## When you wash something outside, remember:

it's not just water going down the storm drain.



Used wash water combines detergent and soaps with everything else that people wash off – food, heavy metals, litter, bacteria, oil and grease, sediment. If poured down storm drains, this mix enters creeks and drinking water reservoirs.

#### "Just a little bit" doesn't make a difference? Think

**again!** Storm drains are large systems that drain water from urban areas. Many small spills in addition to blatant dumping endanger the health of our waterways. Make sure wash water does NOT go down storm drains!

**Beware of "greenwashing."** Look for CAUTION statements on products, even products labeled "natural" or "biodegradable." Though these labels may indicate "less harmful," they do not necessarily mean harmless.

A note about cleaning products: The term *biodegradable* merely means that biological agents (such as bacteria) can break down the product to 90% water, carbon dioxide and biomass within six months. If detergents get into waterways, they immediately start to remove protective mucus on fish and damage organisms' tissues. Soaps of all kinds can make water toxic for stream life, attach to soil and plants, and change water chemistry.

The majority of all natural soaps and cleaning products are formulated to be used in the home, where they are discharged to a sanitary sewer for treatment. They should not be used outside where they may run off into the nearest creek or waterway. "Natural" does NOT mean safe to eat, drink, pour in your eyes or put into our waterways where fish and other wildlife live and drink, and where humans and pets play. Even products labeled as natural, biodegradable cleansers can have either very acid or very alkaline pH - enough to cause skin burns, and irritate lungs and mucous membranes. In streams, they can change pH and kill fish and other aquatic organisms.

#### Storm drain protection and washwater containment supplies

Many businesses develop unique containment systems or storm drain protection using common construction materials. For ideas or sources of **storm drain protection** and **spill containment** supplies, conduct an online search.

All residents and businesses conducting outdoor washing are required to adhere to the Town of Chapel Hill's illicit discharge ordinance.



#### For more information, contact:

Jason Salat, Stormwater Specialist
Public Works | Stormwater Management
208 N. Columbia St. | Chapel Hill NC 27514
www.townofchapelhill.org/stormwater
t: 919-969-7246 | jsalat@townofchapelhill.org

# Preventing Pollution From Outdoor Washing Operations

Sidewalks, plazas, parking lots, buildings, and pressure washing and mobile washing operations









## Why Take Special Precautions?

-Storm drains lead to creeks and lakes, even the ocean, with no treatment of flow.

-Creeks are ecosystems needing our protection. Temperature, pH, pollutants all matter.

-All Chapel Hill and Carrboro creeks flow to Jordan Lake, a drinking water source for half a million people, a recreation area for millions, and home to bald eagles, osprey, fish and other wildlife.

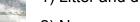
Prevent pollution. It's the law.

Town of Chapel Hill Code of Ordinances for Illicit Discharges
Chapter 23, Article V

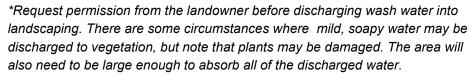
## Washing outdoor surfaces or equipment?

## You may simply drain to a storm drain, gutter or landscaped area\* ONLY IF:





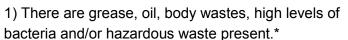
- 1) Litter and debris have been swept up and properly disposed.
- 2) No grease, oil, body wastes, organic waste, hazardous wastes or high levels of bacteria are present.
- 3) No detergents or cleansers are being used.
- 4) Temperature of water does not exceed 150° F.
- 5) You use a "20 mesh" or finer screen to catch any debris that could enter storm drains or remain in the gutter or street after your cleaning operations.





## You will need to PROTECT storm drains, CONTAIN and COLLECT wastewater





- 2) You use soap, chlorine, cleansers, solvents, or degreasers.
- 3) Sand or paint chips\*\* are left from pressure washing.
- 4) Water exceeds 150° F.

**DISPOSAL** of non-hazardous wastewater may need pretreatment before discharge to the sanitary sewer. For questions, please contact Orange Water and Sewer Authority (OWASA) at 919-968-4421.

#### If wastewater:

#### You may need to pre-treat by:

is over 150°
has a pH <6 or >10
is oily or greasy
has dirt, grit, or paint chips

cooling the wastewater to under 150° neutralizing the pH to between 6 and 10 using an oil-water separator using a filter to remove large particles

## Prepare your site before washing.

1) Chart the flow of water from your project site. Find an interception point for diversion to landscaping or determine the low spot where it will collect.



- -ls wash water safe to divert to landscaping? Get homeowners' permission.
- -Identify storm drains that will need to be temporarily blocked.
- -Will you need to collect wastewater for disposal in the sanitary sewer? Determine how it can be collected and what type of containment and transfer to the sewer would work best.



2) "Spot clean" areas containing grease, oil, hazardous or body waste using absorbents. Use absorbent pads or granules to dry out contamination. Sweep or scoop up soiled absorbents for disposal. Bag non-hazardous waste and place in the trash. Prepare hazardous waste for collection by licensed contractors or, in the case of small amounts, inquire about eligibility as a small quantity generator for FREE disposal at the Orange County Household Hazardous Waste (HHW) collection site on Eubanks Road. www.bit.ly/CHAPELHILLHHW



3) Remove litter, dirt and debris from the wash area prior to washing outdoors.



**4) Block affected storm drains.** Choose between berms, inflatable pipe plugs, or storm drain mats/covers. Sand bag berms or other simple methods may also work. Test storm drain protection with clear water before washing operations begin.



5) If needed, set up containment for captured wastewater. Include the rinse water from rinsing the pavement where soap, cleaning products, etc. collect. Residues will wash into creeks with rain, so need to be removed.

Will you need a containment pool or will the storm drain protection suffice to trap wastewater for collection? Have a mop and bucket ready for small amounts of wastewater, or a sump pump or a wet vacuum, tank, and hoses for larger amounts of wastewater.



Up to 100 gallons may be collected and poured into the sanitary sewer if no chemicals other than normal-strength, water soluble cleansers are involved. **Wastewater must be screened of debris. Discharge pH must be between 6 and 10.** Contact OWASA at 919-968-4421 with disposal questions or if you will need to dispose of

more than 100 gallons of wastewater. NEVER open a sewer manhole for any reason.



**WARNING!** To avoid arsenic leaching, do not pressure wash wood treated with chromated copper arsenate (CCA). Acid washes and chlorine compounds used on CCA treated surfaces also release arsenic.

<sup>\*</sup> See instructions for spot cleaning on next page.

<sup>\*\*</sup>Test paint for lead before pressure washing. If lead is present, chips will need to be collected and disposed of as hazardous waste.