

RADFORD UNIVERSITY



MS4 ANNUAL REPORT 2nd Submission

JULY 1, 2022-JUNE 30, 2023

Certification Statements 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 overall financial 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 below;
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.



Mr. Robert Hoover

3/14/21

Date

VP for Finance and Administration & Chief Financial Officer

Radford University

Permit No. VAR040136; Radford University

MS4 Annual Report July 1, 2022 through June 30, 2023

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Program Plan

Changes to the program plan during the reporting year July 1, 2022 - June 30, 2023

Table of Contents: Changes to headings and page numbers

Section 2: Administration, which is located on the 2018-2023 Radford University MS4 Program Plan

- Updated the organizational chart to reflect the following changes
 - Stephanie J. Jennelle to Robert Hoover
- Updated Section 2.2 Responsible Party Contact Information to reflect the updated organizational chart (the correct job titles and contact information will also be added to reflect the changes).

Section 3: Minimum Control Measures

- 3.1 Made changes to each of the high-priority issues by removing strategies that are no longer used and adding new strategies.
- 3.2 Made changes to the Public Involvement and Participation’s introduction section.
 - 3.2.1 Changed title from “BMP: Stormwater Management Website” to “BMP Public Education” (Also changed in the Program Plan TOC)
 - Changed some of the description and goals for the MS4 web page
 - 3.2.2 BMP: Disposal or Collection Events
 - Made changes to the goals for the two events under this heading.
 - 3.2.03 BMP: Pollution Prevention
 - Changed the entire section under this heading. Removed the “Storm Drain Marking Program” and replaced it with the “Pet Waste Station Program”
 - 3.2.4 BMP: Education Event
 - Made changes to the entire “Campus Club Fair” event description and goals

Minimum Control Measure No. 1: Public Education and Outreach

Annual Reporting Requirements

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

Below is a list of the high-priority stormwater issues that Radford University (RU) addressed in the public education and outreach program

- Vehicle Maintenance (Petroleum Releases)

- Trash Elimination and Recycling
- Pet Waste

The annual Report shall also include a list of the strategies used to communicate each high-priority stormwater issues:

- Vehicle Maintenance (Petroleum Release)

During the 2022-2023 reporting period, the educational video had 8 views. Radford University had a booth at the Campus Club Fair and had over 100 visitors where all three of the high-priority stormwater pollution prevention issues were discussed at length. Many of the visitors signed up to receive information about the University MS4 program, pollution prevention and upcoming events. In previous years, a significant number of flyers were tossed on the ground. To minimize the littering, the MS4 team decided to provide information to the campus community through email. Future correspondence is being developed to send out to students with information regarding the high-priority stormwater issues and events. These are being approved and will be on the 2023-2024 Annual Report. The facilities department received approximately 12 calls during the reporting period that potentially pertained to Vehicle Maintenance and Petroleum-based spills. A list of these calls can be found in the MCM #2 section.

- Evaluation: An increase in water quality can be expected by educating the public on how to properly maintain their vehicle to prevent leaking pollutants and on how to dispose of pollutants so they do not end up in the waterways. The number of visitors to the Campus Club Fair booth was significant enough that the MS4 team plans to participate in the January Club Fair as well as the August Club Fair going forward. Radford University will continue to track the numbers of individual views of the vehicle maintenance educational video located on the MS4 page of the university website and the attendance at various events. Lastly, the MS4 team will regularly review the reports of potential petroleum spill clean ups to determine if it is necessary to adjust this strategy.

- Trash Elimination and Recycling

During the 2022-2023 reporting period, Radford University had a booth at the Campus Club Fair and had over 100 visitors where all three of the high-priority stormwater pollution prevention issues were discussed at length. Many of the visitors signed up to receive information about the University MS4 program, pollution prevention and upcoming events. In previous years, a significant number of flyers were tossed on the ground. To minimize the littering, the MS4 team decided to provide information to the campus community through email. Future correspondence is being developed to send to students with information regarding the high-priority stormwater issues and events. These are being approved and will be found on future reports. The facilities department removes trash/recycling on a regular schedule, but received approximately 13 calls during the reporting period concerning excess trash/recycling materials throughout campus. A list of these calls can be found in the MCM #2 section.

- Evaluation: Educating the public on recycling and proper trash disposal is expected to continue to have a variety of positive impacts to the Radford University campus. Radford University will track any emails or calls to the Facilities Department to determine if changes need to be made to the way the University educates the campus community. Radford University will also look to continue to improve on how information and material is distributed so we are able to reach the largest audience.
- Pet Waste

During the 2022-2023 reporting period, Radford University had a booth at the Campus Club Fair and had over 100 visitors where all three of the high-priority stormwater pollution prevention issues were discussed at length. Many of the visitors signed up to receive information about the University MS4 program, pollution prevention and upcoming events. In previous years, the flyers that were handed out were found on the ground all across campus. To prevent the littering, the MS4 team will start sending emails with various MS4 information. The informative emails have been created and will be found on future reports. Four pet waste stations were purchased to be installed along the River Walk. A program has been developed that will get students involved with the maintenance of the waste stations. This will be reflected on the 2023-2024 Annual Report. The facilities department received 12 calls during the reporting period concerning pet waste and other animal related issues. A list of these calls can be found in the MCM #2 section.

- Evaluation: A decrease in pet waste entering the Radford University storm sewer system is expected by staying vigilant in educating the campus community to clean up after their pets. Radford University will track any incoming emails and calls to the Facility Department to get suggestions from the public. We will also continue to monitor the number of visits to the websites and number of visitors to any events around campus. Radford University will continue to look for new ways to reach the largest audience with our educational materials.
- Other calls reviewed by the MS4 team: There were various other calls which included potential MS4 issues that did not fit into one of the high-priority stormwater issue categories. One of these calls was considered an illicit discharge and the details can be found at the MCM #3 section of this report. A list of these calls can be found in the MCM #2 section.

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:*
 - The public input for the July 1, 2022 – June 30, 2023 reporting period was received through calls to the Facilities, Planning and Construction work order system and through person to person conversations during the Campus Club Fair. The work order calls, separated into different categories, can be found below.

Radford University					
Vehicle Maintenance and Other Petroleum-based Spills					
Category	W.O. Number	DATE	Description	Solution	Illicit Discharge
Vehicle	23-01455	8/16/2022	Armstrong loading dock scissor lift needs repaired	RU facilities mechanic made repairs	No
Vehicle	23-04562	10/31/2022	Accident - brick wall damage	RU PD investigated	No
Vehicle	23-04761	11/2/2022	Gas smell at Buchanan House	EHS investigated, no odor found	No
Vehicle	23-06942	1/26/2023	Gas smell at Armstrong	EHS investigated, no smell found	No
Vehicle	24-07464	2/8/2023	Accident - Car ran through grass area	Landscaping staff repaired	No
Vehicle	23-09596	3/21/2023	Gas smell at Allen Building	Propane Tank repair - EHS investigated	No
Vehicle	23-09715	4/26/2023	Asphalt repair around Gas pumps	RU facilities repaired according to SOP	No
Vehicle	23-10012	5/5/2023	Lot FF transit shelter vandalized with paint	RU PD investigated - Facilities cleaned following SOP	No
Vehicle	23-11058	6/28/2023	Forklift gas leak at Dalton loading dock	Clean up following SOP. EHS completed report	Yes

Radford University					
Trash Eliminating and Recycling					
Category	W.O. Number	DATE	Description	Solution	Illicit Discharge?
Waste	23-00441	7/12/2022	Dalton deck over book store trash covered with maggots. Needs trash changed and area cleaned	RU Facilities responded	No
Waste	23-00508	7/13/2022	Hydraulic line busted on Walker trash compactor	RU garage cleaned following SOP	No
Waste	23-02786	9/12/2022	Lot HH broken glass and vandalism	RU facilities cleaned up	No
Waste	23-02793	9/12/2022	Lot E broken glass and vandalism	RU facilities cleaned up	No
Waste	23-03248	9/22/2022	Recycling bin overflowing	Recycling Department cleaned up	No
Waste	23-03652	10/3/2022	Dalton trash compactor needs repaired	Recycling Department made repair arrangements	No
Waste	23-04694	11/1/2022	Russell - Trash bag busted and garbage all over	Recycling/Housekeeping cleaned up	No
Waste	23-04952	11/9/2022	Russell - trash needs changed	Recycling/Housekeeping cleaned up	No
Waste	23-05172	11/16/2022	Waldron Trash can full of metal and needs to be emptied	Recycling/Housekeeping cleaned up	No
Waste	23-08268	3/6/2023	Muse patio littered with trash and glass	Housekeeping cleaned up	No
Waste	23-09207	4/7/2023	SRW overflowing trash bins	Housekeeping cleaned up	No
Waste	23-10015	5/5/2023	Trash chute stopped up at Muse	Recycling Department checked for unknown damage - repaired	No
Waste	23-10926	6/22/2023	Trash compactor at Dalton needs refurbished	Recycling Department responded and made repairs	No

Radford University					
Pet Waste and Other Animal Related Issues					
Category	W.O. Number	DATE	Description	Solution	Illicit Discharge?
Pet	23-00299	7/5/2022	Boiler House - set traps for groundhogs	RU Facilities set traps as requested	
Pet	23-00370	7/7/2022	Lot X - Dead cat in parking lot	RU Facilities removed	No
Pet	23-01489	8/17/2022	Bird droppings at softball dugout	Housekeeping cleaned up, Facilities made repairs to keep	No
Pet	23-04596	11/1/2022	Dedmon loading dock - skunk in the trash	RU Facilities set traps as	No
Pet	23-06340	1/10/2023	SELU Observatory rodent droppings	Housekeeping clean up.	No
Pet	23-07983	2/27/2023	Dedmon Baseball Field shed - skunk trap requested	RU Facilities set traps as requested	No
Pet	23-08471	3/15/2023	Pet waste at Washington Hall	Housekeeping clean up	No
Pet	23-10214	5/17/2023	Skunk found on loading dock at Dedmon	Trap was set, but animal was not caught	No
Pet	23-10313	5/22/2023	915 Tyler - traps set for skunks	RU Facilities set traps as	No
Pet	23-10345	5/23/2023	Boiler House - set traps for groundhogs	RU Facilities set traps as	No
Pet	23-10636	6/7/2023	Dead animal odor at Walker	Landscapers cleaned up EHS investigated (W.O. 23-10615)	No
Pet	23-11001	6/26/2023	Dead animal found at Russell main entrance	Landscapers cleaned up	No

Radford University					
Other Potential Stormwater Issues					
Category	W.O. Number	Date	Description	Solution	Illicit Discharge?
Misc	23-01189	8/8/2022	CFTS leak from clogged roof drain	Facilities repaired	No
Misc	23-03430	9/28/2022	Hurricane Ian preparation	All departments prepared for flooding	No
Misc	23-03543	10/3/2022	Madison roof leak - clogged roof drain	Facilities made repairs	No
Misc	23-03934	10/11/2022	Moffett window well clogged because of leaves in drain	Facilities staff removed leaves	No
Misc	23-04973	11/10/2022	Tropical Storm Nicole preparation	All departments prepared for flooding	No
Misc	23-06425	1/12/2023	Roof at Dalton has grease from equipment cleaning	EHS reported, clean up completed following SOP	Yes
Misc	23-07901	2/22/2023	Storm grate fell into MH structure	Facilities responded to safety hazard and repaired	No
Misc	23-08888	3/30/2023	Armstrong car wash bay not working	RU Facilities repaired	No
Misc	23-09182	4/3/2023	Muse leak from clogged roof drain	Facilities repaired	No
Misc	23-09182	4/7/2023	Roof drain clogged at Muse	RU Facilities repaired	No
Misc	23-09396	4/14/2023	Lot A Sanitary clog	Facilities and City of Radford repaired - MS4 Team investigated	No
Misc	23-09425	4/14/2023	McConnel roof drain flooding during rain	RU Facilities repaired	No
Misc	23-09493	4/18/2023	Lot AA, Student dropped car keys down storm drain	RU Facilities retrieved them	No
Misc	23-09773	4/28/2023	Exterior drain clogged at Russell	RU plumbers repaired	No
Misc	23-09809	4/29/20223	Vandalism - Soap put into fountain at Armstrong car wash bay mechanical repairs	RU PD investigated - housekeeping RU Facilities repaired	No
Misc	23-10017	5/5/2023	Exterior stairwell clogged at	Plumbers investigated and made repairs	No
Misc	23-10216	5/7/2023	Jefferson. Standing water present		No
Misc	23-10037	5/8/2023	Vandalism - Soap put into fountain at Heth	RU PD investigated - housekeeping cleaned up	No
Misc	23-10216	5/17/2023	Jefferson - Stairwell drain clogged	Facilities repaired	No
Misc	23-10308	5/22/2023	Vandalism - Soap put into fountain	RU PD investigated - housekeeping	No
Misc	23-10352	5/24/2023	Pressure wash Peters Courtyard and clean drain	Work completed according to SOP	No
Misc	23-10395	5/25/2023	Lot U replace trash can - spray painted - vandalism	RU Recycling Department replaced	No
Misc	23-11092	6/30/2023	Lot E Transit Canopy painted - Vandalism	RU PD investigated - Facilities cleaned up - Paint was dry, no illicit	No

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/stormwater-management.html>

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

Radford University participated in the following public involvement activities:

- "Renew the New" event every August. (**Restoration**)
- MS4 Booth at the campus club fair in August (**Education**)
- Household hazardous waste collection day in April. (**Disposal**) During the reporting period, this event was held at the New River Resource Authority. (Radford University advertises the event for the New River Resource Authority and is available to help in any way possible)
- Radford University Storm drain marking program (**Pollution Prevention**) Radford University has removed this program from the Program Plan and from subsequent Annual Reports.
- Radford University Pet Waste Station Program (**Pollution Prevention**)

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:*

1. Public engagement continues to be a major priority for improving water quality on campus and around the community. The different things the MS4 team focuses on helps to educate our Faculty, Staff and Students. The team wants to give them a measurable way, by which, they can help protect our nearest major waterway, the New River.
 - o **"Renew the New"** – Since 2001, volunteers have worked diligently towards cleaning trash and debris out of the New River. Many tons of garbage and hundreds of tires have been removed and relocated to the local landfill. According to the metrics received from the New River Valley Regional Commission, in 2022, the Renew the New event had over 90 Volunteers and collected 3 tons of garbage.

Evaluation: This event has been successful since 2007 and continues to move to different parts of the river as sections are cleaned up. The Radford University MS4 team will continue to advertise the event to get the largest number of volunteers and help whenever possible.
 - o **Campus Club Fair booth** – The MS4 team set up a booth at the Campus Club Fair during this reporting period. We feel that this is the best method of reaching the largest number of individuals within the campus community.

Evaluation: The Campus Club Fair is one of the largest gatherings of students, faculty and staff through the year. The fair is a good place to get educational material to as many members of the Radford University community. Over 100 students, faculty and staff stopped by the booth to talk about stormwater events and general pollution prevention. This event was successful enough that the MS4 team is looking into setting up a booth for the January Campus Club Fair. The MS4 team will continue to watch for other events that allow the distribution of educational materials.

- o **Household Hazardous Waste Program** – The New River Resource Authority started holding the Household Hazardous Waste Event at the local landfill after Covid. According to them, it was easier because the materials to hold the event were already on site and did not need to be hauled. The MS4 Team advertised for the event on the MS4 Website and at the Campus Club Fair. The turnout was on par with previous Hazardous Waste Days, so the plan is to work with the New River Resource Authority in promoting the event and providing volunteers as needed. **The metrics for the event can be found under Appendix A.**

Evaluation: The partnership between the New River Resource Authority and Radford University has been mutually beneficial for several years. While there have been adjustments, the MS4 Team remains confident that working with them to promote the Household Hazardous Waste Day remains one of the best ways to keep hazardous materials out of the Radford, VA waterways.

- 2. **Pet Waste Station Program** – The MS4 team has purchased and installed four Pet Waste Stations along the Riverwalk on the Radford University campus. There were two campus community members involved in the installation of the stations. A member of the University staff was responsible for maintaining the waste stations until the RU Student Environmental Club took over this responsibility. The Environmental Club did not begin in time for this Annual Report, but will be reported on the 2023-2024 Annual Report.

Evaluation: The MS4 Team initially pitched this program at the Campus Club Fair and received a good deal of interest. It did take a bit of time to get the group of students to officially commit to maintaining the stations full time, but a group of responsible students were located. At this point, the group appears to be happy about their volunteer opportunity and helping to mitigate the amount of pet waste that would end up in the campus waterways. The volunteers will be asked to track how often the stations must be emptied and to comment on the need for waste stations at other locations throughout campus.

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

- None

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:*
 - The MS4 map and information table were updated to reflect the changes to the MS4 during the reporting period. See Appendix B.
 - Information can also be accessed through Radford University's MS4 website <https://www.radford.edu/content/sustainability/home/stormwater-management.html>
2. *The total number of outfalls screened during the reporting period as part of the dry weather screening program:*
 - 45 Outfalls were screened as part of the dry weather screening program. Since Radford University has less than 50 Outfalls, they are each screened annually.
 - See Appendix B
 - Information can also be accessed through Radford University's MS4 website <https://www.radford.edu/content/sustainability/home/stormwater-management.html>
3. *A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:*
 - The source of illicit discharge;
 - The dates that the discharge was observed, reported, or both;
 - Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method;
 - How the investigation was resolved;
 - A description of any follow-up activities; and
 - The date the investigation was closed.
 - Radford University had two illicit discharges or spills reported during the 2022-2023 reporting period.
 1. The source of the illicit discharge that was reported on 01/10/2023 was grease on a roof caused when a fan motor on an exhaust hood was cleaned at Dalton Hall. The illicit discharge was initially observed on 1/10/2023 and cleaned up following the correct SOP on 1/12/2023. The illicit discharge was not observed during dry

screening. The clean-up was completed by maintenance auxiliary staff. The work order was closed on 1/12/2023.

2. The source of the illicit discharge that was reported on 06/28/2023 was a gasoline leak from a forklift at the loading dock of Dalton Hall. The illicit discharge was observed and cleaned up the same day it was reported. The illicit discharge was not found during dry screening. The clean-up was completed by Radford University EHS staff. The work order was closed on 6/29/2024.

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 IE 4 a {3}:*

- 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 confirms all land-disturbing projects that occurred during the 2022-2023 reporting period were conducted in conformance with the University's Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management (AS&S), as approved by DEQ.
 - See Appendix C for a spreadsheet of the Land Disturbing Activities during the 2022-2023 reporting period.
- 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.

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). The Artis Center (formerly known as the "CAIC") project is still ongoing and a total of 62 inspections were performed between July 1, 2022 and June 30, 2023.

- See Appendix C for the Regulated Land Disturbing Activities spreadsheet
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.
 - See Appendix C for a list of enforcement actions, if there were any 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):*
 - The number of privately-owned storm water management facility inspections Conducted:
 - Radford University has a total of 11 BMP facilities on campus.
 - 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:
 - Radford University had 0 enforcement actions during this reporting period.
 - Please see **Appendix D** for a list of enforcement actions, if there were any during the reporting period
2. *Total number of inspections conducted on stormwater management facilities owned or operated by the permittee:*
 - During the reporting period, one complete inspection was performed on the Stormwater Management Facilities by Foresight Design Services.
 - Please see **Appendix D** for a summary of the inspection report and the location of the entire report
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:*

- Radford University did not complete any maintenance, repair, or retrofit activities during the reporting period. The only maintenance activities necessary was grass and weed cutting.
 - Please see **Appendix D** for a list of maintenance, repair or retrofit activities completed during the reporting period, if any were completed
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 IE 5 for a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities:

- During the reporting period, July 1, 2022 – June 30, 2023, Radford University did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.
5. *A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part IE 5 g and the date on which the information was submitted:*
- During the reporting period, July 1, 2022 – June 30, 2023, Radford University did not complete any BMPs that would need reported to the DEQ BMP Warehouse.

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

Annual Reporting Requirements

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

6. *A summary of any operational procedures developed or modified in accordance with Part IE 6 a during the reporting period:*
- April 2018 Thompson & Litton created and provided a SWPP for Radford University's Facilities, Maintenance and Operations Facility. 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.

- See Appendix E for information on Pollution Prevention and Good Housekeeping.

7. *A summary of any new SWPPPs developed in accordance Part IE 6 c during the reporting period:*

- There were no new SWPPs developed during this reporting period, July 1, 2022 – June 30, 2023. The only project on campus that required a SWPPP is the Artis Center (formerly known as “CAIC”) Project. The SWPPP was prepared on June 11, 2021 and implemented on June 21, 2021.

8. *A summary of any SWPPPs modified in accordance with Part IE 6 for the rationale of any high priority facilities delisted in accordance with Part IE 6 h during the reporting period:*

- No SWPPs were modified during this reporting period.

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

- There were no new Nutrient Management Plans developed during the reporting period of July 1, 2022 – June 30, 2023.
- Location and the total acreage of each land area
- N/A
- The date of the approved nutrient management plan
- The current nutrient management plan approved by the department of conversation and recreation is valid from June 1, 2021 - June 1, 2024.

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

- The date of the training event;
- The number of employees who attended the training event; and
- The objective of the training event.

Radford University Training			
Training Title	Objective	Training Date	Total Staff Trained
Pesticides/Herbicides Registered Technician	VDACS Certification	Expires 6/30/2024	4
Pesticides/Herbicides Commercial Applicator	VDACS Certification	Expires 6/30/2024	1
Certified Fertilizer Applicator	VDACS Certification	Various	2
ESC Program Administrator	DEQ Certification	Various	1
SWM Program Administrator	DEQ Certification	Various	1

NOTE: The IDDE Pollution Prevention Training materials have been created and approved for distribution. All facilities staff completed the training, but not early enough to be included in the 2022-2023 Annual Report. The staff training will be on the 2023-2024 Annual report. The MS4 team will be training the entirety of our Maintenance, Construction and Housekeeping staff on an annual basis.

Appendices



Appendix A



Radford University participated in Renew the New River volunteer effort

Radford University's student volunteers helped clean up the New River on August 27th, 2022. Students were invited to participate in the Giles County event, Fall into the New.



Radford University participates in Campus Club Fair

Club Fair is a huge event at Radford University. Hundreds of student organizations and campus departments gather together on Moffett Lawn to help students get connected at Radford. The event is held the first Friday of each semester. The MS4 team had a booth set up and had over 100 visitors to the booth.

RADFORD UNIVERSITY

Sustainability



For questions about **Stormwater Pollution Prevention and Illicit Discharges**
Contact: Wayne Hebb
(540) 831-7815
whebb@radford.edu

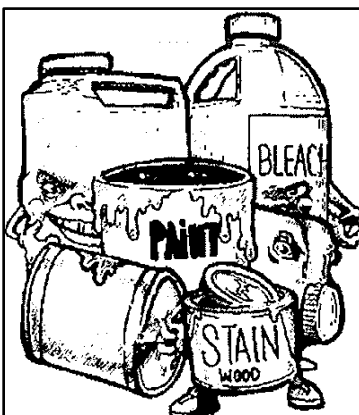
Stormwater Pollution Prevention

What can you do to protect the waterways?

- Clean up your pet waste
- Do not allow chemicals from vehicle maintenance drip onto the pavement
- Place all garbage in the proper bin and Recycle anything possible



Poster from the Campus Club Fair



NRV Regional Household Hazardous Waste Collection Day

Residents served by the New River Resource Authority are invited to participate in the Regions HHW & Document Shredding Event on September 10th, 2022 from 9:00am to 2:00pm.

Residents interested in this event will need to call NRRA at (540) 674-1677 to schedule an appointment. Event will be held at the New River Resource Authority, 7100 Cloyd's Mtn. Road, Dublin, VA 10AM-2PM.

NOCOMMERCIAL WASTE or COMMERCIAL VEHICLES will be accepted for HHW

This program is sponsored by

The New River Resource Authority

Radford University participates in Regional Household Hazardous waste collection



New River Resource Authority

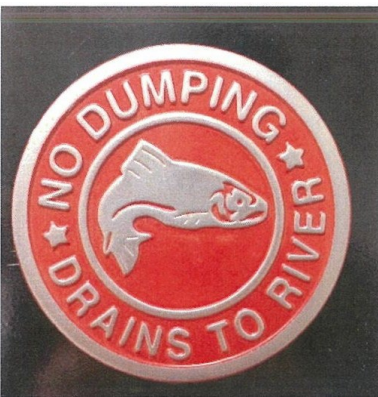
Household Hazardous Waste Collection Day Totals

	Description	Quantity	Units
1	Aerosol Cans	2	Cubic Yard Box
2	Propane	16	20 lb Each
3	Propane	78	1 lb Each
4	Fire Extinguishers	19	Each
5	Bulk Flammable Liquid	5	55 Gallon Drums
6	Paint Related Materials	10	Cubic Yard Box
7	Flammable Solids	1	55 Gallon Drums
8	Oxidizer Solid	1	55 Gallon Drums
9	Organic Peroxide Type D Liquid	1	5 Gallon Pail
10	Pesticide Solid	2	55 Gallon Drums
11	Pesticide Liquid	4	55 Gallon Drums
12	Corrosive Acidic Liquid	2	55 Gallon Drums
13	Corrosive Basic Liquid	5	55 Gallon Drums
14	Corrosive Basic Solid	1	55 Gallon Drums
15	Alkaline Batteries	1	55 Gallon Drums
16	Nickel Cadium Batteries	1	5 Gallon Pail
17	Lithium Batteries	1	5 Gallon Pail
18	Lithium Ion Batteries	1	5 Gallon Pail
19	Nickel Metal Hydride Batteries	1	5 Gallon Pail
20	Bulked Antifreeze	1	55 Gallon Drums
21	Bulked Motor Oil	11	55 Gallon Drums
22	Compact Fluorescent Bulbs	1	5 Gallon Pail
23	Flourescent Light Tubes	268	Per Linear Foot
24	Lead Acid Batteries	1	No Charge
25	Pesticides Liquid	1	Cubic Yard Box



Radford University has installed pet waste stations along the paved Riverwalk. Student, faculty and staff groups will be the primary care takers of these waste stations and will be responsible for making sure they are emptied regularly and any report any maintenance issues. The current program involves installing waste stations in areas around campus where they are needed the most and maintaining the waste stations. The pet waste stations will also be an excellent place for displaying educational signage

Pet Waste Station Program



Radford University continues to participate 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 Waterways" is a simple phrase to remind those passing by that the stormwater Inlets connect to local waterways and that dumping will pollute those waters. During the outfall inspection that occurs in late May or early June, the storm drain inventory map is used to identify drains that empty into the river. These drains are identified with a "No Dumping" medallion. The Drain marking public participation is included IDDE training materials. During the annual inspection, the missing or damaged medallions are replaced.

Storm Drain Marking Program

Appendix B

Illicit Discharge Detection and Elimination

SUMMARY

The 45 outfalls listed on the ORI report were investigated on 6/2/2023. This list includes the additional outfalls included from the recent acquisition of property to the University.

Of those new outfall locations acquired, 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. There have been no overall changes to those systems this year.

Previous flow testing had revealed that the Fitness Center, Science and Humanities 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.

This year only one of the facilities had traces of ammonia detected from any flows coming from the Fitness Center or Humanities buildings. Flow was detected at the Science Building and recorded in flow from EM-2 with no ammonia. Flow was recorded at the Fitness Center and recorded in flow from JE-6 with traces of ammonia from the roof drains.

Significant rainfall events in previous years have caused the RU staff to focus on damage along the riverbanks instead of normal maintenance tasks. Locations around RU-NR-2 were significantly hit and damaged a few years ago. 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. This year, no signs of additional damage were observed at the outfall locations.

The university continues working on preliminary plans for a possible river work project that will help stabilize the entire area.

MAP CHANGES

No changes during this reporting period.

The new Advanced Drainage Systems (ADS) retention pond for the Artis Center facility is anticipated to be online within the 2024 year.

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 roof drains at the Science Building.

RU-JE-6 Flow tests indicated levels of Ammonia. Flow traced through campus to roof drains at the Fitness Building.

RU-NR-11 stream flow tested with no indicators of illicit discharge. Leaking through the BMP at the riser structure from wetland.

MAINTENANCE CONCERNS (On Radford University Property)

RU-AF-1, RU-NR-2, RU-CA-2, RU-CL-1, RU-NR-6, RU-NR- 4.5, RU-NS 5, RU- NR-5.5, RU-NR-4, RU-NS- 4, RU-DO-1, Cleanup/debris

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

RU-NR-9, Maintenance/recommend Riprap
RU-NR-8, RU-EM-5, RU-NR-10, RU-JE-1, Cleanup/debris

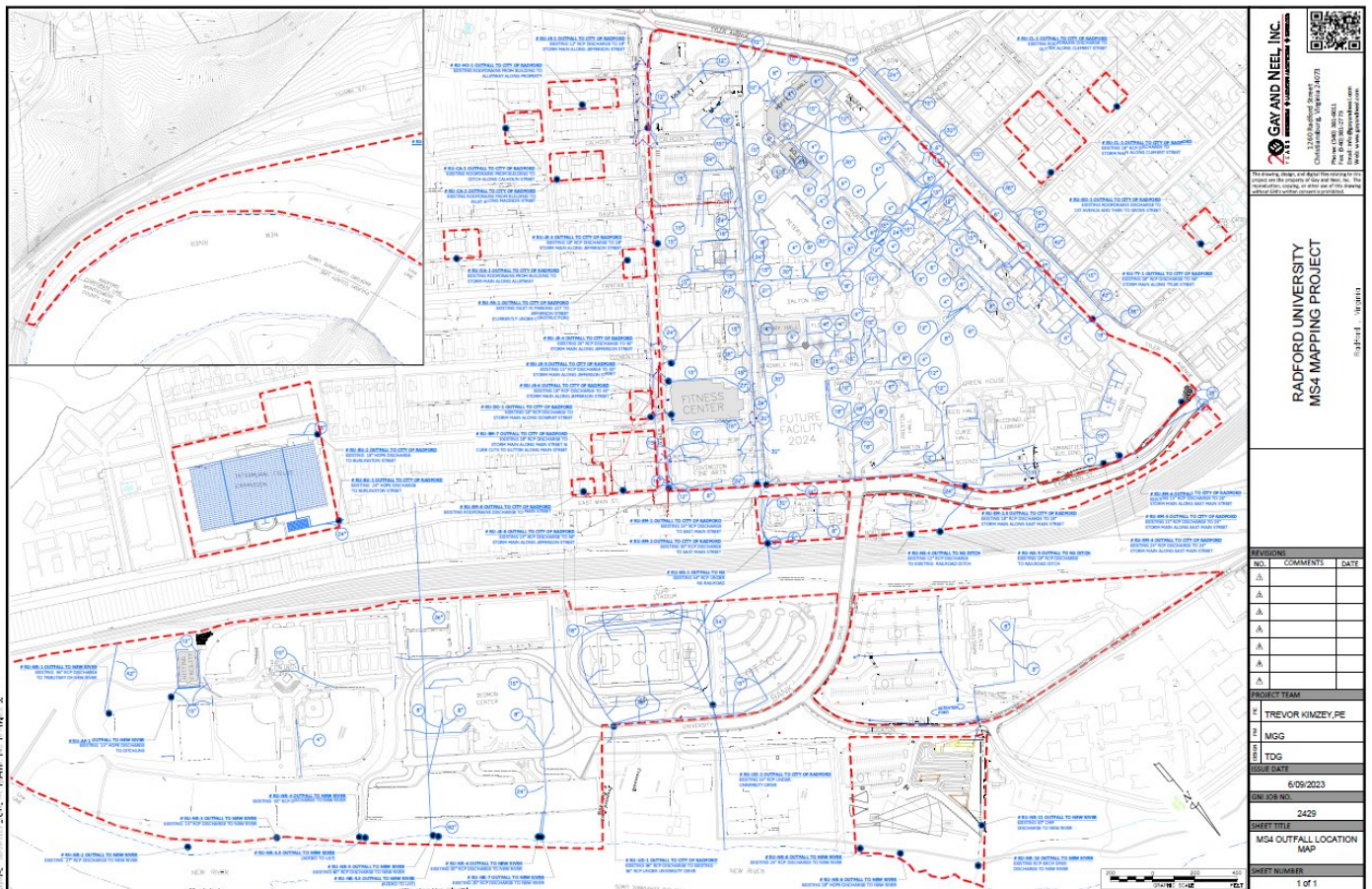
INVESTIGATION NEEDED (More information needed on outfall and drainage basin)

RU-CA-2

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, such as chemical or fuel storage areas should be investigated regularly to prevent illicit discharges.

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



2023 MS4 Outfall Location Map

Appendix C



Radford University Regulated Land-Disturbing Activities 1-Sep-22

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:

- Project name or project number
 - Project location (including nearest intersection, latitude and longitude, access point)
 - On-site Project Manager and contact information
 - Responsible Land Disturber (RLD) name and contact information
 - Project description
 - Area of disturbance for the project
 - Estimated disturbed acreage for individual projects must be reported in the following manner:
 - Linear Projects – beginning and ending coordinates, or
 - Site Development – central to polygon or point coordinates
- Note: Coordinates may be reported by UTM (x, y, zone, and datum) or state plane (x, y, zone, and datum).
- Project start and finish date
 - Any variances/exemptions/waivers associated with this project



Project Name	Location	Project Manager Contact Information	RLD Contact Information	Project Description	Estimated Area	Estimated Start Date	Estimated Completion Date	Comments
Trail Connector	River Campus	Chris Shelton	N/A	Trail connecting to existing pedestrian walking trail	ES&C/SWM - less than 10,000 sq. Ft.	May-22	Jun-22	
Draper Bus Pull Off	Main Campus	Chris Shelton	N/A	Create bus pull off along Tyler Ave at Draper Hall	ES&C/SWM - less than 10,000 sq. Ft.	Oct-22	Nov-22	Designed by Dewberry
615 Fairfax Parking Lot		Chris Shelton	N/A	Expanded existing parking lot F	ES&C/SWM - less than 10,000 sq. Ft.	Sep-22	Oct-22	
The Artis Center	Main Campus	Guy Rhodes grhodes2@radford.edu (540) 831-7756	TBD	New capital project and associated sitework	ES&C/SWM - 4.66 acres	Jun-22	Sep-24	Design by DAA ESC/SWM Plans and SWPPP by DAA Plan Review and Inspections by Foresight

The most recent version of the Annual Standards and Specifications for Erosion and Sediment Control can be found on the Radford University MS4 web page along with other Stormwater Management Documents.

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

Upcoming stormwater pollution prevention events can be found at:

<https://www.radford.edu/content/sustainability/home/initiatives/stormmanage.html>

Appendix D

Post-Construction Stormwater Management

EXECUTIVE SUMMARY

Foresight Design Services investigated the initial 11 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. The 2021 report completed by FDS (formerly Gay and Neel, Inc.) 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, RU still has excessive growth around some of the existing BMPs; it is suggested that this excessive growth be better 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 has seen 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 similar concerns from the previous reports and the current inspections still show some 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. Typical mowing should be monthly or at least twice a year. This will allow for better access to the facility and inspections. In addition, clean and remove debris quarterly to allow for access at risers and other facility features.

See example schedule below for typical mowing and debris removal:

Detention Pond Inspection and Maintenance Schedule				
Task	Frequency*	Inspection Date and Notes	Maintenance Notes	Maintenance Date and Notes
Mowing	Monthly. Inspect to determine if monthly mowing will be sufficient		Monthly mowing will prevent the establishment of woody plants that may damage the embankments.	
Clean and remove debris from inlet and outlet structures	Quarterly		As needed. Inspect orifice and outlet pipe. Check for water flow through orifice if ponded water exists above orifice height.	
Repair undercut or eroded areas	Annually		As needed.	
Monitor sediment accumulation in forebay(s) and detention area	Annually		As needed, expected 5-7 Year activity	
Inspect inlets, low flow channels and overflow weir(s)	Quarterly		As needed	
*Specific site conditions may be cause for modifications to the frequency of inspections or maintenance.				
<u>Additional Comments:</u>				

The report in its entirety can be viewed on the Radford University MS4 website at:

https://www.radford.edu/content/dam/departments/administrative/Sustainability/2022_ms4/2022_07_06_2022_BMP_Inspection_Report.pdf

Appendix E

Pollution Prevention/Good Housekeeping

RADFORD UNIVERSITY

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:

- o Cleaning Supplies
- o Construction Wastes (debris, sludge, etc.)
- o Non-Residential Vehicle Wash
- o Paint
- o 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 the Pollution
- Location of the issue
- 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's NPDES Stormwater Program Website](#), or the [DEQ State of Virginia MS4 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/stormwater-management.html>