

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

VPDES GENERAL PERMIT NO. VAR040128

**Chesapeake Bay TMDL Implementation
Annual Status Report**

**for the reporting period
July 1, 2023 - June 30, 2024
Fiscal Year 2024**

**Department Of Juvenile Justice (DJJ)
Agency 777
Bon Air Facility**




September 30, 2024

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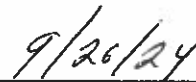
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1. SIGNED CERTIFICATION (PART IV K-2):

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.



Responsible Official Signature
Bradley Wilcox
DJJ Facilities Operations Director



Date

VAR040128
Permit Number

Department of Juvenile Justice - Consolidated MS4s at Bon Air
MS4 Name

2. INTRODUCTION

DJJ-Bon Air was originally issued an MS4 permit in 2014 by the Commonwealth of Virginia. This permit sets forth minimum requirements for the operation of DJJ’s storm sewer system, including storm water treatment systems, and is reissued every five years. DJJ’s current permit number is VAR040128, and the current permit cycle duration is from November 1, 2023, to October 31, 2028. The permit mandates that a Chesapeake Bay TMDL Implementation Annual Status Report be submitted to the Virginia DEQ by October 1st during each permit cycle. The annual status report details progress in meeting permit requirements for the Chesapeake Bay TMDL from July 1st to June 30th of the previous year. This CB TMDL Implementation Annual Status Report covers DJJ’s progress in meeting the permit requirements for the period from July 1, 2023, to June 30, 2024.

3. ANNUAL REPORTING REQUIREMENTS (PART I D.)

In Part I section D of the MS4 general permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

Part I D. Annual Reporting Requirements.

6. *For the purposes of this permit, the MS4 program plan, annual reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports shall be maintained as separate documents and submitted to the department as required by this permit as separate documents.*

Response: Understood! The MS4 program plan, annual reports, Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports are maintained and submitted to the department as separate documents.

4. PART II – TMDL SPECIAL CONDITIONS

A. CHESAPEAKE BAY TMDL SPECIAL CONDITION

As per Part I D. 6. (stated above) of the MS4 general permit, the Chesapeake Bay TMDL Implementation Annual Status Report must be maintained as a separate document from the Annual Report and submitted to the department independently. This CB TMDL Implementation Annual Status Report is for the reporting period from July 1, 2023, to June 30, 2024.

In Part II A. 14. of the MS4 general permit, the permit lists specific items to be addressed in the Chesapeake Bay TMDL Implementation Annual Status Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

14. *Chesapeake Bay TMDL implementation annual status report.*

a. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall submit a Chesapeake Bay TMDL implementation annual status report in a method (i.e., how the permittee must submit) and

format (i.e., how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.

Response: Acknowledged. DJJ Bon Air submits MS4 Chesapeake Bay TMDL implementation annual status reports to DEQ no later than October 1 of each year in a method and format acceptable to DEQ and in accordance with the general permit requirements. This annual status report specifically covers the period from July 1, 2023, to June 30, 2024.

b. Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

Response: Acknowledged. DJJ Bon Air submits all MS4-related forms and reports, including Chesapeake Bay TMDL implementation annual status reports, to DEQ electronically.

c. The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL action plan received and how the permittee responded.

Response: Acknowledged! DJJ will incorporate a summary of any public comments received on Chesapeake Bay TMDL action plan and how DJJ responded in the next reporting period.

d. Each Chesapeake Bay TMDL implementation annual status report shall include the following information:

(1) A list of Chesapeake Bay TMDL action plan BMPs, not including annual practices, implemented prior to the reporting period that includes the following information for reported BMP;

(a) The number of BMPs for each BMP type;

(b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported

Chesapeake Bay TMDL action plan BMPs inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

Response: A list of Chesapeake Bay TMDL Action Plan BMPs implemented before the reporting period, along with the BMP type and the estimated reduction of pollutants of concern achieved by each BMP type, is provided below. These BMPs are also listed in DJJ’s Chesapeake Bay TMDL action plan. DJJ has electronically reported these BMPs using the DEQ BMP Warehouse.

BMP	Date Implemented	Nitrogen Removal Reduction (lb/yr)	Phosphorus Removal Reduction (lb/yr)
Land Conversion to Forest	2018	11	1.08
Manufactured Treatment Manhole	2020	24	1.82
	Total	35	2.90

(2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period:

(a) The BMP type and a description of the location for each BMP;

(b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.

Response: There were no Chesapeake Bay TMDL action plan BMPs implemented during the reporting period.

e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired.

Response: No credits were acquired during the reporting period to meet the required reductions in Part II A.3, A.4, or A.5.

f. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented.

Response: Acknowledge! No annual practices were applied during the reporting period.

g. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen and total phosphorus.

Response: DJJ already achieved compliance with cumulative reductions for total nitrogen. DJJ has a phosphorus deficit of 3.13 lbs./yr. CB Action Plan will be revised

within one year of third cycle permit’s effective date to consider redevelopment projects.

Table 3 a: Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven, and Creek Basins							
		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr)	Existing Developed Lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)	Load (lbs/yr)	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction required by 10/31/2028	Sum of 100% cumulative reduction (lb/yr)
Nitrogen	Regulated Urban Impervious	9.39	17.21	162	9%	15	28
	Regulated Urban Pervious	6.99	32.68	228	6%	14	
Phosphorus	Regulated Urban Impervious	1.76	17.21	30	16%	4.85	6.03
	Regulated Urban Pervious	0.5	32.68	16	7.25%	1.18	

BMP	Date Implemented	Nitrogen Removal Reduction (lb/yr)	Phosphorus Removal Reduction (lb/yr)
Land Conversion to Forest	2018	11	1.08
Manufactured Treatment Manhole	2020	24	1.82
	Total	35	2.90

h. Any revisions made to the Chesapeake Bay TMDL action plan.

Response: The Chesapeake Bay TMDL Action Plan was not revised; however, a draft Phase III CB TMDL Action Plan was prepared along with the registration statement for permit renewal, which came into effect on 11/1/2023. This draft action plan will be finalized during the next reporting period.

i. A list of BMPs that are planned to be implemented during the next reporting period.

Response: None. There are no BMPs planned for implementation during the next reporting period. DJJ will update its Chesapeake Bay TMDL Action Plan during this time. We will assess whether we meet the required 100% reduction target. If not, we will develop a plan to implement BMPs to meet the nitrogen and phosphorus reduction requirements. This will be reported in the next reporting period.

15. *Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, that are located in the expanded 2020 census urban areas with a population of at least 50,000, and within the permittee's MS4 service area, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.), if the following conditions apply:*

a. The activity disturbed one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover. The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent nitrogen pollutant load for new sources meeting the requirements of this condition.

Response: This is not applicable to DJJ because:

- **DJJ's MS4 service area did not change between the 2010 and 2020 censuses.**
- **No project was designed in accordance with Part II.C.**

16. *Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that are located in the expanded 2020 census urban areas with a population of least 50,000, and within the permittee's MS4 service area, and began construction after July 1, 2014, if the following conditions apply:*

a. The activity disturbs one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover. The permittee shall utilize Table 4 of Part II A 6 to develop the equivalent nitrogen pollutant load for grandfathered sources meeting the requirements of this condition.

Response: There are no grandfathered projects within DJJ's MS4 service area after July 1, 2014; therefore, this requirement is not applicable to DJJ.

5. SIGNATORY REQUIREMENTS

In Part IV section K. 2. of the MS4 permit, the permit lists specific items to be addressed in the annual report and Chesapeake Bay TMDL annual status report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

Part IV K. 2.

2. Reports and other information. All reports required by state permits, including annual reports, and other information requested by the department shall be signed by a person described in Part IV K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a) The authorization is made in writing by a person described in Part IV K 1;*
- b) 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 operator. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and*
- c) The signed and dated written authorization is submitted to the department.*

Response: This report has been signed by Mr. Bradley Wilcox, DJJ Facilities Operations Director. See Section 1 on page 1 of this report.