Exterior Cleaning and Powerwashing for U-M Employees

Guideline

Revision Date: 3/17/22

Applies To: University of Michigan employees

Wastewater from outside cleaning activities such as car washing, equipment cleaning, building and window cleaning, powerwashing, and masonry cleaning can cause impacts to surface waters when it is allowed to discharge to the storm water system. In addition, residues left behind by these and other activities can be carried to surface waters by storm water runoff and impact soils adjacent to the cleaning activity.

Washing with Additives (such as soap or other chemical cleaners)

When washing outdoors (including powerwashing) using an additive, contact Environmental Protection and Permitting Program (EP3) at (734) 647-1143 to review the proposed wastewater management plan. EP3 needs at least two weeks to review and approve the plan prior to beginning work to ensure the activities meet the groundwater permit for portable power washing operations issued by the State of Michigan.

As part of the required record keeping for our permit, U-M Grounds maintains the records on all outdoor power washing activities involving discharge to the ground. Per the permit, discharge to the ground from washing activities:

- Is limited to 1,000 gallons per acre, per month per discharge site.
- Cannot exceed 1,000 gallons per day (5,000 gallons per year) of wash water with additives.

NOTE: All additives must be used for their intended purpose, and in accordance with the manufacturer’s recommendations and label directions.

If the work is determined to produce a hazardous waste, consider using alternative products or methods to reduce the amount of waste generated, such as:

- Alternative cleaners that do not produce hazardous waste.
- Dry methods such as:
  - Sawdust, oil-dry, or vermiculite to clean pavement.
  - Brooms or wire brushes to remove and collect loose debris before using water, chemicals, or both.
- Lower pressure or volume water spray.
Washing with No Additives
When washing outdoors and no additives will be used, follow the requirements for discharge to ground from outdoor washing activities:

- Use potable water as the water source for washing
- Limit washing to the removal of dirt from the exterior of a vehicle, equipment, or a stationary source such as a building
- Block building footer drains and storm drains within and adjacent to the cleaning areas as needed
- Insert filter fabric or sediment control sacks in the storm drains within and around the cleaning area
- Empty the filter fabric or sediment control sacks around the cleaning area as needed

**NOTE:** Washing of the undercarriage of a vehicle or equipment is prohibited.

Washing and Creating Potentially Hazardous or Contaminated Wastewater
If the surfaces to be cleaned contain lead based paint or other chemicals or residues, the wash water will likely need to be collected for proper disposal. Contractors must have a written wastewater management plan. Please contact the U-M EHS Environmental Protection and Permitting Program (EP3) at (734) 647-1143 for review and approval of the wastewater management plan prior to commencing work. EP3 needs **at least two weeks** to review and approve the plan prior to beginning work. Examples of when a plan would be required include, but are not limited to:

- Using high pressure water to strip/remove paint from surfaces
- Stripping paint from buildings with solvents and spraying them clean
- Degreasing equipment with solvents and spraying them clean
- Using caustic or phosphorus containing cleaners