

## **APPENDIX C**

**Illicit Discharge Detection and Elimination Ordinance, Ordinance 1681  
City of Radford Standard Operating Procedure: IDDE: Outfall Screening  
City of Radford MS4 Illicit Discharge Program Dry Weather Screening  
MS4 Outfall Field Screening Inspection Report**

**ORDINANCE NO. 1681**

**AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 32, OF THE RADFORD CITY CODE OF ORDINANCES, TO CREATE AN ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) ORDINANCE FOR THE CITY OF RADFORD TO PREVENT POLLUTANTS FROM ENTERING THE CITY'S MS4, IN ACCORDANCE WITH THE STORMWATER MANAGEMENT ACT, §§ 62.1-44.15:24, *ET SEQ.*, OF THE CODE OF VIRGINIA, AND THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION, CHAPTER 870, 9VA25-870-10, *ET SEQ.*, OF THE VIRGINIA ADMINISTRATIVE CODE**

**WHEREAS**, the City operates a regulated Municipal Separate Storm Sewer System (MS4), and is required to adopt an illicit discharge detection and elimination program to prohibit illicit discharge of pollutants and connections to the City's MS4 as a part of the City's stormwater management and control program; and

**WHEREAS**, the City has adopted a stormwater management and control ordinance, the requirements of which are codified in Chapter 32, of the Radford City Code of Ordinances, which includes provisions to protect pollutants from entering the City's Municipal Separate Storm Sewer System (MS4), and the City now desires to adopt an illicit discharge detection and elimination ordinance to further prevent pollutants from entering the City's MS4, to supplement the City's Stormwater Management Ordinance and program

**WHEREAS**, a public hearing upon this Ordinance No. 1681, prior to its adoption, was held on April 11, 2016, at a regular meeting of the Radford City Council, to receive public comment, following the duly advertised notice thereof of the public hearing regarding this Ordinance No. 1681; and

**NOW THEREFORE BE IT ORDAINED** by the City Council of the City of Radford, Virginia, that a new article, division, or section entitled, "Illicit Discharge Detection and Elimination" is hereby adopted for and on behalf of the City as set forth herein, and the same shall be added to, and shall amend and become a part of Chapter 32, of the Radford City Code of Ordinances, to provide for and to establish an Illicit Discharge Detection and Elimination (IDDE) Ordinance for the City of Radford, Virginia, to protect pollutant's from entering the City's separate storm sewer system (the "MS4"), pursuant to the provisions set forth in this Ordinance Number 1681, and in accordance with and under the authority of the laws and regulations of the Stormwater Management Act (the "Act") §62.1-44.15:24 *et seq.*, of the Code of Virginia, 1950, as amended, and the Virginia Stormwater Management Program (VSMP) Regulation of the Virginia Administrative Code, 9VA25-870-10 *et seq.*, as enacted and adopted herein in this Ordinance No. 1681, for the City's separate storm sewer system (MS4), for and on behalf of the City, and Chapter 32, of the Radford City Code of Ordinances is hereby amended and reenacted herein, subject to any editing deemed necessary or required to amend and to include the same with the existing code provisions set forth in Chapter 32, of the Radford City Code of Ordinances, as follows:

## **ILLICIT DISCHARGE AND DETECTION ELIMINATION**

### **Sec. 32-18. Title and Authority.**

- a. This ordinance shall be known as the “Illicit Discharge Detection and Elimination Ordinance of the City of Radford, Virginia”.
- b. The purpose of this ordinance is to ensure the general health, safety, and welfare of the citizens of the city and state, by protecting property and state waters through the prohibition of illicit discharges of non-stormwater with the city’s regulated municipal separate storm sewer system (MS4) area; subject to certain exceptions, and to prevent water from being rendered dangerous to the health of persons living in the city.
- c. This ordinance regulates non-stormwater discharges and connections from entering the MS4 and establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the Virginia Pollutant Discharge Elimination System’s (VPDES) General Permit For Discharges of Stormwater From Small Municipal Separate Storm Sewer Systems permit issued to the city by the Commonwealth of Virginia, by the Virginia Department of Environmental Quality (DEQ).
- d. This ordinance establishes the City’s illicit discharge and connection program that regulates non-stormwater discharges to the City’s regulated Municipal Separate Storm Sewer System (MS4), consistent with state and federal regulations promulgated pursuant to the law.

### **Sec. 32-19. Purpose and Applicability.**

- a. The purpose of this ordinance is to ensure the general health, safety and welfare of the citizens of the City of Radford and the Commonwealth of Virginia, and to prevent water from being rendered dangerous to the health of persons living in the City of Radford. This ordinance promotes the public health, safety and welfare of persons in the city through the regulation of stormwater discharges to the city’s separate storm sewer system and to prohibit the illicit discharge of nonstormwater to the city’s storm sewer system, subject to certain exceptions. This ordinance is also intended to prohibit illicit connections and illicit discharges to the city’s storm sewer system, and to establish inspection and monitoring procedures to ensure compliance with this ordinance.
- b. This ordinance shall apply to all activities that cause or allow direct or indirect illicit discharges or illicit connections into the city’s municipal separate storm sewer system.
- c. This ordinance is applicable to any non-stormwater discharge that enters, or has the potential of entering, the MS4, located within the city’s regulated MS4 area.

### **Sec. 32-20. Definitions.**

In addition to the definitions already set forth and defined in the Stormwater Management Ordinance in Chapter 38, of the Radford City Code of Ordinances, and Virginia Stormwater Management Act (the “Act”), the definitions set forth in Chapter 870, 9VAC25-870-10, *et seq.* of

the Virginia Stormwater Management Program (VSMP) Regulation, in the Virginia Administrative Code, and in Chapter 3.1 of Title 72.1 of the Code of Virginia, and any amendments thereunto, which are expressly adopted herein and incorporated herein by reference and made a part hereof, the following words and terms as used in this Ordinance shall have the following meanings unless otherwise specified herein. Where the definitions differ, those set forth in the Virginia Administrative Code and the Code of Virginia, and incorporated herein shall have precedence.

*“Act”* means the “Virginia Stormwater Management Act”, Article 2.3 § 62.1-44.15:24 et seq. of Chapter 3.1 of Title 62.1 of the Code of Virginia.

*“Administrator”* means the position, person, or authority responsible in the city for administering the Illicit Discharge Detection and Elimination Ordinance for the city. The city manager or his designee shall be the administrator of this ordinance. Any reference to administrator as the term is used in this ordinance, includes and refers to any designee or designees, including but not limited to any employees, persons, departments, contractors, or agents of the city authorized and appointed by the city manager to administer the provisions of this ordinance for the city.

*“Best Management Practices” or “BMP”* means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices, including both structural and nonstructural practices, to prevent or reduce the pollution of surface waters and ground water systems.

*“City”* means the City of Radford, Virginia.

*“Control measure”* means any best management practice (BMP) or other method used to prevent or reduce the discharge of pollutants to surface waters.

*“Discharge”* means to dispose, deposit, spill, pour, inject, dump, pump, leak, or place by any means, or that which is disposed, deposited, spilled, poured, injected, dumped, pumped, leaked, or placed, by any means.

*“Gray water”* means wastewater discharged from lavatories, bathtubs, showers, clothes washers and laundry sinks.

*“Groundwater”* means all subsurface water, including, but not limited to, that part within the zone of saturation.

*“Illicit connection”* means any connect, in any manner whatsoever, to the City’s Municipal Separate Storm Sewer System (“MS4”), that is not authorized by applicable state law or city ordinance, and which has not been approved by the city in accordance with applicable city ordinances, or state laws, or as may otherwise be authorized by law.

*“Illicit discharge”* means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a separate VPDES or state permit (other than the state permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-870-400D2c(3).

*“Inspection”* mean and include, but is not limited to, any on-site physical examination of all facilities and grounds, premises, properties, or site which may discharge to a storm sewer system, or the state waters; a review of all records on the operation and maintenance of facilities and grounds, premises, properties, or sites, and the results of any monitoring performed for compliance with any local, state, or federal laws and/ or regulations, or permit requirements, including such inspections as permitted by the Act, for any on-site review of compliance with the MS4 state permit or VSMP, and any applicable design criteria, or an on-site review to obtain information or conduct surveys or investigations necessary in the implementation or enforcement of the Act and this ordinance.

*“Industrial wastes”* means any liquid or wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resource.

*“Municipal separate storm sewer system”* or *“MS4”* means all separate storm sewers that are defined as municipal separate storm sewer systems or designated under 9VAC25-870-280 A 1, as a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system or *“MS4”*, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains:

- (a) Owned or operated by a federal, state, city, town , county, district, association, or other public body, created by or pursuant to state law, including the city, having jurisdiction or delegated authority for erosion and sediment control and stormwater management, or a designated and approved management agency under § 208 of the Clean Water Act (CWA) that discharges to surface waters;
- (b) Designed or used for collecting or conveying stormwater;
- (c) That is not a combined sewer; and
- (d) That is not part of a publicly owned treatment works (POTW).

*“Municipal separate storm sewer system”* or *“MS4”* means all municipal separate storm sewers that are located within the portion of the City that is identified as *“urbanized”* by the U.S. Bureau of the Census in the latest Decennial Census.

*“Municipal Separate Storm Sewer System Management Program”* or *“MS4”* means a management program covering the duration of a state permit for a municipal separate storm sewer system that includes a comprehensive 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 CWA and regulations and the 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”* or *“NPDES”* means the federal program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pre-treatment requirements under the Clean Water Act (CWA).

*“Non-Stormwater Discharge”* means any discharge to the storm drain system that is not composed entirely of stormwater.

*“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 liquids and solid wastes; 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 particulate metals; animal wastes; wastes and residues that result from construction of a building or structure; and noxious or offensive matter of any kind.

*“Premises”* means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

*“Regulations”* means the Virginia Stormwater Management Program (VSMP) Regulation or *“VSMP”* regulations of the Virginia Administrative Code, Chapter 870, 9VAC25-870-10, *et seq.*, as amended.

*“Sanitary sewer”* means a system of pipes, conduits or other devices that collect and/or convey sewage to a wastewater treatment or pumping facility.

*“Stormwater”* means precipitation that is discharged across the land surface or through conveyances to one or more waterways, which may include rainfall runoff, snow melt runoff, and surface runoff and drainage.

*“Storm drainage system”* means publicly owned facilities by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and man-made or altered drainage channels, reservoirs and other detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

*“Virginia Pollutant Discharge Elimination System”* or *“VPDES”* means the program issued by the Commonwealth of Virginia for imposing and enforcing pre-treatment requirements pursuant to the Clean Water Act (CWA).

*“Virginia Stormwater Management Program”* or *“VSMP”* means a program approved by the State Board, that has been established by a locality to manage the quality and quantity of runoff resulting from land-disturbing activities, which shall include such items as local ordinances, rules, permit requirements, annual standards and specifications, policies and guidelines, technical materials, and requirements for plan review, inspection, enforcement, where authorized in this article, and evaluation consistent with the requirements of this article and associated regulations.

*“Wastewater”* means any water or liquid, other than uncontaminated stormwater, discharged from a facility.

**Sec. 32-21. Compatibility with other ordinances, requirements and regulations.**

(a) This ordinance is intended to supplement other provisions and requirements of the Radford City Code. This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule, regulation, statute, or other provision of law. Nothing in this ordinance shall negatively affect any other provisions and requirements of the Radford City Code, including but not limited to the city's Stormwater Management Ordinance and/or the city's Erosion and Sediment Control Ordinance, and any amendments thereunto.

(b) The requirements of this ordinance shall be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation, statute, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall apply.

**Sec. 32-22. Control of pollutant contributions from interconnected MS4s.**

(a) MS4 systems not owned or operated by the city, but which are interconnected with the city's MS4, shall be controlled so that they do not impair the operation of or contribution to the failure of the city's MS4 or of any interconnected MS4 to meet any applicable local, state, or federal law or regulation or permit. Any person who is the owner of interconnected MS4 systems shall be responsible for the quality within their systems and shall coordinate with the owners of the downstream MS4s.

**Sec. 32-23. Prohibited discharges and connections.**

(a) It shall be unlawful and a violation of this ordinance to allow any discharge that is not composed entirely of stormwater, except as described in subsection (b) below, which enters or has the potential of entering the MS4.

- (1) Discharging, or causing or allowing to be discharged, sewage, industrial wastes, yard wastes, gray water, or other wastes, into the storm sewer system, or any component thereof, or onto driveways, sidewalks, parking lots, the round or any other areas draining to the storm sewer system;
- (2) Connecting, or causing, or allowing connection of any sanitary sewer to the storm sewer system, including any sanitary sewer connected to the storm sewer system as of the date of the adoption of this ordinance;
- (3) Connecting, or causing or allowing connection to the storm sewer system, without a valid VSMP, VPDES or NPDES permit, any structure that conveys any liquid other than stormwater or discharges listed in subsection (b), including, but not limited to pipes, drains, sanitary sewer lines, washing machine drains, or floor drains.
- (4) The prohibitions set forth in subsections (2) and (3) listed above in this section expressly include, without limitations, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of the connection.

- (5) Throwing, placing, or depositing, or causing to be thrown, placed or deposited in the storm sewer system anything that impedes or interferes with the free flow of the stormwater system therein, or adversely affects water quality.
- (6) Failure by any property owner to notify the administrator, or his designee, of an illegal discharge or illicit connection on, or from, such owner's property to the City's storm sewer system or any component thereof.
- (7) Violate any condition or provision of this ordinance or any permit or approval granted for stormwater discharges or connections to allow any stormwater discharges to the City's MS4.
- (8) To enter in any stormwater retention pond, storm sewer or drain, except that this shall not apply to any city personnel or others authorized to perform work in such areas.

(b) Subject to the provisions of subsection (c) of this section, the following activities are deemed permissible non-stormwater discharges, and shall not be unlawful or a violation of this ordinance.

- (1) Discharges or flows covered by a separate individual or general VPDES or VSMP permit for non-stormwater discharges;
- (2) Individual non-stormwater discharges or flows that have been identified in writing by the Virginia Department of Environmental Quality as de minimis discharges that are not significant sources of pollutants to state waters and do not require a VPDES permit;
- (3) Water line flushing;
- (4) Landscape irrigation;
- (5) Diverted stream flows or rising groundwaters;
- (6) Uncontaminated groundwater infiltration, as defined by 40 CFR 35.2005(20);
- (7) Uncontaminated pumped groundwater;
- (8) Discharges from potable water sources, foundation drains, irrigation water, springs, water from crawl spaces or footing drains;
- (9) Air conditioning condensation;
- (10) Lawn watering;
- (11) Individual residential car washing;

- (12) Flows from riparian habitats and wetlands;
- (12) De-chlorinated swimming pool discharges with pH between 6.0 to 8.0 standard units, at ambient water temperature, and with less than 0.10 milligrams per liter or parts per million;
- (13) Street wash water;
- (15) Discharge or flows resulting from firefighting and other public safety activities;
- (16) Discharges associated with the maintenance or repair of public water, sanitary, and storm sewer lines, and public drinking water reservoirs and drinking water treatment or distributions systems conducted in accordance with applicable federal and state regulations and standards;
- (17) Discharges associated with any activity by the city, its employees and designees, in the maintenance of any component of a City maintained stormwater management facility conducted in accordance with applicable federal and state regulations and standards, and law;
- (18) Discharges specified in writing by the administrator as being necessary to protect public health and safety;
- (19) Any activity authorized by a valid Virginia Stormwater Management Program (VSMP) permit, a valid Virginia Pollutant Discharge Elimination System (VPDES) permit, a valid Virginia Pollution Abatement (VPA) permit, a National Pollutant Discharge Elimination System (NPDES) permit, or as may be otherwise permitted by law or the regulations.

(c) In the event any of the activities listed in subsection (b), of this section are found by the administrator to be a significant contributor of pollutants discharged into the MS4, the administrator shall serve a written notice to the party responsible for the activity ordering that the activity be ceased or conducted in a manner that will avoid the discharge of pollutants to MS4. The notice shall set forth and state the deadline by which the activity shall cease or be conducted without pollution. Failure to comply with such order within the time stated in the notice shall result in the revocation of the exemption listed in subsection (b) above, and shall constitute a violation of the provisions of this section and ordinance.

#### **Sec. 32-24. Best Management Practices.**

(a) The city may require the use of best management practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of the city's MS4. The person, owner, or operator, of a commercial or industrial establishment shall provide, at the expense of the person, owner, or operator, reasonable protection from accidental discharge of prohibited materials and wastes into the city's MS4 system through the use of structural and non-

structural BMPs. Furthermore, any person responsible for a property, premises, or facility which is or may be the source of an illicit discharge may be required to implement, at such person's sole expense, additional structural and non-structural BMPs and/or implement a stormwater pollution prevention plan (SWPPP) to prevent the further discharge of pollutants to the MS4.

**Sec. 32-25. Notification of spills.**

(a) Pursuant to Section II.B.3 of 9VAC25-890-40, the city prohibits illicit discharges to the city's MS4. Any person owning or occupying any premises, property, or facility, who has knowledge of a discharge of pollutants from those premises, property, or facilities which may violate the prohibitions found in this ordinance shall immediately take action to abate the discharge and shall notify the city or the administrator, either in person or by phone within twenty-four (24) hours of becoming aware of the discharge. Observed discharges of hazardous materials or substances shall be immediately reported by calling "911". If the illicit discharge was emitted from a commercial or industrial establishment, the person, owner or operator of said establishment shall also retain an on-site written record of the discharge as well as the actions taken to prevent its recurrence.

**Sec. 32-26 Inspections and compliance monitoring.**

(a) The administrator shall have the authority to carry out all inspections and monitoring procedures necessary to determine compliance and/or noncompliance with this ordinance, and to enforce the requirements of this ordinance, including the prohibition of illicit discharges and connections to the storm sewer system. The administrator may monitor stormwater outfalls or other components of the municipal storm sewer system as may be appropriate in the administration and enforcement of this ordinance.

(b) The administrator shall have the authority, in the administrator's sole discretion, to require a Stormwater Pollution Prevention Plan (SWPPP) from any person whose property discharges, or has the potential to discharge, to the MS4.

(c) The administrator and his duly authorized designee(s), employees, agents, or any other representative of the city, bearing proper credentials and identification, shall be authorized to enter any public property or to request entry into any private premises, properties, or facilities, at any reasonable time for the purpose of enforcing this ordinance, including, but not limited to the taking of samples of discharges, inspecting monitoring equipment, inspecting and copying documents relevant to the enforcement of this ordinance, and such other items as may be deemed necessary for the enforcement of this ordinance.

(d) If the person in charge of the property refuses to allow the administrator to enter in accordance with subsection (c) above, then the administrator may present sworn testimony to a magistrate or court of competent jurisdiction and request the issuance of an inspection warrant to enter the premises, property or facility for the purpose of making such inspections and investigations. The administrator shall make a reasonable effort to obtain consent from the person, owner, occupant or operator in charge of the premises prior to seeking the issuance of an inspection warrant under this section.

(e) The administrator shall have the authority to require any person responsible for a discharge to the MS4 to document that such discharge meets and is in compliance with the requirements of this ordinance. This includes, but is not limited to, the ability of the administrator to require such person to provide monitoring reports, test results, and such other matters as may be deemed necessary to show that such discharge or connection is in compliance with the requirements of this ordinance. The cost of any required documentation shall be the responsibility of the person responsible for the discharge.

(f) The failure of any person to comply with any of the requirements of this section shall constitute a violation of this Ordinance.

### **Sec. 32-27. Emergency Conditions.**

Notwithstanding any other provisions of this article, whenever the city determines that conditions or activities require immediate action to help protect public health, safety or welfare or to provide for compliance with this ordinance, or rules promulgated herein or city approved construction plans, city personnel, employees, and/or designee(s) designated by the administrator are authorized to enter at a reasonable time in or upon any property or premises in the city for the purpose of testing, inspecting, investigating, measuring, sampling, and correcting such emergency conditions. Failure to admit city personnel, employees, and/or designee(s) of the administrator, responding to emergency conditions as determined by the city or the administrator, shall constitute a separate violation of this ordinance.

### **Sec. 32-28. Enforcements, violations, and penalties.**

(a) Notice of violation. Whenever the administrator finds that a person has violated a prohibition or failed to meet a requirement of this ordinance, the administrator may order compliance through written notice of violation to the responsible party or person. Such notice may require, without limitation:

- (1) The performance of monitoring, analyses and reporting.
- (2) The elimination of illicit connections or discharges.
- (3) That violating discharges, practices or operations shall cease and desist.
- (4) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property or premises.
- (5) Payment of the costs of administration and remediation.
- (6) The implementation of source control or treatment BMPs.

(b) If abatement of a violation and/or restoration of affected property or premise are required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Such notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be performed by the city or a designated

governmental agency or contractor procured by the city or other governmental agency, and the expense thereof shall be charged to the violator.

(c) Any person who commits any of the acts prohibited by this chapter or violates any of the provisions of this ordinance shall be liable to the city for all costs of testing, containment, cleanup, abatement, removal, disposal, and any other related costs or expenses that the city may incur in connection with the enforcement of this ordinance and/or the prohibition and/or correction of a violation of this ordinance.

(d) Any person who violates any of the provisions of this ordinance shall be guilty of a Class 1 misdemeanor and, upon conviction, is subject to punishment by a fine of not more than two thousand five hundred dollars (\$2,500.00) per violation, per day, and confinement in jail for not more than twelve (12) months, either or both.

(e) Each day during which a violation of this ordinance occurs or continues shall be deemed a separate and distinct violation of this ordinance.

(f) The administrator may bring legal action to enjoin a violation of this ordinance and the existence of any other remedy shall be no defense to any such actions.

(g) In addition to any of the remedies set forth above, the administrator may seek to impose, or have imposed by the appropriate authority, any of the remedies provided for by § 62.1-44.15:48, Code of Virginia, as amended, which are incorporated herein by reference, and made a part hereof.

(e) In any court action that may result from enforcement of this ordinance, a judge hearing the case may direct the person responsible for the violation or the property owner to correct the violation and each day that the violation continues shall constitute a separate violation of this ordinance.

(f) Any person who knowingly makes any false statements, representations, or certifications in any record, report, or other document, either filed or requested pursuant to this ordinance, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required or used by the administrator under this ordinance in monitoring discharges or connections, shall be guilty of a violation of this ordinance.

(g) The remedies set forth in this section shall be cumulative, not exclusive, and it shall be no defense to any action that one or more of the remedies set forth in this section have been sought or granted, and the pursuant of any one remedy or cause of action shall not preclude the pursuant of another.

#### **Sec. 32-29. Severability of Invalid Provisions.**

If the provisions of any article, division, section, subsection, clause, paragraph, or any portion of this ordinance is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, then any such order of judgment shall not be so construed as to render invalid or unconstitutional any of the remaining provisions of this ordinance.

This Ordinance No. 1681 shall become effective as of the date of its Adoption.

First Reading: June 13, 2016

Motion: Mr. Nicholson  
Second: Dr. Harshberger

Recorded Vote:

Dr. Harshberger:	Yes
Mr. Marshall:	Yes
Mr. Nicholson:	Yes
Mr. Turk:	Yes
Mayor Brown:	Yes

Second Reading: July 11, 2016

Motion: Dr. Harshberger  
Second: Mr. Marshall

Recorded Vote:

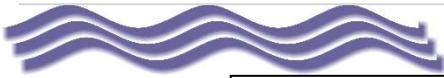
Mr. Gropman:	Yes
Dr. Harshberger:	Yes
Mr. Marshall:	Yes
Mr. Turk:	Yes
Mayor Brown:	Yes

ATTEST:



Melissa Skelton, Radford Deputy City Clerk



**Standard Operating Procedure:****IDDE: Outfall Screening**

Date: 6/30/2016\*    Version: 1    Review Frequency: Annual

**Reasons for Procedure**

The City of Radford has a permit to operate a Municipal Separate Storm Sewer System (MS4) issued by the Virginia Department of Environmental Quality. This permit authorizes the City to discharge stormwater pursuant to the Virginia Stormwater Management Program and the Virginia Stormwater Management Act. Pollution prevention and good housekeeping practices are a requirement of this permit.

Standard Operating Procedures (SOPs) have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.

**1.0 Purpose**

The purpose of the **IDDE: Outfall Screening** SOP is to provide basic guidance for City employees conducting illicit discharge inspections of storm drainage system outfalls.

**2.0 Scope**

This procedure applies to City outfalls as shown on the Stormwater Management Map located on the City's GIS website or the print map in the City's Engineering Department.

**3.0 Responsibility**

All City employees or City-contracted personnel who are responsible for and/or who will conduct illicit discharge inspections.

**3.1 Managers and Supervisors**

All Supervisors are responsible for ensuring their staff's compliance with the correct methods of dealing with IDDE: Outfall Screening inspections. This includes non-City companies that are contracted to perform work for the City. Supervisors are responsible for ensuring training is conducted with the most recent version of the SOP.

**3.2 Personnel Performing the Job**

City Employee's and outside contract personnel are responsible for following the City's **IDDE: Outfall Screening** SOP's "Do's" and "Dont's"



## 4.0 Procedures

### 4.1 Do's and Don't's

#### "DO's"

- Inspections are to occur during dry weather (no runoff producing precipitation in last 48 hours).
- Conduct inspections with at least two staff per crew.
- Conduct inspections during low groundwater and leaf off conditions if possible.
- Complete Site Info section on Outfall Field Screening Report Form before leaving the office.
- Ensure outfall is accessible
- Characterize the outfall by recording information on the Outfall Field Screening Report
- Photograph the outfall with a digital camera or Trimble GPS unit.
- If dry weather flow is present and does not appear to be an illicit discharge, attempt to identify the source of the flow (document flow for future comparison).
- Document dry outfalls for future comparison.
- Follow procedure below in if an illicit discharge is suspected.

#### "DONT's"

- **DO NOT** enter private property without permission.
- **DO NOT** Inspect outfalls if it is not safe to do so.

### 4.2 Equipment List:

1. System map
2. Outfall Field Screening Report Forms
3. City identification
4. Digital camera (spare batteries)
5. Cell phone
6. Clip board and pencils
7. Dry erase board and pens
8. Flashlight (spare batteries)
9. Disposable gloves
10. Folding wood ruler
11. Temperature probe
12. pH probe
13. Ammonia test strips
14. Five 1-liter (polyethylene) sample bottles
15. Watch with second hand
16. Calculator
17. Hand sanitizer
18. Safety vests
19. First aid kit
20. Machete
21. Cooler
22. Permanent marker

*\*Printed versions of SOPs with previous review dates are considered current as long as the version number is the same as the current version.*



#### **4.3 Suspected Illicit Discharge Procedures**

- Contact the Public Works Superintendent immediately.
- Use Outfall Field Screening Report Form to document observations
- Visually inspect general area for possible sources
- Take photos
- Estimate flow
- Collect samples if they would help with source identification.
- Attempt to locate where the discharge is coming from.

#### **5.0 Annual Review of Procedure/Training**

Supervisors are responsible for reviewing this procedure at least once each year with all employees. Any Supervisors who hire contractors are required to convey the requirements of this procedure to the contractors.

#### **6.0 Regulatory impacts**

Discharges of any material other than stormwater are prohibited by the City of Radford's illicit Discharge Ordinance. 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.



## Dry Weather Screening

Dry weather discharges from municipal storm sewer systems have been shown to contribute significantly to downstream water quality degradation. Because of this, it is important for the City of Radford to develop a dry weather screening program to identify and eliminate illicit discharges, and to remain in compliance with MS4 permit requirements. The following sections outline and describe processes to be used by the City of Radford, Virginia as part of a dry weather illicit discharge screening program based on MS4 requirements and recommendations from the Center for Watershed Protection IDDE Guidance Manual.

### A. Schedule & Prioritization

A dry weather screening event will be conducted only during periods of dry weather, defined as at least 72 hours after the most recent rain event (greater than or equal to 0.10 inches of precipitation).

Because some sources are more likely to produce illicit discharge, it is important to prioritize sub-watersheds on an ongoing basis to ensure that high risk locations are screened regularly. Aspects that factor into a sub-watershed's priority can include infrastructure age, upstream land use, illicit discharge history, dumping, and cross connections. The following table can be used to assist in prioritizing sub-watersheds, with a higher score equating a higher priority.

Sub-watershed Condition	Description	Points Assigned
Past Discharge Complaints/Reports	Less than 5	1
	5 to 10	2
	Greater than 10	3
Dry Weather Water Quality (% of times water quality standards are exceeded)	Less than 25%	1
	25% to 50%	2
	Greater than 50%	3
Number of Stormwater Outfalls	Less than 10	1
	10 to 20	2
	Greater than 20	3
Average Age of Development	Less than 25 years	1
	25 to 50 years	2
	Greater than 50 years	3

*Adapted from CWP IDDE Guidance Manual (2004)*

Once all sub-watersheds have been scored, those with scores in the top third should be classified as high risk, those in the middle third by score as moderate, and those in the bottom third as low risk.

### B. Required Minimum Annual Screenings

Screenings are required to be conducted annually for a minimum of 50 outfalls. A record should be kept documenting outfalls that have been previously screened in order to track compliance. By



tracking outfall screening, effort can be made to ensure that no outfalls are left unscreened over a long period of time as well as focus screening efforts on high risk outfalls.

## C. Data Collection Methodology

The "Outfall Field Screening Report" form or database should be completed for each outfall screened by City staff. The form includes information related to the following:

- Date/Time/Weather
- Latitude / Longitude
- Drainage area land use
- Outfall description
- Quantitative information such as flow measurements and estimated discharge rate
- Visual observations

Weather information is available from NOAA and/or [www.weather.gov](http://www.weather.gov) for the 72-hour period preceding a scheduled dry weather screening event.

## D. Investigation of non-stormwater discharges

In the event that a continuous or intermittent non-stormwater discharge is suspected or identified, a subsequent investigation should be performed within 60 days to identify and locate the discharge source. The priority of discharges to investigate are as follows.

- Sanitary sewage or significant contamination.
- Less hazardous discharges such as noncontact cooling water, wash water, etc.

Discharges that are authorized under a separate VPDES or state permit do not require further action.

## E. Source Investigation and Follow-Up Methodology

If a non-stormwater discharge is identified, the field staff will note the flow rate and field conditions of the discharge, and attempt to identify the source of the discharge by tracing the flow upstream. Photographs will be taken of observed conditions and/or sources. Field staff will notify the City Engineering Department and collect samples if instructed to do so.

If no source can be identified through initial investigation, the field staff will notify the City Engineering Department to schedule for follow-up investigation by City staff at two (2) week intervals. When/if an illicit discharge is identified, City staff will conduct additional investigations as needed to eliminate the source; refer to section F.



If an intermittent discharge is observed, the City will document a minimum of three (3) separate investigations made in an attempt to observe the discharge when it is flowing. If all three (3) attempts are unsuccessful, the follow up investigations will be terminated and the outfall will continue to be assessed as per the regular schedule.

If an illicit discharge is identified, but within 6 months of initiation of investigations a source has not been identified AND the same discharge has not been identified again, the occurrence will be documented and the outfall's inspection priority will be increased in future annual inspections.

## F. Illicit Discharge Source Elimination Policies and Procedures

### 1. Internal Source – Originating from City Property, Equipment, and/or Activities

- a. The Public Works Superintendent will identify and contact the responsible party and direct supervisor of the responsible party to amend activities/procedures or conduct repairs to eliminate the discharge.
- b. City staff will conduct a follow-up investigation to verify that the discharge has been eliminated. If not addressed, repeat Step a. Continue as needed.
- c. City staff will increase the outfall's inspection priority in future annual inspections.

### 2. External Source – Originating Outside of City Property, Equipment, and/or Activities

- a. The Public Works Superintendent will identify and contact the responsible party to amend activities/procedures or conduct repairs to eliminate the discharge.
- b. City staff will conduct a follow-up investigation to verify that the discharge has been eliminated. If not addressed, the City Engineering Department will contact the Virginia Department of Environmental Quality (DEQ) Blue Ridge Regional Office and notify of the responsible party's actions in reference to the General Permit VAR04 9VAC25-890-40.
- c. City staff will increase the outfall's inspection priority in future annual inspections.

## G. Tracking

The "Outfall Field Screening Report" form or database should be completed for each outfall screened by City staff; the illicit discharges section should be used to track additional investigations. A database or spreadsheet should be created and maintained including screening dates, whether an illicit discharge was documented, subsequent action, and outfall priority.

## H. Public Reporting

The "Outfall Field Screening Report" form or database will be provided to residents upon request and used to investigate public complaints and follow-up inspections.

## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name:		NPDES Permit No.: VA		
Date of Inspection:		Outfall ID No.:		
Land Uses in Outfall Drainage Area (Select All):		Latitude: _____° _____' _____"		
<input type="checkbox"/> Industrial	<input type="checkbox"/> Urban Residential	Longitude: _____° _____' _____"		
<input type="checkbox"/> Commercial	<input type="checkbox"/> Suburban Residential	Dry Weather Inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> Open Space	<input type="checkbox"/> Other:	Date of Previous Precipitation:		
Inspector Name(s):		Amount of Previous Precipitation: _____ in		
		Were Photographs Taken? <input type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If No, skip to Certification Section)</i>				
Description of Flow Rate: <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				

Were sample(s) collected of the dry weather flow?  Yes  No (If Yes, No. Samples: \_\_\_\_\_)

**FIELD / LABORATORY ANALYSIS**

PARAMETER	RESULTS	UNITS	PARAMETER	RESULTS	UNITS
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		

Indicate the parameters above that were analyzed by a DEP-certified laboratory:

**ILLICIT DISCHARGES**

Is the dry weather flow an illicit discharge?  Yes  No  
 If Yes, describe efforts made to determine the source(s) of the illicit discharge.

Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.

Inspector Comments:

**RESPONSIBLE OFFICIAL CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Responsible Official Name \_\_\_\_\_ Signature \_\_\_\_\_

Telephone No. \_\_\_\_\_ Date \_\_\_\_\_

## Illicit Discharge Incident Tracking Sheet

<b>Incident ID:</b>				
<b>Responder Information</b>				
Reported to:			Date:	
Time:			Precipitation (inches) in past 24-48 hrs:	
<b>Reporter Information</b>				
Incident time:			Incident date:	
Contact information ( <i>optional</i> ):				
<b>Incident Location</b> ( <i>complete one or more below</i> )				
Latitude and longitude:				
Stream address or outfall #:				
Closest street address:				
Nearby landmark:				
<b>Primary Location Description</b>		<b>Secondary Location Description:</b>		
<input type="checkbox"/> Stream corridor ( <i>In or adjacent to stream</i> )		<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland area ( <i>Land not adjacent to stream</i> )		<input type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (storm water pond, wetland, etc.):	
Narrative description of location:				
<b>Upland Problem Indicator Description</b>				
<input type="checkbox"/> Dumping		<input type="checkbox"/> Oil/solvents/chemicals	<input type="checkbox"/> Sewage	
<input type="checkbox"/> Wash water, suds, etc.		<input type="checkbox"/> Other: _____		
<b>Stream Corridor Problem Indicator Description</b>				
Odor	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid/Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide (rotten eggs); natural gas	<input type="checkbox"/> Other: Describe in "Narrative" section		
Appearance	<input type="checkbox"/> "Normal"	<input type="checkbox"/> Oil sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Suds
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input type="checkbox"/> None:	<input type="checkbox"/> Sewage (toilet paper, etc)	<input type="checkbox"/> Algae	<input type="checkbox"/> Dead fish
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Narrative description of problem indicators:				
Suspected Violator (name, personal or vehicle description, license plate #, etc.):				

### Investigation Notes

Initial investigation date:

Investigators:

No investigation made

Reason:

Referred to different department/agency:

Department/Agency:

Investigated: No action necessary

Investigated: Requires action

Description of actions:

Hours between call and investigation:

Hours to close incident:

Date case closed:

Notes:

I am emailing you to report an illicit discharge. I called the City but they said you were off. While cleaning around our stormwater outfall RU-NR-5. I noticed a gray cloud leaching into the new river. I traced the discharge past our property across the railroad track to 502 east main street. From there I tracked it up Calhoun Street next to some apartments and I couldn't go any farther. I got a sample of the grey water and took it to Clear Water in Christiansburg for testing. I should have the results back early next week and I will let you know.





## Illicit Discharge Hotline Incident Tracking Sheet

<b>Incident ID:</b> 2018-1				
<b>Responder Information</b>				
Call taken by: Jason Eanes		Call date: 6/22/18		
Call time: 4:34 PM		Precipitation (inches) in past 24-48 hrs: 0.00		
<b>Reporter Information</b>				
Incident time: Unknown		Incident date: unknown		
Caller contact information (optional):				
<b>Incident Location</b> (complete one or more below)				
Latitude and longitude: 37° 8' 21.15" N 80° 32' 21.11" W				
Stream address or outfall #: RU-NR-5				
Closest street address: University Drive Lot 2				
Nearby landmark: Debus Center				
<b>Primary Location Description</b>		<b>Secondary Location Description:</b>		
<input checked="" type="checkbox"/> Stream corridor (In or adjacent to stream)	<input checked="" type="checkbox"/> Outfall	<input type="checkbox"/> In-stream flow	<input type="checkbox"/> Along banks	
<input type="checkbox"/> Upland area (Land not adjacent to stream)	<input type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (storm water pond, wetland, etc.):		
Narrative description of location: Out fall Behind Lot 2				
<b>Upland Problem Indicator Description</b>				
<input type="checkbox"/> Dumping	<input type="checkbox"/> Oil/solvents/chemicals	<input type="checkbox"/> Sewage		
<input type="checkbox"/> Wash water, suds, etc.	<input checked="" type="checkbox"/> Other: Cloudy Water + Odor			
<b>Stream Corridor Problem Indicator Description</b>				
Odor	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid/Sour	<input type="checkbox"/> Petroleum (gas)
	<input checked="" type="checkbox"/> Sulfide (rotten eggs); natural gas	<input type="checkbox"/> Other: Describe in "Narrative" section		
Appearance	<input type="checkbox"/> "Normal"	<input type="checkbox"/> Oil sheen	<input checked="" type="checkbox"/> Cloudy	<input type="checkbox"/> Suds
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None:	<input type="checkbox"/> Sewage (toilet paper, etc)	<input type="checkbox"/> Algae	<input type="checkbox"/> Dead fish
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Narrative description of problem indicators: Cloudy water and a grey water type smell.				
Suspected Violator (name, personal or vehicle description, license plate #, etc.): Unknown				

Investigation Notes	
Initial investigation date: 6/22/18	Investigators: Jay Eanes City of Redford Neal Thompson R U
<input type="checkbox"/> No investigation made	Reason:
<input type="checkbox"/> Referred to different department/agency:	Department/Agency:
<input type="checkbox"/> Investigated: No action necessary	
<input checked="" type="checkbox"/> Investigated: Requires action	Description of actions: Traced color & cloudiness to 509 Calhoun street water coming from Spring.
Hours between call and investigation: 1 hour	Hours to close incident: Still open
Date case closed: Still open	
Notes: Traced to flowing Springs. Water comes from underground and have not been able to locate if its leak from another location. Measured E coli & Coliform which elevated but not dangerous. May need to route "Spring" into sewer system	



1075 West Main St.,  
P.O. Box 6122  
Christiansburg, VA 24068

(540) 381-5700  
[www.clearcreekwaterworks.com](http://www.clearcreekwaterworks.com)

## CERTIFICATE OF ANALYSIS

SAMPLE ID: 11461-18

SAMPLE CUSTOMER: Radford University  
501 Stockton Street  
Radford VA 24141

SAMPLE LOCATION: RU – NR - 5  
Radford VA 24141

WELL PERMIT NO:

TAX MAP ID NO:

PWSID:

SAMPLE RESULTS: Mailed results to SAMPLE CUSTOMER indicated above.  
Emailed results to: [LThompson@radford.edu](mailto:LThompson@radford.edu)  
Sent results to \_\_\_\_\_ County / City, Attn: \_\_\_\_\_  
Sent results to ODW, \_\_\_\_\_, VA, Attn: \_\_\_\_\_

### CUSTODY INFORMATION

DATE COLLECTED: 06/22/18      DATE RECEIVED: 06/22/18  
TIME COLLECTED: 1:10 pm      TIME RECEIVED: 2:28 pm  
COLLECTED BY: Neal Thompson      SAMPLE TYPE: Non-Potable Water

### ANALYSIS OF SAMPLE

TEST	METHOD	DATE COMPLETED	TECHNICIAN	RESULT
Total Coliform	ONPG-MUG	06/23/18	AR	1011.2 MPN/100 ml
<i>E.coli</i>	ONPG-MUG	06/23/18	AR	1011.2 MPN/100 ml

#### NOTES:

Analysis indicates this sample **DOES NOT MEET** the standards established by the USEPA for drinking water.

LABORATORY CERTIFICATION NO: #00085

By:

A handwritten signature in black ink, appearing to read "Andrea Slom".



1075 West Main St.,  
P.O. Box 6122  
Christiansburg, VA 24068

(540) 381-5700  
[www.clearcreekwaterworks.com](http://www.clearcreekwaterworks.com)

## CERTIFICATE OF ANALYSIS

SAMPLE ID: 11460-18

SAMPLE CUSTOMER: Radford University  
501 Stockton Street  
Radford VA 24141

SAMPLE LOCATION: 502 Main Street  
Radford VA 24141

WELL PERMIT NO:

TAX MAP ID NO:

PWSID:

SAMPLE RESULTS:

Mailed results to SAMPLE CUSTOMER indicated above.

Emailed results to: [LThompson@radford.edu](mailto:LThompson@radford.edu)

Sent results to \_\_\_\_\_ County / City, Attn: \_\_\_\_\_

Sent results to ODW, \_\_\_\_\_, VA, Attn: \_\_\_\_\_

### CUSTODY INFORMATION

DATE COLLECTED: 06/22/18

DATE RECEIVED: 06/22/18

TIME COLLECTED: 1:47 pm

TIME RECEIVED: 2:25 pm

COLLECTED BY: Neal Thompson

SAMPLE TYPE: Non-Potable Water

### ANALYSIS OF SAMPLE

TEST	METHOD	DATE COMPLETED	TECHNICIAN	RESULT
Total Coliform	ONPG-MUG	06/23/18	AR	1011.2 MPN/100 ml
<i>E.coli</i>	ONPG-MUG	06/23/18	AR	913.6 MPN/100 ml

#### NOTES:

Analysis indicates this sample **DOES NOT MEET** the standards established by the USEPA for drinking water.

LABORATORY CERTIFICATION NO: #00085

By:

A handwritten signature in black ink, appearing to read "Andrea Slom".