



Standard Operating Procedure: Illicit Discharge Detection

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Scope

This procedure applies to illicit discharge detection and elimination activities performed on UVA property.

Responsibility

All UVA staff and contractors are responsible for preventing illicit discharges from their operations and for stopping or containing an illicit discharge when observed if safe to do so. If personnel are unsure of response procedures or if any non-staff member observes an illicit discharge, they should call Environmental Health and Safety at 434-982-4911 or the FM Academic Customer Support Center at 434-924-1777 to report the illicit discharge. If it is safe to do so, personnel should begin efforts to contain the discharge immediately upon discovery.

Procedures

1. Initial Actions and Notifications

- a. Illicit discharges may be discovered during dry weather screenings, as described in the Outfall Inspections SOP, by report from students, faculty, staff, or community members, or by any other means of discovery. Upon discovery of an illicit discharge, efforts shall be immediately undertaken to stop or contain the discharge if possible.
- b. Environmental Resources (ER) staff must be consulted prior to taking action to resolve any impacts from the release, to ensure remediation efforts will not cause additional harm to state waters. ER shall have oversight of all cleanup and remediation efforts.
- c. Notify UVA Utilities of any illicit discharge. A complete description of the discharge and as much information as possible will be provided by whomever is reporting the illicit discharge.
- d. Any time Utilities staff are notified of an illicit discharge by staff other than ER staff, Utilities should notify ER of the illicit discharge. ER staff should immediately follow up on the illicit discharge report.
- e. Depending on the nature of the discharge, ER staff will immediately notify DEQ of the incident, but in no case later than within 24 hours. Information on current DEQ reporting protocols can be found in section 7.0 of this SOP.
- f. If the source of the illicit discharge is determined to not originate from UVA property, ER staff should provide information on the illicit discharge to Albemarle County or City of Charlottesville staff as applicable.

2. Discharge Identified

- a. If the contaminant is identified as a sanitary sewer overflow, the [SSO Response SOP](#) will be followed.
- b. Petroleum spills are to be cleaned up in accordance with the University's SPCC Plan.
- c. If the contaminant is identified as hazardous, immediately call Environmental Health and Safety (434-982-4911) or the fire department, as appropriate, for assistance in clean-up.
- d. If the source of the discharge is identified as being caused by an uncontrolled activity such as improper trench dewatering, wash water, or improper disposal of liquids, the staff responsible for the illicit discharge should be immediately notified to cease operations. Their supervisor should be contacted, and a verbal explanation of proper protocol should be provided to appropriate staff as soon as possible.
- e. If the source of the discharge is determined to be a leaking piece of equipment, vehicle, or dumpster, the leak should be contained, and the leaking item shall be removed from service until it can be repaired. In the case of leaking dumpsters, UVA Recycling or the site contractor should be contacted to request a properly sealed dumpster.
- f. If a contractor is causing the illicit discharge on UVA property, the UVA staff responsible for oversight of the contractor should also be contacted. The illicit discharge should be stopped or contained and brought to the contractor's attention. The contractor should be made aware of appropriate means for conducting activities on UVA property before work is allowed to continue.

3. Discharge Not Immediately Identified

- a. If the nature and source of the discharge is not immediately obvious, use a variety of strategies to test the discharge and locate the source of contamination.
- b. Contact construction project managers, zone maintenance staff, and supervisors responsible for industrial activities within the drainage area to determine if they can help identify or isolate the source.
- c. Use GIS software to strategically check manholes in the upstream tributary storm sewer system for contamination.
 - i. Visual observations should be used to look for presence of flow, colors, odors, floatable materials, or deposits or stains. The GIS map can then be used to trace the path of manholes back to the potential source.
 - ii. Manholes closest to the outfall should be investigated first, with staff progressively moving up the sewer network and inspecting manholes until it can be determined specifically where the source is coming in or between which two manholes the source is coming in.
- d. Dye testing can be conducted to determine if there are any improper connections between the sanitary sewer and the storm sewer. Dye tests can also provide valuable information regarding system connections and can confirm water flow direction.
- e. Camera equipment can also be used to locate the source of contamination, by exploring the storm sewer system and looking for pollution between manholes.

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- f. Smoke testing can be used to identify cross-connections with the sanitary sewer or other underground sources caused by damage to the storm drain. Smoke testing should be used as a last resort, and others within the area should be notified in advance of the smoke testing so as not to cause alarm. Utilities or Zone staff should be immediately notified if a cross connection is discovered in order to mitigate the cross connection as soon as possible.
- g. If the above efforts do not identify the source of the illicit discharge, ER staff should revisit the site approximately 24 hours from the time the discharge was initially reported or the next business day following the discharge to see if the discharge has reoccurred.
 - i. If there is no discharge observed during the follow up visit, ER staff should determine whether repeat visits are required or if the circumstances of the discharge should be considered a one-time event. The frequency of return visits to the site and the rationale should be documented.
 - 1. In the case of a one-time event, such as illegal dumping, the event should be documented in detail in case a similar event happens in the future and a pattern can be identified.
 - ii. If a discharge is observed, the IDDE procedures beginning in Section 3 should be repeated to try to observe the source of the discharge.
 - iii. For continuous discharges or discharges that are expected to occur more frequently than a one-time discharge, ER should determine the frequency of return visits to the site on a case-by-case basis and the rationale should be documented.

4. Remediation Efforts

- a. Efforts to clean up the illicit discharge or remediate impacts caused by the illicit discharge shall only be undertaken after consultation with ER staff. ER staff, in consultation with DEQ where applicable, shall make the final decision on appropriate steps to clean up or remediate impacts caused by the discharge.
- b. No clean up or remediation efforts shall be undertaken that could potentially cause additional harm to state waters beyond impacts caused by the release of the initial illicit discharge. In no case should a contained illicit discharge be released to state waters unless DEQ has been consulted and has granted approval for such a release.

5. Documentation and Follow-up

- a. ER staff will enter information about the incident in the IDDE Tracking Spreadsheet. The spreadsheet will describe the nature of the contamination and all response and follow-up measures.
- b. Upon confirmation that the illicit discharge has been eliminated, ER staff should follow up within 48 hours to revisit the site and ensure the illicit discharge has been completely eliminated and that additional issues have not occurred as a result of clean-up efforts.
- c. ER staff will complete and submit any required follow up reporting to DEQ as described in Section 6.

6. Reporting information

ER staff are responsible for making the following reports as appropriate:

- Illicit discharges that originate from or may impact the Albemarle County MS4 should be reported to the Water Resources Program.
 - Illicit discharges that originate from or may impact the City of Charlottesville MS4 should be reported to the Water Resources Specialist.
 - Illicit discharges resulting from the operation of a contractor working on behalf of UVA should be reported to UVA Risk Management at orm-frm@virginia.edu.
 - Illicit discharges that enter UVA's MS4 or state waters should be reported to DEQ within 24 hours of discovery as follows. Current reporting information was obtained from the DEQ website and via instructions from DEQ VRO PReP Staff.
1. During *normal work hours* call the number listed for the Pollution Response Program (PREP) for the [PREP Regional Office Contact](#) that covers the area where the incident occurred. DEQ prefers that all initial reports be made over the phone when possible [*currently the number for the Valley Regional Office is 540-574-7800*]. A follow up report should also be made via email as instructed by the person receiving the call.
 2. Alternatively, the on-line [Pollution Reporting Form](#) allows citizens and permittees to report pollution events on-line. Once you complete the form, a unique reference number is provided. **IMPORTANT** – citizens and permittees should make note of this number. The number will be required for follow-up on any pollution report.

Nights, holidays, and weekends, call the Virginia Emergency Operations Center 24-hour reporting number, 1 800 468-8892. Starting with the 2023-2028 MS4 Permit, online PReP reporting can function as night, holiday, and weekend reporting.