

Parking Garage Pressure Washing

Standard Operating Procedures

The wash water resulting from the routine cleaning of the parking garages on campus is a non-stormwater discharge into the storm sewer system that is only allowable under certain conditions. This fact sheet summarizes those conditions and the standard operating procedures for University staff to follow to properly discharge the wash water into the storm sewer system.

Standard Operating Procedures

- 1) The University Parking and Transportation Services (Parking) will notify the Environmental Quality Management (EQM) at least seven days prior to the beginning of the release of water into the storm sewer. EQM will notify the Kentucky Division of Water (KDOW) regional office and Lexington-Fayette Urban County Government Division of Water Quality (LFUCG) if deemed necessary.
- 2) Parking will assure that contractors pre-soak oil spots with bio-degradable degreaser and clean thoroughly with water and rinse down other floor surfaces to remove loose dirt, debris and de-ice products for the UK Parking Garages in an environmentally friendly manner.
- 3) There are three options available:
 - Option #1 - discharge all wash water into the sanitary sewer system, or
 - Option #2 - treat the wash water using approved protocol with subsequent discharge to the storm sewer system, or
 - Option #3 – collect wash water with subsequent transportation and discharge at a permitted sewer treatment plant.
- 4) **Option #1.** The procedure involves blocking all storm drains to prohibit any discharge to the storm sewer and discharging the resulting wash water directly into the sanitary sewer system. It is recommended that the areas first be swept/blown to remove large debris items. Further, all of the city's discharge prohibitions must be met (<https://www.lexingtonky.gov/industrial-discharge-guidelines>). Considering the volume and quality of water anticipated from washing parking garages, this should not be a concern. While this option presents itself as potentially the least costly of the three, if there is no means to easily direct the wash water into a nearby sanitary sewer manhole, then it may not be the most practical in the short-term. However, if such an outlet is readily available no testing is required and there is no direct cost of using the sanitary sewer system.
- 5) **Option #2.** This procedure has been evaluated by city officials responsible for storm water quality discharging into city-owned storm sewer systems. In general the methodology includes:
 - a) Sweeping, shoveling and blowing of dirt and debris from the parking areas prior to washing.
 - b) Use of oil dry to remove any pooled oil prior to washing.
 - c) Use of a filter sock around drains to remove silt, dirt and other debris during wash down.
 - d) Use of petroleum removal sock to remove petroleum sheen during wash down.
 - e) Use of de-chlorination tablets to remove chlorine from wash water prior to discharge.
 - f) Periodic testing of wash water to ensure chlorine concentrations are acceptable.

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To properly employ the above option one of the more important aspects includes ensuring the removal of all contaminants including the reduction of chlorine. Acceptable chlorine level in the effluent water is less than 0.1 mg/L. If contaminants are not effectively removed from the water discharged into our storm sewer system, the University could be in violation of its Municipal Separate Storm Sewer System (MS4) Permit.

- 6) **Option #3.** This procedure includes cleaning the garages while collecting the resultant wash water with subsequent transportation to a pre-approved treatment facility. Testing may or may not be required by the receiving facility.
- 7) Parking will notify EQM when discharge is complete. EMD will notify KDOW and LFUCG as needed.

Contacts and Responsibilities

The University's MS4 Permit coordinator (Water Quality Compliance Manager) is on staff within EQM. You may contact the Water Quality Compliance Manager at kevin.lewis@uky.edu or 859-257-0093.

Parking's Associate Director is responsible for the parking garage cleaning. The phone number to that office is (859) 257-2038 or 6317.

LFUCG's Division of Water Quality's Compliance and Monitoring Manager can be reached at (859) 425-2412.

The Kentucky Division of Water Regional Office's Environmental Inspector can be reached at (502) 564-3358.