



REGION 3

PHILADELPHIA, PA 19103

**CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT**

for

Name of Facility: Dominion – Materials and Metering Services Center

Facility Address: 4307 Castlewood Road, Richmond, VA 23234

Mailing Address: 4307 Castlewood Road, Richmond, VA 23234

Report Prepared on: 1/09/2025 By: _____,
Date *Signature*
Environmental Scientist (ERG)

Report Final as of: _____ By: _____, EPA
Date *Signature*

General Information

Type of Inspection:	Industrial Stormwater
Owner:	Virginia Electric and Power Company DBA Dominion Energy Virginia
Operator:	Dominion Energy Virginia
Permittee:	Dominion Energy Virginia
NPDES Permit No:	VA0087734
NPDES Permit Effective Date:	November 1, 2020 (modified October 24, 2023)
NPDES Permit Expiration Date:	October 31, 2025
Receiving Water and/or MS4:	Grindall Creek, James River Basin
Latitude and Longitude:	37.46726, -77.44613

On-Site Facility Inspection Overview

On November 19, 2024, a contractor for the U.S. Environmental Protection Agency (EPA) Region 3, ERG (hereinafter, referred to as the EPA Inspector) conducted an industrial stormwater inspection at Dominion – Materials & Metering Services Center (hereinafter, Facility) in Richmond, Virginia. Dominion Energy Virginia is the Permittee and the Facility owner and operator. Two representatives from the Virginia Department of Environmental Quality (DEQ) also attended the inspection.

Approximate Entry Time: 1:15 PM (EST) **Approximate Exit Time:** 3:45 PM (EST)

DSB ID: ECAD-6115

TABLE OF CONTENTS

	Page
I. INTRODUCTION.....	3
II. INSPECTION PROCESS	3
Inspection Opening Conference	3
Facility Inspection.....	4
Summary of Observations.....	7
Closing Conference.....	7

Appendix A: National Pollutant Discharge Elimination System Permit No. VA0087734

Appendix B: Photograph Log

Appendix C: Exhibit Log

Exhibit 1 – Facility SWPPP, dated October 2024

Exhibit 2 – Facility SWPPP Site Map, dated October 17, 2024

I. INTRODUCTION

On November 19, 2024, a contractor for EPA Region 3, ERG (hereinafter, referred to as the EPA Inspector) conducted an industrial stormwater inspection at Dominion – Materials and Metering Service Center (hereinafter, Facility) in Richmond, VA. Dominion Energy Virginia is the Permittee and the Facility owner and operator. Two representatives from the Virginia Department of Environmental Quality (DEQ) attended the inspection. The purpose of the inspection was to observe compliance with the Clean Water Act (CWA) and to verify compliance with the Facility’s DEQ National Pollutant Discharge Elimination System (NPDES) Permit No. VA0087734 (hereinafter, the “Permit”) and applicable State and Federal regulations. A copy of the Permit, which authorizes the Facility to discharge stormwater from Outfalls 001 and 003 to Grindall Creek in the James River Basin, is included as [Appendix A](#).

The Facility is located on an approximate 31-acre property, the majority of which is impervious, comprising buildings, asphalt, and concrete. The Facility primarily consists of equipment laydown areas for transformers, transformer oil storage areas, a meter repair shop, a warehouse, and a building materials shed.

Stormwater from the Facility flows to storm drain inlets throughout the Facility and is discharged to Grindell Creek via Outfalls 001 and 003 on the southern perimeter of the Facility. Stormwater in the northeast corner of the Facility drains to Outfall 002, which Virginia DEQ removed from the Permit in October 2023 due to the absence of industrial activity in the outfall drainage area. Outfall 002 discharges to the City of Richmond municipal separate storm sewer system (MS4).

At the time of the inspection, the southern portion of the Facility was under construction to repave surfaces, to reduce sheet flow to Grindall Creek, and to install stormwater conveyances and treatment systems. The construction activity was occurring in the drainage areas for Outfalls 001 and 003. The Facility was also conducting stream restoration activities along Grindall Creek. The construction activity started in May 2023 and was being conducted under a construction general permit issued by Virginia DEQ (NPDES Permit No. VAR105090).

Photographs taken during the inspection are included in [Appendix B](#) (Photograph Log) and documents supporting observations in this report are included in [Appendix C](#) (Exhibit Log).

II. INSPECTION PROCESS

Inspection Opening Conference

The EPA Inspector arrived at the Facility at approximately 1:15 PM (EST) for the inspection. Mr. Stephen Clark of ERG displayed his CWA inspector credentials to the Facility representatives upon entry and explained the primary purpose of the CWA inspection was to evaluate the Facility’s compliance relevant to the Permit requirements. The EPA Inspector explained that any information that the Facility deemed to be confidential business information (“CBI”) should be identified during the inspection and it would be handled as CBI according to EPA’s CBI procedures. Table 1 lists the individuals that participated in the inspection.

Table 1: Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Region III Inspectors and Contractors			
Stephen Clark, Inspector	ERG	720-789-8046	Stephen.clark@erg.com
Facility Representatives			
Wendy Bailey, Sr. Environmental Compliance Coordinator	Dominion	804-517-7869	Wendy.J.Bailey@dominionenergy.com
Beverly Wood, Environmental Manager	Dominion	--	--
Virginia DEQ			
Heather Weimer, Water Compliance Technical Reviewer	Virginia DEQ	804-337-9856	heather.weimer@deq.virginia.gov
Megan Mayfield, Director Office of Water Permitting	Virginia DEQ	804-914-3729	megan.mayfield@deq.virginia.gov

Weather and Precipitation

At the time of the inspection, the weather was mostly sunny with a maximum temperature of approximately 70 degrees Fahrenheit; no precipitation was experienced during the inspection. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the inspection and 5 days prior are provided in the table below.

Table 1. Precipitation Preceding Inspection¹

Station Name	Date	Precipitation Amount (inches) ²
RICHMOND INTERNATIONAL AIRPORT, VA US USW00013740	11/14/2024	0.92
RICHMOND INTERNATIONAL AIRPORT, VA US USW00013740	11/15/2024	0.38
RICHMOND INTERNATIONAL AIRPORT, VA US USW00013740	11/16/2024	0.00
RICHMOND INTERNATIONAL AIRPORT, VA US USW00013740	11/17/2024	0.00
RICHMOND INTERNATIONAL AIRPORT, VA US USW00013740	11/18/2024	0.00
RICHMOND INTERNATIONAL AIRPORT, VA US USW00013740	11/19/2024	0.03

Facility Inspection

As part of the inspection, the EPA Inspector visually observed Facility conditions in the presence of the Facility representatives (refer to Appendix B, Photographs 1 through 14).

The Facility representatives provided the EPA Inspector with an updated Facility Stormwater Pollution Prevention Plan (SWPPP) site map, dated October 17, 2024, prior to the inspection that included revisions to reflect ongoing construction activity at the Facility. The Facility had made various hand-written notes on the site map to reflect ongoing changes, such as paving activities (refer to Figure 1 below; refer to Appendix C, Exhibits 1 and 2 for the SWPPP and SWPPP Site Map, respectively).

¹ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

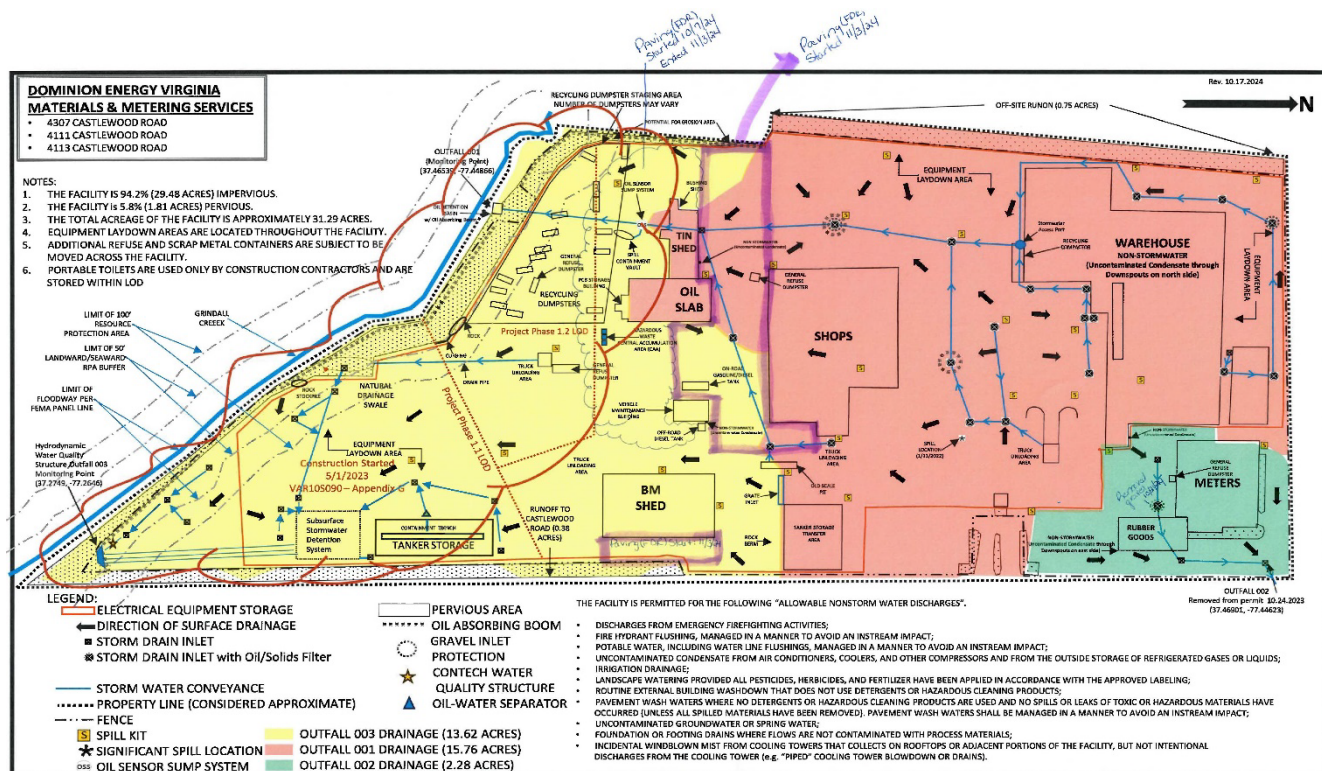


Figure 1. Facility SWPPP Site Map, dated October 17, 2024

The Facility inspection began in the drainage area for Outfall 002, which was removed from the Permit in October 2023. The EPA Inspector did not observe industrial activity in the drainage area and briefly observed operations conducted in the rubber goods building, which is used for testing and cleaning rubber materials such as personal protective equipment.

The EPA Inspector then observed the equipment laydown areas in the northern and western portions of the Facility (refer to [Appendix B, Photograph 1](#)). Filter socks and gravel were installed at various storm drain inlets (refer to [appendix B, Photographs 2–4](#)).

The EPA Inspector then observed the truck unloading area on the east side of the shops building (refer to [Appendix B, Photograph 5](#)). Some staining was present on the asphalt surface upgradient of a storm drain inlet; however, the staining did not reach the inlet. A drop inlet filter was installed at the storm drain inlet. According to the SWPPP site map, stormwater that enters this drain inlet flows to the oil sensor sump system prior to being discharged via Outfall 001.

After the truck unloading area, the EPA Inspector observed the tanker storage area and the building materials shed. The EPA Inspector inspected the contents of one of the spill kits at the building materials shed, which contained unused supplies such as absorbent mats (refer to [Appendix B, Photograph 6](#)). Prior to walking to Outfall 003, the EPA Inspector and Facility representatives then stopped at and discussed the subsurface stormwater detention system that was being installed in the Outfall 003 drainage area. The system was not yet online and will contain filters to treat stormwater prior to discharge.

The EPA Inspector observed Outfall 003 located in the southeast corner of the Facility (refer to [Appendix B, Photographs 7 and 8](#)). Typically, four pipes convey stormwater to a forebay upgradient of Grindall Creek. At the time of the inspection, one of the four pipes, which discharges stormwater runoff from inside the construction area, extended past the forebay to prohibit industrial stormwater discharges from

commingling with construction stormwater discharges prior to the Outfall 003 monitoring location. The Permittee monitors industrial discharges at the forebay outlet.

After Outfall 003, the EPA Inspector observed Grindall Creek stream restoration activities prior to observing Outfall 001 (refer to [Appendix B, Photographs 9 and 10](#)).

The EPA Inspector then observed various areas north of Outfall 001, such as the recycling dumpsters, tin shed, oil slab, PCB storage building, and the hazardous waste central accumulation area. The EPA Inspector observed sealed and labeled drums containing waste lamps near the tin shed ([Appendix B, Photographs 11 and 12](#)). The hazardous waste containers were locked and emergency information was posted on one of the containers (refer to [Appendix B, Photograph 13](#))

The EPA Inspector also stopped at and discussed the operations and maintenance of the oil sensor sump system with the Facility representatives (refer to [Appendix B, Photograph 14](#)). Facility staff inspect the oil sensor sump system quarterly. The system is equipped with a conductivity sensor and automatic valve actuator to divert stormwater runoff that contains oil to a spill containment vault. A detection of oil via the conductivity sensor triggers an alarm that notifies Facility staff. Facility staff inspect and monitor the spill containment vault when stormwater is being diverted to the vault.

The EPA Inspector observed the interior of the vehicle maintenance building before concluding the Facility inspection. The building has a floor sump, but the sump did not have a drain pipe.

Records Review

The EPA Inspector reviewed the following records pertaining to Permit requirements:

- EPA Enforcement and Compliance History Online (ECHO) effluent limit and benchmark exceedance reports during the period from November 2019 through November 2024;
- DMR, laboratory analytical results, and chain-of-custody forms for the following:
 - Quarterly monitoring of copper and zinc at Outfall 001; monitoring periods of July 1, 2024 to September 30, 2024 and April 1, 2024 to June 30, 2024
 - Semi-annual monitoring at Outfalls 001 and 003; monitoring period of January 1, 2024 to June 30, 2024;
- SWPPP, dated October 2024 (the document included a signed certification statement dated October 21, 2024);
- SWPPP site map, dated October 17, 2024;
- Routine Facility SWPPP Inspection Reports for October 2024, July 2024, and April 2024;
- Storm Water Quarterly Visual Examination Reports for 2024 and 2023;
- Operations and Maintenance Manual, dated October 2024;
- Annual Non-stormwater Discharge Evaluations for 2024 and 2023;
- Stormwater training records for August 2024 ;
- Outfall Sample Bench Sheets for Outfalls 001 and 003 for monitoring conducted on May 14, 2024 and November 14, 2024 (the bench sheets included documentation for pH meter calibration (including the pH buffer solution lot numbers and expiration dates);
- Corrective Actions Log that includes SWPPP corrective actions from 2022 to 2024; and
- Whole Effluent Toxicity (WET) testing analytical results for Outfall 001 for monitoring conducted in August 2023.

Summary of Observations

Following the records review and onsite inspection of the Facility, the EPA Inspector did not have any additional observations related to the Facility's Permit requirements. Site conditions observed during the inspection are described in the *Facility Inspection* section of this report and depicted in Appendix B – Photograph Log.

Closing Conference

After the Facility inspection, the EPA Inspector met with the Facility representatives for a closing conference and shared preliminary observations. The EPA Inspector reiterated to the Facility representatives that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by the EPA Inspector upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference, as a result of reviewing additional documentation following the inspection.

The inspection concluded at approximately 3:45 PM (EST).

Appendix A
NPDES Permit No. VA0087734



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0087734
Effective Date: November 1, 2020
Modified Date: October 24, 2023
Expiration Date: October 31, 2025

**AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM**

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit as set forth herein.

Owner: Virginia Electric and Power Company
DBA Dominion Energy Virginia
Facility Name: Dominion – Materials & Metering Services Center
City: Richmond
Facility Location: 4307 Castlewood Rd, Richmond, VA 23234

The owner is authorized to discharge to the following receiving stream:

Stream: Grindall Creek
River Basin: James River
River Subbasin: Lower James River
Section: 1a
Class: III
Special Standards: none

A handwritten signature in blue ink that reads "James B. Robb".

Deputy Regional Director, Piedmont Regional Office

October 24, 2023
Date

A. Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater from outfall number 001.
 - a. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS ¹	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^{1,3}	SAMPLE TYPE
001 Flow (MG)	NA	NA	NA	NL	1 per 6 Months	Estimate
002 pH (standard units)	NA	NA	6.0	9.0	1 per 6 Months	Grab
004 Total Suspended Solids (TSS) (mg/L)	NA	NA	NA	NL	1 per 6 Months	Grab
137 Hardness (mg/L)	NA	NA	NA	NL	1 per 6 Months	Grab
257 Total Petroleum Hydrocarbons (TPH) (mg/L) ^{2,4, 5}	15	NA	NA	20	1 per 6 Months	Grab
442 Copper, Dissolved (µg/L)	NA	NA	NA	NL	1 per 3 Months	Grab
448 Zinc, Dissolved (µg/L)	NA	NA	NA	NL	1 per 3 Months	Grab

NL: No Limitation, monitoring required

NA: Not Applicable

¹ If no discharge occurs during the monitoring period, then the Discharge Monitoring Form shall be submitted indicating "No Discharge."

² The limitations are expressed in two significant digits.

³ 1 per 6 Months monitoring period shall be defined as January 1st through June 30 to be reported on the DMR due no later than July 10th and July 1st through December 31st to be reported on the DMR due no later than January 10th of the following year. 1 per 3 Months monitoring periods shall be defined as January 1st through March 31st, April 1st through June 30th, July 1st through September 30th, and October 1st through December 31st - DMR due no later than April 10th for the first quarter, July 10th for the second quarter, October 10th for the third quarter and January 10th of the following year for the fourth quarter.

⁴ TPH is the sum of individual gasoline range organics and diesel range organics, or TPH-GRO and TPH-DRO, to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B and 8270D. If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

⁵ See Part I.B.3 for quantification levels and reporting instructions.

- b. Estimate the total volume discharged during the storm event.
- c. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event. A "measurable storm event" is defined as a storm event that results in an actual discharge from the site.
- d. See Part I Sections C.1, C.2, and C.3 for additional stormwater and WET testing monitoring requirements.
- e. To demonstrate compliance with Part I.A.1, samples shall be taken at Outfall 001.

A. Limitations and Monitoring Requirements

2. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater from Outfall number 002.
 - a. There shall be no discharge of stormwater associated with industrial activity or process water discharges from Outfall 002.

A. Limitations and Monitoring Requirements

3. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater from Outfall number 003.

a. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^{1, 2}	SAMPLE TYPE
199 Flow (MG)	NA	NA	NA	NL	1 per 6 Months	Estimate
002 pH (standard units)	NA	NA	NL	NL	1 per 6 Months	Grab
004 Total Suspended Solids (TSS) (mg/L) ⁴	NA	NA	NA	NL	1 per 6 Months	Grab
137 Hardness (mg/L)	NA	NA	NA	NL	1 per 6 Months	Grab
257 Total Petroleum Hydrocarbons (TPH) (mg/L) _{3, 4}	NA	NA	NA	NL	1 per 6 Months	Grab
012 Total Phosphorus (TP) (mg/L) ⁵	NA	NA	NA	NL	1 per 6 Months	Grab
068 Total Kjeldahl Nitrogen (TKN) (mg/L) ^{4, 5}	NA	NA	NA	NL	1 per 6 Months	Grab
389 Nitrate + Nitrite (mg/L) ⁵	NA	NA	NA	NL	1 per 6 Months	Grab
013 Total Nitrogen (mg/L) ^{5, 6}	NA	NA	NA	NL	1 per 6 Months	Calculated

NL: No Limitation, monitoring required

NA: Not Applicable

¹ If no discharge occurs during the monitoring period, then the Discharge Monitoring Form shall be submitted indicating "No Discharge."

² 1 per 6 Months monitoring period shall be defined as January 1st through June 30 to be reported on the DMR due no later than July 10th and July 1st through December 31st to be reported on the DMR due no later than January 10th of the following year.

³ TPH is the sum of individual gasoline range organics and diesel range organics, or TPH-GRO and TPH-DRO, to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B and 8270D. If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

⁴ See Part I.B.3 for quantification levels and reporting instructions.

⁵ 1 per 6 Months nutrient monitoring is only required for the first two years of the permit, resulting in a total of 4 samples.

⁶ Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

- b. Estimate the total volume discharged during the storm event.
- c. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event. A "measurable storm event" is defined as a storm event that results in an actual discharge from the site.
- d. See Parts I.B.8, I.B.9, I.C.2, and I.C.3 for additional stormwater monitoring requirements.
- e. To demonstrate compliance with Part I.A.3, samples shall be taken at Outfall 003.

B. Other Requirements and Special Conditions

1. **Operation and Maintenance Manual Requirement** The permittee shall maintain a current Operations and Maintenance (O & M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31. The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted Outfall locations and techniques to be employed in the collection, preservation, and analysis of stormwater samples taken for compliance with this permit;
 - b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
 - c. Discussion of Best Management Practices, if applicable;
 - d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.B.2 below that will prevent these materials from reaching State waters; List type and quantity of wastes, fluids, and pollutant (e.g. chemicals) stored in bulk at this facility;
 - e. Discussion of treatment works design, treatment works operation, routine preventive maintenance of units within the treatment works, critical spare parts inventory and record keeping;
 - f. A plan for the management and/or disposal of waste solids and residues;
 - g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
 - h. List of facility, local and state emergency contacts; and,
 - i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.
2. **Materials Handling/Storage** Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

3. Compliance Reporting

- a. The quantification levels (QL) shall be less than or equal to the following concentrations:

Effluent Characteristic	Quantification Level
Total Suspended Solids (TSS)	1.0 mg/L
Total Petroleum Hydrocarbons (TPH)	5.0 mg/L
TKN	0.50 mg/L
Dissolved Copper	1.6 µg/L
Dissolved Zinc	22 µg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit."

- b. Reporting:

Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

Daily Maximum – Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise, the numerical value shall be reported.

- c. **Significant Digits** - The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.
4. **Total Maximum Daily Load (TMDL) / Nutrient Reopener** This permit shall be modified or, alternatively, revoked and reissued:
- a. If any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;
 - b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade, or
 - c. To incorporate alternative nutrient limitations and/or monitoring requirements, should:
 - (1) the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
 - (2) a future water quality regulation or statute require new or alternative nutrient control.
5. **Facility Closure** If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Piedmont Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.
6. **Water Quality Criteria Reopener** Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
7. **Industrial Concept Engineering Report** Prior to constructing any wastewater treatment works, the permittee shall submit a Concept Engineering Report (CER) to the DEQ Piedmont Regional Office. DEQ written approval shall be secured prior to constructing any wastewater treatment works. The permittee shall construct the wastewater treatment works in accordance with the approved CER. No later than 14 days following completion of construction of any project for which a CER has been approved, written notification shall be submitted to the DEQ Piedmont Regional Office certifying that, based on an inspection of the project, construction was completed in accordance with the approved CER. The written notification shall be certified by a professional engineer licensed in the Commonwealth of Virginia or signed in accordance with Part II.K of this permit. The installed wastewater treatment works shall be operated to achieve design treatment and effluent concentrations. Approval by the Department of Environmental Quality does not relieve the owner of the responsibility for the correction of design

and/or operational deficiencies. Noncompliance with the CER shall be deemed a violation of this permit.

8. Low Level PCB Sampling

- a. The permittee shall monitor the effluent at Outfall 003 for Polychlorinated Biphenyls (PCBs). DEQ will use these data for development (or implementation) of a PCB TMDL for the Lower James River and to determine the need for a PCB Pollutant Minimization Plan (PMP). The permittee shall conduct the sampling and analysis in accordance with the requirements specified below.

At a minimum:

- (1.) The sampling protocol shall be submitted to the DEQ-Piedmont Regional Office (PRO) for review and approval prior to the first sample collection and no later than 60 days from the effective date of this permit modification.
- (2.) The permittee shall collect a minimum of two wet weather samples according to the PCB Point Source Guidance, Appendix C (Sample Collection Methods for Effluent and Storm Water). These samples shall be taken at Outfall 003 during the first two semi-annual monitoring periods following the approval of the sampling protocol and the commencement of discharge. Semi-annual monitoring periods are defined as January-June and July- December.
- (3.) Monitoring and analysis shall be conducted in accordance with EPA Method 1668 revisions A, B, C or other revisions issued by EPA prior to final promulgation, congener specific results as specified in the PCB Point Source Monitoring Guidance. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.
- (4.) The data shall be submitted to DEQ-Piedmont Regional Office no later than 30 days following receipt of the analytical results of the final sampling event sample(s). The submittal shall include the unadjusted and appropriately quantified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results should be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.
- (5.) If the results of this monitoring indicate actual or potential exceedance of the water quality criterion or the Waste Load Allocation specified in the approved TMDL, within 180 days of notification by DEQ, the permittee shall submit to DEQ-Piedmont Regional Office for review and approval a Pollutant Minimization Plan (PMP) designed to locate and reduce sources of PCBs in the stormwater. The PMP for Outfall 003 shall include at a minimum the items specified in Part I.B.8.b below and an annual progress report shall be submitted as stipulated in Part I.B.8.c.

- b. Pollutant Minimization Plan (PMP)

The permittee shall submit to DEQ-PRO for review and approval a Pollutant Minimization Plan (PMP) designed to investigate the location and potential reduction of sources of PCBs in the collection system. The PMP shall detail the practices and procedures which will be followed to investigate the location and potential reduction of sources of PCBs. This PMP shall include, but not necessarily be limited to, the following items, as appropriate:

- (1.) Provide a facility contact for the contents of the PMP and any activities associated with the PMP;
- (2.) Provide a proposed implementation schedule for minimization activities and prospective milestones;
- (3.) Proposal for actions to be taken for known or probable sources;

- (4.) Proposal for actions to be taken to find and control unknown sources;
- (5.) Summary of any previous minimization activities that have been performed in the past;
- (6.) Proposal for measuring, demonstrating, and reporting progress of implemented activities in order to meet the annual progress reporting requirements discussed in Part I.B.8.g below;
 - a. Alternative PCB test methods are acceptable provided analytical sensitivity is sufficient for detection and quantification.
 - b. The permittee may perform further monitoring of the final effluent to determine effectiveness of the reduction efforts and to reestablish a new baseline for PCBs in the final effluent.
- (7.) Estimate the PCB load reduction provided by treatment; and
- (8.) Provide information on continuing assessment of progress, which may include establishment of criteria to evaluate whether the location and potential reduction of PCB sources has been addressed, and whether a more routine follow-up awareness, education, and inspection approach is appropriate.
- (9.) Once approved, the plan shall be incorporated into the permit by reference and become an enforceable part of this permit.

c. Pollutant Minimization Plan (PMP) Annual Progress Report

An Annual Report shall be submitted to DEQ-PRO for all outfalls that require a PMP for review and approval by February 10th for the previous year's PMP activities. The Annual Report shall include, at a minimum:

- (1.) Summarize PMP activities and results of investigating the location and potential reduction of sources of PCBs during the past calendar year
- (2.) Address any revisions needed for the PMP for the coming year;
- (3.) Material and process modifications;
- (4.) Summarize measures taken to address and control known, probable and potential sources; and
- (5.) Discuss incremental and cumulative changes from baseline loading;
- (6.) PCB monitoring results and data summary.

The annual progress report shall present measurable progress by comparing the existing PCB loads to the baseline measurements and the TMDL WLA. The report shall also present adaptive management efforts used to achieve meaningful PCB reductions.

C.1 Stormwater Monitoring Requirements

The permittee shall conduct all stormwater monitoring in accordance with Part I.A.1, Part I.A.3, and Part I.C.2.a (Sample Type) of this permit.

a. Stormwater Management Evaluation

The Stormwater Pollution Prevention Plan (SWPPP), which is to be developed and maintained in accordance with Part I.C.4 below, shall have a goal of reducing pollutants discharged from all the regulated industrial activity stormwater outfalls.

(1.) Pollutant Specific Screening.

One goal of the SWPPP shall place emphasis on reducing, to the maximum extent practicable, the following pollutants in the outfall noted below.

<u>Outfall Number</u>	<u>Parameter</u>	<u>Screening Criteria⁽¹⁾</u>
001	Dissolved Copper	12 µg/L
001	Dissolved Zinc	120 µg/L

⁽¹⁾Screening Criteria are two significant figures

(2.) Whole Effluent Toxicity Testing

With the exception noted in Part I.C.1.a.(4.) below, the permittee shall conduct annual acute toxicity tests on the outfall noted in a. above using grab samples of the discharge from the stormwater outfall. These acute screening tests shall be 48-hour static tests using *Ceriodaphnia dubia* and *Pimephales promelas*, conducted in such a manner and at sufficient dilutions for calculation of a valid LC50. The tests shall be conducted on a calendar year basis with one copy of all results and all supporting information submitted with the annual report no later than February 10th of each year. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3. Additional technical assistance in developing the procedures for these tests will be provided by the Department of Environmental Quality (DEQ), if requested by the permittee. If any of the biological tests are invalidated, an additional test shall be conducted within thirty (30) days of notification. If there is no discharge during this 30-day period, a sample must be taken during the first qualifying discharge.

(3.) The permittee shall submit the following information with the results of the toxicity tests.

- (a.) The actual or estimated effluent flow at the time of the sampling.
- (b.) The time at which the discharge event began, the time at which the effluent was sampled, and the duration of the discharge event.

(4.) Waiver of Toxicity Screening

The permittee may request the department to waive the annual acute toxicity tests and reporting required by paragraph I.C.1.a.(2) above when the quarterly monitoring results for Dissolved Copper and Dissolved Zinc, as required by Part I.A.1 of this permit, for outfall 001 are below the screening criteria noted in C.1.a. above for four consecutive quarters. If quarterly monitoring results for Dissolved Copper and Dissolved Zinc at outfall 001 are detected at or above the screening criteria noted I.C.1.a.(1) after the waiver is granted, the permittee shall resume annual acute toxicity testing and reporting required by I.C.1.a.(2. and 3.) at the start of the calendar quarter following the date of sample collection. Testing and reporting requirements shall then continue in accordance with I.C.1.a.(2. and 3.) for the duration of the permit term.

(5.) The effectiveness of the SWPPP will be evaluated via the required monitoring for all parameters listed in Part I.A of this permit for the regulated stormwater outfalls, including the specific pollutants noted in a. above and the toxicity screening required by this special condition. Monitoring results that are above the screening criteria for the specific pollutants in a. above or, in the case of toxicity, result in an LC50 of less than 100% effluent, will justify the need to reexamine the SWPPP and any best management practices (BMPs) being utilized for the affected outfalls. In addition, the permittee shall amend the SWPPP whenever there is a change in the facility or its operation which materially increases the potential for activities to result in a discharge of significant amounts of pollutants.

No later than February 10 of each year, the permittee shall submit to the DEQ regional office Regional Office an annual report which includes the pollutant-specific and biological monitoring data from the outfalls included in this condition along with a summary of any steps taken to modify either the SWPPP or any BMPs based on the monitoring data.

b. Benchmark Concentrations.

Should the stormwater monitoring results for a given parameter exceed the benchmark concentration(s) below, the permittee shall implement corrective action(s) in accordance with Part I.C.2.h (Corrective Actions). Stormwater monitoring data submitted by the permittee that is above an established benchmark concentration does not constitute a violation of this permit.

<u>Outfall Number</u>	<u>Parameter</u>	<u>Benchmark</u>
001	TSS	100 mg/L

C.2 Stormwater Management Conditions

a. Sample Type.

For all stormwater monitoring required in Part I.A.1 and I.A.3, or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all samples (except snowmelt samples) shall be collected from the discharge resulting from a storm event that results in a discharge from the site (defined as a "measurable storm event"), providing the interval from the preceding measurable storm event is at least 72 hours.

The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring shall be performed at a time when a measurable discharge occurs at the site. For discharges from a stormwater management structure, the monitoring shall be performed at a time when a measurable discharge occurs from the structure.

The grab sample shall be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of the discharge, provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. This information shall be submitted in the department's electronic discharge monitoring report (e-DMR) system, and maintained with the Stormwater Pollution Prevention Plan (SWPPP). If the sampled discharge commingles with process or nonprocess water, the permittee shall attempt to sample the stormwater discharge before it mixes with the nonstormwater.

b. Recording of Results.

For each storm event monitored under Part I.A.1 and I.A.3 of this permit, the permittee shall identify:

- (1.) The date and duration (in hours) of the storm events sampled;
- (2.) The rainfall total (in inches) of the storm event that generated the sampled runoff; and
- (3.) The duration between the storm event sampled and the end of the previous measurable storm event.
- (4.) For snowmelt or controlled discharges from a stormwater management structure, the permittee shall identify the date of the sampling event.

Documentation explaining a facility's inability to obtain a sample (including dates and times the outfalls were viewed or sampling was attempted), of no rain event, or of deviation from the "measurable" storm event requirements shall be maintained with the SWPPP. Acceptable documentation includes National Climatic Data Center (NCDC) weather station data, local weather station data, facility rainfall logs, and other appropriate supporting data.

c. Representative Outfalls (Substantially Identical Discharges).

If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, frequency of discharges, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall or outfalls. The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee shall include the following in the SWPPP:

- (1.) The locations of the outfalls;
- (2.) An evaluation, including available monitoring data, indicating the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data where available; and
- (3.) An estimate of the size of each outfall's drainage area in acres.

d. Quarterly Visual Examination of Stormwater Quality.

The permittee shall perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below in Part I.C.2.e. The examinations shall be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours, where practicable, and when considerations for safety and feasibility allow. If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation shall be signed and certified in accordance with Part II.K (Signatory Requirements) of this permit.

- (1.) Samples shall be collected in accordance with Part I.C.2.a. Sample examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The visual examination of the sample shall be conducted in a well-lit area. No analytical tests are required to be performed on the samples.
- (2.) The visual examination reports shall be maintained on-site with the SWPPP. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.
- (3.) If the facility has two or more outfalls that discharge substantially identical effluents, the permittee may conduct visual monitoring in accordance with Part I.C.2.c (Stormwater Management Conditions – Representative Outfalls) of the permit.
- (4.) When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee shall document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such things as local flooding, high winds, electrical storms, or situations that otherwise make sampling impracticable, such as drought or extended frozen conditions.

e. Allowable Non-Stormwater Discharges.

- (1.) The following non-stormwater discharges are authorized by this permit:
 - (a.) Discharges from emergency firefighting activities;
 - (b.) Fire hydrant flushings, managed in a manner to avoid an instream impact;
 - (c.) Potable water, including water line flushings, managed in a manner to avoid an instream impact;
 - (d.) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
 - (e.) Irrigation drainage;
 - (f.) Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling;
 - (g.) Routine external building washdown that does not use detergents or hazardous cleaning products;
 - (h.) Pavement wash waters where no detergents or hazardous cleaning products are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed). Pavement wash waters shall be managed in a manner to avoid an instream impact;
 - (i.) Uncontaminated groundwater or spring water;
 - (j.) Foundation or footing drains where flows are not contaminated with process materials; and
 - (k.) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped"

cooling tower blowdown or drains).

- (2.) All other non-stormwater discharges not specifically identified above or in Part I.A of this permit are not authorized and shall either be eliminated or covered under a separate VPDES permit.

f. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities.

The discharge of hazardous substances or oil in the stormwater discharges from the facility shall be prevented or minimized in accordance with the SWPPP for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 or § 62.1-44.34:19 of the Code of Virginia.

Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period:

- (1.) The permittee is required to notify the Department in accordance with the requirements of Part II.G (Reports of Unauthorized Discharges) of this permit as soon as he has knowledge of the discharge;
- (2.) Where a release enters a MS4, the permittee shall also notify the owner of the MS4; and
- (3.) The SWPPP required by this permit shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the SWPPP shall be modified where appropriate.

g. Water Quality Protection.

The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards.

h. Corrective Actions.

- (1.) For Data Exceeding Benchmark Concentration Values. If the benchmark concentration result exceeds the benchmark concentration value for that parameter established in Part I.A.1 and Part I.C.1.b of this permit, the permittee shall review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP shall be completed within 60 days after an exceedance is discovered.

When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.C.4.b.6), implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Piedmont regional office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the exceedance is discovered. Where a construction compliance schedule is included in the SWPPP, the SWPPP shall include appropriate nonstructural and temporary controls to be implemented in the affected portions of the facility prior to completion of the permanent control measure. Any control measure modifications shall be documented and dated, and retained with the SWPPP, along with the amount of time taken to modify the applicable control measure or implement additional control measures.

- (2.) Natural Background Pollutant Levels. If the concentration of a pollutant exceeds a benchmark concentration, and the permittee determines that exceedance of the benchmark concentration is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

- (a.) The concentration of the benchmark concentration is less than or equal to the concentration of that pollutant in the natural background;
- (b.) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and
- (c.) The permittee notifies the DEQ Piedmont regional office on the DMR that the benchmark exceedances are attributable solely to natural background pollutant levels.

Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.

- (3.) Additional Corrective Actions. The permittee shall take corrective action whenever:
- (a.) Routine facility inspections, visual monitoring, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements;
 - (b.) There is any exceedance of an effluent limitation, Total Maximum Daily Load (TMDL) wasteload allocation, or a reduction required by a local ordinance established by a municipality to meet Chesapeake Bay TMDL requirements; or
 - (c.) DEQ determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

The permittee shall review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP shall be completed within 60 days following the discovery of the deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.C.4.b.6), implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the department. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the SWPPP shall include appropriate nonstructural and temporary controls to be implemented in the affected portion of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP. Any corrective actions taken shall be documented and retained with the SWPPP. Reports of corrective actions shall be signed in accordance with Part II K.

C.3 Discharges of Industrial Stormwater to Waters Subject to the Chesapeake Bay TMDL

- a. Discharges Through a Regulated MS4 to Waters Subject to the Chesapeake Bay TMDL
In addition to the requirements of this permit, any facility with industrial activity stormwater discharges through a regulated MS4 that is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL shall incorporate measures and controls into their SWPPP to comply with applicable local TMDL ordinance requirements.

- b. Expansion of Facilities that Discharge to Waters Subject to the Chesapeake Bay TMDL
Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010), states that the wasteloads from any expansion of an existing permitted facility discharging stormwater in the Chesapeake Bay watershed cannot exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the expanded industrial activity.
- (1.) For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after the effective date of this permit, the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the VPDES construction stormwater general permit regulation (9VAC25-880) is exempt from this requirement.
- (2.) The permittee may use the Virginia Stormwater Management Program (VSMP) water quality design criteria to meet the requirements of subdivision "a" of this subsection. Under this criteria, the Total Phosphorus load shall not exceed the greater of:
- (a.) the Total Phosphorus load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity; or
- (b.) 0.41 pounds per acre per year.
- Compliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the Board. Design specifications and pollutant removal efficiencies for specific BMPs may be found on the Virginia Stormwater BMP Clearinghouse website.
- (3.) The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the no net increase requirement.

C.4 Stormwater Pollution Prevention Plan (SWPPP)

A SWPPP for the facility was required to be developed and implemented under the previous permit. The existing SWPPP shall be reviewed and modified, as appropriate, to conform to the requirements of this section. Permittees shall implement the provisions of the SWPPP as a condition of this permit.

The SWPPP requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part I.C.4.b (Contents of the SWPPP). All plans incorporated by reference into the SWPPP become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP (Part I.C.4.b – Contents of the SWPPP), the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. Deadlines for SWPPP Preparation and Compliance.

- (1.) The facility shall update and implement any revisions to the SWPPP as expeditiously as practicable, but not later than 90 days from the effective date of this permit.
- (2.) Measures That Require Construction: In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this

permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portions(s) of the facility prior to completion of the permanent control measure.

b. Contents of the SWPPP.

The contents of the SWPPP shall comply with the requirements listed below. The SWPPP shall include, at a minimum, the following items:

- (1.) Pollution Prevention Team. The SWPPP shall identify the staff individuals by name or title who comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.
- (2.) Site Description. The SWPPP shall include the following:
 - (a.) A description of the industrial activities at the facility.
 - (b.) Site Map. A site map identifying the following:
 - (i) The boundaries of the property and the size of the property in acres;
 - (ii) The location and extent of significant structures and impervious surfaces;
 - (iii) Locations of all stormwater conveyances including ditches, pipes, swales and inlets and the directions of stormwater flow using arrows to indicate which direction stormwater will flow;
 - (iv) Locations of all stormwater control measures, including BMPs;
 - (v) Locations of all surface water bodies, including wetlands;
 - (vi) Locations of potential pollutant sources identified under Part I.C.4(b.)3 (Summary of Potential Pollutant Sources);
 - (vii) Locations where significant spills or leaks identified under Part I.C.4(b.)3 (Summary of Potential Pollutant Sources – Spills and Leaks) have occurred;
 - (viii) Locations of stormwater outfalls.
 1. An approximate outline of the area draining to each outfall;
 2. The drainage area of each outfall in acres;
 3. The longitude and latitude of each outfall;
 4. The location of any MS4 conveyance receiving discharge from the facility; and
 5. Each outfall shall be identified with a unique numerical identification code.
 - (ix) Location and description of all nonstormwater discharges;
 - (x) Location of any storage piles containing salt;
 - (xi) Locations and sources of run-on to the site from an adjacent property, if the run-on is suspected of containing significant quantities of pollutants; and
 - (xii) Locations of all stormwater monitoring points.
 - (c.) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a MS4, identify the MS4 operator and the receiving water to which the MS4 discharges.
- (3.) Summary of Potential Pollutant Sources. The SWPPP shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products and waste products. Material handling activities include the storage, loading and unloading, transportation, disposal or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:

- (a.) Activities in Area. A list of the industrial activities exposed to stormwater.
 - (b.) Pollutants. A list of the pollutants, pollutant constituents, or industrial chemicals associated with each industrial activity that could potentially be exposed to stormwater. The pollutant list shall include all significant materials handled, treated, stored or disposed that have been exposed to stormwater in the three years prior to the date the SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.
 - (c.) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The SWPPP shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance during the three-year period prior to the date the SWPPP was prepared or amended. The list shall be updated within 60 days of the incident if significant spills or leaks occur in exposed areas of the facility during the term of the permit.
 - (d.) Sampling Data. The SWPPP shall include a summary of existing stormwater discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.
- (4.) Stormwater Controls.
- (a.) Control measures shall be implemented for all the areas identified in Part I.C.4(b).3 (Summary of Potential Pollutant Sources) to prevent or control pollutants in stormwater discharges from the facility. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility. The SWPPP shall describe the type, location and implementation of all control measures for each area where industrial materials or activities are exposed to stormwater. Selection of control measures shall take into consideration:
 - (i.) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
 - (ii.) Control measures generally shall be used in combination with each other for the most effective water quality protection;
 - (iii.) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;
 - (iv.) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid groundwater contamination);
 - (v.) Flow attenuation by use of open vegetated swales and natural depressions can reduce instream impacts of erosive flows;
 - (vi.) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
 - (vii.) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
 - (b.) Non-numeric technology-based effluent limits. The permittee shall implement the following types of control measures to prevent and control pollutants in the stormwater discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges.
 - (i.) Good Housekeeping. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. The permittee shall perform the following good housekeeping measures to minimize pollutant discharges:
 1. The SWPPP shall include a schedule for regular pickup and disposal of waste

materials, along with routine inspections for leaks and conditions of drums, tanks and containers;

2. As feasible, the facility shall sweep or vacuum;
 3. Store materials in containers constructed of appropriate materials;
 4. Manage all waste containers to prevent a discharge of pollutants;
 5. Minimize the potential for waste, garbage, and floatable debris to be discharged by keeping areas exposed to stormwater free of such materials or by intercepting materials prior to discharge; and
 6. Facilities that handle pre-production plastic or plastic waste shall implement BMPs to eliminate stormwater discharges of plastics.
- (ii.) Eliminating and Minimizing Exposure. To the extent practicable, manufacturing, processing and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Unless infeasible, facilities shall implement the following:
1. Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from potential sources of pollutants;
 2. Locate materials, equipment, and activities so that potential leaks and spills are contained, or able to be contained, or diverted before discharge;
 3. Clean up spills and leaks immediately, upon discovery of the spills or leaks, using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
 4. Store leaking vehicles and equipment indoors or, if stored outdoors, use drip pans and adsorbents;
 5. Utilize appropriate spill or overflow protections equipment;
 6. Perform all vehicle maintenance or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also capture any overspray; and
 7. Drain fluids from equipment and vehicles that will be decommissioned, and for any equipment and vehicles that remain unused for extended periods of time, inspect at least monthly for leaks.
- (iii.) Preventive Maintenance. The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid situations that could result in leaks, spills and other releases of pollutants in stormwater discharge from the facility. This program is in addition to the specific control measure maintenance required under Part I.C.4.b.6 (Maintenance).
- (iv.) Spill Prevention and Response Procedures. The SWPPP shall describe the procedures that will be followed for preventing and responding to spills and leaks, including:
1. Preventive measures, such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
 2. Response procedures, including notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team;

3. Procedures for plainly labeling containers (e.g., "used oil," "spent solvents," "fertilizers and pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur; and
 4. Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.
- (v.) Salt Storage Piles or Piles Containing Salt. Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank or tanks, or within an above ground storage tank or tanks, or disposed of through a sanitary sewer (with the permission of the owner of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to surface waters.
- (vi.) Employee Training. The permittee shall implement a stormwater employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided at least annually for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measure operation and maintenance, etc. The SWPPP shall include a summary of any training performed.
- (vii.) Sediment and Erosion Control. The SWPPP shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and stabilization control measures to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.
- (viii.) Management of Runoff. The SWPPP shall describe the stormwater runoff management practices (i.e., permanent structural control measures) for the facility. These types of control measures shall be used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges from the site.
- Structural control measures may require a separate permit under § 404 of the Clean Water Act (CWA) and the Virginia Water Protection Permit Program Regulation (9VAC25-210) before installation begins.
- (ix.) Dust Suppression and Vehicle Tracking of Industrial Materials. The permittee shall implement control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials. Stormwater collected on-site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water, well water, and uncontaminated reuse water may also be used for this purpose. There shall be no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles.

(5.) Routine Facility Inspections.

Personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of control measures shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater, areas where spills or leaks have occurred in the past three years, discharge points, and control measures. At least one member of the pollution prevention team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the SWPPP based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of once per calendar quarter unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. Inspections shall be performed during operating hours. At least once each calendar year, the routine facility inspection shall be conducted during a period when a stormwater discharge is occurring.

The requirement for routine facility inspections is waived for facilities that have maintained an active Virginia Environmental Excellence Program (VEEP) E3/E4 status. This waiver does not apply to additional sector specific requirements unless specified in Part I.C.4.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but no later than 60 days following the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, and shall include at a minimum:

- a. The inspection date;
- b. The names of the inspectors;
- c. Weather information and a description of any discharges occurring at the time of the inspection;
- d. Any previously unidentified discharges of pollutants from the site;
- e. Any control measures needing maintenance or repairs;
- f. Any failed control measures that need replacement;
- g. Any incidents of noncompliance observed; and
- h. Any additional control measures needed to comply with the permit requirements.

(6.) Maintenance.

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all control measures, and shall include a description of the back-up practices that are in place should a runoff event occur while a control measure is off-line. The effectiveness of nonstructural control measures shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

All control measures identified in the SWPPP shall be maintained in effective operating condition and shall be observed at least annually when a stormwater discharge is occurring to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

If routine facility inspections required by Part I.C.4.b.5 (Routine Facility Inspections) identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of control measures, including the dates of regular

maintenance, dates of discovery of areas in need of repair or replacement, dates for repairs, dates that the control measures returned to full function, and the justification for any extended maintenance or repair schedules.

(7.) Non-Stormwater Discharges.

- (a.) Discharges of certain sources of non-stormwater are allowable discharges under this permit (Part I.C.2.e – Allowable Non-Stormwater Discharges). All other non-stormwater discharges are not authorized and shall be either eliminated or covered under this, or a separate VPDES permit.
- (b.) Annual outfall evaluation for unauthorized discharges.
 - (i.) The SWPPP shall include documentation that all stormwater outfalls associated with industrial activity have been evaluated annually for the presence of unauthorized discharges. The documentation shall include:
 - 1. The date of the evaluation;
 - 2. A description of the evaluation criteria used;
 - 3. A list of the outfalls or on-site drainage points that were directly observed during the evaluation;
 - 4. A description of the results of the evaluation for the presence of unauthorized discharges; and
 - 5. The actions taken to eliminate unauthorized discharges if any were identified.
 - (ii.) The permittee may request in writing to the Department that the facility be allowed to conduct annual outfall evaluations at 20% of the outfalls. If approved, the permittee shall evaluate at least 20% of the facility outfalls each year on a rotating basis such that all facility outfalls will be evaluated during the period of coverage under this permit.

(8.) Signature and SWPPP Review.

- (a.) Signature and Location. The SWPPP, including revisions to the SWPPP to document any corrective actions taken as required by Part I.C.2.h (Stormwater Management Conditions – Corrective Actions) shall be signed in accordance with Part II.K (Signatory Authority), dated, and retained on-site at the facility covered by this permit in accordance with Part I.C.2.h Stormwater Management Conditions – Corrective Actions). All other changes to the SWPPP, and other permit compliance documentation, shall be signed and dated by the person preparing the change or documentation.
- (b.) Availability. The permittee shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to the department, EPA, or the operator of a MS4 receiving discharges from the site at the time of an on-site inspection or upon request.
- (c.) Required Modifications. The permittee shall modify the SWPPP whenever necessary to address all corrective actions required by Part I.C.2.h (Stormwater Management Conditions- Corrective Actions). Changes to the SWPPP shall be made in accordance with the corrective action deadlines in Part I.C.2, and shall be signed and dated in accordance with Part II.K (Signatory Authority).

The Director may notify the permittee at any time that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a

later date is granted in writing by the Director, and shall submit a written certification to the Director that the requested changes have been made.

(9.) Maintaining an Updated SWPPP.

(a.) The permittee shall review and amend the SWPPP as appropriate whenever:

- (i.) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
- (ii.) Routine inspections or compliance evaluations determine that there are deficiencies in the control measures, including BMPs;
- (iii.) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
- (iv.) There is a spill, leak or other release at the facility;
- (v.) There is an unauthorized discharge from the facility; or
- (vi.) The department notifies the permittee that a TMDL has been developed and applies to the permitted facility, consistent with Part I.B.4

(b.) SWPPP modifications shall be made within 60 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified control measures (distinct from regular preventive maintenance of existing control measures described in Part I.C.4.b.6) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Director. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

(c.) If the SWPPP modification is based on a significant spill, leak, release, or unauthorized discharge, include a description and date of the incident, the circumstances leading to the incident, actions taken in response to the incident, and measures to prevent the recurrence of such releases. Unauthorized discharges are subject to the reporting requirements of Part II.G (Reports of Unauthorized Discharges) of this permit.

PART II - CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
 - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
 - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
 - c. Samples taken shall be analyzed by a laboratory certified under 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A.1.a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit by hard copy or by E-DMR not later than the 10th day of the month after the monitoring period, unless another reporting schedule is specified elsewhere in this permit. Monitoring results sent by hard copy shall be submitted to:

DEQ - Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part V.F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part V.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;

3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit. Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part V.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part V.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts V.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part V.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts V, G, H and I shall be made to the Department's Regional Office at pro.SSO-UD@deg.virginia.gov or (804) 572-5020. For telephone reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), follow the instructions on the voicemail to reach the appropriate staff. For emergencies, the Virginia Department of Emergency Management maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:
 - a. 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- 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 which 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 permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. 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.
2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part V.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 V.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 company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part V.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts V.K.1 or 2 shall make the following 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."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but

not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part V.U), and "upset" (Part V.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts V.U.2 and U.3.
2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part V.I.
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part V.U.2.
 - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part V.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part V.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part V.I.2; and
 - d. The permittee complied with any remedial measures required under

Part V.S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of Permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part V.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part V.Y.1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part V.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Appendix B Photograph Log



Photograph 1. DSCN0596.JPG View of the equipment laydown area in the northern portion of the Facility.



Photograph 2. DSCN0597.JPG View, facing northwest, of a storm drain inlet in the northwest corner of the Facility in the equipment laydown area.



Photograph 3. DSCN0598.JPG Close-up view of the storm drain inlet shown in Photograph 2.



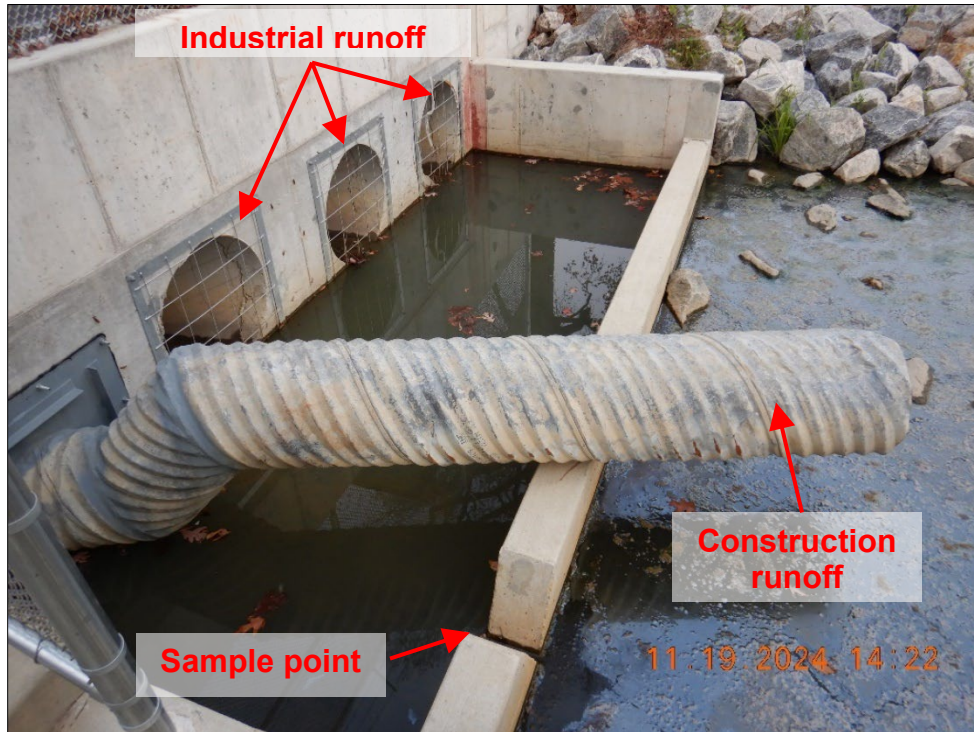
Photograph 4. DSCN0600.JPG View of a storm drain inlet in the equipment laydown area in the western portion of the Facility.



Photograph 5. DSCN0601.JPG View of the truck unloading area on the east side of the shops building. Stormwater that enters this inlet flows to the oil sensor sump system prior to being discharged via Outfall 001.



Photograph 6. DSCN0602.JPG View inside a spill kit at the building materials storage shed. The spill kit contained unused supplies such as absorbent mats.



Photograph 7. DSCN0604.JPG View of the forebay upstream of Outfall 003. The pipe that extends past the forebay conveys stormwater from construction activity. The pipe was extended to prevent construction stormwater discharges from commingling with industrial stormwater discharges prior to the Outfall 003 monitoring location.



Photograph 8. DSCN0605.JPG View of Outfall 003 to Grindall Creek.



Photograph 9. DSCN0607.JPG View of Outfall 001 to Grindall Creek. The outfall structures were located inside a fence associated with construction activity.



Photograph 10. DSCN0606.JPG Additional view of Outfall 001 to Grindall Creek.



Photograph 11. DSCN0608.JPG View of drums of waste lamps that were sealed and labeled.



Photograph 12. DSCN0609.JPG Close-up view of one of the drums shown in Photograph 11. The drum label states the drum contained waste lamps.



Photograph 13. DSCN0611.JPG View of the hazardous waste central accumulation area. The containers were locked, and an emergency information posting was affixed to one of the containers.



Photograph 14. DSCN0610.JPG View of the oil sensor sump system located upgradient of Outfall 001. The system is equipped with a conductivity sensor, automatic valve actuator, and spill containment vault to divert stormwater containing oil prior to discharge via Outfall 001.

Appendix C Exhibit Log

Exhibit 1
Facility SWPPP, dated October 2024

STORM WATER POLLUTION PREVENTION PLAN

FOR THE

Castlewood Road Facility

4307 Castlewood Road
Richmond, VA 23234

Prepared by:

Dominion Energy Environmental Services

Updated

April 2018

September 2018

September 2019

October 2020

May 2021

January 2022

August 2022

September 2022

August 2023

January 2024

May 2024

August 2024

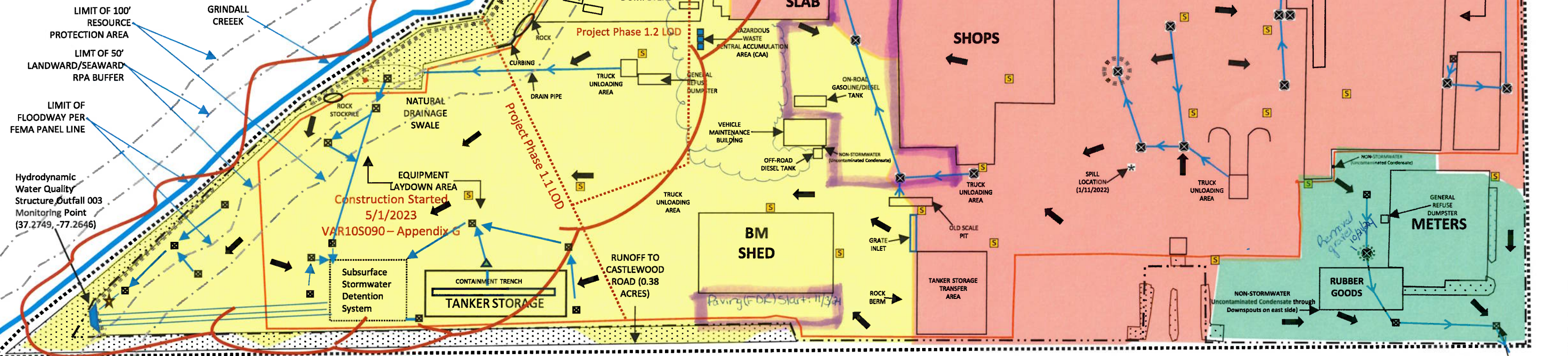
October 2024

DOMINION ENERGY VIRGINIA
MATERIALS & METERING SERVICES

- 4307 CASTLEWOOD ROAD
- 4111 CASTLEWOOD ROAD
- 4113 CASTLEWOOD ROAD

NOTES:

1. THE FACILITY IS 94.2% (29.48 ACRES) IMPERVIOUS.
2. THE FACILITY IS 5.8% (1.81 ACRES) PERVIOUS.
3. THE TOTAL ACREAGE OF THE FACILITY IS APPROXIMATELY 31.29 ACRES.
4. EQUIPMENT LAYDOWN AREAS ARE LOCATED THROUGHOUT THE FACILITY.
5. ADDITIONAL REFUSE AND SCRAP METAL CONTAINERS ARE SUBJECT TO BE MOVED ACROSS THE FACILITY.
6. PORTABLE TOILETS ARE USED ONLY BY CONSTRUCTION CONTRACTORS AND ARE STORED WITHIN LOD



LEGEND:

- ELECTRICAL EQUIPMENT STORAGE
- DIRECTION OF SURFACE DRAINAGE
- STORM DRAIN INLET
- ⊗ STORM DRAIN INLET with Oil/Solids Filter

- STORM WATER CONVEYANCE
- PROPERTY LINE (CONSIDERED APPROXIMATE)
- - - FENCE

- SPILL KIT
- ★ SIGNIFICANT SPILL LOCATION
- OIL SENSOR SUMP SYSTEM
- OUTFALL 003 DRAINAGE (13.62 ACRES)
- OUTFALL 001 DRAINAGE (15.76 ACRES)
- OUTFALL 002 DRAINAGE (2.28 ACRES)

- PERVIOUS AREA
- ===== OIL ABSORBING BOOM
- GRAVEL INLET PROTECTION
- ★ CONTECH WATER QUALITY STRUCTURE
- ▲ OIL-WATER SEPARATOR

THE FACILITY IS PERMITTED FOR THE FOLLOWING "ALLOWABLE NONSTORM WATER DISCHARGES".

- DISCHARGES FROM EMERGENCY FIREFIGHTING ACTIVITIES;
- FIRE HYDRANT FLUSHING, MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT;
- POTABLE WATER, INCLUDING WATER LINE FLUSHINGS, MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT;
- UNCONTAMINATED CONDENSATE FROM AIR CONDITIONERS, COOLERS, AND OTHER COMPRESSORS AND FROM THE OUTSIDE STORAGE OF REFRIGERATED GASES OR LIQUIDS;
- IRRIGATION DRAINAGE;
- LANDSCAPE WATERING PROVIDED ALL PESTICIDES, HERBICIDES, AND FERTILIZER HAVE BEEN APPLIED IN ACCORDANCE WITH THE APPROVED LABELING;
- ROUTINE EXTERNAL BUILDING WASHDOWN THAT DOES NOT USE DETERGENTS OR HAZARDOUS CLEANING PRODUCTS;
- PAVEMENT WASH WATERS WHERE NO DETERGENTS OR HAZARDOUS CLEANING PRODUCTS ARE USED AND NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED (UNLESS ALL SPILLED MATERIALS HAVE BEEN REMOVED). PAVEMENT WASH WATERS SHALL BE MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT;
- UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS;
- INCIDENTAL WINDBLOWN MIST FROM COOLING TOWERS THAT COLLECTS ON ROOFTOPS OR ADJACENT PORTIONS OF THE FACILITY, BUT NOT INTENTIONAL DISCHARGES FROM THE COOLING TOWER (e.g. "PIPED" COOLING TOWER BLOWDOWN OR DRAINS).

Revisions Log

Revision Date	Revised By	Purpose of Revision
01/09/2024	Wendy Bailey	Removed outfall 002, added outfall 003 and revised associated forms. Updated routine corrective action and BMPs utilized at the site. Added Revisions Log.
05/17/2024	Wendy Bailey	Added new Supervisor (R. Davis) contact information, page 2. Added Tanker Storage to “Potential Pollutant Sources”, page 10.
08/26/2024	Wendy Bailey	Conducted a review, added annual evaluation report, made minor edits and updated map.
10/17/2024	Beverly Wood	Reviewed the SWPPP and added reference to Facility Response Plan

Table of Contents

MANAGEMENT SWPPP CERTIFICATION	iv
GOALS AND OBJECTIVES, AND ACTION ITEMS	19
RECORD OF REVIEWS	20
1.0 FACILITY INFORMATION	1
1.1 Facility Description - General.....	1
1.2 Facility Owner and Operator	1
2.0 CONTACT AND TEAM MEMBERS	2
2.1 Pollution Prevention Team	2
2.2 Spill Prevention and Response.....	2
2.3 POTW City Notification Requirement.....	2
3.0 SAMPLING / MONITORING AND INSPECTION REQUIREMENTS	3
3.1 Summary of Outfalls	3
3.2 Non-Storm Water Discharges.....	4
3.2.1 Certification of Non-Storm Water Discharges	4
3.2.2 Allowable Non-Storm Water Discharges	4
3.3 Monitoring Requirements	4
3.4 Benchmark Monitoring.....	6
3.5 TMDL Monitoring.....	8
3.6 SWPPP Inspection Requirements	9
3.7 Storm Water Management Evaluation	9
4.0 POTENTIAL POLLUTANT SOURCES	100
4.1 Summary of Potential Pollutant Sources	10
4.2 EPRCA § 313 Potentials.....	11
4.3 Site Bulk Oil	11
4.4 Site Bulk Chemicals / Materials	11
4.5 Sediment & Erosion	12
4.5.1 Sediment & Erosion Control	12
4.5.2 Construction Erosion & Sediment Control.....	12
5.0 STORM WATER CONTROLS	13
5.1 Structural BMPs	13
5.2 Non-Structural BMPs	13
5.2.1 Employee Training	14
5.2.2 Good Housekeeping.....	14
5.2.3 Eliminating and Minimizing Exposure.....	14
5.2.4 Routine Facility Inspections	15
5.2.5 Spill Prevention and Response Procedures	15
5.3 Preventive Maintenance.....	15
5.4 Management of BMPs	15
5.5 Maintenance of BMPs.....	16

6.0	GOOD HOUSEKEEPING MEASURES	16
6.1	Fugitive Dust Emissions.....	16
6.2	Delivery Vehicles.....	16
6.3	Fuel Oil Unloading Areas.....	16
6.4	Chemical Loading/Unloading Areas.....	16
6.5	Miscellaneous Loading / Unloading Areas.....	16
6.6	Small Liquid Storage Tanks	16
6.7	Large Bulk Fuel Storage Tanks	16
6.8	Spill Reduction Measures.....	17
6.9	Oil Bearing Equipment in Switchyards.....	17
6.10	Residue Hauling Vehicles	17
6.11	Ash Loading Areas.....	17
6.12	Areas Adjacent to Disposal Ponds or Landfills.....	17
6.13	Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse Sites.....	17
6.14	Vehicle Maintenance Activities.....	17
6.15	Material Storage Areas	17
7.0	DOCUMENTATION	17
7.1	Spills and Leaks	17
7.2	Storm Water Monitoring Requirements.....	18
7.3	Site Inspections.....	18
7.4	Annual Evaluation	18
7.5	Goals & Objectives	19
7.6	Record of Review	20

Appendices

Appendix A	Topographic Site Map and Site Vicinity Map
Appendix B	Site Plan
Appendix C	Storm Water Drainage Areas
Appendix D	Annual Compliance Evaluation Summary Report
Appendix E	SWPPP Monitoring Forms
Appendix F	SWPPP Inspection Report Forms
Appendix G	Construction Sediment and Erosion Control
Appendix H	Non-Storm Water Certification
Appendix I	Corrective Action Log
Appendix J	Oil & Chemical Spill History
Appendix K	Annual Storm Water Monitoring Report

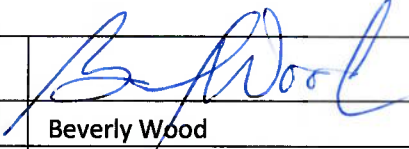
ABBREVIATIONS

AST	Aboveground Storage Tank
BMP	Best Management Practice
DEQ	Department of Environmental Quality
FRP	Facility Response Plan
LMS	Learning Management System
MGD	Millions of Gallons per Day
µg/L	Micrograms per Liter
mg/l	Milligrams per Liter
MS4	Municipal Separate Storm Sewer System
ODCP	Oil Discharge Contingency Plan
OP	Operating Procedures
POTW	Publicly Owned Treatment Works
SDS	Safety Data Sheets
SOP	Standard Operating Procedures
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
UST	Underground Storage Tank
VPDES	Virginia Pollutant Discharge Elimination System

CERTIFICATION

VA0087734 Part I, C.3.a: Deadlines for Plan Preparation and Compliance
VA0087734 Part I, C.3.e.: Signature and Plan Review

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.

Signature:		Date	10/21/24
Printed Name:	Beverly Wood		
Title:	Manager, BU Environmental Excellence		

1.0 FACILITY INFORMATION

1.1 Facility Description - General

VA0087734 Part I, C.3.b.(2): Site Description

At this facility: The Material & Metering Services facility has an oil storage building with approximately 21 steel tanks providing storage for used transformer oil awaiting reprocessing, reprocessed oil, new oil, water/oil mixtures, scrap oil and PCB contaminated oil. A transformer rework shop onsite rehabilitates used transformers. As part of the rework, transformer oil is removed and replaced with either new or reprocessed oil. There is also a Meter Repair shop that refurbishes old or broken electric meters and a Rubber Good's shop used for testing and cleaning all kinds of rubber goods. Please refer to Appendix C for the site drainage map.

1.2 Facility Owner and Operator

Facility Owner:	Virginia Electric and Power Co.	Operator Name:	Dominion Energy Virginia
Address:	120 Tredegar Street Richmond, VA 23219	Address:	120 Tredegar Street Richmond, VA 23219
Telephone:	(804) 217-2652	Telephone:	(804) 217-2652

2.0 Contacts & Team Members

2.1 Pollution Prevention Team

VA0087734, Part I, C.3.b.(1): Contents of the Plan

Name	Title	Contact Number
Mary Bess Bolin	Manager-Supply Chain Services	(804) 271-2859 (office), (804)-921-0655 (cell)
Beverly Wood	Manager-DEV Environmental Excellence, (1, 2, 3, 4, 5, 6)	(804) 229-0691 (cell)
Wendy Bailey	Senior Environmental Compliance Coordinator (2, 3, 4, 5, 6)	(804) 517-7869 (cell)
Michael Bailey	Engineer III (2, 3, 4, 5, 6)	(804) 840-5520 (cell)
Lauren Faulkner	Environmental Specialist III (4)	(804) 217-2652 (cell)
Ian Dilmore	Supervisor, Materials Recycling (2,3)	(804) 310-3942 (cell)
Mark Lineberry	Supervisor, Transportation (2,3)	(804) 393-9888 (cell)
Raymond Davis	Supervisor, Materials Recycling (2,3)	(804) 317-3976 (cell)
James Claiborne	Supervisor, Logistics (2,3)	(804) 314-6249 (cell)

(1) RESPONSIBLE PERSON FOR OVERALL COORDINATION AND DEVELOPMENT.

(2) RESPONSIBLE PERSON FOR IMPLEMENTATION, INSPECTIONS, TRAINING, AND REVISIONS TO PLAN.

(3) RESPONSIBLE PERSON FOR COORDINATION OF CORPORATE ENVIRONMENTAL AND FACILITY REQUIREMENTS.

(4) RESPONSIBLE PERSON FOR PERMIT INTERPRETATION.

(5) RESPONSIBLE PERSON FOR STORM WATER SAMPLING.

(6) RESPONSIBLE PERSON FOR TOXICITY SAMPLING.

2.2 SPILL PREVENTION AND RESPONSE

VA0087734 Part I, C.2.f.: Releases of Hazardous Substances or Oil in Excess of Reportable Quantities VA0087734, Part I C.3.b.(6)(b)(iv): Spill Prevention and Response Procedures

The Environmental Compliance Coordinator, or designee of the Pollution Prevention Team is on call 24 hours a day and 7 days a week. In the event of a spill and/or leak, site personnel are to contact the Environmental Compliance Coordinator or designee of the Pollution Prevention Team.

The Spill Prevention Control and Countermeasure (SPCC) plan, the Oil Discharge Contingency Plan (ODCP), and the Facility Response Plan (FRP) which are found under separate cover, reference the appropriate actions for oil leaks. The facility also has a site-specific procedure that addresses corrective action for spills. Facility personnel respond to small/incidental spills, whereas Dominion Energy approved spill response vendors are utilized for larger spills. The procedures for proper labeling of containers are addressed in the SPCC/ODCP/FRP, the Hazardous Materials Transportation Guide, the facility Hazard Communication Plan and other training programs referenced within the SWPPP.

2.3 Municipal Separate Stormwater Sewer System (MS4) Notification Requirement

The facility discharges non-industrial stormwater through Outfall 002 to the municipal storm sewer system (MS4) belonging to the City of Richmond that ultimately discharges to Grindall Creek. The drainage area for Outfall 002 includes the meter building and some outdoor storage. Outfall 002 was removed from the permit in October 2023.

(If a spill or a release enters the MS4, notify the City of Richmond MS4 (dial 311) (<https://rva.gov/public-utilities/stormwater-management>). Subsequently, the SWPPP will be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the SWPPP shall be modified where appropriate.

3.0 SAMPLING / MONITORING AND INSPECTION REQUIREMENTS

3.1 Summary of Outfalls

The Facility's general storm water VPDES Permit VA0087734 encompasses storm water Outfalls 001 and 003. Outfall 002 was removed from the permit during October 2023 and is no longer a permitted industrial outfall. The VPDES permits and historical sampling data are maintained under separate cover at the Facility in the VPDES permit files. A summary of the storm water test results collected during the current permit term are kept in the Facility's files. The non-storm water discharges are described in section 3.2.

Dominion Energy's Materials & Metering Service Center is contained on approximately 31.29 acres and approximately 94% of that is impervious. A large portion of the storm water discharges from the facility through Outfalls 001 and 003.

Outfall 001 Drainage Area: On the western side of the facility, storm water discharges via sheet flow from a drainage area consisting of approximately 16 acres. Generally, storm runoff associated with site areas north of the oil storage, vehicle maintenance, and covered storage buildings is directed to drop inlets that feed to the Spill Prevention Control and Countermeasure (SPCC) secondary containment system located west of the oil storage building. Under normal operating conditions, storm water entering the SPCC containment system is directed to Outfall 001, which discharges to Grindall Creek located southwest of the Tin Shed building. The containment system is equipped with an oil sensor and will automatically collect and contain spilled oil that reaches the storm drop inlets. A detailed description of the SPCC containment system and its operation is contained in the SPCC Plan. The drainage area for Outfall 001 consists of loading/unloading areas, shop buildings, warehouses, and indoor/outdoor storage facilities.

Discharge Drainage Area 003: This area has been under construction in phases since May 2023 in efforts to reduce the sheet flow to Grindall Creek and install stormwater conveyance systems to and through Outfall 003. Construction Stormwater Permit's LOD covers this entire drainage area until project is complete.

Storm drainage from south of the oil slab and tin shed, south of the transportation offices in the Shops building, and south of the tanker storage transfer area moves by stormwater

conveyance to the southeastern corner of the facility, through a Contech Jellyfish underground chamber system, and ultimately enters Grindall Creek.

3.2 Non-Storm Water Discharges

3.2.1 Certification of Non-Storm Water Discharges

A copy the latest Non-Storm Water certification from the dry weather visual observation is provided in Appendix H.

3.2.2 Allowable Non-Storm Water Discharges

VA0087734 Part I, C.2.e.: Allowable Non-Storm Water Discharges

The facility is permitted under the above referenced permit in Part I.C.2.e, for the following “Allowable Non-storm Water Discharges”. The outfalls most likely to receive the following discharges are identified below in italics. Please refer to Appendix C where the discharge is occurring and use the color-coded drainage legend for identifying the associated outfall.

- Discharge from emergency firefighting activities (*001 and 003*);
- Fire hydrant flushing, managed in a manner to avoid an instream impact (*001 and 003*);
- Potable water, including water line flushing, managed in a manner to avoid an instream impact (*001 and 003*);
- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids (*001 and 003*);
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- Routine external building washdown that does not use detergents or hazardous cleaning products (*001 and 003*);
- Pavement wash water where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled materials has been removed). Pavement wash waters shall be managed in a manner to avoid an instream impact (*001 and 003*);
- Uncontaminated groundwater or spring water (*001 and 003*);
- Foundation or footing drains where flows are not contaminated with process materials;
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharge from the cooling tower (e.g., “piped” cooling tower blowdown or drains).

All other non-stormwater discharges not specifically identified above or in part 1A of the permit are not authorized.

3.3 Monitoring Requirements

VA0087734 Part I, C.2.a.: Sample Type

VA0087734 Part I, C.2.d.: Quarterly Visual Examination of Storm Water Quality

QUALITATIVE MONITORING PARAMETERS OF VPDES PERMIT

Discharge Parameters	Monitoring Frequency	VPDES Permit # VA0087734 Monitoring Location
Color	Quarterly	Outfalls 001 and 003
Odor	Quarterly	Outfalls 001 and 003
Clarity	Quarterly	Outfalls 001 and 003
Floating Solids	Quarterly	Outfalls 001 and 003
Settled Solids	Quarterly	Outfalls 001 and 003
Suspended Solids	Quarterly	Outfalls 001 and 003
Foam	Quarterly	Outfalls 001 and 003
Oil Sheen	Quarterly	Outfalls 001 and 003
Other Obvious Indicators	Quarterly	Outfalls 001 and 003
Probable Sources of Any Observed Stormwater Contamination	Quarterly	Outfalls 001 and 003

NOTE: QUARTERLY MONITORING MONTHS ARE: JANUARY-MARCH, APRIL-JUNE, JULY-SEPTEMBER, OCTOBER-DECEMBER. MONITORING SHOULD BE TAKEN IN DAYLIGHT AND NORMAL WORKING HOURS AND WHEN SAFE TO DO SO

ANALYTICAL MONITORING PARAMETERS OF VPDES PERMIT

Discharge Characteristics	Monitoring Frequency	Monitoring Location
Flow (MG)	Semi-Annually	Outfalls 001 and 003
pH (standard units)	Semi-Annually	Outfalls 001 and 003
Copper, Dissolved (µg/L)	Quarterly	Outfall 001
Zinc, Dissolved (µg/L)	Quarterly	Outfall 001
Total Suspended Solids (TSS) (mg/L)	Semi-Annually	Outfalls 001 and 003
Total Petroleum Hydrocarbon (TPH) (mg/L)	Semi-Annually	Outfalls 001 and 003
Hardness	Semi-Annually	Outfalls 001 and 003
Total Phosphorus (TP)	Semi-Annually	Outfall 003
Total Kjeldahl Nitrogen (TKN)	Semi-Annually	Outfall 003
Nitrate + Nitrite	Semi-Annually	Outfall 003
Total Nitrogen	Semi-Annually	Outfall 003

TOXICITY MONITORING PARAMETERS OF VPDES PERMIT

Discharge Characteristics	Monitoring Frequency	VPDES Permit # Monitoring Location
<i>Ceriodaphnia dubia</i> and <i>Pimephales promelas</i>	Annual Acute	Outfall 001*

*Received a waiver on 6/21/2018 stating that annual testing is waived for outfall 001. Testing will resume if dissolved copper and zinc are detected at or above the comparative values in accordance with permit section C.1.a.(4.)

*NOTE: Outfall 001 had a dissolved zinc exceedance during the 2nd 2021 quarterly sampling event and will now have to resume the annual WET testing.

3.4 Benchmark Monitoring

VA0087734, Part I.C.2.h:	Corrective Actions (SWPPP Cross Reference #9)
VA0087734, Part I.C.b:	Benchmark Monitoring (SWPPP Cross Reference #32)

The facility is required to monitor the stormwater discharges for the pollutants of concern listed in the table below. Benchmark concentration values are not effluent limitations. Exceedance of a benchmark concentration does not constitute a violation of the permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided. (Section 3.7 of the SWPPP). In addition, exceedance of benchmark concentrations may indicate the requirement for more specific pollution prevention controls. Should the stormwater monitoring result for a given parameter exceed the benchmark concentration(s) below, the permittee shall implement corrective action(s) in accordance with Part I.C.2.h (Corrective Actions). Stormwater monitoring data submitted by the permittee that is above an established benchmark concentration does not constitute a violation of this permit.

Benchmark Monitoring Requirements Outfalls 001	
Pollutants of Concern	Benchmark Concentration
TSS (total suspended solids)	100 mg/L

The permit provides the following corrective actions related to benchmark monitoring results:

(1) Data exceeding benchmarks concentration values.

(a) If the benchmark concentration result exceeds the benchmark concentration value for that parameter established in Part I.A.1 and I.A.2 and Part I.C.1.b of the permit, the permittee shall review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP shall be completed within 60 days after an exceedance is discovered.

When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.C.4.b.6), implementation shall be completed before the next anticipated storm event, if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Piedmont regional office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the exceedance is discovered. Where a construction compliance schedule is included in the SWPPP, the SWPPP shall include appropriate nonstructural and temporary controls to be implemented in the affected portions of the facility prior to completion of the permanent control measure. Any control measure modifications shall be documented and dated, and retained with the SWPPP, along with the amount of time taken to modify the applicable control measure or implement additional control measures.

(b) Natural background pollutant levels. If the concentration of a pollutant exceeds a benchmark concentration value, and the facility determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

- (i) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;
- (ii) The facility documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and
- (iii) The facility notifies the DEQ Piedmont Regional Office on the DMR that the benchmark exceedances are attributable solely to natural background pollutant levels. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.

(2) Corrective actions. The facility shall take corrective action whenever:

- (a) Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state, or federal officials, or any other process, observation, or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or
- (b) There is any exceedance of an effluent limitation (including coal pile runoff), or TMDL waste load allocation; or
- (c) The DEQ Piedmont Regional Office determines, or the facility becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

The facility shall review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP shall be completed within 60 days following the discovery of the deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing best management practices (BMPs) described in Part I.C.4.b.(6), implementation shall be completed before the next anticipated storm event, if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the DEQ Piedmont Regional Office. In cases where construction is necessary to implement control measures, the facility shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

Any corrective actions taken shall be documented using the corrective action log provided in Appendix I and retained with the SWPPP. Reports of corrective actions shall be signed in accordance with Part II.K. of the VPDES permit.

3.5 SWPPP Inspection Requirements

VA0087734 Part I,C.4.b.(5): Routine Facility Inspections VA0087734 Part I, C.4.b.(6): Maintenance of BMPs
--

The above referenced permit condition requires the identified storm water exposed items identified in this plan to be inspected at least quarterly. Per the permit, conduct at least one inspection per quarter (**January – March**), (**April – June**), (**July – September**), and (**October – December**). Oil storage and handling equipment facilities are inspected on a weekly and/or monthly basis in accordance with the SPCC Plan. Chemical storage, material inventory, and containment inspections are performed on a quarterly basis in accordance with the SWPPP. See Appendix F for the blank inspection form. Records of these inspections are kept at facility's files and available upon request.

3.6 Additional Corrective Actions

VA0087734 Part I, C.2.h.3 & Part I, C.4.b.9: Additional Corrective Actions & Maintaining an Updated SWPPP

The permittee shall review the **SWPPP** and modify it as necessary to address any deficiencies. Revisions to the **SWPPP** shall be completed within 60 days following the discovery of the deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.C.4.b.6), implementation shall be completed before the next anticipated storm event, if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the department. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the **SWPPP** that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the **SWPPP**, the **SWPPP** shall include appropriate nonstructural and temporary controls to be implemented in the affected portion of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the **SWPPP**. Any corrective actions taken shall be documented and retained with the **SWPPP**. Reports of corrective actions shall be signed in accordance with part II K.

3.7 Storm Water Management Evaluation

VA0087734, Part I.C.1.a: Stormwater Management Conditions

The SWPPP shall have a goal of reducing pollutant discharges from all the regulated industrial activity stormwater outfalls.

Pollutant Specific Screening

One goal of the SWPPP shall place emphasis on reducing, to the maximum extent practicable, the following pollutants in the outfalls noted below:

Outfall No.	Pollutants	Comparative Value
001	Dissolved Copper	12 µg/L
001	Dissolved Zinc	120 µg/L

The effectiveness of the SWPPP will be evaluated via the required monitoring for all parameters listed in Part I.A.1 and Part I.A.2 of the VPDES permit for the regulated stormwater outfalls, including the specific pollutants noted in the table above. Monitoring results that are above the comparative value for the specific pollutants in the table above will justify the need to reexamine the SWPPP for the affected outfall. In addition, the facility shall amend the SWPPP whenever there is a change in the facility or its operation which materially increases the potential for activities to result in a discharge of significant amounts of pollutants.

No later than February 10 of each year, the facility shall submit to the DEQ Piedmont Regional Office an annual report which includes the pollutant-specific and biological monitoring data from the outfalls

included in the permit condition in Part I.C.1.a(5) of the VPDES permit along with a summary of any steps taken to modify the SWPPP based on the monitoring data.

4.0 POTENTIAL POLLUTANT SOURCES

A SWPPP evaluation and associated SPCC/ODCP/FRP Plan updating reviews identify the following equipment and areas that could potentially impact storm water because of spills during oil or chemical transfer operations. The likelihood is low and is primarily associated with storm drain vicinity to the equipment/operation. Please refer to Appendix C for general sheet flow direction.

These areas represent the most likely areas where storm water can be impacted.

The balance of potential exposure would be limited to catastrophic equipment damage or loss including loss of secondary containment. Refer to the SPCC/ODCP/FRP Plan.

4.1 Summary of Potential Pollutant Sources

VA0087734, Part I, C.4.b.(3): Summary of Potential Pollutant Sources

Facility / Equipment / Chemical Area	Activity	Pollutant(s) or Pollutant Parameter(s)
ELECTRICAL EQUIPMENT STORAGE AREAS	Storage / Unloading	POLLUTANT: Mineral Oil DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Mid
FUEL UNLOADING	Storage / Unloading	POLLUTANT: Gas and Diesel DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Mid
ELECTRICAL EQUIPMENT STORAGE AREAS	Storage	POLLUTANT: Zinc DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: High
ROOFTOPS	Storm Resistant Covers	POLLUTANT: Zinc DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: High
GENERAL REFUSE	Storage	POLLUTANT: General Refuse DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: Mid
Recycling	Storage	POLLUTANT: Metals DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: Moderate
Equipment Laydown Areas	Storage	POLLUTANT: Metals DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: Moderate

Tanker Storage Shed	Storage	POLLUTANT: Diesel and Mineral Oil DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Mid
---------------------	---------	---

4.2 EPRCA § 313 Potentials

The facility submits a Tier II report annually; copies of the reports are maintained on site and available upon request.

4.3 Site Bulk Oil

VA0087734 Part I, C.4.b.(4): Storm Water Controls

The oil related tables are in the facility's current SPCC/ODCP/FRP Plan, which is maintained at the facility under separate cover.

4.4 Site Bulk Chemicals/ Materials

VA0087734 Part I, C.4.b.(4)(v): Additional Requirements for Salt Storage

VA0087734 Part I, C.4.b.(4): Storm Water Controls

This facility does not store stockpiles of salt or other deicing materials.

Chemical / Material Storage		
Storage Tank Type (tanks located outside)	Storage Capacity	Best Management Practices (BMPs)
Dumpsters	Various (Roll Off Containers)	Routine Inspections
Small rock/sand pile	<10,000 lbs. of each	Routine Inspections

Chemical & Material Unloading & Transfer Facilities		
Unloading/Transfer Area	Storage Capacity (Source)	Structural BMPs Secondary Containment (Gallons)
Oil transfer – tanker storage area	~6,000 gallon tankers of oil	15,000 gallons oil containment capacity
Gas / Diesel / DEF loading and unloading area	12,000 gallon, double-compartment gas/diesel/DEF tank	Active Containment – spill kits and manned
Off-road Diesel loading and unloading area	1,000 gall off-road diesel tank	Active Containment – spill kits and manned

4.5 Sediment & Erosion

VA0087734 Part I, C.4.b.(4): Storm Water Controls
 VA0087734 Part I, C.4.b.(4)(vii): Sediment and Erosion Control
 VA0087734 Part I, C.4.b.(4)(viii): Management of Runoff

4.5.1 Sediment & Erosion Control

The Facility utilizes curbs, drains, rocks and grates/inlets to control storm water runoff. Approximately 94% of the property is impervious surfaces such as roof tops, concrete and paved storage areas, parking lots and roads.

4.5.2 Construction Erosion & Sediment Control

Appendix G is reserved for Erosion Control and Sediment Plan insertion in the event of construction activity at the Facility. Such plans are required for Construction Storm Water Permits and developed with a specific focus on site topography, drainage patterns, soils, ground cover, and adjacent runoff areas. Current construction stormwater permit #: VAP10S090

5.0 STORM WATER CONTROLS

VA0087734 Part I, C.4.b.(4): Storm Water Controls
VA0087734 Part I, C.4.b.(4)(viii): Management of Runoff

Storm water management controls appropriate for the Facility can be summarized as follows:

UNIT OR AREA NAME	APPROPRIATE STORM WATER MANAGEMENT CONTROLS
Storage Tanks	Secondary containment, shutoff valves, safe fill and shutdown procedures, inspections, and spill kits.
Oil-Filled Mechanical/Electrical Equipment	Oil detention system, Oil-water separator, spill kits, and inspections.
Material Transfer Areas	Secondary containment, oil detention system, written procedures, spill kits, and inspections.
Storage Buildings	Materials are stored inside buildings with secondary containment, spill kits and inspections.
Management of Runoff (Runoff Controls)	The Facility utilizes curbs, rock, swales/trenches, gravel, limestone gravel and grates/inlets to control storm water runoff. Oil sensor sump, 15,000-gallon spill containment basin, and oil retention basin. An underground detention system and Jellyfish filtration system for control in the lower yard.
Backup Measures and Controls	Facility staff monitors the detection of oil from the oil sensor sump and can control discharge by diverting flow to a 15,000-gallon spill containment system. In addition, an oil detention system equipped with baffles is located just upstream of Outfall 001 to prevent the discharge of oil should a spill occur. Oil booms are also maintained at the basin of Outfall 001. An oil separator is used in conjunction with the underground detention system and Jellyfish for Outfall 003. Other backup measures and BMPs are evaluated on a routine basis and depend mainly on the conditions at the time of the any event.

NOTE: For associated BMPs that are not yet developed, please refer to items in Action Item Table 7.5.

5.1 Structural BMPs

Refer to Section 5.0 for structural BMPs in place at this Facility.

5.2 Non-Structural BMPs

The Facility has Operating Procedures (OP) that are related to storm water contact management. They reduce the potential for storm water contact due to equipment failure or operational losses. The associated OPs are listed in section 5.2.1.

5.2.1 Employee Training

VA0087734 Part I, C.4.b.(4).(b).(vi): Employee Training

The Facility maintains general training guidelines for all personnel at the Facility. All Facility personnel are provided with initial job training for their duties. The Pollution Prevention team member indicated with (2) is responsible for verifying that Facility employees are familiar with the SWPPP. Personnel receive training commensurate with their duties and the site operations. The Facility also has the following training that encompasses storm water management:

- Annual Environmental Training (Oil Spills, PCBs, Hazardous and Non-Hazardous Waste, Aboveground Storage Tank (AST), ODCP, SPCC, FRP, VPDES, Hazardous Communication, SWPPP)

The following table represents the Operational Procedures (OP) associated with storm water and used as training. Copies of the OPs are maintained in the Facility's files and available upon request.

OP Number	Operating Procedure Name
XVII	Spill Response Procedure
XIII	Loading & Unloading Materials
III	Heavy Transformer Handling Procedure
I	Materials Operations Forklift Safety Procedures
VII	Fueling Off-Road at Castlewood Road Procedure
VIII	PCB Handling Procedures
IX	Street Light Lamp Returns

Safety Data Sheets (SDS) are available for all employees so they may understand the nature of materials onsite. Refer to Facility's files or intranet for copies of the SDS.

5.2.2 Good Housekeeping

VA0087734 Part I, C.4.b.(4)(b)(i): Good Housekeeping

The Facility uses inspections required by the SPCC, ODCP, FRP and SWPPP to re-enforce "Good Housekeeping". A copy of the SWPPP inspection form is in Appendix E. The checklists ensure corrective actions are initiated before any deterioration or malfunction occurs to oil/chemical storage containment or BMPs.

5.2.3 Eliminating and Minimizing Exposure

VA0087734, Part I, C.4.b.(4)(b)(ii): Eliminating and Minimizing Exposure

The Facility minimizes exposure by use of housekeeping, structural & non-structural BMPs.

5.2.4 Routine Facility Inspections

VA0087734 Part I, C.4.b.(5): Routine Facility Inspections

Routine facility inspections are comprehensive in scope. Refer to Appendix E. The inspections include:

- Storm Water: Quarterly Inspection
- SPCC Inspections per the current plan

5.2.5 Spill Prevention and Response Procedures

VA0087734 Part I, C.4.b.(4)(b)(iv): Spill Prevention and Response Procedures

The Facility has an ODCP/FRP plan to complement the spill response procedures given above in the OP table of Section 5.2.1. Employees trained in spill prevention and response procedures are instructed on the importance of preventing discharges to the storm water system.

Facility personnel responsible for spill response receive annual spill prevention/response and storm water pollution prevention training through on-site training sessions and/or HUB training. Facility personnel conduct the same internal notification procedures for both oil and chemical spills. For every spill/release incident, site personnel will confer with the Facility's Environmental Compliance Coordinator or designee to evaluate the risk level of the spill/release, contact all necessary agencies, and determine the appropriate response. For significant and high-risk spill scenarios, a certified spill response contractor will be contacted for cleanup. Contact information for spill response contractors is listed in the SPCC/ODCP/FRP. Necessary equipment (e.g., oil boom, absorbent material, oil dri, drain blockers, etc.) to implement a cleanup is available to site personnel.

5.3 Preventive Maintenance

VA0087734 Part I, C.4.b.(4)(b)(iii): Preventive Maintenance

This facility is continually updating its BMPs per findings from the routine inspections.

Refer to 5.2.4 for specific inspection form names. Please see facility O&M Manual and the SPCC/ODCP/FRP plan. All control measures identified in the SWPPP shall be maintained in effective operating condition.

5.4 Management of BMPs

VA0087734 Part I, C.4.b.(6): Maintenance of BMPs

Based upon facility evaluation, Section 4.0 (Potential Pollutant Sources) identified those types and locations of equipment that can potentially impact storm water because of operational or equipment failure or human error. The continuing structural or non-structural BMPs that are currently utilized, and will continue to be utilized, until planned BMP feasibility studies are completed for possible future construction and/or implementation. Refer also to Section 5.5.

5.5 Maintenance of BMPs

VA0087734 Part I, C.2.g.: Water Quality Protection
VA0087734 Part I, C.2.h.: Corrective Actions
VA0087734 Part I, C.4.b.(6): Maintenance of BMPs

The Castlewood facility uses limestone gravel and stormwater drop inlet filtration as BMPs to assist with reducing TSS, zinc, and copper. These BMPs are deployed around select storm water drains as needed and based on analytical results. The facility also uses an oil sensor underground containment system and oil retention basin as an oil recovery BMP for Outfall 001. Routine maintenance is conducted on the oil sensor device to ensure reliability. A Contech Jellyfish filter system, a Contech Continuous Deflective Separation (CDS) system and Oil-Water Separator are utilized in the lower yard to control oil and pollutants that could potentially discharge into Outfall 003. Other BMPs around site include rock and curbing. Maintenance of BMPs is conducted as necessary and documented through inspections and/or corrective action log.

REFER TO APPENDIX I, CORRECTIVE ACTION LOG, FOR THE MOST RECENT BMP RECOMMENDATIONS.

6.0 GOOD HOUSEKEEPING MEASURES

VA0087734, Part I C.4.b.(4)(b)(i): Good Housekeeping

6.1 Fugitive Dust Emissions

NA

6.2 Delivery Vehicles

The owner/driver for any vehicle leaking oil is notified to ensure the vehicle can be repaired to stop the leak while on site.

6.3 Fuel and Oil Loading/Unloading Areas

Refer to Section 5.2.1 of this plan which references facility procedures for “Loading & Unloading Materials” and “Spill Response Procedures”.

6.4 Chemical Loading/Unloading Areas

Refer to Section 5.2.1 of this plan which references facility procedures for “Loading & Unloading Materials” and “Spill Response Procedures”.

6.5 Miscellaneous Loading/Unloading Areas

Refer to Section 5.2.1 of this plan which references facility procedures for “Loading & Unloading Materials”, Heavy Transformer Handling Procedure”, “Materials Operations Forklift Safety Procedures” and “Spill Response Procedures”.

6.6 Small Liquid Storage Tanks

During routine inspections, these areas are inspected.

6.7 Large Bulk Fuel Storage Tanks

Refer to Section 4.3 and the Facility's SPCC plan maintained under separate cover.

6.8 Spill Reduction Measures

Refer to Section 5.0 and the Facility's SPCC/ODCP/FRP plan maintained under separate cover.

6.9 Oil Bearing Switchyard Equipment (i.e. Transformers)

Refer to Section 4.3 and the Facility's SPCC plan maintained under separate cover.

6.10 Residue Hauling Vehicles

NA

6.11 Ash Loading Areas

NA

6.12 Areas Adjacent to Disposal Ponds or Landfills

NA

6.13 Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse Sites

General refuse is disposed of in trash dumpsters located throughout the Facility. Putrescible waste is disposed of in covered municipal waste dumpsters and / or cans.

6.14 Vehicle Maintenance Activities

All vehicle maintenance is conducted in the vehicle maintenance building.

6.15 Material Storage Areas

All other material storage areas and structural BMPs are routinely inspected/evaluated.

7.0 DOCUMENTATION

The following subsections represent the various areas of documentation.

7.1 Spills and Leaks

VA0087734 Part I, C.2.f.: Releases of Hazardous Substances of Oil in Excess of Reportable Quantities

VA0087734 Part I, C.4.b.(3)(c): Spills and Leaks

VA0087734 Part I, C.4.b(9).: Maintaining an Updated SWPPP

This Facility had a reportable event on January 11, 2022. 15 gallons of oil leaked from a transformer radiator crack in a weld, which reached the stormwater drainage system that flows through Outfall 001. The oil sensor did not detect the amount of oil in the stormwater and released less than 1 gallon of oil to

Grindall Creek. The spill was documented in Appendix J and is located on the map provided in Appendix C. All appropriate notifications were made to the DEQ.

NOTE: The immediate (within 24 hours) reports required in Parts V, G, H and I of Permit VA0087734 shall be made to the Department's Regional Office at pro.SSO-UD@deq.virginia.gov or (804) 572-5020. For telephone reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), follow the instructions on the voicemail to reach the appropriate staff. For emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone service at 1-800-468-8892.

7.2 Storm Water Monitoring Requirements

VA0087734 Part I, C.2.a.: Sample Type

VA0087734 Part I, C.2.d: Quarterly Visual Examination of Storm Water Quality

VA0087734 Part I, C.4.b.(3)(d).: Sampling Data

Monitoring records are maintained in the facility's files and available upon request. A Toxics Management and Annual Summary Report of Storm Water is submitted to DEQ on an annual basis and copies of the past three years' reports are provided in Appendix K of this plan. The e-DMRs for Outfalls 001, 002, and 003 are maintained in the facility's files.

7.3 Site Inspections

VA0087734, Part I, C.4.b.(5) : Inspections:

Blank Inspection forms are provided in Appendix F as an example and records are maintained in Facility's files and available upon request.

7.4 Annual Outfall Evaluation for Unauthorized Discharges

VA0087734 Part I, C.4.b.(7)b.: Annual Outfall Evaluation for Unauthorized Discharges

In the permit that was reissued in 2020, the requirement to complete Annual Stormwater Compliance Evaluations was removed. The site must complete an Annual Evaluation of Outfalls 001 and 003 for the presence of unauthorized discharges.

The documentation shall include:

1. The date of the evaluation;
2. A description of the evaluation criteria used;
3. A list of the outfalls or on-site drainage points that were directly observed during the evaluation;
4. A description of the results of the evaluation for the presence of unauthorized discharges; and
5. The actions taken to eliminate unauthorized discharges if any were identified.

Refer to Appendix D for evaluation summary forms and reports from previous years.

ANNUAL COMPLIANCE EVALUATION CERTIFICATION

Date of Site Visit	Purpose
April 1, 2009	SWPPP Update / Annual Evaluation
April 5, 2010	SWPPP Update / Annual Evaluation
March 28, 2011	SWPPP Update / Annual Evaluation
March 30, 2012	SWPPP Update / Annual Evaluation
March 28, 2013	SWPPP Update / Annual Evaluation
April 11, 2014	SWPPP Update / Annual Evaluation
April 16, 2015	SWPPP Update / Annual Evaluation
April 19, 2016	SWPPP Update / Annual Evaluation
July 11, 2017	SWPPP Update / Annual Evaluation
August 1, 2018	SWPPP Update / Annual Evaluation
September 4, 2019	SWPPP Update/ Annual Evaluation
September 17, 2020	SWPPP Update/Annual Evaluation
April 21, 2021	SWPPP Update
June 8, 2022	SWPPP Review/Annual Evaluation
August 22, 2022	SWPPP Update
September 23, 2022	Removed member of Pollution Prevention Team
August 8, 2023	SWPPP Update/Annual Evaluation
January 8, 2024	SWPPP Update
May 17, 2024	SWPPP Update
August 26, 2024	Annual Evaluation / SWPPP Update
October 14, 2024	SWPPP Update

7.5 Goals & Objectives

VA0087734 Part I, C.2.g.: Water Quality Protection
VA0087734 Part I, C.2.h.: Corrective Actions
VA0087734 Part I, C.4.b.(9): Maintaining an Updated SWPPP

The storm water pollution prevention plan (SWPPP) has been developed as required by the Facility's storm water discharge permit and to incorporate good engineering practices. This SWPPP describes this Facility, its operations, identifies potential sources of storm water pollution at the facility, recommends appropriate BMPs or pollution control measures to reduce the discharge of pollutants in storm water runoff, and provides for periodic review of this SWPPP. It is the objective of this program to improve the

quality of surface waters by reducing the amount of pollutants potentially contained in the storm water runoff being discharged.

ACTION ITEMS

Action items are listed in the implementation schedule below. Completed action items will be removed from the list at the next SWPPP revision.

ACTION ITEM IMPLEMENTATION SCHEDULE			
Action Item	Responsible Person	Completion Deadline	Actual Date Completed
Repair erosion along property fence line and along Grindall Creek; project has been designed and bid awarded; awaiting environmental and construction permitting	Dominion Energy Facility Group	TBD	
Full depth reclamation pavement restoration project	Dominion Energy Facility Group	TBD	

7.6 Record of Review

VA0087734 Part I, C.2.h.: Corrective Actions
 VA0087734 Part I, C.4.: Storm Water Pollution Prevention Plan
 VA0087734 Part I, C.4.a: Deadlines for Plan Preparation and Compliance
 VA0087734 Part I, C.4.b.(9): Maintaining an Updated SWPPP

Record of Reviews (SWPPP Permit Reference #13)				
Date of Comprehensive Site Evaluation Summary Report ^{3,5}	Date of Inspection ¹	Date Minor SWPPP Revisions Completed ²	Date of Substantial BMP Modification ⁴	Reason for Amendment
			March 3, 2010	New SWPPP Template was Implemented
March 2011		March 2011		Annual SWPPP Evaluation
			August 11, 2011	Reissued VPDES Permit
		October 8, 2012		General Update
		January 10, 2013		General Update
April 11, 2014	April 11, 2014			Annual SWPPP Evaluation

April 16, 2015	April 16, 2015			Annual SWPPP Evaluation
May 11, 2016	April 19, 2016	May 12, 2016		Reissued VPDES Permit and Annual SWPPP Evaluation
		February 22, 2017		Add clarifying language regarding chemical spill training and response. Revised the PPT member information.
August 2, 2017	July 11, 2017	August 2, 2017		Annual SWPPP Evaluation
	April 2, 2018	April 19, 2018		General Update
September 1, 2018	August 1, 2018			Annual SWPPP Evaluation
September 23, 2019	September 4, 2019			Annual SWPPP Evaluation
October 16, 2020	September 17, 2020	October 16, 2020		Annual SWPPP Evaluation
May 18, 2021	April 21, 2021			Annual SWPPP Review
December 14, 2021		December 14, 2021		Update due to personnel changes
January 18, 2022				Update
June 8, 2022, August 23, 2022				Annual SWPPP Evaluation
August 22, 2022		August 22, 2022		Revise post Self-Assessment; update corrective actions from quarterly metals monitoring
September 23, 2022		September 26, 2023		Revised contacts
August 8, 2023		August 8, 2023		Conducted a SWPPP review and completed the Annual SWPPP Evaluation
			January 8, 2024	Update due to permit modification
			May 17, 2024	Reviewed SWPPP, updated to incorporate the Jellyfish filter, CDS system and oil-water separator. Added new supervisor in contacts. Referenced tanker storage shed as potential pollutant.
August 14, 2024	July 31, 2024	August 26, 2024		Reviewed SWPPP and incorporated minor edits and updated drainage map.

			October 17, 2024	Reviewed SWPPP and added references to FRP.
--	--	--	------------------	---

¹ A Facility inspection must be completed by qualified personnel familiar with Facility operations in accordance with State and Federal SWPPP regulations.

² The SWPPP shall be modified as necessary to include minor changes in SWPPP text, Facility controls or BMPs. Revision to the SWPPP must be completed within 60 days following the inspection unless permission for a later date is granted in writing by the State NPDES authority.

³ If substantial SWPPP change is necessary including significant modification of existing BMPs or if the addition of new BMPs is necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the State NPDES authority. Refer to the Action Item Schedule on the next page.

⁴ The permittee shall amend the SWPPP whenever: (1) there is a change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility; (2) during inspections, monitoring, or investigations by facility personnel or by local, state, or federal officials, it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified.

⁵ A report summarizing the scope of the inspection name(s) of personnel making the inspection, date(s) of the inspection, and major observations relating to the implementation of the SWPPP, and actions taken in accordance with the NPDES permit shall be made and retained as part of the SWPPP for at least five years from the date of the inspections.

Appendix A

Topographic Site Map and Site Vicinity Map

Appendix B

Site Plan

Appendix C

Storm Water Drainage Areas

Appendix D

Annual Compliance Evaluation Summary Report

Appendix E

SWPPP Monitoring Forms

Appendix F

SWPPP Inspection Report Forms

Appendix G

Construction Sediment and Erosion Control

Appendix H

Non-Storm Water Certification

Appendix I

Corrective Action Log

Appendix J

Oil & Chemical Spill History

When a significant leak does occur, the Facility ECC will include an updated list in this Appendix.

Appendix K

Annual Storm Water Monitoring Report

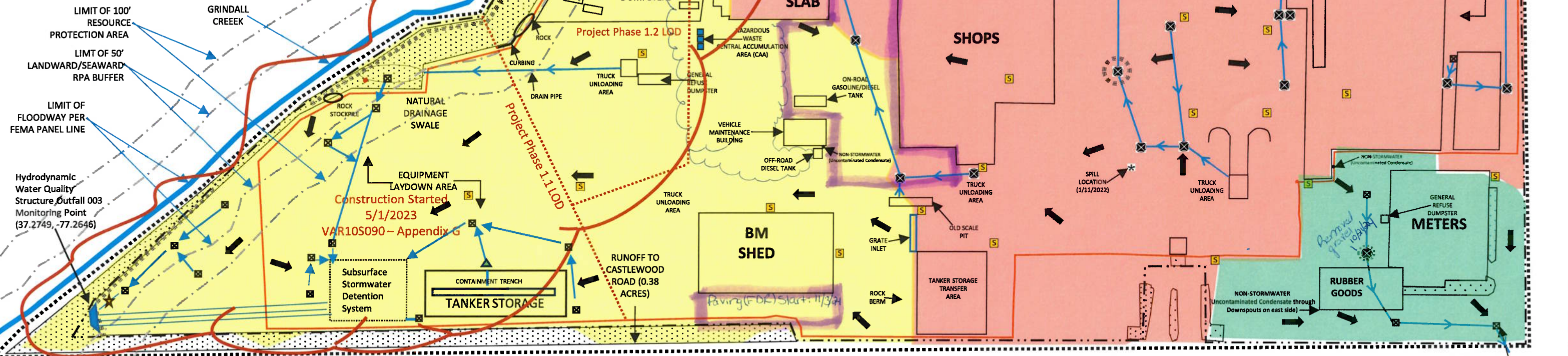
Exhibit 2
Facility SWPPP Site Map, dated October 17, 2024

DOMINION ENERGY VIRGINIA
MATERIALS & METERING SERVICES

- 4307 CASTLEWOOD ROAD
- 4111 CASTLEWOOD ROAD
- 4113 CASTLEWOOD ROAD

NOTES:

1. THE FACILITY IS 94.2% (29.48 ACRES) IMPERVIOUS.
2. THE FACILITY IS 5.8% (1.81 ACRES) PERVIOUS.
3. THE TOTAL ACREAGE OF THE FACILITY IS APPROXIMATELY 31.29 ACRES.
4. EQUIPMENT LAYDOWN AREAS ARE LOCATED THROUGHOUT THE FACILITY.
5. ADDITIONAL REFUSE AND SCRAP METAL CONTAINERS ARE SUBJECT TO BE MOVED ACROSS THE FACILITY.
6. PORTABLE TOILETS ARE USED ONLY BY CONSTRUCTION CONTRACTORS AND ARE STORED WITHIN LOD



LEGEND:

- ELECTRICAL EQUIPMENT STORAGE
- DIRECTION OF SURFACE DRAINAGE
- STORM DRAIN INLET
- ⊗ STORM DRAIN INLET with Oil/Solids Filter

- STORM WATER CONVEYANCE
- PROPERTY LINE (CONSIDERED APPROXIMATE)
- - - FENCE

- SPILL KIT
- ★ SIGNIFICANT SPILL LOCATION
- OIL SENSOR SUMP SYSTEM
- OUTFALL 003 DRAINAGE (13.62 ACRES)
- OUTFALL 001 DRAINAGE (15.76 ACRES)
- OUTFALL 002 DRAINAGE (2.28 ACRES)

- PERVIOUS AREA
- ===== OIL ABSORBING BOOM
- GRAVEL INLET
- PROTECTION
- ★ CONTECH WATER QUALITY STRUCTURE
- ▲ OIL-WATER SEPARATOR

THE FACILITY IS PERMITTED FOR THE FOLLOWING "ALLOWABLE NONSTORM WATER DISCHARGES".

- DISCHARGES FROM EMERGENCY FIREFIGHTING ACTIVITIES;
- FIRE HYDRANT FLUSHING, MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT;
- POTABLE WATER, INCLUDING WATER LINE FLUSHINGS, MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT;
- UNCONTAMINATED CONDENSATE FROM AIR CONDITIONERS, COOLERS, AND OTHER COMPRESSORS AND FROM THE OUTSIDE STORAGE OF REFRIGERATED GASES OR LIQUIDS;
- IRRIGATION DRAINAGE;
- LANDSCAPE WATERING PROVIDED ALL PESTICIDES, HERBICIDES, AND FERTILIZER HAVE BEEN APPLIED IN ACCORDANCE WITH THE APPROVED LABELING;
- ROUTINE EXTERNAL BUILDING WASHDOWN THAT DOES NOT USE DETERGENTS OR HAZARDOUS CLEANING PRODUCTS;
- PAVEMENT WASH WATERS WHERE NO DETERGENTS OR HAZARDOUS CLEANING PRODUCTS ARE USED AND NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED (UNLESS ALL SPILLED MATERIALS HAVE BEEN REMOVED). PAVEMENT WASH WATERS SHALL BE MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT;
- UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS;
- INCIDENTAL WINDBLOWN MIST FROM COOLING TOWERS THAT COLLECTS ON ROOFTOPS OR ADJACENT PORTIONS OF THE FACILITY, BUT NOT INTENTIONAL DISCHARGES FROM THE COOLING TOWER (e.g. "PIPED" COOLING TOWER BLOWDOWN OR DRAINS).

OUTFALL 002
Removed from permit 10.24.2023
(37.46901, -77.44623)