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 directly to local streams, rivers and lakes untreated. 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.”

1.0 Purpose

The purpose of this procedure is to describe the proper means for washing the exterior surfaces of University buildings, windows, loading docks, patios, roads, garages or parking lots. Soaps, degreasers, chemicals, automotive fluids, litter, and a host of other materials either used for or generated from the washing can pollute the state’s waterways if they are allowed to enter the University’s storm sewer system. Discharge of these contaminants into a storm drain is considered an “Illicit Discharge.” Illicit discharges can result in significant fines from regulatory agencies. Departments that request or implement the outdoor washing of buildings or exterior surfaces must comply with this procedure.

2.0 Scope

This procedure applies to the washing of any exterior building surface, parking garage, and paved exterior surface.

3.0 Responsibility

3.1 Facilities Management Environmental Resources

Prior to start of the operation, the job must first be reviewed by Environmental Resources (ER) personnel in Facilities Management. ER staff will work with the project manager with the goal of finding a reasonable means to keep the project within regulatory requirements.

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1 General Permit No: VAR040073, General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems.
3.2 Building or Project Managers

Managers must provide ER with a copy of the proposed cleaning plan for review and approval. Include MSDS’s of the cleaning products proposed. 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 run-off may contain pollutants which must not enter the storm system. Therefore, the building or project manager must contact Environmental Resources for consultation before proceeding with the job. Managers are expected to convey the requirements of this procedure to contractors if non-UVA personnel are used for building washing. Managers 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. The approved cleaning procedure may vary depending on the substances to be removed from the exterior surface, the location of the operation, and the availability of a sanitary sewer in the area of the procedure to be done. Personnel should locate and place all necessary precautionary equipment (drain covers, absorbent mats or pads, wet-dry vacuums, etc.) prior to the start of the washing operation.

4.0 Procedures

4.1 Cleaning Plan Approval

Contact ER to review and approve washing plans before any outdoor washing takes place.

4.2 Clear tap water – Primary Option

When clear water will be used and the resulting waste water is not expected to contain a substance other than water and dirt generated from the surface being cleaned, the employee can proceed with washing the surface taking the required safety precautions (work outside of prime hours, use wet floor signs if applicable, etc.). An example of this would be washing chalk graffiti from a building with water. The resulting waste water cannot be allowed to enter any storm drain inlet. There are two choices for the proper disposal for the waste water:

4.21 The water can be directed onto a grass or vegetated area where it can be absorbed into the soil. No runoff from the area should occur and no runoff should at any time enter a storm drain inlet.

4.22 Contain the resulting waste water on an impermeable surface or within the existing infrastructure where it can be picked up for proper disposal into the sanitary sewer. A containment pad, berms, and pump system can be used to capture wastewater and divert it to a holding tank for proper disposal. Wet-dry
vacuums can also be used for smaller jobs. Larger jobs can be broken into smaller sections with moving containment if necessary.

4.3 Cleaning Chemicals – Secondary Option

The use of cleaning chemicals is strongly discouraged. When chemicals/detergents must be used, a containment area must be set up that fully encloses the work site and keeps 100% of the waste water within the site for retrieval and proper disposal in the sanitary sewer. 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 a grease spill with detergents resulting in waste water containing solvents and greases.

A containment pad, berms, and pump system can be used to capture wastewater and divert it to a holding tank for proper disposal. Wet-dry vacuums can also be used for smaller jobs. Larger jobs can be broken into smaller sections with moving containment if necessary.

When power washing old paint off a building, the wastewater will contain paint chips that need to be collected, evaluated, and disposed of properly. Old paint stripped off of buildings may contain heavy metals (such as lead, chromium, cadmium, or mercury), and may need to be disposed of as hazardous waste. Contact UVA EHS at 982-4911 for proper disposal of such material.

4.4 Documentation

Staff from ER will conduct spot inspections for compliance with the cleaning plan. Project managers should let ER staff know when the operation will take place.

5.0 Annual Review of Procedure

All location and project managers who perform and/or request that these washing operations be performed are responsible for reviewing this procedure with all employees who have these job duties at least once each year. Any project managers who hire contractors to perform these job duties are required to convey the requirements of this procedure to the contractors.

6.0 Illicit Discharge Violations

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. 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. 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.