

# RADFORD UNIVERSITY



## **MS4 ANNUAL REPORT JULY1, 2020-JUNE 30, 2021**

## Certification Statement and Requirements

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

- 1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;*
- 2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or*
- 3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.*

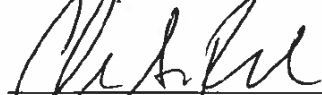
### Duly Authorized Representatives

A person is a duly authorized representative only if:

- 1. The authorization is made in writing by a person described above;*
- 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and*
- 3. The written authorization is submitted to the department.*

### 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 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.

 28 SEPTEMBER 21  
Mr. Chad A. Reed Date

Vice President for Finance and Administration & Chief Financial Officer  
Radford University  
Permit No. VAR040136; Radford University

**MS4 Annual Report July 1, 2020 through June 30, 2021**

**Table of Contents**

<b>Minimum Control Measure No. 1: Public Education and Outreach</b>	<b>Page 4</b>
<b>Minimum Control Measure No. 2: Public Participation/Involvement</b>	<b>Page 5</b>
<b>Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination</b>	<b>Page 6</b>
<b>Minimum Control Measure No. 4: Construction Site Runoff Control</b>	<b>Page 7</b>
<b>Minimum Control Measure No. 5: Post-Construction Runoff Control</b>	<b>Page 8</b>
<b>Minimum Control Measure No. 6: Pollution Prevention/Good Housekeeping</b>	<b>Page 9</b>
<b>Appendices</b>	<b>Page 10</b>
<b>Appendix A</b>	<b>Page 11</b>
<b>Appendix B</b>	<b>Page 16</b>
<b>Appendix C</b>	<b>Page 18</b>
<b>Appendix D</b>	<b>Page 19</b>
<b>Appendix E</b>	<b>Page 20</b>

## **Minimum Control Measure No. 1: Public Education and Outreach**

### ***Annual Reporting Requirements***

*Per VAR040136 MCM 1, g. The annual report shall include:*

*1. A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program*

- Vehicle Maintenance (Petroleum Releases)
- Trash Elimination and Recycling
- Pet Waste

*2. A list of the strategies used to communicate each high-priority stormwater issues:*

- Informational flyer dedicated to our three high priority water quality issues.
- Informational video on car maintenance that is located on the MS4 website.
- Use social media to spread the word out on sustainable activities that could potentially have effects on storm water issues. Twitter: [https://twitter.com/sustainable\\_RU](https://twitter.com/sustainable_RU) (821 followers)

In order to increase program visibility, Radford University implemented newly designed informational flyers, utilized the RU MS-4 website to share a new informational video, and extended our outreach by the use of social media. Outcomes show that electronic media is more engaging and sustainable than previously used printed material.

## **Minimum Control Measure No. 2: Public Participation/Involvement**

### ***Annual Reporting Requirements***

*Per VARO40136 MCM 2, f. MS4 Annual Report shall include:*

*1. A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded:*

- No public input was received during the reporting period of July 2020 – June 2021

*2. A webpage address to the permittee's MS4 program and stormwater website:*

- Radford University's MS4 Webpage can be found at:  
<https://www.radford.edu/content/sustainability/home/resources/stormwater-management.html>

*3. A description of the public involvement activities implemented by the permittee:*

Radford University participated in the following public involvement activities:

- *The annual "Renew the New" each August. (**Restoration**)* (This event went virtual due to COVID)
- *Booth at the campus club fair in August (**Education**)* (This event was canceled due to COVID)
- *Certified Storm water Student (**Education**)* For the third consecutive year, Radford University Sustainability collaborated with the National Storm water Center to bring the "Certified Storm water Student" program to Radford University students. We targeted students with interest in careers in environmental consulting, environmental engineering, or land development or management. Since the event was virtual, we opened registration to all Virginia institutions. On Tuesday, April 20 at 6PM the National Storm water Center hosted the virtual course where Radford University students joined with other students across the Commonwealth to learn about storm water runoff, the Clean Water Act, and the Municipal Separate Storm Sewer System (MS4). Participants earned a student certification from the National Storm water Center. Twenty five students registered for the course, representing Radford University, Virginia Tech, University of Virginia, University of Richmond, and the Virginia Community College System.
- *Household hazardous waste in April. (**Disposal**)* (This event was not hosted at Radford University April 2020. Plan to continue this next year if current health landscape is back to normal.)
- *Storm drain marking program (**Pollution Prevention**)* continued to mark storm drains throughout campus

*4. A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality:*

- Public engagement continues to be the utmost priority. Outreach activities such as Renew the New, booth exhibit at the on-campus club fair, Household Hazardous Waste (HHHW) civic event to properly dispose of community household waste, and ongoing storm drain visibility marking continue to grow community participation. Due to COVID, the ability to participate in public activities diminished.
- See Appendix A

*5. The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities:*

- City of Radford
- Town of Blacksburg

## **Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

### ***Annual Reporting Requirements***

*Per VAR040136 MCM 3, e. annual report shall include:*

1. *A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year:*

- Radford University utilizes an outside contractor to inspect the storm water outfalls annually. Outside professionals provide the institution with expert insight and guidance to support continuous improvement. Changes were made before June 30<sup>th</sup> See Appendix B (Update with report from Gay and Neal)
- Information can also be accessed through Radford University's MS4 website <https://www.radford.edu/content/sustainability/home/resources/stormwater-management.html>

2. *The total number of outfalls screened during the reporting period as part of the dry weather screening program:*

- See Appendix B
- Information can also be accessed through Radford University's MS4 website <https://www.radford.edu/content/sustainability/home/resources/stormwater-management.html>

3. *A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:*

*(a) The source of illicit discharge;*

*(b) The dates that the discharge was observed, reported, or both;*

*(c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);*

*(d) How the investigation was resolved;*

*(e) A description of any follow-up activities; and*

*(f) The date the investigation was closed.*

- No illicit discharges or spills were reported this year.

## **Minimum Control Measure No. 4: Construction Site Runoff Control**

### **Annual Reporting Requirements**

Per VAR040136 Part 1 MCM 4, d. The annual report shall include:

1. If the permittee implements a construction site stormwater runoff program in accordance with Part I E 4 a (3):

(a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control:

- Radford University conducts regular inspections on new construction with enforcement actions are enforced as necessary. In this reporting period, no infractions requiring enforcement action occurred.
- Radford University confirms all land disturbing projects that occurred during the reporting period have been conducted in conformance with Radford University's Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management (AS&S), as approved by DEQ.
- See Appendix C

(b) If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.

- All land disturbing projects were conducted in compliance with approved standards and specifications.
- See Appendix C

2. Total number of inspections conducted

- Radford University performed regular inspections as required by the Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management (AS&S).
- These inspection reports can be found at the Armstrong Complex at Radford University Facilities Management.
- See Appendix C

3. The total number and type of enforcement actions implemented and the type of enforcement actions.

- There were no enforcement actions implemented during the reporting period.

## **Minimum Control Measure No. 5: Post-Construction Stormwater Management**

### ***Annual Reporting Requirements***

*Per VAR040136 Part 1 MCM 5, i. The Annual Report will include:*

1. the permittee implements a Virginia Stormwater Management Program in accordance with Part I E 5 a (1) and (2):

*(a) The number of privately owned stormwater management facility inspections*

*Conducted:*

- Radford University has 11 BMP facilities on campus. These facilities were inspected once during reporting period.

*(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action:*

- Please see Appendix D

2. *Total number of inspections conducted on stormwater management facilities owned or operated by the permittee:*

- Please see Appendix D

3. *A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection:*

- Please see Appendix D

4. *A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities:*

- Radford University continues to use an outside contractor for external expertise in inspecting university storm water management facilities.
- Please see Appendix D

5. *A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted:*

- Please see Appendix D



## **Minimum Control Measure No. 6: Pollution Prevention/Good Housekeeping**

### ***Annual Reporting Requirements***

*Per VAR040136 Part 1 MCM 6, q. The Annual Report will include:*

*1. A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period:*

- In April 2019, Thompson & Litton created and provided SWPPs for Radford University. These written procedures were designed to minimize or prevent pollutant discharge from daily operations, equipment maintenance, and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers. These written procedures are utilized as part of employee training. There were no new developments or modifications made to these documents during this reporting period.

*2. A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period:*

- Two new SWPPPs were developed during the reporting period for the Fairfax Street Renovations and Baseball projects. These SWPPPs can be accessed at Radford University Facilities management.

*3. A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in accordance with Part I E 6 h during the reporting period:*

- No SWPPs were modified during this reporting period.

*4. A summary of any new turf and landscape nutrient management plans developed that includes:*

*(a) Location and the total acreage of each land area*

*(b) The date of the approved nutrient management plan*

- This plan covers 94.6 acres including five warm season athletic fields, four cool season athletic fields and six cool season common areas scattered across the Radford University campus. Each location will be discussed separately.
- Our current nutrient management plan approved by the Department of Conversation and Recreation is valid from June 1, 2021 – June 1, 2024.
- Information can also be accessed through Radford University's MS4 website <https://www.radford.edu/content/sustainability/home/resources/stormwater-management.html>

*5. A list of the training events conducted in accordance with Part I E 6 m, including the following information:*

*(a) The date of the training event;*

*(b) The number of employees who attended the training event; and*

*(c) The objective of the training event.*

- All trainings that were planned and scheduled were cancelled due to COVID-19 concerns. Trainings will resume when the health landscape improves.

# Appendices



# Appendix A

## Radford University participates in Renew the New River volunteer effort

August 29<sup>th</sup>, 2020. Radford University's student participated in the Renew the New. Due to Covid-19, students participated in an informal cleanup and people were encouraged to clean up independantly. No metrics were kept for this event.



## Radford University participates in Campus Club Fair



Greetings Student Leaders,

I am excited to announce that both annual re-registration and the sign-up for Fall Club Fair are now live! We have created screen recordings walking through [how to re-register your organization](#) and [how to sign-up for Fall Club Fair](#).

All student organizations must complete re-registration every year. Organizations that do not complete their re-registration by October 1<sup>st</sup> will lose their active status until they complete the re-registration. There is not a leadership orientation requirement this year; this information has been incorporated into the re-registration form. All you need to do is complete the re-registration form to keep your organization in active status.

Fall Club Fair will be 100% virtual this year through RU Involved. Your club will need to set up an online meeting with a URL that you put in the sign-up form to create your “booth”. If you signed up for Fall Club Fair when the plan was to have the event in person, you will need to sign up again for the virtual club fair.

If you have any questions, please contact us at [involve@radford.edu](mailto:involve@radford.edu).

Best wishes,

Liz Craft

Assistant Director for Student Involvement

You are receiving this email because you are a member of RUInvolved

## Radford University participates in Regional Household Hazardous waste collection

Due to Covid-19 Radford University did not host the Regional Household Hazardous waste collection in April 2020

No we will be having it here at the landfill again. It went over so well, we decided to just have it here.

Sherry

-----Original Message-----

From: Thompson, Neal <[lthompson@RADFORD.EDU](mailto:lthompson@RADFORD.EDU)>  
Sent: Thursday, March 18, 2021 8:21 AM  
To: Sherry Johnson <[ssjohnson@newriverresourceauthority.org](mailto:ssjohnson@newriverresourceauthority.org)>  
Subject: RE: HHHW

Are You guys wanting to have it here at the University? If so, I will need to run it by the director.

-----Original Message-----

From: Sherry Johnson <[ssjohnson@newriverresourceauthority.org](mailto:ssjohnson@newriverresourceauthority.org)>  
Sent: Thursday, March 18, 2021 7:32 AM  
To: Thompson, Neal <[lthompson@RADFORD.EDU](mailto:lthompson@RADFORD.EDU)>  
Subject: RE: HHHW

Good morning. We are going to have one just waiting on the last week of March to announce the date. I will definitely let you know.

I have a new email address: [ssjohnson@newriverresourceauthority.org](mailto:ssjohnson@newriverresourceauthority.org)

Take care,

Sherry

-----Original Message-----

From: Thompson, Neal <[lthompson@RADFORD.EDU](mailto:lthompson@RADFORD.EDU)>  
Sent: Wednesday, March 17, 2021 3:42 PM  
To: Sherry Johnson <[ssjohnson@newriverresourceauthority.org](mailto:ssjohnson@newriverresourceauthority.org)>  
Subject: HHHW

Sherry,

any word on having a household hazardous waste of yet the spring?

Sent from my iPhone



### **Radford University participates in storm drain marking**

Radford University has participated in and is maintaining the “Storm Inlet Marking” program. This program involves labeling stormwater inlets with a marker educating residents not to dump pollutants into the stormwater inlet. The message, “No Dumping, Drains to Rivers” is a simple phrase to remind those passing by that the stormwater inlets connect to local waterways and that dumping will pollute those waters. In Late May and early June during the annual outfall inspection, I used the storm drain inventory map and identify the drains that directly lead to the river. These drains are identified with a medallion. The drain marking public participation is included IDDE training materials. Missing or damaged medallions are replaced at this time.



NATIONAL STORMWATER CENTER

PRESENTS:

# Certified Stormwater Student Class

**Tuesday, April 20**

**Online**

[https://attendee.gotowebinar.com/  
register/4785333403052375564](https://attendee.gotowebinar.com/register/4785333403052375564)

**6:00—7:30 PM**

## **Course Overview**

- ◊ Examine the Clean Water Act & NPDES
- ◊ Learn what stormwater is & its impacts
- ◊ Learn what illicit discharges are & understand where to look for discharges and how to report illicit discharges
- ◊ Discover ways to participate in your community



National Stormwater Center  
105 East Broadway, Bel Air, Maryland 21014  
1-888-397-9414, [info@npdes.com](mailto:info@npdes.com), [www.NPDES.com](http://www.NPDES.com)

# Appendix B

## Illicit Discharge Detection and Elimination

### SUMMARY

The 34 outfalls listed on the ORI report were investigated on 6/24/2021. Based upon the recent acquisition of property by the University, additional outfalls were investigated. These new outfalls have been added to the list and maps.

Of the new outfall locations, many were determined to be simply gutter flow from the roofs to the street. Some of the new sites have inlets and pipe networks that carry the flow into the Radford City system, while others are a combination.

Previous flow testing had revealed that Student Recreation and Wellness Center, Center for the Sciences, and Hephill Hall's HVAC system discharges into the existing storm drainage system. This accounts for the various levels of ammonia detected at times from the units as the flow is monitored. Not every year the flow is detected but each time it is found, the flow is located at the same areas on campus.

This year no traces were detected from any flows coming from the Student Recreation and Wellness Center, Center for the Sciences, and Hephill Hall.

Significant rainfall events this year has caused the Radford University staff to focus on damage along the riverbanks instead of normal maintenance tasks throughout the previous years. Locations around RU-NR-2 were significantly hit and damaged last year. This year many of the repairs have been completed to restore the outfall areas and banks of the river. These areas will be continuously monitored throughout the coming year.

The university is currently working on preliminary plans for a possible river work project that will help stabilize the entire area. However, funding and design will take time.

### MAP CHANGES

**BMP on Fairfax Street now completed and added to map. All new outfall locations from acquired properties added to the map. To be completed in 2021.**

### NEW OUTFALL LOCATIONS (11 New)

**RU-EM-7, RU-EM-8, RU-DO-1, RU-FA-1, RU-DA-1, RU-CA-1, RU-CA-2, RU-HO-1, RU-CL-1, RU-CL-2, RU-GO-1**

### FLOW TESTS

**RU-BU-2** stream flow tested with no indicators of illicit discharge.

**RU-NR-1** stream flow tested with no indicators of illicit discharge.

**RU-NR-5** stream flow tested with no indicators of illicit discharge.

**RU-NR-7** stream flow tested with no indicators of illicit discharge.

**RU-EM-2** Flow tests indicated no levels of ammonia. Flow traced through campus to roofdrains at the Center for the Sciences Building. Had Ammonia previously.

### MAINTENANCE CONCERNS (On Radford University Property)

**RU-AF-1, RU-NR-3, RU-EM-6, RU-EM-5, RU-NS-5, RU-BU-1, RU-NR 5, Cleanup/debris**



# MAINTENANCE CONCERNS (Outfall on City Property, Contact Radford City)

RU-NR-9, Maintenance/recommend Riprap

RU-NR-10, RU-JE-1, Cleanup/debris

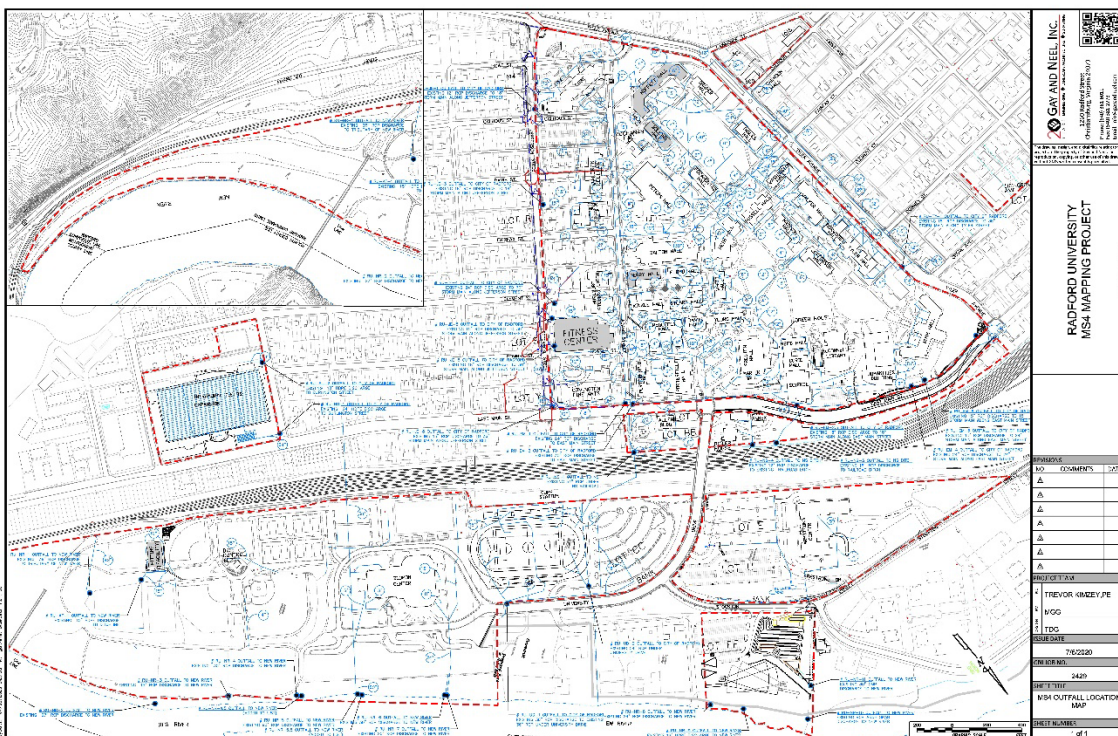
Note all outfall flows will ultimately be conveyed to the New River. Since 2010, DEQ has generated several ambient water columns and sediment PCB data in support of total maximum daily loads (TMDLs) for PCB polychlorinated biphenyls (PCBs) in the New River.

Outfall watersheds should be monitored for sediment and chemical discharges that could increase the TMDL. Any possible sources should be investigated prior to an illicit discharge event.

A DEQ Draft Report dated 2017 is available for details on specific sources of PCBs

Street Name/Location	Outfall Number	Latitude	Longitude	Coordinate System	Data Source (Survey, Map, GPS)	Pipe Shape	Pipe Span (in)	Pipe Rise (in)	Receiving Feature	Subwatershed Area (ac)	Waterbody	HUC12	VAHUG TMDL	Reconnaissance Date	ORI Date(s)	ORI Results	Notes
<b>Jefferson St.</b>																	
RU-JE-1	37° 8' 32.32" N	80° 32' 57.90" W	Map	Round	12	12	18"	Storm Main	3.4	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-JE-3	37° 8' 7.73" N	80° 32' 54.07" W	Map	Round	18	18	18"	Storm Main	0.6	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-JE-4	37° 8' 11.36" N	80° 32' 50.30" W	Map	Round	24	24	30"	Storm Main	2.1	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-JE-5	37° 8' 12.10" N	80° 32' 49.53" W	Map	Round	15	15	30"	Storm Main	1.6	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-JE-6	37° 8' 13.49" N	80° 32' 48.32" W	Map	Round	18	18	30"	Storm Main	0.8	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	Flow Tested		
RU-JE-8	37° 8' 16.14" N	80° 32' 45.89" W	Map	Round	15	15	36"	Storm Main	0.7	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
<b>East Main St.</b>																	
RU-EM-1	37° 8' 18.38" N	80° 32' 49.63" W	Map	Round	24	24		East Main	9.8	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-EM-2	37° 8' 18.67" N	80° 32' 50.17" W	Map	Round	30	30		East Main	51.1	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	Flow Tested upstream near source		
RU-EM-2.5	37° 8' 25.05" N	80° 32' 59.62" W	Map	Round	18	18	18"	Storm Main	0.7	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-EM-4	37° 8' 27.80" N	80° 33' 2.22" W	Map	Round	24	24	24"	Storm Main	1.7	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-EM-5	37° 8' 28.00" N	80° 33' 2.22" W	Map	Round	15	15	24"	Storm Main	2.1	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-EM-6	37° 8' 27.88" N	80° 33' 11.41" W	Map	Round	15	15	18"	Storm Main	0.7	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
<b>Tyler Avenue</b>																	
RU-TY-1	37° 8' 22.29" N	80° 33' 11.09" W	Map	Round	18	18	36"	Storm Main	16.1	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
<b>Norfolk Southern Railroad</b>																	
RU-NS-1	37° 8' 20.73" N	80° 32' 48.13" W	Map	Round	54	54	54"	Storm Main	1.4	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NS-4	37° 8' 24.79" N	80° 32' 55.04" W	Map	Round	12	12		Ex. RR Ditch	0.9	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NS-5	37° 8' 25.50" N	80° 32' 56.49" W	Map	Round	18	18		RR Ditch	0.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
<b>New River</b>																	
RU-NR-1	37° 8' 7.88" N	80° 32' 11.46" W	Map	Round	36	36		Trib. Of New River	Offsite	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	Stream Flow tested		
RU-NR-2	37° 8' 14.88" N	80° 32' 10.33" W	Map	Round	27	27		New River	9.9	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-3	37° 8' 17.24" N	80° 32' 14.77" W	Map	Round	15	15		New River	2.1	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-4	37° 8' 19.52" N	80° 32' 18.62" W	Map	Round	30	30		New River	9.5	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-4.5	37° 8' 19.52" N	80° 32' 18.62" W	Map	Round	30	30		New River	Unknown	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-5	37° 8' 21.97" N	80° 32' 22.07" W	Map	Round	60	60		New River	12.3	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	Stream Flow Tested		
RU-NR-5.5	37° 8' 21.97" N	80° 32' 22.07" W	Map	Round	30	30		New River	Unknown	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-6	37° 8' 24.83" N	80° 32' 27.21" W	Map	Round	30	30		New River	Unknown	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-7	37° 8' 25.09" N	80° 32' 27.50" W	Map	Round	20	20		New River	10.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	Spring Flow Tested		
RU-NR-8	37° 8' 34.64" N	80° 32' 11.17" W	Map	Round	24	24		New River	3.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-9	37° 8' 36.09" N	80° 32' 42.66" W	Map	Round	18	18		New River	2.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-10	37° 8' 36.07" N	80° 32' 45.70" W	Map	Alrch	72	72		New River	3.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-NR-11	37° 8' 37.33" N	80° 32' 47.53" W	Map	Round	30	30		New River	3.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
<b>University Drive</b>																	
RU-UD-1	37° 8' 23.05" N	80° 32' 34.37" W	Map	Round	36	36		36" RCP	6.5	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-UD-2	37° 8' 25.83" N	80° 32' 39.09" W	Map	Round	54	54		54" RCP	7.6	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
<b>Burlington Street</b>																	
RU-BU-1	37° 8' 21.21" N	80° 32' 29.22" W	Map	Round	18	18		24" RCP	1.2	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		
RU-BU-2	37° 8' 3.59" N	80° 32' 31.47" W	Map	Round	18	18		24" RCP	7.8	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	Stream Flow tested		
<b>Athletic Fields</b>																	
RU-AF-1	37° 8' 8.85" N	80° 32' 15.30" W	Map	Round	15	15		To Trib of New River	4.6	New River - Connells Run	50500011801	NE57	7/6/2020	7/6/2020	No Flow		

Note all outfalls flows will ultimately be conveyed to the New River. Since 2010, DEQ has generated several ambient water column and sediment PCB data in support of total maximum daily loads (TMDLs) for PCB polychlorinated biphenyls (PCBs) in the New River. Outfall watersheds should be monitored for sediment and chemical discharges that could increase the TMDL. Any possible sources should be investigated prior to an illicit discharge event. A DEQ Draft Report dated 2017 is available for details on specific sources of PCBs



# Appendix C

Radford University Regulated Land-Disturbing Activities July 2020 - June 2021									
RU will provide the following information on any regulated land-disturbing activity to DEQ Central Office no less than two weeks prior to the start of the activity:									
<ul style="list-style-type: none"> <li>• Project name or project number</li> <li>• Project location (including nearest intersection, latitude and longitude, access point)</li> <li>• On-site Project Manager and contact information</li> <li>• Responsible Land Disturber (RLD) name and contact information</li> <li>• Project description</li> <li>• Area of disturbance for the project</li> <li>• Estimated disturbed acreage for individual projects must be reported in the following manner:                             <ul style="list-style-type: none"> <li>o Linear Projects – beginning and ending coordinates, or</li> <li>o Site Development – central to polygon or point coordinates</li> </ul> </li> </ul> Note: Coordinates may be reported by UTM (x, y, zone, and datum) or state plane (x, y, zone, and datum).									
<ul style="list-style-type: none"> <li>• Project start and finish date</li> <li>• Any variances/exemptions/waivers associated with this project</li> </ul>									
Project Name	Location	Project Manager Contact Information	RLD Contact Information	Project Description	Estimated Area	Estimated Start Date	Estimated Completion Date	3rd Party Inspections	Comments
1101 Grove Ave Renovation	1101 Grove Ave City of Radford	Lou Ferguson wferguso@radford.edu (540)-831-7781	Price Builders, Inc.	Limited site work to create positive drainage away from the building/building renovation	ES&C - less than 10,000 sf SWM - less than 1 acre	January 2020	August 2021	NA	
Baseball Bullpen Improvements	Athletics area	Stephen Harrison sharrison@radford.edu 540-831-7804	Radford University	Limited sitework to adjust bullpen area including sidewalks	ES&C - less than 10,000 sf SWM - less than 1 acre	January 2020	March 2020	NA	
Fairfax Street Improvements	Main Campus 37.1359, -80.5486	Lou Ferguson wferguso@radford.edu (540)-831-7781	Radford University Chris Shelton - RLD07811	Parking, sidewalks, and associated utility and drainage improvements	ES&C/SWM - 2.47 acres	January 2020	August 2020	2	Design by T&L ESC/SWM Plans and SWPPP by T&L Plan review by GNI
Baseball Field Turf Replacement	Athletics Campus	Guy Rhodes grhodes2@radford.edu (540)-831-7756	Matt Ward LandTek Group RLD 13506	Replace existing natural turf field with artificial turf field	ES&C/SWM - 3.4 acres	November 2020	April 2021	9	Design by T&L ESC/SWM Plans and SWPPP by T&L Plan Review and Inspections by GNI
Trail Connector	Athletics Campus	Chris Shelton cshelton19@radford.edu (540)-831-7783	NA	Trail connection to existing pedestrian walking trail	ES&C/SWM - less than 10,000 sf	May 2021	August 2021	NA	
Fairfax Street Signs	Main Campus	Chris Shelton cshelton19@radford.edu (540)-831-7783	NA	Install signs at existing Moffett Lawn	ES&C/SWM - less than 10,000 sf	May 2021	June 2021	NA	
Parking Lot	1023 Clement Street	Chris Shelton cshelton19@radford.edu (540)-831-7783	NA	Create paved parking lot	ES&C/SWM - less than 10,000 sf	April 2021	August 2021	NA	Design by GNI
Parking Lot	1028 Fairfax Street	Chris Shelton cshelton19@radford.edu (540)-831-7783	NA	Create paved parking lot	ES&C/SWM - less than 10,000 sf	April 2021	August 2021	NA	Design by GNI
Parking Lot	1019 Clement Street	Chris Shelton cshelton19@radford.edu (540)-831-7783	NA	Create paved parking lot	ES&C/SWM - less than 10,000 sf	April 2021	August 2021	NA	Design by GNI
Parking Lot	609 East Main Street	Chris Shelton cshelton19@radford.edu (540)-831-7783	NA	Create paved parking lot	ES&C/SWM - less than 1 acre (0.65 Acres)	April 2021	August 2021	6	Design by GNI ESC Plans by GNI Plan review by Dewberry Inspections by ECS

**Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management can be found on the Radford University website at: [https://www.radford.edu/content/dam/departments/administrative/Facilities-Planning/RU Annual Standards Specs Rev4 full doc.pdf](https://www.radford.edu/content/dam/departments/administrative/Facilities-Planning/RU%20Annual%20Standards%20Specs%20Rev4%20full%20doc.pdf)**

# Appendix D

## Post-Construction Stormwater Management

### EXECUTIVE SUMMARY

Gay and Neel, Inc. investigated the initial 10 BMP facilities on campus to determine if they met compliance in regard to the original design as well as determining if the facilities were being maintained properly. In addition, a new BMP was added during a parking lot project at Moffett Quad and Russell Hall make the new total 11 BMP's. The 2020 report completed by GNI referenced some of the original three main areas of concern for the existing facilities on campus:

- 1) Sediment accumulation,
- 2) Invasive species,
- 3) Excessive vegetation growth.

Radford University has been working on the areas of concern and has addressed many of the original concerns from previous reports. Since 2019, Radford University still has excessive growth around some of the existing BMPs; it was suggested that this excessive growth be properly managed and removed on a regular basis. We noted that in some cases, BMP's showed signs of excessive vegetative growth in certain areas of the facility that make it difficult to inspect the berms and the facility components.

The underground detentions have been maintained in excellent condition as well as the majority of the other detention facilities on campus. This report saw no signs of increase in sediment in the underground facilities. However, it should be noted that some are close to reaching the 5% mark and may require sediment removal.

The constructed wetland area continues to have the most concerns from the previous reports and the current inspections still show areas of excessive vegetation and difficulty inspecting parts of the BMP. The excessive vegetative growth makes inspections less effective to monitor for invasive species and to check for maintenance issues within the facility.

In summary, this report emphasizes the need to continue sediment monitoring, manage vegetation growth at the existing BMPs and to keep any invasive species out of the existing Constructed Wetland BMP. Mowing should be monthly or at least twice a year. This will allow for better access to the facility and inspections. In addition, cleaning and removal of debris quarterly will allow for access at risers and other facility features.

<https://www.radford.edu/content/sustainability/home/resources/stormwater-management.html>

# Appendix E

## Pollution Prevention/Good Housekeeping



### Illicit Discharge Detection and Elimination (IDDE)

By definition, an illicit discharge is any discharge to a municipal separate storm sewer system 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, In other words, an illicit discharge is the discharge of any substance into a storm sewer system that is **NOT** stormwater. Some examples of these substances include:

- Cleaning Supplies
- Construction Wastes (debris, sludge, etc.)
- Non-Residential Vehicle Wash
- Paint
- Vehicle Oil

*Are there exceptions to this policy?*

Yes! Below are examples of what is not an illicit discharge

- Fire Fighting Activities
- Dechlorinated Swimming Pool Discharges
- Landscape Irrigation and Lawn Watering
- Foundation/Footing Drains
- Water Line Flushing
- Discharges of Potable Water Sources
- Street Wash Water
- Air Conditioning Condensation

*What should I do if I witness an illicit discharge?*

Contact Radford University Facilities Management

If you notice any illicit discharges or have concerns about practices on Radford University grounds or construction projects please contact Facilities Management by phone at (540) 831-7800

Please be prepared to give the following information if possible:

Source of pollution.  
Location of problem.  
Responsible party (if known).  
Date and time.

*What is the difference between a storm sewer and a sanitary sewer?*

Sanitary sewers are underground pipes that carries liquid from places like the bathroom, sinks, and kitchens to a wastewater treatment plant. Substances that enter sanitary sewers are filtered and treated before being discharged.

While storm sewers may seem similar they are only designed to carry stormwater and runoff. Storm sewers are not treated and lead directly into our natural environment. Substances that are not stormwater should never be released into the storm sewer system. At Radford University, many storm sewer inlets can be identified by the “No Dumping – Drains to Stream” medallion:



*Want to find out more about Illicit Discharge Detection and Elimination?*

Other resources can be found through the [EPA](#), or the [DEQ State General Permit](#).

Radford University's SWPP's and SOP's can be located at Radford University's MS4 website:

<https://www.radford.edu/content/sustainability/home/resources/stormwater-management.html>