THE UNIVERSITY OF TENNESSEE KNOXVILLE
FACILITIES SERVICES

August 10th, 2018

Valerie McFall
Tennessee Department of Environment and Conservation
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921

Dear Ms. McFall,

On behalf of the University of Tennessee, I am pleased to submit the enclosed sixth annual report for the NPDES Permit issued February 8, 2017. Below is a summary of information and accomplishments for the University of Tennessee Stormwater Management Program for the 2018 Fiscal Year.

1.0 Executive Summary

This annual report documents The University of Tennessee's compliance with the Stormwater management program requirements as detailed in the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit number TNS076121. This annual report contains program information and accomplishments from July 1, 2017 to June 30, 2018.

1.1 Program Highlights

Program highlights and milestones during the reporting period consist of the following:

- Completed the Stormwater Master Plan
- The BMP manual titled University of Tennessee Best Management Practice Manual – A Stormwater Planning and Design Manual for Stormwater Management Practices was updated to include more clarified and descriptive guidelines concerning best management practices.
- Hosted 3 Adopt-A-Stream and 2 River Rescue programs and events.
- The Stormwater Student Assistant received TDEC EPSC Level 1 Certification.
- Conducted over 105 Stormwater Compliance Inspections on active construction projects.
- Installed 28 Outfall Markers at campus stormwater discharge points
- Update elements of the Stormwater Management Plan consisting of:
  - Runoff Reduction Policy
  - Developed a protocol for assessing the conditions of campus roadways for purpose of paving
- Conducted dry weather screening

1.2 Program Modifications

Program modifications that occurred during the reporting period consist of the following:

- Created an Operation, Maintenance and Inspection form for all BMP's

1.3 Program Advising

The previously established Stormwater Advisory Committee meets quarterly to review Stormwater Management recommendations to be presented to the Vice Chancellor for Finance and Administration. The charge of this committee is to serve as oversight for the development and implementation of the University's Stormwater Master Plan.

2.0 Municipal Separate Storm System Information

2.1 Population Served

Due to the seasonal nature of the University of Tennessee, the population densities vary considerably throughout the year. Special events, contractors, vendors, and normal traffic further contribute to our temporary populations. An additional part of the University of Tennessee storm infrastructure includes the University of Tennessee Space Institute in Tullahoma. Based on recent enrollment records, the annual student population is 28,321. The total University staff consists of over 9,744 full time and part time employees.

2.2 Service Area

The University maintains and operates only those portions of the storm sewer system located within the University property boundaries of Main Campus and the Institute of Agriculture Campus. The University of Tennessee properties specifically addressed in this permit cover an area of approximately 910 acres.

Remote University facilities such as properties south of the Tennessee River are primarily rural with less defined Stormwater conveyances. Stormwater runoff at these sites is managed in compliance with pertinent requirements for those locations. These sites are not included in the NPDES MS4 Stormwater Permit.

Many discharges from University outfalls include run-on contributions from the City of Knoxville storm sewer system, but the primary drainage at the outfalls is conveyed from the University.

2.3 MS4 Conveyance System

The storm sewer system, for the main University of Tennessee Campus in Knoxville, conveys water from approximately 1 square mile of University owned land into several watersheds including Second Creek, Third Creek, East Fork Third Creek, and the Tennessee River. Throughout campus, Stormwater runoff is collected in various BMP devices, curb inlets, area drains, and similar drainage structures that lead to the storm sewer system. The runoff is

conveyed primarily through underground piping which eventually discharges into open stream channels before leaving University property.

2.4 Land Use Composition Estimates

The following are estimated land use activities within the University's jurisdictional area.

Estimated Percentages:	
Office and Institutional	24%
Parking	11%
Roads/Sidewalks/Current Construction	23%
Athletics	7%
Green Space	35%

2.5 Receiving Streams

The University of Tennessee contributes runoff into Second Creek, Third Creek, East Fork Third Creek and the Tennessee River/Fort Loudoun Lake. The University of Tennessee Space Institute contributes stormwater runoff into Woods Reservoir. Table 1 below summarizes information provided by the Tennessee Department of Environment and Conservation on the various receiving waters of the State.

Table 1: Receiving Stream Summary

Water Body ID	Water Body Name	Segment/Length	303d Cause	TMDL
TN06010201 087-1000	Second Creek	From Cumberland Avenue to the Tennessee River/ 0.3 Miles	Other Anthropogenic Habitat Alterations, Nitrate, Nitrite, Loss of Biological integrity due to siltation, Escherichia coli	Fecal Coliform Bacteria: April 4, 2003 Siltation/Habitat Alteration: February 1, 2006
TN06010201 067-0100	East Fork Third Creek	From Sutherland Avenue extending 0.12 miles to the South / 0.12 miles	Loss of biological integrity due to siltation, Other Anthropogenic Habitat Alterations, Escherichia coli	
TN06010201 067-1000	Third Creek	From Cumberland Avenue to the Tennessee River/ 1.08 miles	Nitrates, Nitrite, Loss of biological integrity due to siltation, Other Anthropogenic Habitat Alterations, Escherichia coli	Fecal Coliform Bacteria: April 4, 2002 Siltation/Habitat Alteration: February 1, 2006

Water Body ID	Water Body Name	Segment/Length	303d Cause	TMDL
TN06010201	Fort Loudoun Reservoir	From 0.06 miles upstream of Second Creek to 0.16 miles downstream of Alcoa Highway/ 2.25 miles	Mercury, PCBs	PCB's March 3, 2010
TN06030003 036_1000	Woods Reservoir	Approximately 3.22 Miles of shoreline south of the Robert W Hamm Rd Crossing.	PCBs	PCBs November 13, 2007

3.0 Public Education and Outreach

An integral part of the Stormwater Management program involves the education of the campus community and others about water resources, how we affect water quality, and what we can do to minimize pollution and lessen our impact on the environment. To facilitate this, the University has developed a Public Information and Education (PIE) plan that outlines target pollutants, target groups, programs/events and measurable goals to provide information to the campus community. The campus community (excluding athletic events) includes over 38,000 students, faculty, staff, contractors, vendors and visitors. The Public Education and Outreach program metrics are summarized in Table 2 below.

Table 2: Public Education and Outreach summary

Fiscal Year 2018 Metrics	Quantity	Target Audience	
		Campus Population	Faculty, Staff, Contracted Employees
Stormwater Awareness Info Graphics posted	160	X	X
Stormwater Awareness Training sessions	2		X
Stormwater Awareness Stickers distributed	278	X	X
Stormwater Webpage	1	X	X
Public Meetings held	1	X	X
Stormwater Awareness Presentations	4	X	X

4.0 Public Participation and Involvement

4.1 Public Participation Program

The University provides opportunities for stakeholders and the public to participate in the Stormwater Management Program development and implantation through:

- The Stormwater Advisory Committee, which is a group comprised of University stakeholders who oversee the development and implementation of the permitted Stormwater Management Program.
- The Water Quality Forum, which is comprised of local MS4s that work towards a common goal of increasing water quality in our shared watershed.
- The Tennessee Stormwater Association (TNSA), which is comprised of a statewide MS4s, Consultants and State Regulators that work to help each other build consistent Stormwater management programs and ultimately increase water quality.
- The Environmental Compliance Team which is comprised of various University department representatives who ensure the campus stays within compliance of all environmental programs.
- River Rescue, which is an annual event that the University helps facilitate to clean up our local waterways. We sponsor two locations on campus, had 38 volunteers and were able to collect 62 bags, 750lbs trash + 500lbs wood/metal/mattress.
- The Adopt a Stream program, which provides an opportunity for our faculty, staff and students to take ownership in stream segments that run through campus. These groups focus on invasive vegetation removal and trash pickup.
- Student project assistance and advising, which provides information and project consulting to students working on projects related to Stormwater Management. These student projects range anywhere from Engineering, to Landscape Architecture to Advertising.
- The Invasive Removal Events, was an event where student volunteers from ESS220 Waters and Civilizations course aided the Stormwater Coordinator and student assistant with removing invasive plant species from the Second Creek streambank.

Table 3: Public Participation and Involvement Program summary

Fiscal Year 2018 Metrics	Quantity
Stormwater Advisory Committee Meetings	4
Water Quality Forum Meetings	4
TNSA Meetings	3
Environmental Compliance Team Meetings	3
River Rescue Sites	2
Adopt a Stream Sites	3
Student Projects	5
Invasive Removal Events	3

4.2 Public Reporting Program

The University provides an opportunity for the public to participate in the Stormwater Management Program development and implementation through reporting of environmental concerns and illicit discharges. Information on reporting Stormwater related problems have been publicized on the Stormwater awareness info graphics, Stormwater awareness stickers, and the Stormwater display in the University Center and on the Stormwater webpage, which has a feature that allows users to submit an electronic form that is sent to the Stormwater Management Coordinator.

Table 4: Public Reporting Program summary

Fiscal Year 2018 Metrics	Quantity
Reported Environmental Concerns	3
Reported Illicit Discharges	2

5.0 Illicit Discharge Detection and Elimination

5.1 Storm Sewer System Inventory

Previously, a consultant was hired by the university to map all of the underground utilities for the UTK campus. The completed mapping is now being field verified and updated. Additionally, the Stormwater Coordinator and Student Assistant dry-weather screen all outfalls twice a year. The program has transitioned from paper forms to electronic forms thus increasing efficiency for completing this task.

5.2 Illicit Discharge Program

A standard operating procedure (SOP) for illicit discharge detection and elimination has been developed and is in place. Illicit discharges are identified either in person, or via submittal of the electronic form located on the website, or via telephone calls of concern placed by the public. There is currently a substantial amount of construction on the Main Campus, which increases the likelihood that construction related illicit discharges may occur. An Illicit Discharge Policy prohibiting this type of activity, and the associated Enforcement Response Plan have been implemented.

In addition to the SOP and Policy, Outfall Inventory and Dry Weather Screening events are conducted on a semi-annual basis in our 4 receiving streams. A standardized Outfall Inventory data sheet is utilized for collecting all necessary information in the field and documenting illicit discharge inspections at outfall locations. 82 outfalls (64 at the University of Tennessee Knoxville and 18 at the University of Tennessee Space Institute at Tullahoma) have been identified and investigated as part of this process and an Outfall inventory and dry weather screening report has been prepared.

Table 5: Illicit Discharge Program summary

Fiscal Year 2018 Metrics	Quantity
Electronic forms received	2
Phone calls received	2
Illicit Discharges detected	3
Illicit Discharges resolved	2
Outfalls Inspected	82

6.0 Construction Site Runoff Control

The University of Tennessee is a state agency and is subject to the State erosion and sediment control regulations as specified in the State of Tennessee general NPDES permit for discharges of Stormwater associated with construction activities. For projects disturbing greater than or equal to 1.0 acres, a Stormwater Pollution Prevention Plan (SWPPP) and associated Erosion and Sediment Control Plan are submitted to the University Stormwater Management Coordinator for review and then submitted to TDEC for review and issuance of a Notice of Coverage prior to commencement of land disturbing activities. For projects disturbing 0.1 to 0.99 acres, the erosion and sediment control plans are submitted to the University Stormwater Management Coordinator for review and approval prior to commencement of land disturbing activities as outlined in the Stormwater Management Standard Operating Procedures.

All projects at the University that have a land disturbance component are required to follow the regulations outlined in the NPDES permit and are subject to enforcement procedures outlined in the Enforcement Response Plan. Unlike other permitted MS4s, the University is typically the owner, developer, and project manager for on-campus projects. Construction requirements and penalties are outlined in the project contract, and typical enforcement is tied to payment and final project acceptance. All approved projects on campus are inspected by the University Stormwater Management staff on at least a monthly basis. All inspections are performed using the TDEC Erosion and Sediment Control Handbook as guidance.

The Construction Site Runoff Control Program is performance based and is quantifiable through the number of plan reviews/approvals, inspections performed, complaints received and enforcement actions issued. These measureable goals are summarized in Table 6 below.

Table 6: Construction Site Runoff Control Program summary

Fiscal Year 2018 Metrics	Quantity
TDEC CGP Permits	10
University Plan Review/Approval	15
Projects Receiving NOVs	2
University Erosion and Sediment Control Inspections	105
Publicly Reported Construction Site Issues	2

7.0 Post Construction Runoff Control

The University has developed and implemented a Runoff Reduction policy. This policy provides guidelines to ensure site design standards for all new and redevelopment projects disturbing greater than 1 acre, require management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or reuse at minimum the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. In addition to this policy the University's post construction Stormwater control program includes post construction runoff inspections, a Best Management Practice Inventory and Maintenance Program, and a Best Management Practices Manual- A Stormwater Planning and Design Manual for Stormwater Management Practices.

8.0 Pollution Prevention and Good Housekeeping

The University's pollution prevention and good housekeeping operations span a collection of multiple individual programs;

1. Stream Monitoring Program
2. NPDES-Regulated Industrial Facilities
3. Stormwater Collection System Operations and Maintenance
4. Permanent Stormwater BMP Operations
5. Landscape Services Operations and Maintenance
6. Snow Removal and Control
7. Recycling and Solid Waste Management
8. Hazardous Waste Management
9. Vehicle Cleaning

These nine programs are described in more detail below.

8.1 Stream Monitoring Program

Stream monitoring of impaired water bodies is required as a component of the MS4 permit to assess the effectiveness of the BMPs in achieving contaminant load allocations. Both analytical monitoring and non-analytical monitoring are required in stream segments listed as impaired. A sampling plan has been developed to satisfy the requirements of the MS4 permit for all 303d listed streams that have the pollutant source identified as discharges from MS4 areas.

Implementation of this plan will be used to evaluate the effectiveness of the University's Stormwater Management Program. At minimum these stream segments will be sampled on a 5 year rotation as required. Additional sampling may be conducted as needed. A summary of samples collected as part of the 2017 stream monitoring program are summarized in table 7 below.

Table 7: 2017 Stream monitoring summary

Stream Segment	Samples to be conducted				
	Macro Invertebrate Stream Survey	E. Coli	Total Suspended Solids	Nitrate / Nitrite	Visual Habitat Assessment
East Fork Third Creek	1	2	2	0	2
Third Creek	2	2	2	2	2
Second Creek	2	2	2	2	2
Total Samples to be Collected	5	6	6	4	6

A Benthic Study was completed in cooperation with a representative from TDEC. This study looked at 5 total locations (2 Third Creek, 2 Second Creek, 1 East Fork Third Creek) in water bodies influenced by campus operations. The Stormwater Management Program used Dinkins Biological Consulting to collect and process the red samples. Following internal review that data was shared with the local TDEC Environmental Field Office.

8.2 NPDES regulated Industrial Facilities

The University's Steam Plant located on Lake Loudon Boulevard maintains a Tennessee Multi Sector General Permit (TMSP) for Stormwater discharges associated with industrial activity. This Facility is permitted as a steam electric power generating operation. Historically this facility has been fueled by combustion of coal. The use of coal as a fuel source was discontinued in March 2015, and Natural Gas will be used going forward.

Table 8: NPDES Regulated Industrial Facilities summary

Fiscal Year 2018 Metrics	Quantity
NPDES Stormwater Regulated Industrial Facilities	1
Compliance Audits Performed	0
Audited Facility Not in Compliance	0

8.3 Stormwater Collection System Operations and Maintenance

The Stormwater collection system operations and maintenance is performed both by our in house utilities division and outsourced through task managed contracts. The operations and maintenance work performed consists of storm drain cleaning, removal of blockage, cleaning of catch basins and area drains, the inspection and pump out of proprietary water quality treatment

devices. Collected material removed from the Stormwater collection system is hauled off site and disposed of properly.

Table 9: MS4 Operations and Maintenance summary

Fiscal year 2018 Metrics	Quantity
Catch Basins/ Inlets Cleaned	8
Water quality units inspected	21
Water quality units pumped out	2

8.4 Permanent Stormwater BMP Operations

The University owns and operates various permanent Stormwater Best Management Practices on Campus. See Table 10 below for a breakdown of BMP type.

Table 10: Stormwater BMP summary

Type of BMP	Total Devices	Quantity	Unit
Stormwater Harvesting and Reuse	8	149,800	Gallons
Water Quality Unit	21	21	Units
Rain Garden	4	37679	Square Feet
Permeable Pavement System	4	42680	Square Feet
Dry Detention	3	3	Locations
Green Roof	3	14,622	Square Feet
Silva Cell Bioretention	10 locations	116	Trees
Grassed Swale	4	895	Linear Feet
Vegetated Filter Strip	4	7,670	Linear Feet

Routine monthly BMP inspections, rainfall event triggered inspections (following events exceeding 0.5 inches of rainfall in a 24 hour period), and maintenance are performed under the supervision of staff qualified in Stormwater inspection, as well as operations and maintenance. Standardized maintenance tasks are outlined in the UT BMP Manual and are specific to each type of applicable BMP.

A Stormwater Master Plan and Vision document was development to reflect the evolution of our Stormwater Management Program, and progress the campus has made in Stormwater Management.

8.5 Landscape Services Operations and Maintenance

Landscape Services is responsible for the maintenance and improvement of the campus grounds on the Main and Agricultural campuses. This includes mowing, raking, mulching, fertilizing, weeding, edging, litter pick-up, street sweeping, grading, excavating, trenching, demolition, hauling, asphalt preparation, landscape design, planting, transplanting, pruning, and tree removal.

Two vacuum trailers are dedicated to perform leaf collection during the 3 month long leaf season. Collected leaves are transported to our compost facility to be incorporated into the campus composting operation

Table 11: Landscape Services Operations and Maintenance summary

Fiscal year 2018 Metrics	Quantity
Landscaped Area Maintained (acres)	274 (estimated)
Leaves /Woodchips / Brush Composted (Tons)	729.35 tons

8.6 Snow and Ice Removal and Control

Landscape Services provides ice and snow removal services for the Main and Agricultural campuses. These services are provided on a priority basis, with safety of the greatest number of individuals being used to determine the order of service. The universities salt and de-icing supply is stored in an enclosed area to prevent Stormwater contact.

Table 12: Snow and Ice Removal and Control summary

Fiscal year 2018 Metrics	Quantity
Salt Applied	48.82 tons
Alternative De-icing Product Applied	22.05 tons

The Alternative De-icing Product is 80% Salt and 20% CaCl (Calcium-Chloride).

8.7 Recycling and Solid Waste Management

The University maintains a comprehensive recycling and solid waste reduction program including contract dumpsters with plugs and lids, 108 plastic/cans recycling stations, 79 cardboard recycling stations, 61 paper recycling stations, 34 compost stations, and one public drop off location. All waste collection areas are picked up 1-5 times per week depending on location and need.

Table 13: Recycling and Solid Waste Management Program summary

Fiscal year 2018 Metrics	Quantity
Compost/Food	389.57 tons
Green Waste	729.90 tons
Construction and Demolition (non-landfill/recycled)	320.80 tons
Scrap Metal	.87 tons
Office Paper (mixed)	231.47 tons
Glass	61.01 tons
Cardboard	449.41 tons
Plastic (mixed)	253.93 tons
Paper Shredding	100 tons
Textiles (mattress, carpet, clothing donations)	42.68 tons
Pallets	149.10 tons

Fiscal year 2018 Metrics	Quantity
Electronics	16.75 tons
Batteries	2.81 tons
Used Motor Oil	3.73 tons
Cooking Oil	18.77 tons
Hard Plastics	4.64 tons
Light bulbs/Ballasts	12.35 tons
Cinder Blocks	9.84 tons
Scrap Wood	4.52 tons
Dumpsters Repaired	5
Dumpsters Replaced	8
Service Requests	829

8.8 Hazardous Waste Management

The University's Environmental Health and Safety department provides a collection service for all Hazardous and Acutely Hazardous Waste substances. This service is provided to the University labs, shops and storage facilities that generate these types of waste as well as other types of waste materials that require special disposal or handling procedures such as mercury lamps. Incident response agreements are continuously maintained with the City of Knoxville Fire Department.

8.9 Vehicle Cleaning

Fleet Management has an engineered wash bay facility on campus for washing vehicles. This facility discharges to the sanitary sewer system. There is no vehicle washing that could cause impacts to the storm sewer system permitted outside of the facility constructed for this purpose.

Please see the attached Small MS4 Annual Report Form CN-1291.

Please call me at (865) 805-4007 if you have any questions concerning this report.

Sincerely,

Garrett Ferry, CPESC

Stormwater Management Coordinator

Facilities Services Department

University of Tennessee

Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower,
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

Phase II Small Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 Information

Name of MS4: The University of Tennessee, Knoxville		MS4 Permit Number: TNS076121
Contact Person: Garrett Ferry		Email Address: gferry@utk.edu
Telephone: (865) 805-4007		MS4 Program Web Address: stormwater.utk.edu
Mailing Address: 2040 Sutherland Avenue		
City: Knoxville	State: TN	ZIP code: 37921 (Physical) 37996 (mailing)

What is the current population of your MS4? 38,065

What is the reporting period for this annual report? July1 2017 to June 30 2018

2. Discharges to Waterbodies with Unavailable Parameters or Exceptional Tennessee Waters (Section 3.1)

A. Does your MS4 discharge into waters with unavailable parameters (previously referred to as impaired) for pathogens, nutrients, siltation or other parameters related to stormwater runoff from urbanized areas as listed on TN's most current 303(d) list and/or according to the on-line state GIS mapping tool (tdeconline.tn.gov/dwr/)? If yes, attach a list. ☒ Yes ☐ No

B. Are there established and approved TMDLs (http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program) with waste load allocations for MS4 discharges in your jurisdiction? If yes, attach a list. ☒ Yes ☐ No

C. Does your MS4 discharge to any Exceptional Tennessee Waters (ETWs - http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34304:4880790061142)? If yes, attach a list. ☐ Yes ☒ No

D. Are you implementing specific Best Management Practices (BMPs) to control pollutant discharges to waterbodies with unavailable parameters or ETWs? If yes, describe the specific practices: Requiring design of EPSC measures to meet or exceed a 5 Year storm evernt. ☒ Yes ☐ No

3. Public Education/Outreach and Involvement/Participation (Sections 4.2.1 and 4.2.2)

A. Have you developed a Public Information and Education plan (PIE)? ☒ Yes ☐ No

B. Is your public education program targeting specific pollutants and sources, such as Hot Spots? If yes, describe the specific pollutants and/or sources targeted by your public education program: Any and all pollutants that have the potential to impact stormwater quality. ☒ Yes ☐ No

C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: stormwater.utk.edu ☒ Yes ☐ No

D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Stormwater stickers, flyers in dorms and educational buildings, website, and working with lecturers to communicate with students about public events and volunteer oppurtunities.

E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: Held 4 stormwater Advisory Committee Meetings, Attended 4 Water Quality Forum Meetings, Attended 3 TNSA Meetings, Hosted 3 Environmental Compliance Team Meetings, Hosted 2 Tennessee River Rescue Sites, Maintained 3 Adopt a Stream Sites, Facilitated 5 stormwater student projects, held 3 Invasive Removal Events.

F. Summarize any specific successful outcome(s) (e.g., citizen involvement, pollutant reduction, water quality improvement, etc.) fully or partially attributable to your public education and participation program during this reporting period: 38 Volunteers during the Tennessee River Rescue collected 62 bags of trash which included 750 pounds of trash and 500 pounds of wood/metal/mattresses, 19 students toured various stormwater infrstructure around campus, 3 different invasive removal events totaled an estimated 1,024 cubic feet of debris.

4. Illicit Discharge Detection and Elimination (Section 4.2.3)

A. Have you developed and do you continue to update a storm sewer system map that shows the location of system outfalls where the municipal storm sewer system discharges into waters of the state or conveyances owned or operated by another MS4? ☒ Yes ☐ No

B. If yes, does the map include inputs into the storm sewer collection system, such as the inlets, catch basins, drop structures or other defined contributing points to the sewershed of that outfall, and general direction of stormwater flow? ☒Yes ☐ No

C. How many outfalls have you identified in your storm sewer system? 82

D. Do you have an ordinance, or other regulatory mechanism, that prohibits non-stormwater discharges into your storm sewer system? ☒Yes ☐ No

E. Have you implemented a plan to detect, identify and eliminate non-stormwater discharges, including illegal disposal, throughout the storm sewer system? If yes, provide a summary: Illicit Discharge Detection and Elimination System, Bi-annual Dry Weather Screening. ☒ Yes ☐ No

F. How many illicit discharge related complaints were received this reporting period? 2

G. How many illicit discharge investigations were performed this reporting period? 3

H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 2

5. Construction Site Stormwater Runoff Pollutant Control (Section 4.2.4)

A. Do you have an ordinance or other regulatory mechanism requiring:

Construction site operators to implement appropriate erosion prevention and sediment control BMPs consistent with those described in the TDEC EPSC Handbook? ☒ Yes ☐ No

Construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste? ☒ Yes ☐ No

Design storm and special conditions for unavailable parameters waters or Exceptional Tennessee Waters consistent with those of the current Tennessee Construction General Permit (TNR100000)? ☒ Yes ☐ No

B. Do you have specific procedures for construction site plan (including erosion prevention and sediment BMPs) review and approval? ☒ Yes ☐ No

C. Do you have sanctions to enforce compliance? ☒ Yes ☐ No

D. Do you hold pre-construction meetings with operators of priority construction activities and inspect priority construction sites at least monthly? ☒ Yes ☐ No

E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 10

F. How many active priority and non-priority construction sites were inspected this reporting period? 15

G. How many construction related complaints were received this reporting period? 2

6. Permanent Stormwater Management at New Development and Redevelopment Projects (Section 4.2.5)

A. Do you have a regulatory mechanism (e.g. ordinance) requiring permanent stormwater pollutant removal for development and redevelopment projects? If no, have you submitted an Implementation Plan to the Division? ☒ Yes ☐ No ☒ Yes ☐ No

B. Do you have an ordinance or other regulatory mechanism requiring:

Site plan review and approval of new and re-development projects? ☒ Yes ☐ No

A process to ensure stormwater control measures (SCMs) are properly installed and maintained? ☒ Yes ☐ No

Permanent water quality riparian buffers? If yes, specify requirements: Since all receiving streams are waters with unavailable parameters, we use a 60 ft. water quality riparian buffer on all projects adjacent to streams. ☒ Yes ☐ No

C. What is the threshold for development and redevelopment project plans plan review (e.g., all projects, projects disturbing greater than one acre, etc.)? All Projects.

D. How many development and redevelopment project plans were reviewed for this reporting period? 15

E. How many development and redevelopment project plans were approved? 15

F. How many permanent stormwater related complaints were received this reporting period? 2

G. How many enforcement actions were taken to address improper installation or maintenance? 48

H. Do you have a system to inventory and track the status of all public and private SCMs installed on development and redevelopment projects? ☒ Yes ☐ No

I. Does your program include an off-site stormwater mitigation or payment into public stormwater fund? If yes, specify. We have develolped a Stormwater Mitigation banking system. ☒ Yes ☐ No

7. Stormwater Management for Municipal Operations (Section 4.2.6)

A. As applicable, have stormwater related operation and maintenance plans that include information related to maintenance activities, schedules and the proper disposal of waste from structural and non-structural stormwater controls been developed and implemented at the following municipal operations:

Streets, roads, highways? ☒ Yes ☐ No

Municipal parking lots? ☒ Yes ☐ No

Maintenance and storage yards? ☒ Yes ☐ No

Fleet or maintenance shops with outdoor storage areas? ☒ Yes ☐ No

	Salt and storage locations?	☒ Yes	☐ No
	Snow disposal areas?	☐ Yes	☒ No
	Waste disposal, storage, and transfer stations?	☒ Yes	☐ No
B.	Do you have a training program for employees responsible for municipal operations at facilities within the jurisdiction that handle, generate and/or store materials which constitute a potential pollutant of concern for MS4s?	☒ Yes	☐ No
	If yes, are new applicable employees trained within six months, and existing applicable employees trained and/or retrained within the permit term?	☒ Yes	☐ No

8. Reviewing and Updating Stormwater Management Programs (Section 4.4)

A. Describe any revisions to your program implemented during this reporting period including but not limited to:

Modifications or replacement of an ineffective activity/control measure. The Best Management Practice manual, Runoff Reduction Policy, Operation and Maintenance Plan, Stormwater Mitigation Program Guidance Document were updated during this reporting period.

Changes to the program as required by the division to satisfy permit requirements. None.

Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. Added 330 acres of campus area due to the inclusion of the University of Tennessee Space Institute and Concord Street Facilities.

B.	In preparation for this annual report, have you performed an overall assessment of your stormwater management program effectiveness? If yes, summarize the assessment results, and any modifications and improvements scheduled to be implemented in the next reporting period. See attached letter.	☒ Yes	☐ No

9. Enforcement Response Plan (Section 4.5)

A. Have you implemented an enforcement response plan that includes progressive enforcement actions to address non-compliance, and allows the maximum penalties specified in TCA 68-221-1106? If no, explain. _____ ☒ Yes ☐ No

B. As applicable, identify which of the following types of enforcement actions (or their equivalent) were used during this reporting period; indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater management), and note those for which you do not have authority:

Action	Construction	Permanent Stormwater	Illicit Discharge	In Your ERP?	
Verbal warnings	#6	#N/A	#1	☒ Yes	☐ No
Written notices	#2	#N/A	#N/A	☒ Yes	☐ No
Citations with administrative penalties	#N/A	#N/A	#N/A	☒ Yes	☐ No
Stop work orders	#N/A	#N/A	#N/A	☒ Yes	☐ No
Withholding of plan approvals or other authorizations	#N/A	#N/A	#N/A	☒ Yes	☐ No
Additional Measures	#N/A	#N/A	#N/A	Describe: N/A	

C. Do you track instances of non-compliance and related enforcement documentation? ☒ Yes ☐ No

D. What were the most common types of non-compliance instances documented during this reporting period? Sediment leaving construction sites.

10. Monitoring, Recordkeeping and reporting (Section 5)

A. Summarize any analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. 5 Total Recoverable Iron samples were collected at the outfall receiving discharge from steam plant effluent

B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Performe dry weather screening at all 82 outfall locations twice annually.

C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. ☐ Yes ☒ No

11. Certification

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

"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 gather and evaluate 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 knowing violations."

Dave Irvin
Associate Vice Chancellor
Printed Name and Title

Signature

9/9/18
Date

Annual reports must be submitted by September 30 of each calendar year (Section 5.4) to the appropriate Environmental Field Office (EFO), identified in the table below:

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	1301 Riverfront Pkwy, Suite 206	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 520-6688
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 R S Gass Boulevard	Nashville	37216	(615) 687-7000