



**Standard Operating Procedure:
FM Yard Equipment Washing Stations**

Date: 12/14/2018* Version: 2 Review Frequency: Annual

Reasons for Procedure

The University of Virginia (UVA) has a permit to operate a Municipal Separate Storm Sewer System (MS4) issued by the Virginia Department of Environmental Quality. This permit authorizes UVA to discharge stormwater pursuant to the Virginia Stormwater Management Program and the Virginia Stormwater Management Act.

Since storm drain systems are not connected to a sanitary sewer treatment plant, water traveling through the storm drain system flows untreated directly to local streams, rivers and lakes. An illicit discharge to the storm system is generally defined as any discharge that is not composed entirely of stormwater. UVA's MS4 Program "shall include all procedures developed by the operator to detect, identify, and address nonstormwater discharges to the MS4."¹

1.0 Purpose

This procedure describes the proper use of the washing stations located in the FM Leake Yard. These stations are designed for the washing FM equipment and containers and is equipped with a drain that discharges to the sanitary sewer. Washing items can generate wastewater contaminated with detergents, oils, plant litter, grease and heavy metals. Discharge of these contaminants into a storm drain or surface waters is considered an "Illicit Discharge." Illicit discharges can result in contamination of surface waters and significant fines from regulatory agencies. Using this station will eliminate these harmful discharges by directing this waste water to the sanitary sewer.

2.0 Scope

The only approved locations for equipment and material washing in the FM Yard are the washing station located next to the shops, the drain under the old recycling sort facility east of the Landscape Building, and the trench drain in front of the salt/sand storage shed. Each of these drains discharge directly to the sanitary sewer. Any equipment, vehicles, or items needing to be washed, such as trash cans or tools, within the FM Yard must follow these guidelines. Vehicle and equipment washing operations must also follow the UVA SOP on vehicle and equipment washing.

3.0 Responsibility

3.1 Facilities Management Environmental Resources

¹ General Permit No: VAR040073, General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems.

Environmental Resources staff will work with managers to make sure that FM staff understand that all washing activities done in the Yard are to occur only at designated washing stations.

3.2 Managers

Managers are expected to convey the requirements of this procedure to outside contractors if non-UVA personnel need to wash equipment at the Yard. Managers and supervisors are responsible for ensuring training is conducted with the most recent version of the SOP.

3.3 Personnel Performing the Job

Personnel must follow the correct procedures according to the approved plan, depending on whether clear water or water including detergents/chemicals will be used. If it is observed that the drain system is clogged, washing activities will be stopped immediately and the service desk contacted to report the situation.

4.0 Procedures

The designated wash areas include areas where surface runoff flows only to sanitary sewers and the paved, bermed, and sloped Washing Station which will contain and direct wash water to the sanitary sewer. All chemicals or detergents used must be suitable for disposal in the sanitary sewer. Even if detergents or solvents will not be used, the resulting waste water runoff may contain pollutants which must not enter the storm system. Due to the location of two storm sewer inlets directly below the Washing Station, it is possible for contaminated water to escape the approved wash area if care is not taken to prevent this from happening.

4.1 General Cleaning/Rinsing With Tap Water – Primary Option

- 4.1.1 Before washing begins, all plant debris, trash, and dirt should be removed by sweeping up the material and discarding it into a dumpster or waste container.
- 4.1.2 Items to be washed should be placed within the confines of a sanitary drain so that spray from water hose does not cause oils or grease to leave the paved wash area.
- 4.1.3 As little water as possible should be used.
- 4.1.4 If any debris is deposited onto the concrete pad area, it should be swept and cleaned up as much as possible. Debris should not be flushed into the drain as this will clog the drain. The pad and surrounding area should be left clean when washing is complete.
- 4.1.5 If this drain becomes clogged, the Service Desk ((434) 924-1777) should be notified so that a work order can be generated. Washing activities should immediately stop if the drain becomes clogged, as overflow may discharge pollutants downhill to the storm sewer and Meadow Creek.

4.2 Cleaning with Detergents or Chemicals – Secondary Option

The use of detergents and cleaning chemicals is strongly discouraged. Also, when chemicals or waste residuals remain on the equipment being washed, additional measures are required to make sure that the resulting waste water is contained and directed into the sanitary sewer drain. If additional means (tarp screens, etc.) are necessary contain the overspray, these need to be put in place before the operation begins. These effluents cannot be allowed to drain into stormwater systems or into adjacent soils. An example of this type of job would be the removal of pesticides/herbicides residuals from landscaping equipment. As with all washing operations at this facility, as much solid material as possible should be removed from the item and disposed of in the trash prior to beginning the washing activity.

- 4.2.1 If there is a potential for escape of pollutants from the drainage area of the sanitary sewer drain, use spill pads, sandbags or other absorbent material to direct the wastewater to the drain.
- 4.2.2 Take care while using the hose to prevent excessive spray from leaving the sanitary drain site.
- 4.2.3 When washing may result in effluents containing heavy metals (such as lead, chromium, cadmium, or mercury), this may need to be disposed of as hazardous waste. Contact UVA Environmental Health and Safety at 982-4911 for proper ways of washing equipment and disposal of such material.
- 4.2.4 If the sanitary drain becomes clogged, stop cleaning immediately and contact the FM Service Desk at (434) 924-1777.

5.0 Review of Procedure/Training

All location and project managers are responsible for reviewing this procedure at least once every 24 months with all employees who perform or request these washing duties. Project managers must also convey the procedure requirements to hired contractors who may perform these job duties.

6.0 Regulatory impacts

The University's storm sewer system is directly connected to the City's; therefore, any discharge into UVA's storm system impacts the City's storm sewer system. Illicit discharges such as exterior surface wash water are prohibited by the University's MS4 permit and by the City of Charlottesville's Water Protection Ordinance. This offense is punishable by civil and criminal penalties as illicit discharges constitute a threat to the public health, safety, and welfare, and are deemed public nuisances.

*Printed versions of SOPs with previous review dates are considered current as long as the version number is the same as the current version. Current versions of all SOPs are maintained on the UVA Environmental Resources website.