



## Standard Operating Procedure: Exterior Surfaces Washing

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### Scope

This procedure applies to all exterior washing operations on University of Virginia (UVA) property, including any building surfaces, parking garages, paved surfaces (i.e. sidewalks), vehicles, or equipment.

### Responsibility

Anyone performing washing activities on UVA property must comply with this procedure. The washing of privately owned vehicles and equipment on UVA property is discouraged, including in parking garages and parking lots. In the event these activities take place, proper precautions to prevent stormwater contamination shall be utilized as described in these procedures.

### Procedures

#### 1. Washing Operations – Moveable Vehicles or Equipment

- a. Designated wash areas with drains directed to the sanitary sewer include the wash area next to the trash compactor at the John Paul Jones Arena Loading Dock, rooms 138 and 148 inside the tunnel at Scott Stadium, the bus wash bay at Parking and Transportation, and locations described in the [FM Yard Vehicle and Equipment Wash Locations SOP](#). Washing operations at these areas are excluded from the subsequent procedures if all wash water is directed to the sanitary drain and the pH of the wash water is between 6 – 9 when chemicals are used.

#### 2. Washing Operations – Tap Water Only

- a. This option only applies to non-heated tap water or heated water whose thermal impacts have been mitigated prior to discharge into a storm sewer or stream. In the event heated tap water is used and the thermal impacts cannot be mitigated prior to discharge into a storm sewer or stream, procedures in section 3 must be followed. When non-heated tap water will be used and the material being washed off is general buildup of dirt or debris, there are several choices for the proper handling of the resultant water:
  - i. The water can be directed onto a grass or vegetated area where it can be absorbed into the soil as long as the operations do not cause localized erosion. No runoff should be allowed to leave the vegetated area or enter a storm drain inlet, unless treated as described in the next bullet.
  - ii. Block any nearby storm or roof drain inlets using appropriate controls to filter, settle, or similarly treat the water.
    1. This option must be managed in a matter to avoid an instream impact (e.g. temperature, color, clarity). If an in-stream impact is observed,

washing operations must be ceased until more appropriate control measures can be implemented.

2. If the washing is intended to remove mud from a surface, proper erosion and sediment controls, including inlet protection, should be utilized to prevent sediment-laden water from entering the storm drains.
- iii. Follow the procedures described in section 3 for containment of wash water with cleaning chemicals.

### 3. **Cleaning Chemicals – Secondary Option**

- a. Consultation with Environmental Resources is encouraged prior to the start of any non-routine exterior washing operations using chemicals.
- b. The use of cleaning chemicals is strongly discouraged. When chemicals or detergents must be used, a containment area must be set up that fully encloses the work site and keeps all wastewater within the site for proper disposal in the sanitary sewer or offsite. The wastewater cannot be allowed to drain into stormwater systems or into adjacent soils.
- c. All of the resulting wash water must be contained on an impermeable surface or within the existing infrastructure where it can be captured for proper disposal into the sanitary sewer. Examples of containment options include but are not limited to:
  - i. Putting down plastic sheeting or tarps and using impermeable berms to contain the liquid on the sheeting.
  - ii. Sandbags or drain plugs used within the storm drain system and a pump system or wet-dry vacuum can be used to collect the wastewater.
- d. Larger jobs can be broken into smaller sections with moving containment if necessary. UVA Utilities Distribution or an outside contractor can be used for large jobs requiring sandbags or drain plugs.
  - i. If contractors are performing work for a large job that requires manhole entry, the project manager must consult with UVA Utilities and confirm if contractor personnel need confined space certifications.
- e. SDS's of the cleaning products should be reviewed prior to use.
- f. A Utilities Distribution manager must be consulted, and their approval must be given prior to disposing of wash water containing chemicals in the sanitary sewer to ensure the water is not disruptive to operations of the receiving wastewater treatment plant. Consultation shall include the dilution rate and estimated gallons generated per day. Wash water must have a pH between 6-9 for disposal in the sanitary sewer.
- g. In the event chemicals or detergents with a pH outside of the range of 6-9 are used, two disposal options are available:
  - i. Arrangements must be made to collect the wash water to send off site for proper disposal, or

- ii. The wash water must be collected for on-site adjustment of the pH to the approved sanitary discharge range, with permission from a Utilities Distribution manager. The following requirements apply for on-site adjustment:
  - 1. Personnel must have pH test strips or a pH sensor available.
  - 2. Common pool chemicals or common household items such as baking soda or vinegar can be used to modify the pH range.
  - 3. The wash water must be thoroughly mixed throughout the containment to ensure the pH of the entire container is brought within the acceptable range.
  - 4. The pH of the adjusted wash water must be reviewed by Utilities Distribution or Environmental Resources staff prior to each sanitary sewer discharge.
  - 5. The water should also be filtered, prior to discharge to the sanitary sewer if solids are present.
- h. When power washing paint off a building, the wastewater may 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 434-982-4911 for consultation and proper disposal of such material.

**4. Independent Contractors Performing Vehicle Detailing on UVA Property**

- a. Independent contractors desiring to perform vehicle detailing or other washing related activities on privately owned vehicles located on UVA property must contact Environmental Resources before proceeding with operations. Contractors must demonstrate their operations will comply with this policy and that they will not cause an illicit discharge. This will include taking proper precautions to prevent stormwater contamination as described in Section 2 or 3 and having spill cleanup materials on-hand.