# Pollution From Surface Cleaning



### Why Care?

- Storm water discharges are untreated
- Storm drains discharge to local creeks and the Bay
- Wash water from surface cleaning activities carry pollutants which are harmful to vegetation and aquatic life

#### Discharges are Against the Law!

- Allowing polluting substances into storm drains is prohibited in California.
- The person who discharges the pollutant (or leaves it behind) and the property owner(s) are both liable.
- Information found within this presentation is <u>not</u> intended to be appropriate for other mobile cleaning jobs
  - Fleet washing and detailing,
  - Carpet cleaning, or
  - Food-related equipment

DUMP NO WASTE



DRAINS TO BAY

## Where Do These Pollutants Come From?

Three phases of the cleaning process can cause problems for the environment:

- Using harmful cleaning chemicals (soaps and solvents)
- Removing toxic materials (oil, antifreeze, and grease) from parking lots, sidewalks, or other surfaces
- Generating polluted wash water from activities (wet sand blasting of buildings) to remove paint

## What Types of Hazardous Waste are Generated from Surface Cleaning?

- Oil-saturated absorbents
  - Does not include oil-saturated rags, which can be cleaned at an industrial laundry
- Wash water that contains lead paint chips
- Solvent cleaners



# So Where Should Wash Water Go?



#### Landscaping or Unpaved Surfaces

Wash water from cleaning unpainted building exteriors, sidewalks, or plazas, if:

Discharge does not contain hazardous waste
 AND

 Discharge will not cause flooding or nuisance problems, or flow to a creek

#### **AND**

You have the owner's permission

#### Sink, Toilet, or Cleanout to the Wastewater Treatment Plant

- Wash water from surface cleaning of painted building exteriors, sidewalks, plazas, parking areas, drive-throughs, food service facility dumpster/grease containment areas, etc., if:
  - You have used dry cleanup methods before washing with or without soap

**AND** 

#### Sink, Toilet, or Cleanout to the Wastewater Treatment Plant (cont'd)

- Discharge does not contain hazardous waste
  AND
- Parking lots, traffic areas, food service facility dumpster/grease containment areas)
  - You or the property owner(s) have checked the local wastewater treatment plant's requirements before discharging to the sanitary sewer

#### Street or Storm Drain

- Wash water from cleaning sidewalks, plazas, and building exteriors, if:
  - You have successfully used dry cleanup methods
    AND
  - Cleaning is done with water only—no soap or other cleaning chemicals

#### **AND**

Water has not removed paint

# Tips on Proper Cleaning and Disposal Methods



### **Avoid Using Soap!**

- Even biodegradable soap is harmful to the environment
- Before you use soap, test to see whether hot water under pressure will do the job.



### **Dry Cleanup Methods**

 Use absorbents (rags, absorbent mats or pads, rice hull ash, cat litter, vermiculite, or sand) to pick up greasy or oily spills

Sweep or vacuum to pick up litter, debris, or saturated

absorbents



#### Dry Cleanup Methods (cont'd)

- Waste materials from dry cleanup (absorbents, paint chips, etc.) may often be disposed of in the trash
  - Check with the local solid waste authority
- Reusable rags may be sent to an industrial laundry



#### Screen Wash Water

- Buildings and decks without loose paint, sidewalks, or plazas without soap,
- Thorough dry cleanup should be sufficient to protect storm drains



#### Screen Wash Water (cont'd)

- If any debris could enter storm drains or remain in the gutter or street after cleaning:
  - Wash water should first pass through a "20 mesh" or finer screen to catch the material
  - Captured debris should be disposed of in the trash

#### **Collect Wash Water**

#### Simple and Acceptable Method

- Requires only a drain plug, small sump pump, and a length of hose
- If a small parking-lot- type catch basin is available:
  - Remove the grate, plug the drain pipe, and place the pump in the catch basin (attached to a garden hose)
  - As wash water drains to the lowest spot, pump to landscaping, a sewer line cleanout, or a container for later disposal to the sanitary sewer.

#### Collect Wash Water (cont'd)

 Vacuum booms may be used to capture and collect wash water.



#### Direct Wash Water to Landscaping

- Direct wash water (no cleaning agents) to landscaped areas
- Check slope and area to avoid runoff into street or gutter
- If soil is very dry, wet it down thoroughly so wash water will sink in



## Block Storm Drains or Contain Wash Water

- Block storm drains with sand bags, plugs or rubber mats, vacuum booms, containment pads, or temporary berms.
- If wash water contains cleaning compounds, plug storm drains and vacuum (pump wastewater to sanitary sewer).



 Non-storm water discharges are not permitted to enter the storm drain system!

#### **Hazardous Waste Disposal**

- Read cleaning product labels before disposing of wash water.
  - Follow use and disposal instructions carefully.
- Check with the city or county environmental health department to find out how small businesses can dispose of hazardous waste at a drop-off event.
  - You must generate less than 27 gallons or 220 pounds of hazardous waste each month to qualify.





#### **Equipment and Supplies**

 Special materials which include sheets of absorbent, storm drain plugs and seals, small sump pumps, and vacuum booms are available.





#### Remember This!

 The discharge of soap or other pollutants to a storm drain or water body violates state and/or local regulations!