



**NORFOLK STATE**  
UNIVERSITY

**ILLICIT DISCHARGE  
DETECTION AND  
ELIMINATION  
PROGRAM**



## Illicit Discharge Detection and Elimination Program

Version	Date	Comments
1	May 2025	Illicit Discharge Detection and Elimination Program
2		
3		
4		

### PROGRAM STATEMENT

Norfolk State University (NSU) is committed to the environmental safety and protection of the campus community. The purpose of this program is to provide for the protection of the environment at NSU, and the surrounding areas, through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by federal, state, and local law. This program establishes MS4 in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process, as implemented through the Virginia Stormwater Management Program (VSMP) permit for NSU. This program contains detailed information regarding requirements for MS4 storm system maintenance.

Norfolk State University (NSU) is the owner and operator of registered small municipal separate storm sewer system (MS4) conveyance system which encompasses approximately 139 acres. A Stormwater Quality and Quantity Management Study was developed for the University by Vanasse, Hangen, Brustlin, Inc. in 2009 and revised in 2018 by Burns and McDonnell. This program contains detailed information regarding requirements for MS4 storm system maintenance.

### Table of Contents

Program statement .....	2
Definitions .....	3
Contacts and legal authorities .....	5
Program contents .....	6
Compatibility with other regulations.....	6
Severability .....	7
Illicit discharges .....	7
Allowed discharges.....	11
Inspections .....	11
Tracking.....	13
Enforcement and penalties .....	13
Education and compliance .....	13

## DEFINITIONS

**Best Management Practices (BMPs):** means schedules of activities, prohibitions of practices, general housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

**Construction Activity** - Activities subject to NPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 5 acres or more. Beginning in March 2003, NPDES Storm Water Phase II permits will be required for construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

**Contractor:** means any individual or company, including a subcontractor, hired to perform services on university property.

**EHS&RM:** Environmental Health Safety and Risk Management Department (EHS&RM)

**Hazardous substance:** means any substance designated under the Code of Virginia or 40 CFR Part 116 pursuant to § 311 of the CWA.

**Illicit discharge:** means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a VPDES or VSMP permit (other than the VSMP permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-870-400 D 2 c (3). Storm drains that have measurable flow during dry weather periods, which contain pollutants or pathogens that could pose a significant threat to the community are illicit discharges. A storm drain with measurable flow that does not contain any pollutants is simply considered a discharge

**Municipal separate storm sewer (MS4):** means a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains:

- 1) Owned or operated by a federal, state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction or delegated authority for erosion and sediment control and stormwater management, or a designated and approved management agency under § 208 of the CWA that discharges to surface waters;
- 2) Designed or used for collecting or conveying stormwater;
- 3) Not a combined sewer; and
- 4) Not part of a publicly owned treatment works.

**Municipal Separate Storm Sewer System (MS4):** means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems or designated under 9VAC-25-890-30.

**Municipal Separate Storm Sewer System Management Program or MS4 Program:** means a management program covering the duration of a permit for a municipal separate storm sewer system that includes a comprehensive planning process that involves public participation and intergovernmental

coordination, to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA) and regulations and the Virginia Stormwater Management Act and attendant regulations, using management practices, control techniques, and system, design and engineering methods, and such other provisions that are appropriate.

**National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit:** means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC §1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

**Non-stormwater discharge:** means any discharge to the storm drain system that is not composed entirely of stormwater.

**Outfall:** means, when used in reference to municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters.

**Point source:** means any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

**Pollutant:** means anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal

wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

**Source:** means any building, structure, facility, installation, or activity from which there is or may be a discharge of pollutants.

**State waters:** means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands (Virginia Code § 62.1-44.3).

**Stormwater:** means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

**Stormwater Management Plan:** A document which describes the Best Management Practices and activities to be implemented by a business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Stormwater, Stormwater Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

**Wastewater:** Any water or other liquid, other than uncontaminated storm water, discharged from a

facility.

**Wetlands:** means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas (Virginia Code § 62.1-44.3)

**Visitor:** means a person who is not enrolled at, compensated by, or an affiliate of the University.

## **CONTACTS AND LEGAL AUTHORITIES.**

University staff shall administer, implement, and enforce the provisions of this policy.

In the event of an illicit leak or spill of prohibited substances, the Police Department (757) 823-9000), EHS & Risk Management Department (757) 823-9142 or the University Architect shall be contacted at (757) 823-2625.

## **STAKEHOLDERS**

This policy is applicable to all students, faculty, staff, contractors, vendors and visitors of the University. This policy shall apply to all water entering the storm drain system generated on any lands owned or operated by the University.

## **POLICY CONTENTS**

Management Program (VSMP) permit for NSU.

The objectives of this policy are as follows:

- Prevent or minimize to the maximum extent practicable, the discharge of pollutants from University properties and operations into the storm drainage system (see Procedures Section of this policy).
- Develop, implement and enforce a program to detect and eliminate illicit discharges, as defined by 9VAC25-89-40 and 9VAC25-870-10, into the regulated small MS4 (see Enforcement and Penalties Section of this policy)...
- Comply with the requirements of NSU's stormwater permit posted on MS4 webpage.

Permits for regulated small municipal separate storm sewer systems require the development, implementation and enforcement of a SWMP that includes the following "three minimum control measures":

- Public education and outreach on stormwater impacts
- Illicit discharge detection and elimination
- Renovation/upgrades to BMP's

Regulated Small MS4 permit applications require the applicant to identify:

- Proposed best management practices and measurable goals for each of the "three minimum control measures"

- Timing of the implementation of each control measure
- Persons responsible for implementing the Stormwater Management Program (SWMP).

## **COMPATIBILITY WITH OTHER REGULATIONS**

This policy is not intended to modify or repeal any other policy, ordinance, rule, regulation, or other provision of law. The requirements of this policy are in addition to the requirements of any other policy, ordinance, rule, regulation, or other provision of law, and where any provision of this policy imposes restrictions different from those imposed by any other policy, ordinance, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

## **SEVERABILITY**

The provisions of this policy are declared to be severable. If any provision of this policy is held invalid, this determination will not affect the other provisions or application of this policy.

## **ILLICIT DISCHARGES**

No NSU employee, student, visitor, contractor, or department shall cause or allow discharges into the University's storm drainage system which are not composed entirely of stormwater, except for the allowed discharges provided in the Virginia Stormwater Management Program (VSMP) Permit Regulations (9VAC25-870). The spilling, dumping, or disposal of materials other than stormwater to the storm drainage system are strictly prohibited.

Prohibited discharges include, but are not limited to:

- Oil
- Anti-freeze
- Grease
- Chemicals
- Wash water
- Paint
- Animal waste
- Garbage
- Litter
- Landscaping debris

Materials used by the equipment maintenance staff, vegetative nutrients, housekeeping cleansers, chemicals used in academic and research laboratories have been identified as potential pollutants. Separate procedures have been established for each of these exposures. Multiple BMPs are associated with this Minimum Control Measure. All BMPs defined under this measure shall be implemented beginning in the first permit year, unless specifically stated otherwise. These BMPs are as follows:

1. Equipment maintenance: As much as possible, motorized unlicensed equipment shall be stored under a shed roof to help minimize the amount of stormwater runoff from the equipment. This equipment can develop lubricant and fuel stains which could produce sheen on waters entering stormwater drains. Accumulations of grass clippings, leaves, dirt and loose debris are to be

removed from the equipment, and swept up to prevent their inadvertent entry into stormwater inlets.

Goal: To make equipment operators more accountable for the cleanliness of the equipment and reduce the possibility of petrochemical residue and debris entering the stormwater sewer system.

Schedule: Continuously

Responsible Party: Department of Facilities Management

2. Motor vehicle refueling: The University has an underground gasoline storage tank for use in state vehicles. Refueling of most of those vehicles is performed by the vehicle maintenance staff who has been instructed not to “top-off” the vehicle tank for fear of overflow and spilling onto the pavement. To help prevent incidents, the nozzle has been replaced with one that will close automatically; access to the hose is restricted by locking the nozzle in place, turning off the gasoline pump and restricting refueling to a few hours in the morning when the mechanic is available to oversee the procedure.

Goal: To prevent gasoline from entering the stormwater drains, staining the pavement and reducing the risk of fire.

Schedule: Continuously

Responsible Party: Department of Facilities Management

3. Vegetative nutrients: The University has contracted with a consultant to assist with a nutrient management program. The program includes soil tests, assessments of vegetation and specified application amounts.

Goal: To maintain healthy lawns and plantings while reducing spillage on pavements that can enter stormwater inlets and adversely affect marine life.

Schedule: Continuously

Responsible Party: Department of Facilities Management

4. Dumping: Develop procedures to detect and address non-stormwater discharges, including illegal dumping, will include the University Police patrolling the campus and the presence of facilities groundskeepers, tradesmen and shuttle bus drivers. These individuals are to report observations and incidents that could result in illicit discharges, or conditions that could result in non-stormwater contamination. In addition to these detection methods, the main outfall from campus has a large screen that prevents solids from entering connecting sewers. The University will coordinate with the city to assure this structure remains functional.

Goal: To prevent illegal dumping from entering the stormwater drains, this could impair water quality.

Schedule: Continuously

Responsible Party: University Police and Department of Facilities Management

5. Penalties: A formal proposal shall be drafted advising the campus community that discharge of any materials, solid or liquid other than water into stormwater inlets is prohibited and infractions shall be subject to appropriate fines and/or penalties. Proposals of this nature shall be reviewed by University senior administrators and legal counsel. Enforcement shall include University Police, and if student(s) are involved, summons may be issued to appear before a committee.  
Goal: To inform the public of penalties for illegal dumping. Dumping could impair water quality.

Schedule: First Year, no reoccurrence

Responsible Party: Department of Facilities Management and Administration

6. Removal of grease and oil accumulations from parking lots will require the use of pressure-washing, deployment of petrochemical absorbents around the cleanup site and in front of any affected stormwater inlets

Goal: To prevent illicit discharges from entering the University's stormwater system.

Schedule: Continuously

Responsible Party: Department of Facilities Management

7. In the event that an illicit discharge is identified, it will be reported to DCR in the Annual Report.

Goal: To prevent illicit discharges from entering the University's stormwater system

Schedule: Annually

Responsible Party: Department of Facilities Management

8. Stormwater Outfall inspection: This section includes details on how to find an illicit discharge in the field and the appropriate laboratory strategies to identify particular pollutants. The Outfall Reconnaissance Inventory (ORI) is the most proven method for screening campus stormwater outfalls. The ORI consists of walking all of the campus outfalls to document where they are and what condition they are in. The field team should be able to find where continuous and intermittent stream flows exist. Take note of any outfalls with discharges of very high turbidity, strong odors, unnatural colors or an extreme case of pH on a field litmus test strip. When obvious discharges are found, the field crew should take note and start working upstream to find where the source is and eliminate it. While traversing the campus, field crews should be looking for other more common illicit discharges like oil spills, un-permitted car washing or other harmful liquid spills. If these are encountered the appropriate abatement agency should be notified. The following table provides a step by step process for conducting an ORI.

Goal: To identify potential illicit discharges that could impair water quality.

Schedule: All campus outfalls shall be initially inspected by the end of the third permit year and annually thereafter

Responsible Party: Department of Facilities Management



<b>Field Screening and Data Analysis</b>	
<b>Step</b>	<b>Strategies/Considerations</b>
1. Acquire necessary mapping, equipment and staff	<ul style="list-style-type: none"> <li>▪ Use campus mapping available and documents</li> <li>▪ Obtain spectrophotometer, basic camera, litmus paper, etc.</li> <li>▪ One person field crew with specialized training at a minimum or two person crew with basic field training (ideal for screening)</li> </ul>
2. Determine appropriate screening times	<ul style="list-style-type: none"> <li>▪ During dry season</li> <li>▪ During times when trees are not shedding their leaves</li> <li>▪ At a minimum of 48 hours after a rain event</li> <li>▪ Times of low groundwater levels, generally in the middle of summer through fall for the Hampton Roads area</li> </ul>
3. Identify where to begin screening	<ul style="list-style-type: none"> <li>▪ Low Risk (Low IDP) Areas – integrate field screening with broader watershed assessments.</li> <li>▪ Medium Risk (Medium IDP) Areas – Screen drainage areas within first permit cycle.</li> <li>▪ High Risk (High IDP) Areas – Screen these outfalls in the beginning of the first permit cycle.</li> </ul>
4. Conduct field screening	<ul style="list-style-type: none"> <li>▪ Mark, document and photograph all campus outfalls.</li> <li>▪ Document outfall characteristics</li> <li>▪ Monitor outfalls that have flows</li> <li>▪ Sample all outfalls with potential problems</li> <li>▪ Track major problems back to the source immediately</li> </ul>
5. Compile screening data	<ul style="list-style-type: none"> <li>▪ Develop database for documented field research</li> <li>▪ Enter data into system as it is gathered</li> <li>▪ Start lab analysis of samples taken</li> </ul>
6. Designate screened outfalls	<ul style="list-style-type: none"> <li>▪ Designate outfalls screened as having a “definite, probable, potential or unlikely” illicit discharge potential</li> </ul>
7. Document the extent of discharge problems	<ul style="list-style-type: none"> <li>▪ Compile data from field screening, laboratory testing and initial assessment of problem areas. Update initial assessment of outfalls as High, Medium or Low Illicit Discharge Potential (IDP).</li> </ul>
8. Develop a monitoring strategy	<ul style="list-style-type: none"> <li>▪ Set a goal of monitoring 10% of flowing outfalls per calendar year until the entire campus has been inventoried in the first permit cycle.</li> <li>▪ Repeat this screening each permit cycle.</li> </ul>

The University’s stormwater system receives runoff from the City of Norfolk streets which is conveyed through lines installed by the City. Numerous contacts with City maintenance crews have occurred in

response to construction planning meetings. For communication and regulatory compliance purposes, a specific contact will be located within the City administration.

## **ALLOWED DISCHARGES**

The following discharges to the storm drainage system are allowed, as per 9VAC25-870-400 (D)(2)(c)(3), as they are considered to be not significant contributors of pollutants to the MS4:

- Discharges that are covered under a separate individual or general VPDES or VSMP permit for non-stormwater discharges.
- Discharges or flows which are not significant contributors of pollutants to the municipal separate storm sewer system:
  - Water line flushing;
  - Landscape irrigation;
  - Diverted stream flows;
  - Uncontaminated groundwater infiltration;
  - Uncontaminated pumped groundwater;
  - Discharges from potable water sources;
  - Foundation drains;
  - Air conditioning condensation;
  - Irrigation water;
  - Springs;
  - Water from crawl space pumps; · Footing drains;
  - Lawn watering;
  - Individual residential car washing;
  - Flows from riparian habitats and wetlands;
  - De-chlorinated swimming pool discharges;
  - Street wash water;
  - Discharges or flows from firefighting activities;
  - Flows that have been identified in writing by the Department of Environmental Quality as de minimis discharges that are not significant sources of pollutants to state waters and not requiring a VPDES permit.

## **INSPECTIONS**

NSU shall, at a minimum, visually inspect all outfalls once per year during dry weather conditions to evaluate the physical condition of the outfalls and to ensure that there no flows present from potential illicit discharges. In the event a flow is observed, or evidence suggests that illicit discharges may exist, further investigation shall be administered by any of the following methods:

1. Tracing discharge up the storm sewer system;
2. Sampling of a discharge for analysis in order to determine if a pollutant is present and to identify the pollutant;
3. Implement BMPs to eliminate illicit discharges;
4. Scheduling of follow up observations;
5. Any other appropriate measures deemed necessary.

Flows suspected of containing illicit discharges due to the presence of odors, colors or sheens shall be tested. Test parameters may include but are not limited to ammonia, detergent, chlorine, phosphorus, nitrogen, pH, conductivity, turbidity, temperature, and dissolved oxygen. The results of the inspections and testing shall be maintained in a format to allow tracking of outfall locations, inspection dates, chemical tests conducted, and follow-up procedures implemented to correct any detected illicit discharge. The physical condition of the outfall shall also be noted during the inspections. Once the source of the discharge has been identified, immediate action shall be taken to minimize or remove the discharge. Illicit discharge data will be used in the preparation of the annual report to the Virginia Department of Environmental Quality. The following table summarizes visual and olfactory tests performed during dry weather screening.

<b>Dry Weather Field Screening Tests</b>	
<b>Test for:</b>	<b>Use of Test</b>
1. Odor	<ul style="list-style-type: none"> <li>▪ Indicates presence of sanitary wastewater, industrial flows, or biological chemicals.</li> </ul>
2. Color	<ul style="list-style-type: none"> <li>▪ Depending on color, indicates presence of sanitary wastewater, petroleum, detergents, or other pollutants.</li> </ul>
3. Turbidity	<ul style="list-style-type: none"> <li>▪ Indicates presence of suspended solids, petroleum, or detergents.</li> </ul>
4. Floatables	<ul style="list-style-type: none"> <li>▪ Indicates presence of suspended solids, litter and debris, detergents, or petroleum.</li> </ul>
5. Deposits or Stains	<ul style="list-style-type: none"> <li>▪ Indicates presence of pollutants over a long period of time</li> </ul>
6. Vegetation	<ul style="list-style-type: none"> <li>▪ Health of adjacent vegetation indicates severity or duration of pollution event</li> </ul>
7. Structural Condition	<ul style="list-style-type: none"> <li>▪ Indicates age and status of outfall.</li> </ul>
8. Biology	<ul style="list-style-type: none"> <li>▪ Indicates presence of sanitary wastewater, industrial flows, or biological chemicals.</li> </ul>

Wet weather inspection evaluates the first flush of stormwater discharged from an outfall during a storm, which represents the maximum pollutant load managed by receiving water. This storm event is greater than 0.1 inch of rain falls and occurs at least 72 hours after the greater than 0.1 inch of rainfall storm event. The evaluation and any samples collected should occur within the first 30 minutes of discharge. Wet weather inspection should be planned when weather forecasts show a 40% chance of rain or greater.

**Notification of Spills and Illicit Discharges**

Once a spill or illicit discharge has been observed, the incident shall be immediately reported to the Police Department (757)823-9000 and Environmental Health and Safety Department (EHS&RM) (757) 803-5988. These numbers may be used to report other potential stormwater violations. In the event the EHS&RM is unavailable, Facilities team members may be notified to control spill and commence cleanup. Failure to provide notification of the incident shall be a violation of this policy. The EHS&RM shall conduct an initial investigation within one business day of receiving notification. The EHS&RM department shall immediately determine appropriate measures to be taken in order to prevent further

discharge(s) and to begin remediation of pollution. A follow-up inspection shall be conducted within 7 days of the reported incident to confirm the cleanup process has started or been completed. Spills and Illicit discharges shall be removed or minimized within 90 days of the incident report.

## **TRACKING**

Field surveys and instances of illicit discharges or spills shall be tracked in the WebTMA database. Data fields to be included shall be:

1. Date discharge observed/reported;
2. Location of discharge;
3. Summary;
  - a. Results of investigation;
  - b. Any follow-up to investigation;
  - c. Resolution of investigation;
4. Date investigation closed.

## **ENFORCEMENT AND PENALTIES**

Whenever the University finds that a violation of this policy has occurred, NSU may order compliance by written notice to the responsible party. Such notice may require without limitation:

1. The performance of monitoring, analyses, and reporting;
2. The elimination of prohibited discharges or connections;
3. Cessation of any violating discharges, practices, or operations;
4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
5. Payment of any fee, penalty, or fine assessed against Norfolk State University to cover remediation cost;
6. The implementation of new stormwater management practices;
7. Disciplinary action up to and including dismissal, where appropriate.

The listed requirements will be at the expense of the responsible party. In the event that adequate measures are not initiated, the University may issue work orders to correct the violation and bill the responsible party for expenses incurred.

## **RECORDS**

All data records, reports and response resulting from spills or leaks will be maintained on file in the EHS&RM Office for five (5) years.

## **EDUCATION AND COMPLIANCE**

A training program for Stormwater Pollution Prevention/Good Housekeeping and IDDE is presented to applicable employees upon hire and on an annual basis. The employee training program educates vehicle maintenance shop employees and bus drivers regarding the requirements of the SWPPP. This education



program includes background on the components and goals of the SWPPP and hands-on training in spill prevention and response, good housekeeping, proper material handling, disposal and control of waste, container filling and transfer, and proper storage, washing, and inspection procedures. Shop employees are required to receive the training annually. A record of employee sign-in sheets for the refresher course is maintained for five years. The program will be reviewed annually to determine its effectiveness and to make any necessary changes. New bus drivers also receive spill response and stormwater pollution prevention during their initial training.

Educational materials for Stormwater Pollution Prevention and IDDE are distributed through various forms of media to the members of the University.

Conformity to the requirements of this policy will be monitored by the Environmental, Health, Safety and Risk Management Office. Violations of this policy will be reported to the Vice President for Finance and Administration.

**PUBLICATION**

3/29/2021

**REVIEW SCHEDULE**

Next Scheduled Review 03/31/2022

Approval by:

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**RELATED DOCUMENTS**

None

**FORMS**

None