#### North Carolina Division of Water Quality



### Vehicle Washing Operations & Activities



Technical Guidance to Prevent Water Quality Violations

Revised May 2012

# What types of operations does this apply to?

This technical guidance applies to activities that involve the washing of automobiles, trucks, motorcycles or any other vehicle. It is intended for use by:

- Mobile car washing operations.
- Vehicle detail shops and dealerships that conduct washing operations.

Vehicle washing operations housed in a permanent location should refer to North Carolina Administrative Code section 15A NCAC 02T .0113.

All vehicle washing operations should contact their local government for information on local permitting and compliance.

### Why is vehicle washing a water quality concern?

When cars are washed on paved surfaces, chemicals from detergents combine in the water with grease and automotive fluids. The polluted wash water flows across paved areas into the nearest storm drain or stream. It is a serious water quality threat.

Owners/operators of mobile vehicle cleaning operations and other vehicle service operations that conduct vehicle washing should be aware that any cleaning operation that causes or contributes to a water quality standard violation may be held liable for those actions and subject to penalties under state law. In addition, discharging vehicle wash water to storm drains may violate local ordinances and result in enforcement action by local authorities.



Polluted wash water flows over pavement to the nearest storm drain or stream. Water that enters a storm drain is not treated—it flows to surface waters.

## Managing vehicle wash water to minimize water quality impacts

- Wash vehicles with non-heated water and biodegradable detergents.
- Where feasible, cleaning operations should be undertaken on grassed or graveled areas to prevent discharges to surface waters or storm drainage collection systems.
- When cleaning operations cannot be performed as described above, and when operations are performed in the vicinity of a storm drainage collection system, cover the storm drain with a portable drain cover.
- Use sorbent booms to prevent wash water from discharging to surface waters and/or storm drains and to remove oil, grease and foam from the wash water.
- Any excess ponded water should be removed and properly handled (i.e., discharged to a sanitary sewer collection system with permission from the system's owner) prior to removing the drain cover.
- Do not conduct steam cleaning, engine or parts cleaning at any time.
- Do not use acid-based wheel cleaners.
- Use detergents that are biodegradable with a pH in the range of 6-9 standard units.
- Notify the city and/or county where the cleaning service is being conducted prior to beginning operations.



Portable water containment mats are an effective way to keep vehicle wash water on site. Collected wash water may be allowed to evaporate or disposed of through a sanitary sewer system with permission of the system owner.



Sorbent booms help prevent wash water from discharging to surface waters and/or storm drains. They also help remove oil, grease and detergent foam from wash water.



When vehicle washing is performed in the vicinity of a storm drainage collection system, cover the storm drain with a portable drain cover to prevent illegal discharges.

### What about charity car washes?

Car washes are a popular fundraising option for many community groups. Here are some guidelines for protecting water quality during these events.

- Select a site where wash water can soak into grass or gravel.
- If your site drains into a street, block off the storm drain and divert wash water to an area where the water can pool and evaporate throughout the day.
- Consider contacting your local government to make arrangements for disposing of wash water through a sanitary sewer drain.
- Remove all trash and debris from the car washing area before you begin.
- Use bio-degradable or environmentally friendly soaps instead of harsh detergents. Look for soaps labeled phosphate free or biodegradable. Vegetablebased or citrus-based soaps are safest for the environment.
- Do not use acid-based wheel cleaners.
- Use buckets filled with soapy water to help limit the amount of detergent used.
- Shake car mats over a trash can, not directly on the ground.

#### Still have questions? Contact the DWQ Regional Office closest to your location.

Asheville

828-296-4500

Fayetteville

910-433-3300

Mooresville

704-663-1699

Raleigh

919-791-4200



Washington 252-946-6481

Wilmington

910-796-7215

Winston-Salem 336-771-5000

Central Office 919-807-6300

#### **Online resources**

North Carolina Division of Water Quality: <a href="www.ncwaterquality.org">www.ncwaterquality.org</a>
North Carolina Stormwater Outreach & Education: <a href="www.ncstormwater.org">www.ncstormwater.org</a>