Standard Operating Procedure (SOP)

Utility Construction and Maintenance



Date: 01/31/2023 Version: 1 Review Frequency: Annual

Reasons for Procedure

Radford University (RU) is subject to a General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). The permit requires RU to develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, to ensure compliance with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act and its attendant regulations. This permit authorizes RU to discharge stormwater pursuant to the Virginia Stormwater Management Program and the Virginia Stormwater Management Act.

1. Purpose

The purpose of this procedure is to provide guidance for Radford University staff to control pollutants and illicit discharges during utility construction and maintenance activities. The procedures listed below are critical steps that should be included in the best management practices (BMPs) of the Utility Construction and Maintenance of and university staff and/or contractors.

1. Scope

This procedure applies to projects involving utility construction and maintenance throughout the Radford University campus.

1. Responsibility

# Managers and Supervisors

Managers and Supervisors are responsible for ensuring their staff’s compliance with this procedure. Managers are to train their employees in the proper pollution prevention procedure as it pertains to Utility Construction and Maintenance. Managers and supervisors are responsible for ensuring training is conducted with the most recent version of the SOP.

# Personnel Performing the Job

Personnel must follow the correct procedures in accordance with this SOP.

1. Procedures

Project Planning

* To the extent possible, all maintenance and construction sites should be constructed during periods of dry weather.
* The extent of areas excavated at one time should be minimized where possible to limit the active construction area.

1. Excavation and Material Management – Installing new, or uncovering existing underground utilities must be done with care to avoid the discharge of pollutants to the drainage system

* Locate storm drain inlets prior to any excavation, and provide controls for inlets in close proximity to the work area.
* Existing vegetation in and around areas being excavated should be preserved to provide natural erosion control.
* The limits of the excavation should be minimized to the extent practicable.
* Material excavated during trenching activities should be neatly stockpiled. In the event that the stockpiles must remain overnight, proper covering (secured tarps) and perimeter controls (sediment logs, straw bales, etc.) must be used.
* Materials temporarily stockpiled in a roadway or other impervious surface that conveys directly to the storm drain should be removed by the end of the work day or prior to any precipitation, whichever comes first.
* If excavated material will not be used as backfill, the material should be removed from the site as soon as possible.
* If trench or pipe dewatering s necessary, provide appropriate sediment controls such as dewatering bags or other sediment traps at the point of discharge.
* Dispose all waste materials generated in the construction and maintenance process accordingly.

1. Fluid Storage and Handling

* Fluids should be stored in a general secondary containment structure (storage bin, truck bed, etc.) when not being actively used.
* All materials should be kept in tight fitting containers that are compatible with the material, and with proper labeling provided.
* To the extent possible, fluids should be added to equipment in a location that is an adequate distance from a storm drain inlet. This is typically 25 feet or more.

1. Spills and Leaks
   * Spill kits with absorbent materials should be onsite during all construction and maintenance activities.
   * Dry clean-up methods shall be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
   * Waste sorbent material shall be drained of free-flowing material and disposed of as solid waste in accordance with local regulations.
   * Water should never be used to clean up spilled material.
   * Wash down of pavement should not occur until all spills and leaks have been cleans up. If a buildup of waste materials is present on the pavement, the resulting wash water should be contained and disposed of in a sanitary sewer or by another appropriate means.
2. Annual Review of Procedure/ Training

Radford University managers and personnel managing utility construction and maintenance projects are responsible for reviewing this procedure with employees who have these job duties at least once each year. Project managers who hire contractors to perform these job duties are required to convey the requirements of this procedure to the contractors.

1. Annual Review of Procedure/ Training

Discharges of any material other than stormwater are prohibited in Radford University’s stormwater 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. Proper handling and disposal of landscape wastes will help keep this material out of the stormwater drainage network.