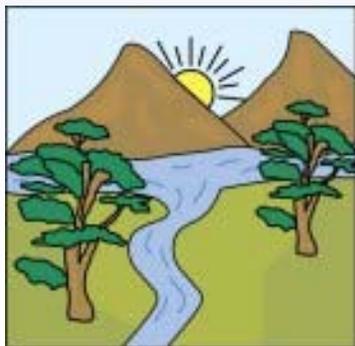


Mobile car washing can adversely affect local streams and downstream receiving bodies if not performed properly. Let's all do our part to protect the waters of our community by conducting appropriate car washing. For more information or further questions contact the Town of Morrisville Engineering Department or the Stormwater Hotline at 919-463-SOAK.



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Stormwater Department**

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**Morrisville**

Stormwater



# Mobile Car Washing

Best Practices to Protect  
the Environment



Town of Morrisville

Vehicles are an important part of our lives. We use them every day to get us to work and to take us places. We take pride in our vehicles and like to keep them clean and looking sharp. In doing so, we frequently wash all the dirt and grime off our vehicles. If not done properly, mobile car washing can harm the environment. With ordinary use, dirt and grime accumulate on our vehicles. Friction from moving parts such as engine components and brake pads produce a dust that coats vehicles. This dust contains harmful metal particles including lead, zinc, copper and other heavy metals. Furthermore, oil and other fluids leak from vehicles.

When washing vehicles the oil, dirt, grease, gasoline, rust, heavy metals, and residue from exhaust fumes are removed from the vehicle and contained in the wastewater. Additionally, the wastewater contains the used soap, solvents, and detergents. There are numerous toxic chemicals in these cleaning products such as soap, wax, window and tire cleaner. When vehicles are washed on impervious surfaces the wastewater flows to the storm sewer system. Wastewater that enters the storm sewer system is not treated like the sanitary system and often flows directly to the nearest stream.

Wastewater from washing cars should never be discharged to a street, gutter, parking lot or storm drain. The pollutants in the wastewater can degrade water quality and stream habitats locally and downstream. The oil and heavy metals can be toxic to wildlife. The soap contains phosphates that can cause excess algae to grow. Excess algae growth can smell bad, look bad and can harm water quality. Furthermore as the algae decays, it consumes oxygen that is required by other aquatic life for survival. In addition, the stream may lead to a drinking water source for communities downstream. Having clean water provides a chance for family activities such as swimming, fishing, and boating.

Mobile car washing is not prohibited or illegal within the town limits but there are steps that must be taken in order to wash vehicles in a manner that will not harm the environment.

- ◆ If possible wash vehicles on a pervious vegetated area where the water can percolate into the ground. This can filter the water before it reaches groundwater or streams.
- ◆ If washing on an impervious surface, direct wastewater to a vegetated area to keep wastewater out of the storm drain.
- ◆ If a vegetated area is not an option, use a portable containment system or create one with a tarp and berms made of wood or PVC piping (see [http://durhamnc.gov/ich/op/pwd/storm/Documents/business\\_outreach/Mobile%20Vehicle%20Washing%20%28JUNE%202011%29.pdf](http://durhamnc.gov/ich/op/pwd/storm/Documents/business_outreach/Mobile%20Vehicle%20Washing%20%28JUNE%202011%29.pdf) on how to properly set up a containment system). The water should then be pumped to a holding tank or to sanitary sewer (a permit may be required).
- ◆ Minimize water usage by using a hose nozzle to prevent the water from running continuously.
- ◆ Use soaps and detergents sparingly. Use only the amount necessary to loosen the dirt and grime.
- ◆ Use soaps and detergents that contain low or no phosphates. (Phosphate is the nutrient that can contribute to algae blooms)
- ◆ Avoid acid based wheel cleaning products.
- ◆ Do not wash vehicle engines or undercarriages. These locations likely contain the most pollutants.
- ◆ Always empty wash buckets into sinks or toilets that lead to the sanitary sewer system.

In order to comply with Federal requirements associated with the Clean Water Act, the Town of Morrisville has a National Pollutant Discharge Elimination System Stormwater Permit. Also known as a NPDES Phase II permit, the permit allows the town to operate and maintain the municipal storm sewer system. The Town is required to enforce regulations that prevent pollutants from discharging into storm drains and eventually polluting creeks and oceans. The operation of mobile car washes on residential and commercial driveways and parking lots could violate the Clean Water Act. Individuals who improperly handle and dispose of non-stormwater materials down the storm drain are subject to civil and criminal prosecution.

