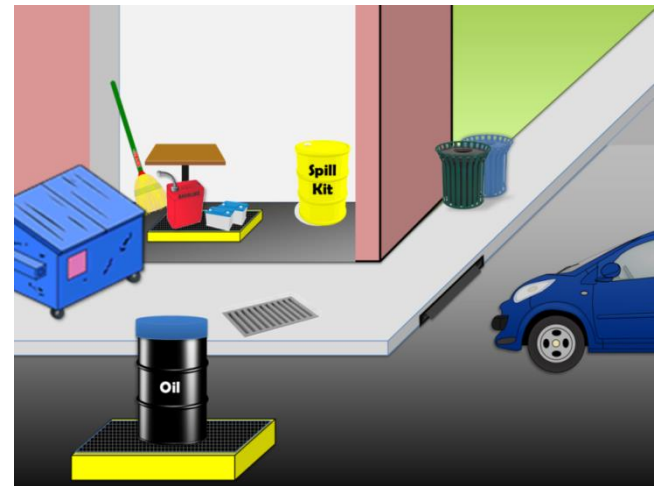
## Stormwater Pollution Prevention Plans

### 1. Good Housekeeping

- Nothing but Water
- Cover & Elevate
- Keep it Clean & Tidy

### 2. Spill response

### 3. Inspect & Maintain Structural BMPs



# Technical Assistance

- **Free Assistance**
- **Tailored Pollution Prevention Plan**
- **Save Money**

**Sign up today**





# Questions?

**Clara Elias**

Pollution Prevention Coordinator

Partnership & Environmental Conservation Division

[clara.elias@dc.gov](mailto:clara.elias@dc.gov)

202-645-4231

If you have questions or need assistance,  
please contact Mary Lynn Wilhere at  
(202) 535-1939 or email,  
[marylynn.Wilhere@dc.gov](mailto:marylynn.Wilhere@dc.gov).