

# STORMWATER POLLUTION PREVENTION AT AUTOMOTIVE REPAIR FACILITIES

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# AGENDA

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Introduction

Stormwater  
Regulations

Best  
Practices

Conclusion







# STORMWATER RUNOFF



# STORMWATER POLLUTION

Anything other than stormwater

- Dirt
- Trash
- Wash water and soaps
- Vehicle and equipment fluids
- Pesticides and fertilizers
- Paints and solvents
- Salt and Brine
- Rust
- Pet waste







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# OUTFALL



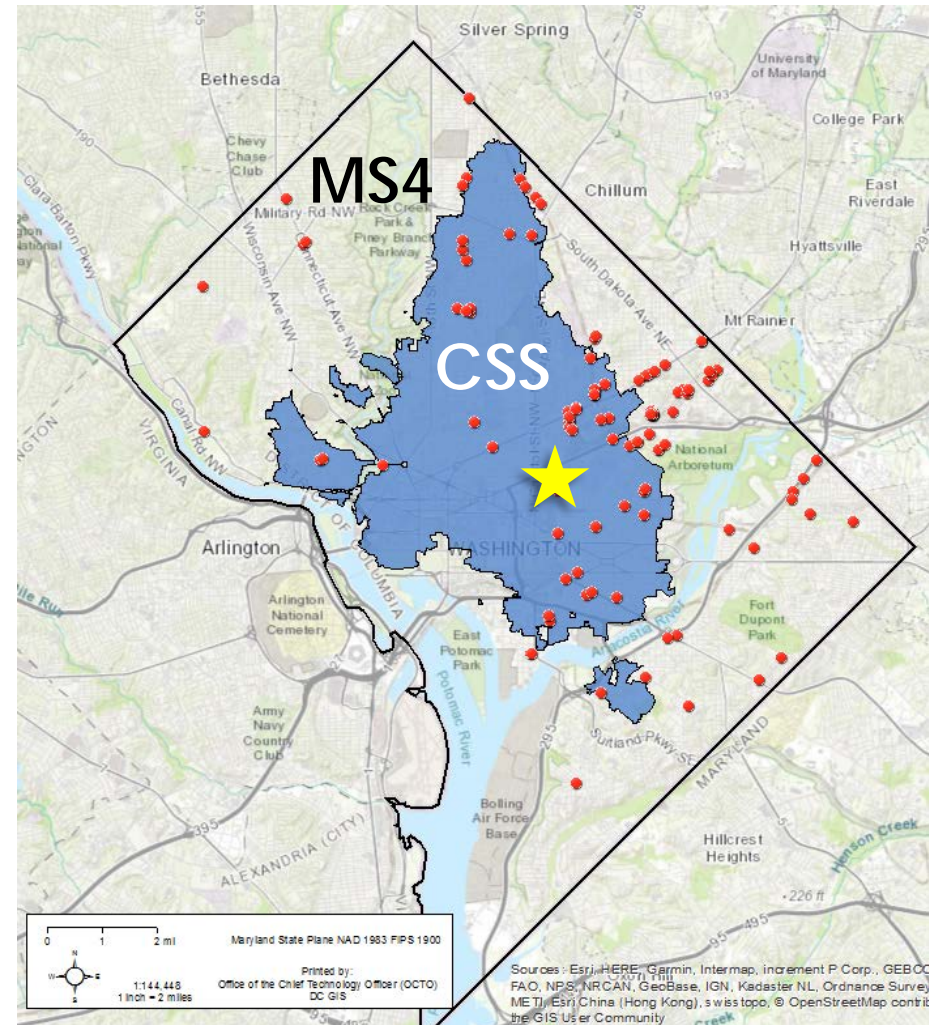
# TWO TYPES OF SEWERS

**2/3** of the District flows directly into local waterways with little to no treatment

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

**Look up your address:**

<https://dcgis.maps.arcgis.com/apps/InformationLookup/index.html?appid=a60a0086b47c4e35a638b7a8abe5954f>

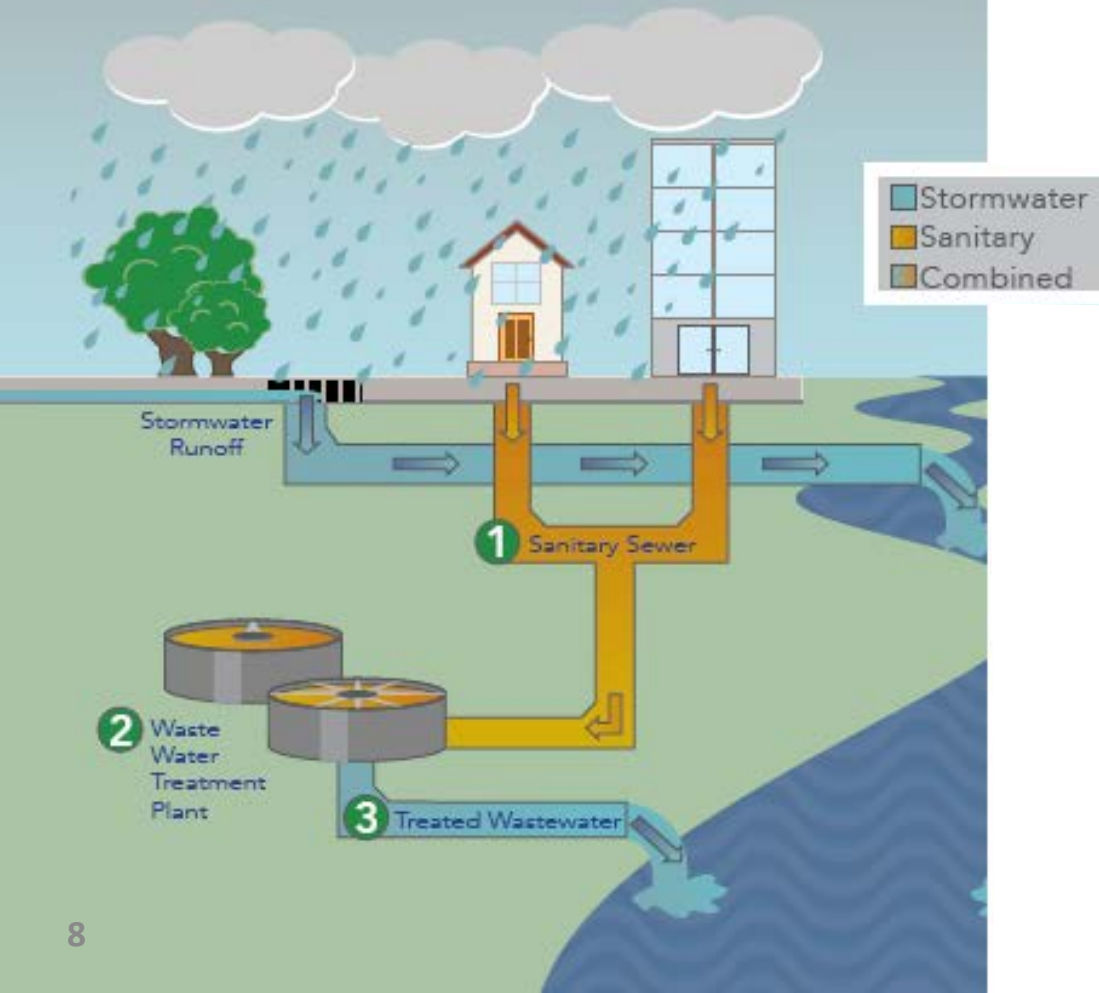




**MS4**

## MUNICIPAL SEPARATE STORM SEWER SYSTEM

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







**MS4**

## MUNICIPAL SEPARATE STORM SEWER SYSTEM

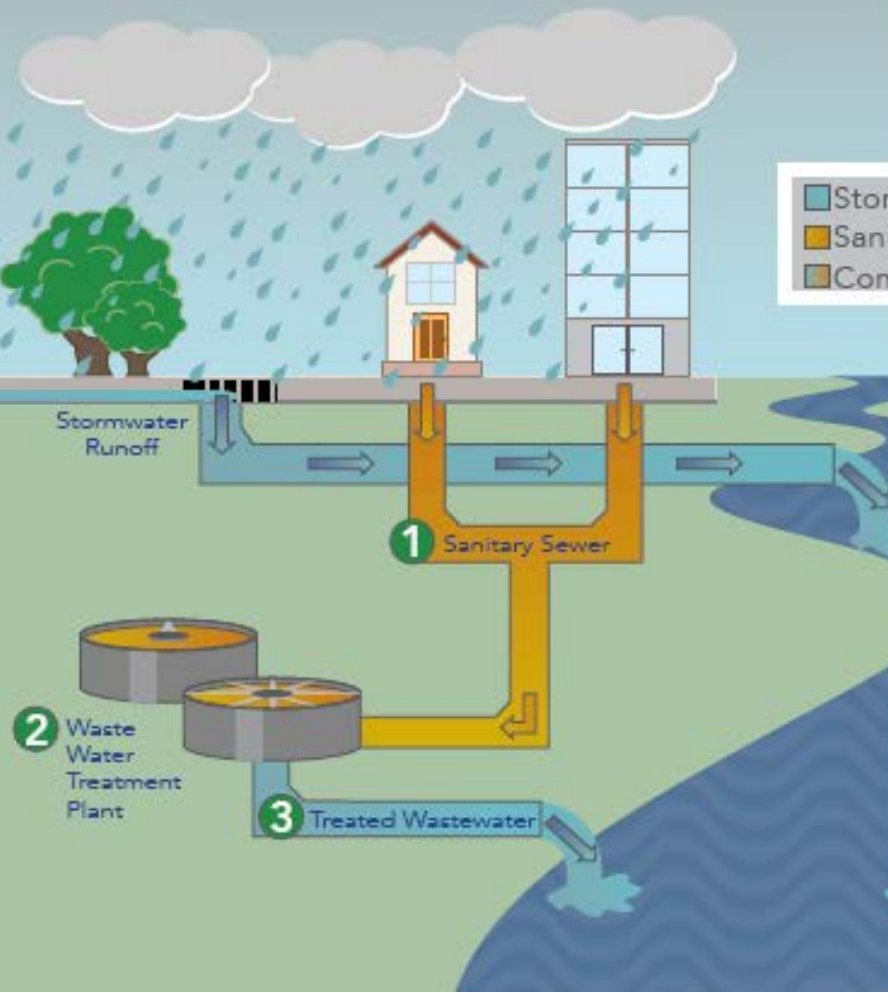


water is life

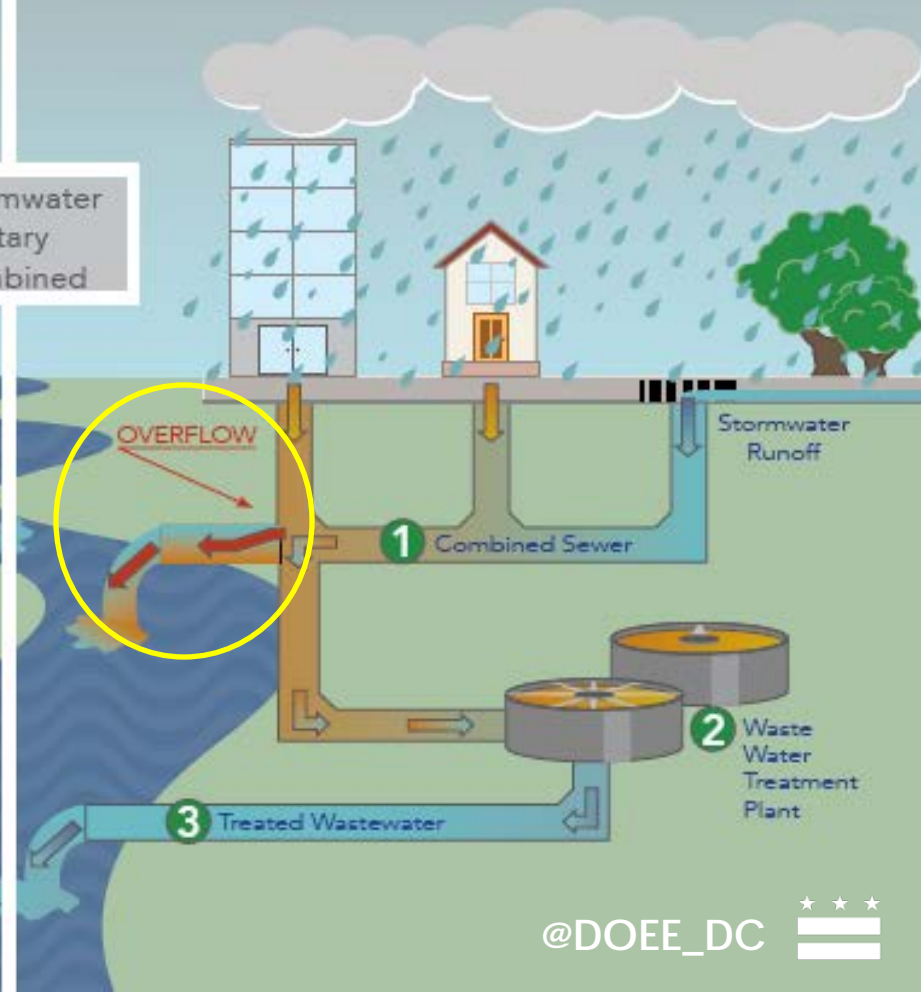
**CSS**

## 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.



# IMPACTS







# TWO-THIRDS OF SHOPS DRAIN TO HICKEY RUN



# STORMWATER REGULATIONS







# DRIPS ADD UP

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





# CLEAN WATER ACT

1972

- Protects waterways from pollution
- Regulates illicit discharges
- Sets water quality standards

**National Pollutant Discharge Elimination System (NPDES)**  
– Permitting system

IN THE MS4





# ILLICIT DISCHARGES

## Illegal Emissions

*The act of allowing material other than stormwater to get into the storm sewer system*

### Types:

- Misconnected/leaking sewer lines
- Materials poured or swept into stormdrains
- Dumpster juice
- Wash water



City of Raleigh, NC



IN THE MS4



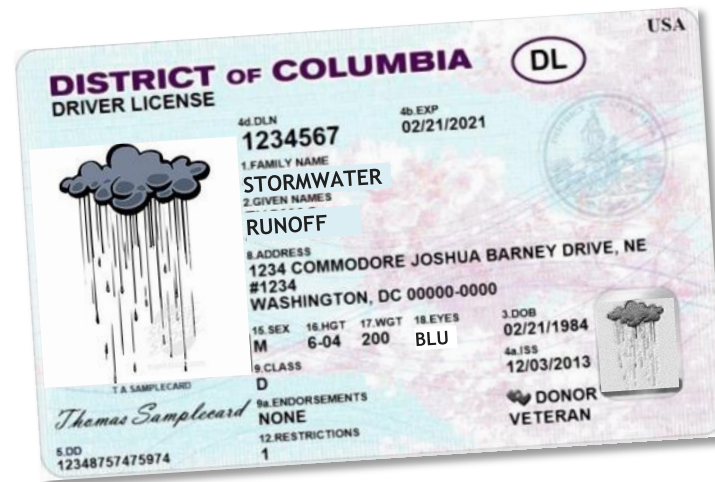
# EPA OVERSIGHT



## NPDES Permits in the District:

1. **Sewer Systems:** DC Water, District of Columbia
2. **Individual Permits:** JBAB, NPS, DCA, et al.
3. **Multi-Sector General Permit (MSGP)** for industrial activity
4. **Construction General Permit** for projects >1 acre

Drivers License for  
Stormwater



IN THE MS4



# INDUSTRIAL ACTIVITIES

## Activities that need MSGP coverage include:

### 1. Passenger transportation

- Buses – school, charter, tour, transit
- Taxis and Limos
- Dead vehicle storage
- Trucks – moving, garbage, freight
- Petroleum Bulk Stations and terminals (except retail)

### 2. Automobile Salvage Yards/Used parts

**... and others**



**APPLY DIRECTLY TO EPA FOR COVERAGE**

[www.epa.gov/npdes/stormwater-discharges-industrial-activities](http://www.epa.gov/npdes/stormwater-discharges-industrial-activities)



# WATER POLLUTION CONTROL ACT

Facilities in the MS4 must have a  
**Spill Prevention and Cleanup Plan**



[doee.dc.gov/publication/water-pollution-control-act-1984](https://doee.dc.gov/publication/water-pollution-control-act-1984)



# EXPECTATIONS

1. Good housekeeping practices
2. Prompt spill and leak response
3. Maintenance of stormwater structures
4. Regular inspections
5. Corrective actions

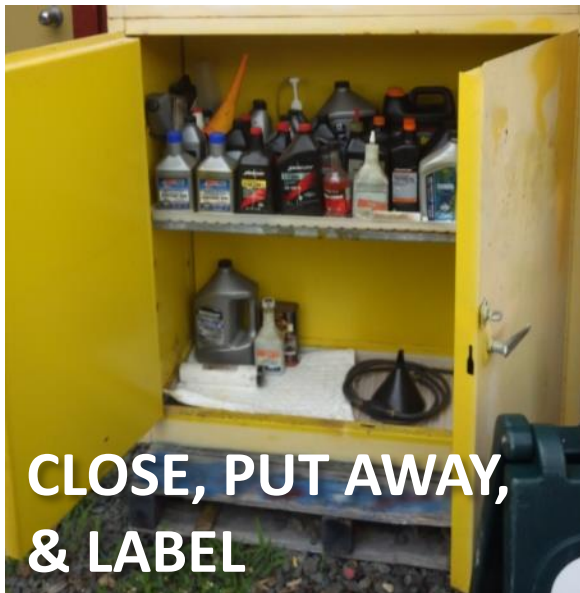


# BEST PRACTICES





# GOOD HOUSEKEEPING





# LIQUIDS

1. **Transfer liquids inside** – in garage or under cover
2. **Keep fluids in secondary containment**, such as in a tub while using them
3. **Keep containers closed** when not in use
4. **Immediately clean up** any spills or drips
5. **Use less toxic alternatives**



# OUTDOOR STORAGE

1. Put it away
2. Keep it clear of stormwater – covered and elevated
3. Keep an eye on containers



*Metal drums are rusting & dented, & boxes of material have degraded*

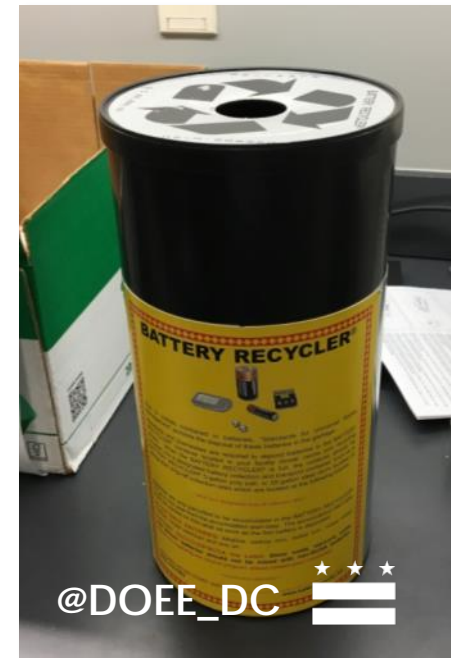


*These supplies are elevated off the ground on pallets & covered with a tarp*



# WASTE

1. **Do not dispose of liquids** in the trash, recycling, or directly into the storm drain
2. **Keep the lids on** dumpsters and trash bins
3. **Dispose of hazardous wastes**, such as batteries, at assigned collection locations





# CONTAIN DRIPS AND LEAKS



# SPILL RESPONSE

## Clean up spills and leaks immediately

### 1. Never use water

- Prevent the material from getting to the drain
- Cover with absorbents and scrub
- Pick/sweep up absorbents and dispose of properly

### 2. Spill kits should be:

- Stocked
- Labeled
- Easily accessible
- Where they belong

**NEVER USE WATER**

### 3. Document all spills and leaks

- Report them to DOEE



# SPILL REPORTING

- **Call 911**  
if it gets into a public storm drain or cannot be controlled
- **Call 202-535-2600**, Monday-Friday, 9am to 5pm  
to report non-emergency spills and leaks





# SPILL CLEANUP VIDEO

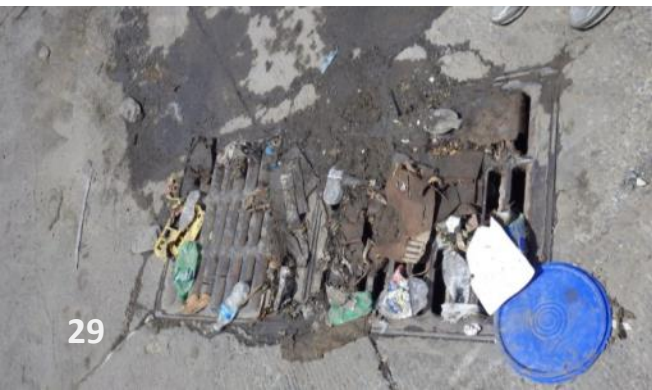


How to Use Your Spill Kit

# MAINTENANCE

Stormwater infrastructure must be regularly maintained and inspected:

- **Oil/Water Separator**
  - **Inspect** twice a year and after major storm events
  - **Maintenance Schedule:**
    - 1x per year
    - When sludge accumulates to 8+ inches
    - When oil on top is over 2 inches deep
    - After a major oil spill impacting tank capacity
  - **Routine Maintenance Costs** \$3,000 - \$7,000 per year



# SELF-INSPECTION

1. **Complete regular self-inspections**
  - Record what you see: checklist and photos
  - Inspect all potential pollutants
2. **Take corrective action (FIX THE PROBLEM)**
3. **Industrial facilities have additional requirements**





# CORRECTIVE ACTIONS

## 1. Immediate Actions

- Same day
- Next day if identified late

## 2. Subsequent Actions

Before next storm event or  $\leq 14$  calendar days

> 14 calendar days **[MSGP]**

Take minimum time

Keep records

> 45 calendar days **[MSGP]**

Notify EPA with rationale



# CONCLUSION



# SUMMARY

**Stormwater picks up pollution as it runs downhill**

**EPA regulates stormwater pollution with permits and fines**

**Automotive repair shops are expected to do:**

1. Good housekeeping practices
2. Prompt spill and leak response and reporting
3. Maintenance of stormwater structures
4. Regular inspections
5. Corrective actions



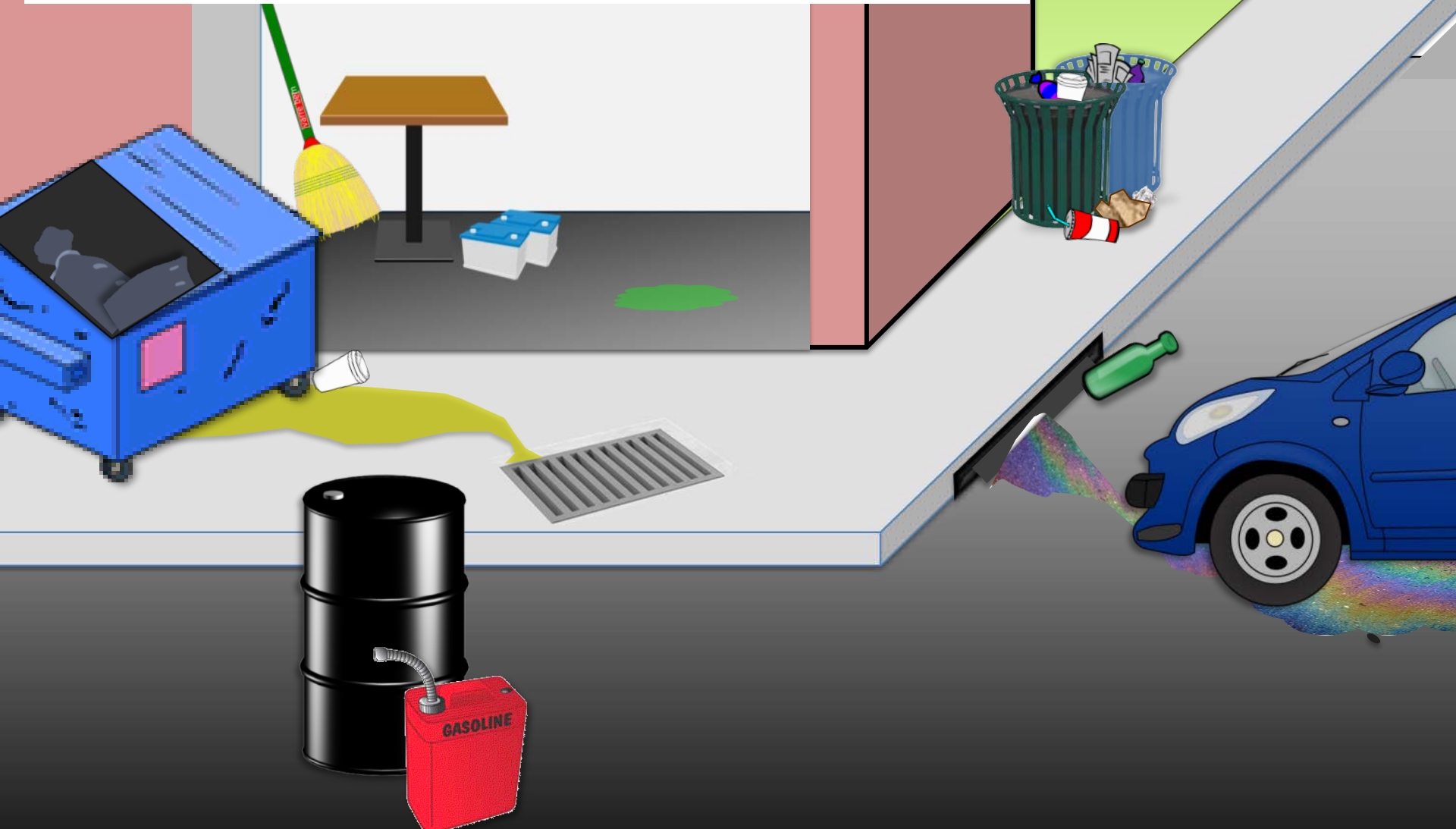


# BAD HOUSEKEEPING PRACTICES



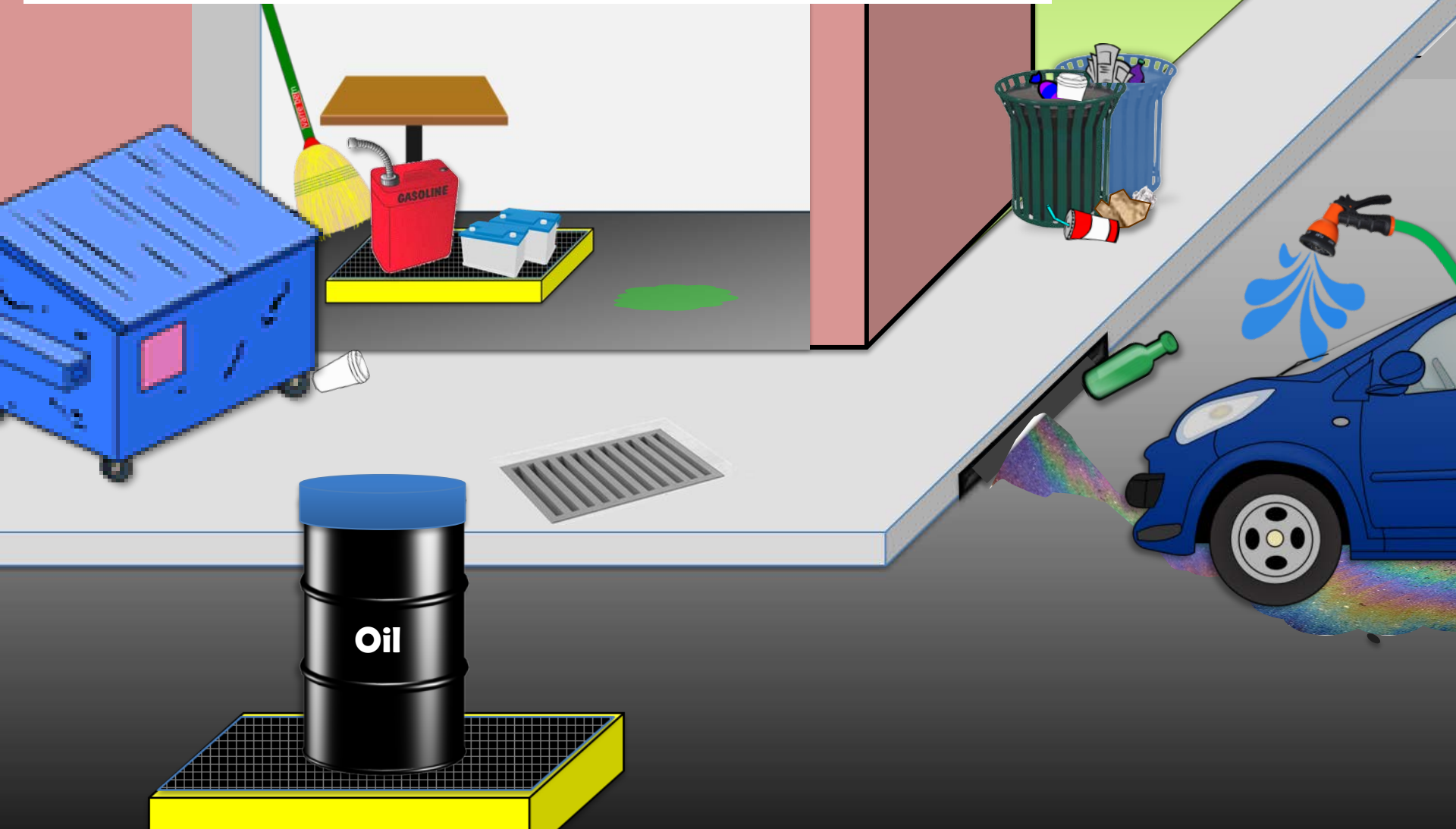
# NOTHING BUT WATER

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



# COVER & ELEVATE

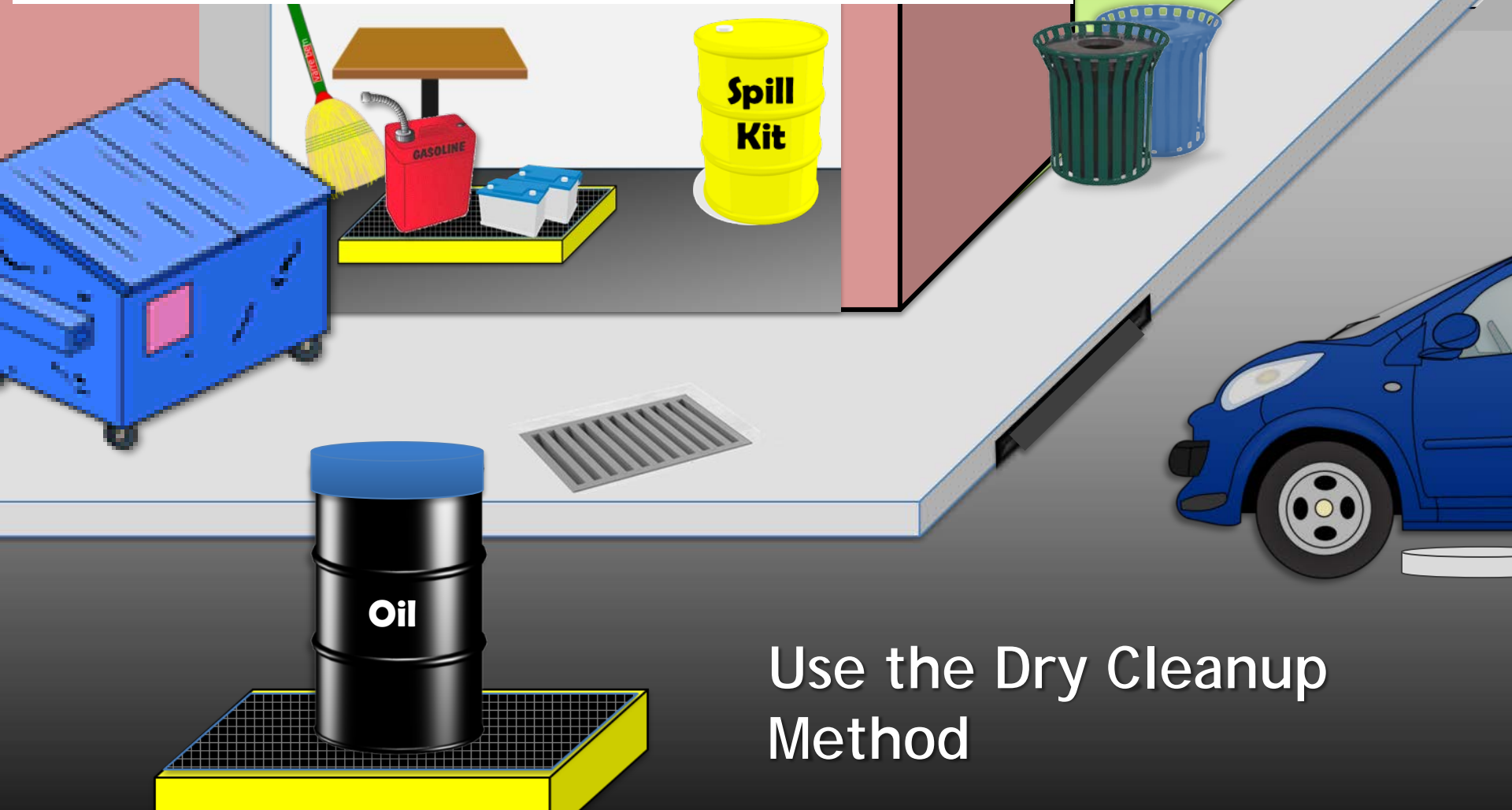
- Keep materials covered & elevated
- Keep lids securely on solid waste storage containers
- Label storage & waste containers





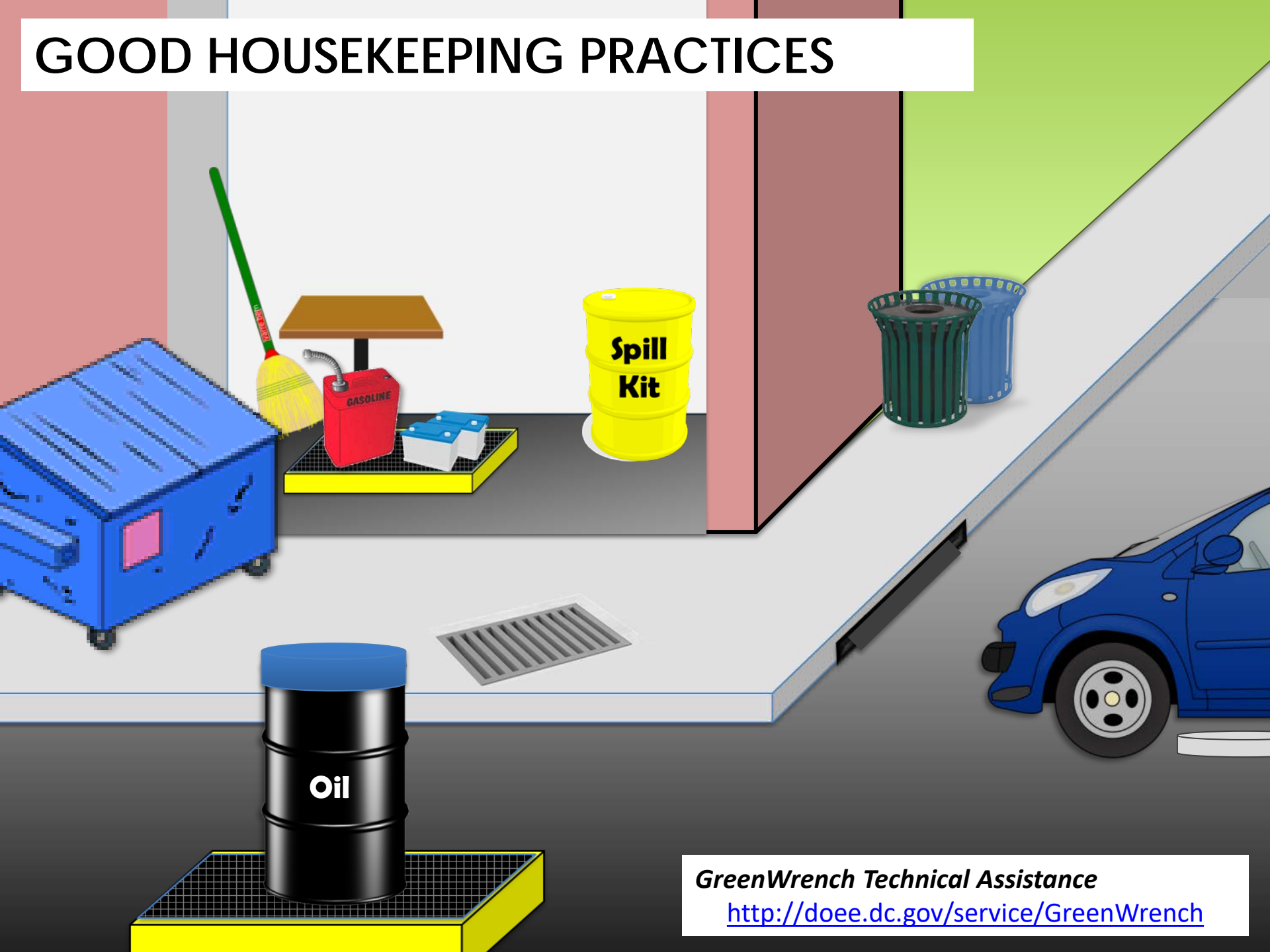
# KEEP IT CLEAN

- Clean up spills, leaks, & drips immediately
- Place drip pans under leaky vehicles
- Pick up litter
- Report overflowing litter cans to 311



Use the Dry Cleanup Method

# GOOD HOUSEKEEPING PRACTICES



*GreenWrench Technical Assistance*

<http://doee.dc.gov/service/GreenWrench>

# CONGRATULATIONS!

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**You have completed stormwater pollution prevention training!**

- You are now expected to implement the BMPs you learned today
- Failure to could lead to penalties up to \$250,000 for the facility *or for the individual*







# QUESTIONS?

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[doee.dc.gov](http://doee.dc.gov)

