COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
SOUTHWEST REGIONAL OFFICE
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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Allen J. Newman, P.E.
Regional Director

July 1, 2016

Mr. John M. McManus, Vice President Environmental Services
American Electric Power Service Corporation
c/o Ms. Lindsey G. Forhan
1 Riverside Plaza
Columbus, OH 43215

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: VPDES Permit No. VA0001015; Clinch River Plant; Russell County

Dear Mr. McManus:

The VPDES Permit No. VA0001015 for the Appalachian Power Company – Clinch River Plant in Russell County, Virginia is enclosed.

Monitoring results on the DMRs should be reported to the same number of significant digits as are included in the permit limit for the parameter. Our records indicate that the facility is an eDMR participant. As such, please submit DMRs electronically.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Alternatively, any owner under §§ 62.1 - 44.16, 62.1 - 44.17, and 62.1 - 44.19 of the State Water Control Law aggrieved by any action of the State Water Control Board taken without a formal hearing, or by inaction of the Board, may demand in writing a formal hearing of such owner's grievance, provided a petition requesting such hearing is filed with the Board. Said petition must meet the requirements set forth in 9VAC25-230-130 (Procedural Rule No. 1 – Petition for formal hearing). In cases involving actions of the Board, such petition must be filed within thirty days after notice of such action is mailed to such owner by certified mail.

If you have any questions about the permit, please contact David Nishida at (276) 676-4864 or by email at david.nishida@deq.virginia.gov .

Sincerely,

Mark S. Trent
Water Permit Manager

Enclosure: VPDES Permit No. VA0001015

Copies: ECM, 6001-2
Raymond A. Whitner, III, Virginia Department of Health

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0001015

Effective Date: July 1, 2016
Expiration Date: June 30, 2021

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, Part I - Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner:	Appalachian Power Company
Facility Name:	Clinch River Plant
City:	Cleveland
County:	Russell
Facility Location:	3464 Power Plant Road

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

Receiving Stream:	Clinch River	Receiving Stream:	Dumps Creek
Basin:	Tennessee – Big Sandy	Basin:	Tennessee – Big Sandy
Subbasin:	Clinch River	Subbasin:	Clinch River
Section:	2	Section:	2
Class:	IV	Class:	IV
Special Standards:	x	Special Standards:	None

Alf Newman

Regional Director, Department of Environmental Quality

7/1/2016

Date

A. EFFLUENT 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 from outfall serial number **003 & 003A**. (advanced wastewater treatment plant)

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

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATION				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NL	NA	NA	NL	Continuous	Measured
pH (standard units)	NA	NA	6.0	9.0	1/Week	Grab
Total Suspended Solids	30 mg/L	NA	NA	100 mg/L	1/3 Months	24 HC
Total Recoverable Copper	37 µg/L	NA	NA	37 µg/L	1/Month	24 HC
Ammonia-Nitrogen	7.6 mg/L	NA	NA	7.6 mg/L	1/Month	24HC
Oil and Grease	15 mg/L	NA	NA	20 mg/L	1/Year	Grab
Total Chromium	0.2 mg/L	NA	NA	0.2 mg/L	1/Year	24 HC
Total Zinc	1.0 mg/L	NA	NA	1.0 mg/L	1/Year	24 HC
Total Iron	1.0 mg/L	NA	NA	1.0 mg/L	1/Year	24 HC
Total Residual Chlorine	40 µg/L	NA	NA	40 µg/L	1/Week	Grab
Total Selenium	NL	NA	NA	NL	1/Month	24 HC
Acute WET, *C. dubia*	NA	NA	NA	NL	1/Year	24 HC
Chronic WET, *C. dubia*	NA	NA	NA	NL	1/Year	24 HC
Acute WET, *P. promelas*	NA	NA	NL	NL	1/Year	24 HC
Chronic WET, *P. promelas*	NA	NA	NA	NL	1/Year	24 HC

1. (*continued from above*)

NL= No Limitation, monitoring required
NA= Not Applicable

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- Data shall be reported as 2 significant digits for each parameter.
- See Part I.B.10 for Total Residual Chlorine for additional effluent limitations and monitoring requirements.
- See Part I.B.14 for additional monitoring and reporting requirements.
- See Part I.C for additional requirements regarding Whole Effluent Toxicity monitoring requirements.
- Part I.A.1 does not apply to discharges from dewatering associated with ash pond closure. See Part I.A.2 for limits associated with dewatering.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning with the initiation of the dewatering operation and lasting until the conclusion of the dewatering activities, the permittee is authorized to discharge from outfall serial number **D003**. Additionally, the following effluent limitations and monitoring requirements apply during any week after the initiation of the dewatering operation in which stormwater that has come into contact with coal ash in Pond 1A/1B has been pumped from Pond 1A/1B below elevation 1554.0 feet. (Pond 1A/1B Dewatering)

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

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATION				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NL	NA	NA	NL	Continuous	Measured
pH (standard units)	NA	NA	6.0	9.0	1/Week	Grab
Total Suspended Solids	30 mg/L	NA	NA	100 mg/L	1/Month	24 HC
Total Recoverable Copper	16 µg/L	NA	NA	30 µg/L	3/Week	4 HC
Ammonia-Nitrogen	2.2 mg/L	NA	NA	7.6 mg/L	3/Week	4 HC
Oil and Grease	15 mg/L	NA	NA	20 mg/L	1/Month	Grab
Total Chromium	0.2 mg/L	NA	NA	0.2 mg/L	1/Month	24 HC
Total Zinc	130 µg/L	NA	NA	240 µg/L	3/Week	4 HC
Total Iron	1.0 mg/L	NA	NA	1.0 mg/L	1/Month	24 HC
Total Residual Chlorine	40 µg/L	NA	NA	40 µg/L	1/Week	Grab
Acute WET, *C. dubia*	NA	NA	100%	NA	*	24 HC
Chronic WET, *C. dubia*	NA	NA	NA	3.12 TU_c	*	24 HC
Acute WET, *P. promelas*	NA	NA	100%	NA	*	24 HC
Chronic WET, *P. promelas*	NA	NA	NA	3.12 TU_c	*	24 HC
Total Antimony	630 µg/L	NA	NA	630 µg/L	3/Week	4 HC
Total Arsenic	210 µg/L	NA	NA	380 µg/L	3/Week	4 HC

2. (*continued from above*)

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATION				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Total Cadmium	2.0 µg/L	NA	NA	3.6 µg/L	3/Week	4 HC
Total Chromium III	140 µg/L	NA	NA	250 µg/L	3/Week	4 HC
Total Chromium VI	14 µg/L	NA	NA	25 µg/L	3/Week	4 HC
Total Lead	29 µg/L	NA	NA	53 µg/L	3/Week	4 HC
Total Mercury	1.0 µg/L	NA	NA	1.9 µg/L	3/Week	4 HC
Total Nickel	37 µg/L	NA	NA	67 µg/L	3/Week	4 HC
Total Selenium	6.6 µg/L	NA	NA	12 µg/L	3/Week	4 HC
Total Silver	5.1 µg/L	NA	NA	9.3 µg/L	3/Week	4 HC
Total Thallium	0.47 µg/L	NA	NA	0.47 µg/L	3/Week	4 HC
Total Aluminum	NL	NA	NA	NL	3/Week	4 HC
Total Barium	NL	NA	NA	NL	3/Week	4 HC
Total Beryllium	NL	NA	NA	NL	3/Week	4 HC
Total Boron	NL	NA	NA	NL	3/Week	4 HC
Total Cobalt	NL	NA	NA	NL	3/Week	4 HC
Total Molybdenum	NL	NA	NA	NL	3/Week	4 HC
Total Vanadium	NL	NA	NA	NL	3/Week	4 HC
Chloride	310 mg/L	NA	NA	570 mg/L	3/Week	4 HC
Hardness (mg/L as $CaCO_3$)	NL	NL	NL	NL	3/Week	4 HC

2. (*continued from above)*

NL= No Limitation, monitoring required
NA= Not Applicable

* WET Testing is to be conducted once during the first week of dewatering, once during the second week of dewatering, and 1/Month thereafter.

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- Data shall be reported as 2 significant digits for each parameter.
- See Part I.B.10 for Total Residual Chlorine for additional effluent limitations and monitoring requirements.
- See Part I.B.14 for additional monitoring and reporting requirements.
- See Part I.C for additional requirements regarding Whole Effluent Toxicity monitoring requirements.
- Sampling for the parameters identified with a monitoring frequency of “3/Week” for outfall D003 during dewatering operations shall occur at least three (3) days per week with a minimum of 48 hours between the conclusion of sampling events. A sampling week extends Sunday through Saturday. The permittee shall contract to receive results for parameters identified with a monitoring frequency of “3/Week” within four business days of taking the sample. Results of the weekly sampling shall be reported to DEQ no later than the close of business Friday of the week following sample collection. This reporting requirement does not substitute for, or alter, Part II.C concerning the monthly reporting of monitoring results with the Discharge Monitoring Report.
- See Part I.B.17 for flow limitations associated with the dewatering of Pond 1A/1B.
- The permittee shall immediately cease the dewatering operation upon notification of an exceedance of an established effluent limit and/or WET limits at outfall D003. See Part I.B.20 for additional requirements.

A. EFFLUENT 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 from outfall serial number **007**. (coal pile runoff)

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

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATION				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NL	NA	NA	NL	2/Month	Est.
pH (standard units)	NA	NA	6.0	9.0	2/Month	Grab
Total Suspended Solids	NA	NA	NA	50 mg/l	2/Month	Grab
Oil and Grease	NA	NA	NA	NL	1/6 Months	Grab
Acute WET, *C. dubia*	NA	NA	NA	NL	1/Year	Grab
Acute WET, *P. promelas*	NA	NA	NA	NL	1/Year	Grab

NL= No Limitation, monitoring required
NA= Not Applicable

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- See Part I.B.14 for additional monitoring and reporting requirements.
- See Part I.C for additional requirements regarding Whole Effluent Toxicity monitoring requirements.

A. LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number **008** (sewage treatment plant).

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATION				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)[a]	NL	NA	NA	NL	1/Day	Estimate[b]
pH (standard units)	NA	NA	6.0	9.0	1/Week	Grab
BOD_5 [c,d]	30 mg/l 1.4 kg/d	45 mg/l 2.0 kg/d	NA	NA	1/ 3 Months	Grab
Total Suspended Solids [c,d]	30 mg/l 1.4 kg/d	45 mg/l 2.0 kg/d	NA	NA	1/ 3 Months	Grab
E.coli	126*	NA	NA	NA	1/Week**	Grab

a. The design flow of this treatment facility is 0.012 MGD.
b. Estimated average daily flow rate shall be based on the most accurate method or device available such as: weir, potable water meter, pump rates, etc.
c. See Part I.B.14 for additional monitoring and reporting requirements.
d. At least 85% removal for BOD_5 and TSS must be attained for this effluent.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

NL = No Limitation; monitoring required
NA = Not Applicable

* = Geometric Mean
** = Between 10 a.m. and 4 p.m.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number **015**.

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

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATION				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NL	NA	NA	NL	1/3 Months	Est.
pH (standard units)	NA	NA	NL	NL	1/3 Months	Grab
Total Suspended Solids	NA	NA	NA	NL	1/3 Months	Grab
Oil and Grease	NA	NA	NA	NL	1/3 Months	Grab

NL= No Limitation, monitoring required
NA= Not Applicable

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- See Part I.B.14 for additional monitoring and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

6. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number **727**. (stormwater runoff, main plant area)

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	Sample Type
Flow (MG)	NA	NA	NA	NL	1/Year	Estimate*
pH (SU)	NA	NA	NA	NL	1/Year	Grab
Oil and Grease (mg/l)	NA	NA	NA	NL	1/Year	Grab
Total Suspended Solids	NA	NA	NA	NL	1/Year	Grab

NL= No Limitation, monitoring required
NA= Not Applicable

* Estimate of the total volume of the discharge during the batch discharge.

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- See Part I.B.14 for additional monitoring and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

7. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water associated with industrial activity from outfalls serial numbers: **501, 502, 503, 504 701, 731, 736, 737, 738, 739, 740, 801, 802 and 803**

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

THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS

There shall be no discharge of floating solids or visible foam in other than trace amounts.

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS:

1. This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard, limitation or prohibition for a pollutant which is promulgated or approved under Section 1317 (previously 307(a)(2)) of the Clean Water Act, if the effluent standard, limitation, or prohibition so promulgated or approved:

   a. Is more stringent than any effluent limitation on the pollutant already in the permit; or

   b. Controls any pollutant not limited in the permit.

2. Debris collected on the intake trash racks shall not be returned to the waterway.

3. There shall be no discharge of Polychlorinated Biphenyl compounds as a result of the operation of this facility in an amount equal to or greater than that detectable by EPA Method 608.

4. There shall be no maintenance chemical additives in the cooling tower blow-down discharges directed to Outfalls 003 and 003A which contain the 126 priority pollutants unless: 1) the permittee can demonstrate compliance with the requirements applicable to the addition of maintenance chemicals to cooling tower discharges as outlined under the Steam Electric Effluent Guidelines (40 CFR Part 423), and 2) the permittee obtains approval from DEQ for the changes in treatment. Requests for approval of the change shall be made in writing and shall include the following information:
   a. Describe the chemical and/or nonchemical treatment to be employed and its purpose;
   b. Provide the name and manufacturer of each additive used;
   c. Provide a list of active ingredients and percentage of composition;
   d. Give the proposed schedule and quantity of chemical usage, and provide either an engineering analysis, or a technical evaluation of the active ingredients, to determine the concentration in the discharge;
   e. Attach available aquatic toxicity information for each additive proposed for use;
   f. Attach any other information such as product or constituent degradation, fate, transport, synergies, bioavailability, etc., that will aid the board with the toxicity evaluation for the discharge; and
   g. An evaluation of the anticipated effects of the chemical additives on wastewater treatment and effluent quality.

5. 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, byproduct 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.

6. Outfall 007 (coal Stockpile runoff and other storm water runoff) shall not exceed 50 mg/l total suspended solids and a pH of 6.0 - 9.0 S.U. Any untreated overflow from facilities designed, constructed and operated to treat the volume of runoff associated with the 10-year, 24 hour rainfall event for this location as defined by the National Weather Service in Technical Paper No.

40, "Rainfall Frequency Atlas of the United States," May, 1961 and subsequent amendments, or equivalent regional or state rainfall probability information developed there from is not subject to the total suspended solids limitation.

7. The duration of biocide treatment of the cooling towers shall be limited to no more than two hours during any eight hour period. During the period while the cooling water is being treated with biocide, all water shall be re-circulated within the cooling tower system, so that no discharge to the wastewater system is allowed. After sufficient contact time, the cooling water shall be de-chlorinated. The discharge from the cooling towers shall be allowed to resume only after testing of the water confirms that de-chlorination is complete.

8. Cooling tower blow-down which discharges through outfall 003 shall be from the cold side of the condenser.

9. All wastewater collected in the leachate collection systems for the landfills shall be pumped to the treatment system serving outfall 003.

10. Final Total Residual Chlorine (TRC) Effluent Limitations and Monitoring Requirements for Outfall 003 and 003A:

    a. The total residual chlorine (TRC) effluent limitations imposed by this permit are a daily maximum limitation of **40 µg/l**. TRC concentration shall be monitored in the final effluent from outfall 003 (or 003A) at least once per week, after the discharge resulting from the application of the chlorine compounds.

    b. The permittee shall operate the dechlorination facilities in a manner which will ensure continuous compliance with the TRC concentration above, but not to the extent that will result in violations of other permitted effluent characteristics or Water Quality Standards.

11. Outfall 001and outfall 014, as listed below, are designated in this permit as potential discharge locations. The outfalls are not authorized to discharge, except as provided for in Part II.G of this permit.

    In addition to the reporting requirements of Part II.G, the permittee is required to report the date of each unauthorized discharge occurrence, the duration of each discharge, an estimation of the amount of wastewater discharged, an estimation of the quantities of total suspended solids discharged during each occurrence. This information shall be reported each month with the discharge monitoring reports.

Potential Discharge Locations	Outfall	Receiving Waters
Reclaim Pond	001	Stream: Clinch River
Leachate Collection Pond	014	Stream: Clinch River

12. The permittee shall notify the Department as soon as they know or have reason to believe:
    a. That any activity has occurred or will occur which would result in the discharge, on a

routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 ug/l);
(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
(4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 ug/l);
(2) One milligram per liter (1 mg/l) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
(4) The level established by the Board.

13. The permittee shall employ or contract at least one wastewater works operator who holds a current wastewater license appropriate for the permitted facility. A **Class II** licensed operator is required for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators and Onsite Sewage Treatment Professionals. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

14. The permittee shall comply with the following reporting requirements for all Part I.A monitoring:

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

Effluent Parameter	Quantification Level
BOD5	2 mg/L
TSS	1.0 mg/L
Total Residual Chlorine	0.10 mg/L
Ammonia-N	0.20 mg/L
Oil & Grease	5.0 mg/L
Total Recoverable Iron	0.1 mg/L
Total Recoverable Copper	5.0 µg/L
Chromium	5.0 µg/L
Zinc	10 µg/L
Total Antimony	5.0 µg/L
Total Arsenic	5.0 µg/L
Total Cadmium	1.0 µg/L
Total Chromium III	5.0 µg/L
Total Chromium VI	5.0 µg/L
Total Lead	5.0 µg/L
Total Mercury	0.1 µg/L
Total Nickel	5.0 µg/L

Total Selenium	5.0 µg/L
Total Silver	0.4 µg/L
Total Thallium	0.2 µg/L
Chloride	1 mg/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. **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 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 (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 (QL must be less than or equal to the QL listed in a. above), 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 (QL must be less than or equal to the QL listed in a. above) 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 (QL must be less than or equal to the QL listed in a. above), 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.

15. 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.

The O&M 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 effluent, storm water and sludge samples;

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.5 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;

e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;

f. 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.

16. This permit shall be modified or alternatively revoked and reissued 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.

17. Pond 1A/1B dewatering shall be limited to a maximum flow rate of 0.36 MGD. This applies to the contribution of flow from Pond 1A/1B to the reclaim pond. Additionally, the discharge from Outfall D003 shall be limited to a maximum of 4.84 MGD during periods when the advanced wastewater treatment plant receives flow from the dewatering operation. The permittee shall maintain a daily pumping log for to dewatering operation and all subsequent contact stormwater management. This log shall be submitted to DEQ monthly along with the submittal of discharge monitoring reports for the period.

18. Pond 1A/1B Notification - The permittee shall notify the DEQ-Southwest Regional Office no later than 72 hours prior to the planned commencement of the discharge associated with dewatering of Pond 1A/1B in preparation of pond closure. A second notification to the DEQ Southwest Regional Office shall be provided no later than 24 hours after initiating the discharge associated with dewatering of Pond 1A/1B.

19. The permittee shall monitor the effluent at outfall 003 for the substances noted in Attachment A, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. Using Attachment A as the reporting form, the data shall be submitted with the discharge monitoring reports for the semi-annual period in which the monitoring was performed. The due dates for semi-annual reporting are January 10 and July 10 of each year. The data shall also be submitted with the next application for reissuance.

    Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.

    The permittee has the option to conduct the dissolved metals sampling utilizing standard sampling practices if the permittee can demonstrate that the analytical results for standard sampling procedures are similar or identical to results obtained using clean sampling, considering the variability (precision) of the analyte detection within a single laboratory. If after two consecutive semiannual sampling events the permittee can demonstrate to the Department through parallel sampling that the data produced are similar, the Department may waive the clean sampling requirement on the remaining dissolved metals monitoring.

    The monitoring shall continue until eight complete sets of analytical results have been submitted for review. The DEQ will use the data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

20. Cease Pond 1A/1B Dewatering Requirements for Outfall D003 – The permittee shall maintain agreement(s) with its contracted lab(s) requiring that results be reported within 48 hours of the Whole Effluent Toxicity test result determination and/or within 48 hours of a Whole Effluent Toxicity test termination. The permittee shall immediately cease the pumping of water from Pond 1A/1B to the reclaim pond upon receipt of results in exceedance of permit limitations and shall promptly notify DEQ, in no case later than 24 hours, after being informed of the exceedance. The DEQ notification shall include the documentation of laboratory notification to the permittee indicating the parameter exceedance, and date and time of notification to the permittee. Should an exceedance occur, the permittee shall initiate a review of the treatment operations and data to identify the cause(s) of the exceedance and initiate appropriate corrective

action(s). Resumption of the pumping of water from Pond 1A/1B to the reclaim pond shall not occur until such time as an evaluation report is provided to DEQ and written authorization to resume the discharge is granted by DEQ.

C. WHOLE EFFLUENT TOXICITY TESTING:

1. Whole Effluent Toxicity (WET) Limitations and Test Requirements – Outfall 003

a. In accordance with the schedule in Part I.C.1.f, the permittee shall conduct *annual acute and chronic toxicity tests* using 24-hour flow-proportioned composite samples of final effluent collected from Outfall 003.

The acute tests shall be:

48-Hour Static Acute test using *Ceriodaphnia dubia*
48-Hour Static Acute test using *Pimephales promelas*

Each test shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC_{50} and corresponding acute Toxic Units (TU_a). For DMR reporting, the TU_a shall be calculated by dividing $100/LC_{50}$. Tests in which control survival is less than 90% are not acceptable. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test.

The chronic tests shall be:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*
Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

Each test shall be performed with a minimum of 5 dilutions, derived geometrically, in order to determine the No Observed Effect Concentration (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e. a "less than" or "zero" NOEC value) are not acceptable, and a retest requiring further dilution must be performed. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test. Such "less than" or "zero" results must be submitted and will be regarded as evidence of effluent toxicity. Express the results as chronic Toxicity Units (TU_c) by dividing 100/NOEC. Report the LC_{50} for each chronic test at the 48-hour point, and the $IC_{25,}$ if calculable, with the NOECs in the required test report.

b. During the term of the permit, the permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. The test dilutions shall be able to determine compliance with the following endpoints:

(1) Acute $LC_{50} \geq 100\%$, equivalent $\leq 1.0\ TU_a$
(2) Chronic NOEC $\geq 10\%$, equivalent $\leq 10\ TU_c$

d. The test data will be evaluated statistically for reasonable potential at the conclusion of the permit term. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule may be required and the toxicity tests of Part I.C.1.a may be discontinued upon written notification from DEQ. If the data indicate that no limit is needed, the permittee shall continue acute and chronic toxicity testing of the outfall as specified in Part I.C.1.f.

e. The permit may be modified, or revoked and reissued to include pollutant specific limits in

lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

f. The permittee shall supply 1 copy of a comprehensive test report for each test type and species for the toxicity tests specified in Part I.C.1.a in accordance with the following schedule:

Monitoring Period	Testing Period	Report Submittal Dates
1st Annual	Permit Issuance – December 31, 2016	January 10, 2017
2nd Annual	January 1, 2017 – December 31, 2017	January 10, 2018
3rd Annual	January 1, 2018 – December 31, 2018	January 10, 2019
4th Annual	January 1, 2019 – December 31, 2019	January 10, 2020
5th Annual	January 1, 2020 – December 31, 2020	January 10, 2021

2. Whole Effluent Toxicity (WET) Limitations and Test Requirements - Outfall 007

a. In accordance with the schedule in Part I.C.2.f, the permittee shall conduct *annual acute toxicity tests* using grab samples of final effluent collected from Outfall 007. This WET Testing shall be conducted throughout the permit term.

The acute tests shall be:

48-Hour Static Acute test using *Ceriodaphnia dubia*
48-Hour Static Acute test using *Pimephales promelas*

Each test shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC_{50} and corresponding acute Toxic Units (TU_a). For DMR reporting, the TU_a shall be calculated by dividing $100/LC_{50}$. Tests in which control survival is less than 90% are not acceptable. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test.

b. During the term of the permit, the permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. The test dilutions shall be able to determine compliance with the following endpoint:

Acute $LC_{50} \geq 37\%$, equivalent $\leq 2.70\ TU_a$

d. The test data will be evaluated statistically for reasonable potential at the conclusion of the permit term. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule may be required and the toxicity tests of Part I.C.2.a may be discontinued upon written notification from DEQ. If the data indicate that no limit is needed, the permittee shall continue acute toxicity testing of the outfall as specified in Part I.C.2.f.

e. The permit may be modified, or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

f. The permittee shall supply 1 copy of a comprehensive test report for each test type and species for the toxicity tests specified in Part I.C.2.a in accordance with the following

schedule:

Monitoring Period	Testing Period	Report Submittal Dates
1st Annual	Permit Issuance – December 31, 2016	January 10, 2017
2nd Annual	January 1, 2017 – December 31, 2017	January 10, 2018
3rd Annual	January 1, 2018 – December 31, 2018	January 10, 2019
4th Annual	January 1, 2019 – December 31, 2019	January 10, 2020
5th Annual	January 1, 2020 – December 31, 2020	January 10, 2021

3. Whole Effluent Toxicity (WET) Limitations and Test Requirements - Outfall D003 (Dewatering Operation)

a. The Whole Effluent Toxicity limitations of Part I.A.2 are final limits to be applied as described in Part I.A.2.

b. WET Limits

(1) Acute WET Limit NOAEC = 100%

(2) Chronic WET Limit NOEC $\geq$ 32%, equivalent to $TU_C \leq 3.12$

c. In accordance with the schedule in Part I.C.3.e. the permittee shall conduct *acute and chronic toxicity tests* using 24-hour flow-proportioned composite samples of final effluent from Outfalls D003 when the dewatering activities are occurring.

The acute tests shall be:

48-Hour Static Acute test using *Ceriodaphnia dubia*
48-Hour Static Acute test using *Pimephales promelas*

These acute tests are to be conducted using a minimum of 4 replicates, with 5 organisms each, for the control and 100% effluent. The NOAEC (No Observed Adverse Effect Concentration) shall be reported as either 100% or ‹ 100% (less than 100%). The effluent will be in compliance if the survival of the test organisms in both the control and 100% effluent exposures equals or exceeds 90%. If the survival in the effluent is less than 90% and this value is significantly different from the control survival, as determined by hypothesis testing, the NOAEC is less than 100% and the effluent is not in compliance. Tests in which control survival is less than 90% are not acceptable. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing.

The chronic tests shall be a Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia* and a Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, in order to determine the No Observed Effect Concentration (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e. a “less than” or “zero” NOEC value) are not acceptable, and a retest requiring further dilution must be performed. Any retest of an unacceptable test must be performed during the same compliance period as the test it is replacing. Such “less than” or “zero” results must be submitted and will be regarded as evidence of effluent toxicity. The WET limit NOEC of 32% ($TU_c = 3.12$) must be represented by a dilution. Express the results as Chronic Toxicity Units (TU_c) by dividing 100/NOEC. Report the LC_{50} for each chronic test at the 48-hour point, and the $IC_{25,}$ if calculable, with the NOEC in the required test report. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

d. The permit may be modified or revoked and reissued to include pollutant-specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant-specific limits must control the toxicity of the effluent.

e. The permittee shall supply 1 copy of a comprehensive test report for each test type and species specified in Part I.C.3.c in accordance with the following schedule as the discharge from dewatering activities continues:

Monitoring Period	Testing Period	Report Submittal Dates
1st Week	The first week during which Part I.A.2 is applicable	By the 10th day of the month following the testing period.
2nd Week	The second week during which Part I.A.2 is applicable	By the 10th day of the month following the testing period.
Monthly Thereafter	Every calendar month following the previous month until the applicability of Part I.A.2 ceases	By the 10th day of the month following the testing period.

D. SPECIAL CONDITIONS APPLICABLE TO OUTFALL 008:

1. *95% Capacity Reopener* - A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Southwest Regional Office of the Virginia Department of Environmental Quality, 355-A Deadmore Street, Abingdon, VA 24210 when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Southwest Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. *Indirect Dischargers* - The permittee shall provide adequate notice to the Department of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

   Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. *O&M 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 and Sewage Collection and Treatment Regulations, 9VAC25-790.

   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.

   The O&M 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 effluent, storm water and sludge samples;

   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 that will

prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;

e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping; and,

f. 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;

i. Procedures for reporting and responding to any spills/overflows/ treatment works upsets.

4. *Reliability Class* - The permitted treatment works shall meet Reliability Class III.

5. *Sludge Reopener* - The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

6. *Sludge Use and Disposal* - The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

   The Sludge Management Plan is considered to be the VPDES sewage sludge permit application form and attachments; The plan consists of using a licensed contractor to pump the sludge into a truck-mounted watertight tank and hauling it to the Town of St. Paul Wastewater Treatment Plant (VA0026221) where additional treatment will be provided prior to final disposal.

7. *Treatment Works Closure Plan* - 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 Southwest Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum:

   a. Verification of elimination of sources and/or alternate treatment scheme;

   b. Treatment, removal and final disposition of residual wastewater and solids;

   c. Removal/demolition/disposal of structures, equipment, piping, outfall and appurtenances;

   d. Site grading, and erosion and sediment control;

   e. Restoration of site vegetation;

   f. Access control;

   g. 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 Southwest Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

8. *CTC, CTO Requirement* - The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner to the DEQ regional water permit manager (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

9. *Public Sewerage Service* - The discharge from outfall 008 shall be terminated whenever public sewerage service is made available.

10. If the facility permitted herein is issued a Notice of Violation for any of the parameters listed below, then all of the following effluent monitoring frequencies shall become effective upon written notice from DEQ and remain in effect until permit expiration.

Parameter	Monitoring Frequency
pH	1/Day
BOD_5	1/Month
TSS	1/Month

E. COOLING WATER INTAKE STRUCTURE REQUIREMENTS:

1. Interim §316(b) Best Technology Available (BTA)

The permittee shall implement interim Best Technology Available (BTA) measures to minimize impingement and entrainment (I&E) mortality and adverse impacts. The following interim BTA measures are to be employed throughout the term of this permit: Continue utilization of the current closed cycle cooling system.

2. Impingement and Entrainment Control Technology Preventative Maintenance

The Operations and Maintenance (O&M) Manual for the permitted facility shall include a description of procedures and a regular schedule for preventative maintenance of all impingement and entrainment (I&E) control technologies and measures, and shall include a description of mitigation protocols and practices to implement should a water withdrawal event occur while an I&E technology or measure is off-line. The O&M Manual shall be updated to incorporate the information required by this condition by no later than 90 days following the effective date of this permit. All I&E control technologies and measures shall be maintained in effective operating condition. The permittee shall maintain documentation of maintenance and repairs of I&E control technologies and measures, including, but not limited to: the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, and date(s) the control technologies returned to full function.

3. Alternate Schedule for Submittal of 40 CFR §122.21(r) Information:

The permittee shall, by no later than 180 days prior to the expiration date of this permit, submit to the DEQ Southwest Regional Office all applicable information described in 40 CFR §§122.21(r)(2) through (r)(8). In addition, the submission shall include information described in 40 CFR §122.21(r)(9).

4. Visual or Remote Inspections

The permittee shall conduct visual inspections or employ remote monitoring devices during the period any cooling water intake structure is in operation. Inspections shall be conducted no less frequently than weekly to ensure that any technologies operated to comply with impingement mortality and entrainment requirements, any additional measures necessary to protect listed threatened and endangered species and designated critical habitat, and other standards for minimizing adverse environmental impact as established in this permit, are maintained and operated to function as designed.

Inspection documentation shall include at a minimum:

(a) Date, time, and location of the inspection or remote monitoring period;

(b) The name(s) and signature(s) of the inspector(s);

(c) A description of water withdrawal volumes or rates occurring at the time of the inspection;

(d) Where available, head loss across the intake screen(s);

(e) If adverse weather conditions exist, a description of the adverse weather conditions;

(f) Any technologies needing maintenance, repair, or replacement.

The requirement to conduct visual or remote inspections is waived when no water is withdrawn through all cooling water intake structures during an entire inspection period. For each cooling water intake structure, the permittee shall document the date(s) when no water is withdrawn through the respective intake structure.

When adverse weather conditions prevent visual inspections or remote monitoring from being safely conducted during a given inspection period, the visual inspection or remote monitoring requirements may be waived provided the permittee prepares documentation explaining the reasons why a visual inspection or remote monitoring could not be safely conducted. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such events as local flooding, high winds, electrical storms, or situations that otherwise make an inspection impracticable, such as drought or extended frozen conditions.

Any deficiencies found during a visual inspection or remote monitoring event shall be corrected as soon as possible, but no later than 30 days following discovery, unless permission for a later date is granted by DEQ in writing.

All documentation relating to visual inspections or remote monitoring, or the inability to safely conduct such monitoring due to adverse weather conditions, shall be signed and certified in accordance with Part II.K of this permit and shall be made available to DEQ personnel for review during facility inspections or no later than 30 days following receipt of a request by DEQ.

5. Annual Certification Statement Requirements

The permittee shall annually prepare a written statement certifying either: a) operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure have been substantially modified, or b) no substantial changes have occurred in the operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure.

If substantially modified operations have occurred, the permittee must provide with the annual certification statement a summary of those changes. In addition, the permittee must submit revisions to the information required at 40 CFR §122.21(r) with the next application for reissuance of this permit.

Certification statements shall be signed in accordance with Part II.K of this permit and submitted to the DEQ Southwest Regional Office by no later than each February 10 for the period covering the preceding calendar year.

6. Measures to protect Federally-listed Threatened or Endangered (T&E) species, designated critical habitat, and fragile species or shellfish

The permittee shall operate each cooling water intake structure and cooling system in a manner designed to minimize incidental take, reduce or remove more than minor detrimental effects to Federally-listed threatened, endangered, or fragile species and designated critical habitat, including prey base.

The permittee shall prepare, on a calendar year basis, a report providing an assessment of the efficiency /effectiveness of the control measures. The report shall include a compilation of any federally-listed threatened or endangered species found to have been impinged or entrained during the reporting year, including the total number and type of organisms (listed by taxa), and

life stage cycle (egg, larva, juvenile, adult) impacted by injury or death. The assessments and compiled data shall be submitted to the DEQ-Regional Office by no later than each February 10 for the preceding calendar year.

7. Federal Endangered Species Act Compliance

Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

F. STORMWATER MANAGEMENT CONDITIONS

1. General Stormwater Special Conditions

a. Sample Type

For all stormwater monitoring required in Part I.A or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72-hour storm event interval is waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first three hours of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If stormwater discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the stormwater discharge before it mixes with the non-stormwater discharge.

b. Recording of Results

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

(1) The date and duration (in hours) of the storm event(s) sampled;
(2) The rainfall total (in inches) of the storm event which generated the sampled discharge; and
(3) The duration between the storm event sampled and the end of the previous measurable storm event.

c. Sampling Waiver

When a permittee is unable to collect stormwater samples required in Part I.A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. 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, 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(s). The substantially identical outfall monitoring provisions apply to quarterly visual monitoring, benchmark monitoring and impaired waters monitoring. The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee shall include the following information in the SWPPP:

(1) The locations of the outfalls;

(2) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data, where available; and

(3) Estimates of the size of the drainage area (in square feet) for each of the outfalls.

e. Quarterly Visual Examination of Stormwater Quality

(1) The permittee must perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must 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. 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 must be signed and certified in accordance with Part II.K of this permit.

(2) Visual examinations must be made of samples collected in accordance with Part I.F.1.a (Sample Type). The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples.

(3) The visual examination reports must be maintained on-site with the Stormwater Pollution Prevention Plan (SWPPP). The report must 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.

f. Authorized Non-Stormwater Discharges

(1) The following non-stormwater discharges are authorized by this permit:

(a) Discharges from fire fighting activities;

(b) Fire hydrant flushings;

(c) Potable water including water line flushings;

(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 fertilizer have been applied in accordance with the approved labeling;

(g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

(h) Routine external building washdown which does not use detergents;

(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 are not authorized and shall either be eliminated or covered under a separate VPDES permit.

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities
The discharge of hazardous substances or oil in the stormwater discharge(s) 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 110, 40 CFR 117 and 40 CFR 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 110, 40 CFR 117 or 40 CFR 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 as soon as he or she has knowledge of the discharge;
(2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
(3) The SWPPP required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

h. 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.

i. Corrective actions
(1) Data exceeding benchmark concentration values, if applicable
(a) If the benchmark monitoring result exceeds the benchmark concentration value for that parameter, 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 30 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.F.2.c (Maintenance), 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-Southwest 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 plan shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) 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 permittee 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 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

(iii) The permittee notifies the DEQ-Southwest 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 permittee 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 wasteload allocation; or

(c) The DEQ-Southwest Regional Office 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 30 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.F.2.c (Maintenance), 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-Southwest 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 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 and retained with the SWPPP. Reports of corrective actions shall be signed in accordance with Part II.K. Follow-up reporting.

If at any time monitoring results indicate that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or the DEQ-Southwest Regional Office determines that discharges from the facility are causing or contributing to an exceedance of a water quality standard, immediate steps shall be taken to eliminate the exceedances in accordance with the above Part I.F.1.i.(2) (Corrective actions). Within 30 calendar days of implementing the relevant corrective action(s) an exceedance report shall be submitted to the DEQ-Southwest Regional Office. The following information shall be included in the report: permit number; facility name, address and location; receiving water; monitoring data from this event; an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number.

j. Additional Requirements for Salt Storage

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/or 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(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission 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 state waters.

2. Stormwater Pollution Prevention Plan

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.F.2.b (Contents of the Plan). 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 of Part I.F.2.b the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. Deadlines for Plan Preparation and Compliance

(1) The facility shall review and update the existing plan as expeditiously as practicable, but no later than 90 days from the effective date of the permit. Verification of compliance shall be provided, in writing, within 10 days of the above deadline.

(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 portion(s) of the facility prior to completion of the permanent control measure.

b. Contents of the Plan

The contents of the SWPPP shall comply with the requirements listed below and those in Part I.F.3. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team

The plan 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) Activities at the Facility

A description of the nature of the industrial activities at the facility.

(b) General Location Map

A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.

(c) 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 (roofs, paved areas and other impervious areas);

(iii) Locations of all stormwater conveyances including ditches, pipes, swales, and inlets, and the directions of stormwater flow (use arrows to show which ways stormwater will flow);

(iv) Locations of all existing structural and source control measures, including BMPs;

(v) Locations of all surface water bodies, including wetlands;

(vi) Locations of potential pollutant sources identified under Part I.F.2.b.(3) (Summary of potential pollutant sources);

(vii) Locations where significant spills or leaks identified under Part I.F.2.b.(4) (Spills and leaks) have occurred;

(viii) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and cleaning areas; loading and unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;

(ix) Locations of stormwater outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the stormwater from the facility discharges to them;

(x) Location and description of all non-stormwater discharges;

(xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and

(xii) Locations and sources of runon to the site from adjacent property where the runon contains significant quantities of pollutants; and

(xiii) Locations of all stormwater monitoring points.

(d) 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 municipal separate storm sewer system (MS4), identify the MS4 operator, and the receiving water to which the MS4 discharges.

(3) Summary of Potential Pollutant Sources

The plan shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: 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, but are not limited to: 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 the area

A list of the industrial activities exposed to stormwater (e.g., material storage, equipment fueling and cleaning, cutting steel beams);

(b) Pollutants

A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil zinc, sulfuric acid, cleaning solvents, etc.) associated with each industrial activity. 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 this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

(4) 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 plan 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 this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities.

(5) Sampling Data

The plan 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.

(6) Stormwater Controls

(a) Control measures shall be implemented for all the areas identified in Part I.F.2 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 runon 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 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 ground water contamination);

(v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream 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) Nonnumeric 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 (e.g., there are no storage piles containing salt).

(i) Good Housekeeping

The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. Typical problem areas include areas around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. The plan 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.

(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. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120.E, thereby eliminating the need to have a permit.

(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.F 2.c (Maintenance).

(iv) Spill Prevention and Response Procedures

The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks, including:

(A) Preventive measures, such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;

(B) 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 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;

(C) 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

(D) 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) Routine Facility Inspections

Facility 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. These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part I.F.2.d. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

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

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than

within 30 days of 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 and time;
(B) The name and signature of the inspector(s);
(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.

(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 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.

c. 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 measure 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 during active operation (i.e., during a stormwater runoff event) 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 site inspections required by Part I.F.2.b.(6)(b)(v) (Routine Facility Inspections) or Part I.F.2.d (Comprehensive Site Compliance Evaluation) 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 date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, date(s) that the control

measure(s) returned to full function, and the justification for any extended maintenance or repair schedules.

d. Comprehensive Site Compliance Evaluation

The permittee shall conduct comprehensive site compliance evaluations at least once each calendar year. The evaluations shall be done by qualified 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. The personnel conducting the evaluations may be either facility employees or outside personnel hired by the facility.

(1) Scope of the Compliance Evaluation

Evaluations shall include all areas where industrial materials or activities are exposed to stormwater, as identified in Part I.F.2.b.(3) (Summary of potential pollutant sources). The personnel shall evaluate:

(a) Industrial materials, residue or trash that may have or could come into contact with stormwater;

(b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;

(c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;

(d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;

(e) Evidence of, or the potential for, pollutants entering the drainage system;

(f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;

(g) Review of stormwater related training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of control measures, including BMPs;

(h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.

(2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part I.F.2.b.(2)(c); revise the description of controls required by Part I.F.2.b.(6) to include additional or modified control measures designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director. If existing control measures need to be modified or if additional control measures are necessary, implementation shall 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 Department;

(3) Compliance Evaluation Report

A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part I.F.2 d.(1) (a) through (h) above. Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of control measures that need to be maintained or repaired; location(s) of failed control measures that need replacement; and location(s) where additional control measures are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall

contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K and maintained with the SWPPP.

(4) Where compliance evaluation schedules overlap with routine inspections required under Part I.F.2.b.(6)(b)(v) (Routine facility inspections), the annual compliance evaluation may be used as one of the routine inspections.

e. Signature and Plan Review

(1) Signature and location

The SWPPP, including revisions to the SWPPP to document any corrective actions taken as required by Part I.F.1.(i) (Corrective Actions), shall be signed in accordance with Part II.K, dated, and retained on-site at the facility covered by this permit in accordance with Part II.B.2. All other changes to the SWPPP, and other permit compliance documentation, shall be signed and dated by the person preparing the change or documentation.

(2) 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 an MS4 receiving discharges from the site at the time of an onsite inspection or upon request.

(3) Required Modifications.

The permittee shall modify the SWPPP whenever necessary to address any corrective actions required by Part I.F.1.i.(1)(Data exceeding benchmark concentration values) or Part I.F.1.i (Corrective actions). Changes to the SWPPP shall be made in accordance with the corrective action deadlines in Part I.F.1.(i)(1) and Part I.F.1(i), and shall be signed and dated in accordance with Part II.K (Signatory Requirements).

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.

f. Maintaining an Updated SWPPP

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

(a) 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;

(b) Routine inspections or compliance evaluations determine that there are deficiencies in the control measures, including BMPs;

(c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;

(d) There is a spill, leak or other release at the facility; or

(e) There is an unauthorized discharge from the facility.

(2) SWPPP modifications shall be made within 30 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.F.2.b.(6)(b)(iii) (Preventative

Maintenance) 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.

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

3. Sector-Specific SWPPP Requirements

In addition to the requirements of Part I.F.2, the SWPPP shall include, at a minimum, the following items:

a. Site Description

Site Map. The site map shall identify the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, general refuse areas; short and long term storage of general materials (including, but not limited to: supplies, construction materials, plant equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills; construction sites; and stock pile areas (such as coal or limestone piles).

b. Stormwater Controls

(1) Good Housekeeping Measures

(a) Fugitive Dust Emissions. The permittee shall describe and implement measures that prevent or minimize fugitive dust emissions from coal and ash handling areas. The permittee shall minimize off-site tracking of coal dust and ash. Control measures to consider include installing specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.

(b) Delivery Vehicles. The plan shall describe measures that prevent or minimize contamination of stormwater runoff from delivery vehicles arriving on the plant site. At a minimum the permittee shall consider the following:

(i) Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and

(ii) Develop procedures to deal with leakage/spillage from vehicles or containers.

(c) Fuel Oil Unloading Areas. The plan shall describe measures that prevent or minimize contamination of precipitation or surface runoff from fuel oil unloading areas. At a minimum the permittee shall consider using the following measures, or an equivalent:

(i) Use of containment curbs in unloading areas;

(ii) During deliveries, having station personnel familiar with spill prevention and response procedures present to ensure that any leaks and spills are immediately contained and cleaned up; and

(iii) Use of spill and overflow protection (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

(d) Chemical Loading/Unloading Areas. The permittee shall describe and implement measures that prevent or minimize the contamination of precipitation or surface runoff from chemical loading and unloading

areas. At a minimum the permittee shall consider using the following measures (or their equivalents):

(i) Use of containment curbs at chemical loading and unloading areas to contain spills;

(ii) During deliveries, having station personnel familiar with spill prevention and response procedures present to ensure that any leaks or spills are immediately contained and cleaned up; and

(iii) Covering chemical loading and unloading areas, and storing chemicals indoors.

(e) Miscellaneous Loading and Unloading Areas. The permittee shall describe and implement measures that prevent or minimize the contamination of stormwater runoff from loading and unloading areas. The permittee shall consider the following, at a minimum (or their equivalents):

(i) Covering the loading area;

(ii) Grading, berming, or curbing around the loading area to divert run-on; or

(iii) Locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems.

(f) Liquid Storage Tanks. The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from aboveground liquid storage tanks. At a minimum the permittee shall consider employing the following measures (or their equivalents):

(i) Use of protective guards around tanks;

(ii) Use of containment curbs;

(ii) Use of spill and overflow protection; and

(iv) Use of dry cleanup methods.

(g) Large Bulk Fuel Storage Tanks. The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from large bulk fuel storage tanks. At a minimum the permittee shall consider employing containment berms (or its equivalent). The permittee shall also comply with applicable state and federal laws, including Spill Prevention Control and Countermeasures (SPCC).

(h) Spill Reduction Measures. The permittee shall describe and implement measures to reduce the potential for an oil or chemical spill, or reference the appropriate section of their SPCC plan. The structural integrity of all aboveground tanks, pipelines, pumps and other related equipment shall be visually inspected as part of the routine facility inspection. All repairs deemed necessary based on the findings of the inspections shall be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.

(i) Oil bearing Equipment in Switchyards. The permittee shall describe and implement measures to prevent or minimize contamination of surface runoff from oil bearing equipment in switchyard areas. The permittee shall consider the use of level grades and gravel surfaces to retard flows and limit the spread of spills, and the collection of stormwater runoff in perimeter ditches.

(j) Residue Hauling Vehicles. All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the container body. Vehicles without load

coverings or adequate gate sealing, or with leaking containers or beds shall be repaired as soon as practicable.

(k) Ash Loading Areas. The permittee shall describe and implement procedures to reduce or control the tracking of ash and residue from ash loading areas. Where practicable, clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water before departure of each loaded vehicle.

(l) Areas Adjacent to Disposal Ponds or Landfills. The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from areas adjacent to disposal ponds or landfills. The permittee shall develop procedures to:

(i) Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles; and

(ii) Reduce ash residue on exit roads leading into and out of residue handling areas.

(m) Landfills, Scrapyards, Surface Impoundments, Open Dumps, General Refuse Sites. The plan shall address and include appropriate control measures to minimize the potential for contamination of runoff from landfills, scrapyards, surface impoundments, open dumps and general refuse sites.

(2) Comprehensive Site Compliance Evaluation. As part of the evaluation, qualified facility personnel shall inspect the following areas on a monthly basis: coal handling areas, loading and unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

4. Sector Specific Storm Water Management Conditions.

Discharges Covered Under This Section. The requirements listed under this section apply to storm water discharges associated with industrial activity from steam electric power generating facilities (SIC 4911 in part) using coal, natural gas, oil, nuclear energy, etc. to produce a steam source, including coal handling areas. Storm water discharges from coal pile runoff subject to numeric effluent limitations are eligible for coverage under this permit, but are subject to the limitations established by Part I.A. Storm water discharges from ancillary facilities (e.g., fleet centers, gas turbine stations, and substations) that are not contiguous to a steam electric power generating facility are not covered by this permit. Heat capture/heat recovery combined cycle generation facilities are also not covered by this permit; however, dual fuel co-generation facilities that generate electric power are included.

a. Storm water runoff from coal storage piles shall comply with the following effluent limitations:

Pollutant of Concern	Limitation
Total Suspended Solids (TSS)	50 mg/L daily maximum
pH	6.0 - 9.0 s.u.

b. Analytical Monitoring. Storm water discharges associated with industrial activity from steam electric power generating facilities shall be subject to the analytical (i.e. benchmark) monitoring provisions for the following potential pollutants:

Pollutant of Concern	Benchmark Concentration
Total Recoverable Iron	1.0 mg/l

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring.

1. Samples and measurements taken as required by this permit shall 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 in accordance with 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 original strip chart 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 not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

   Department of Environmental Quality
   Southwest Regional Office
   355-A Deadmore Street
   Abingdon, VA 24210

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.

4. 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 II.F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.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 II.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 II.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 II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

   NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (276) 676-4800 (voice) or (276) 676-4899 (fax) or online at (http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx**). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services 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 public 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 II 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 II 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 II 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 II 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 II 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 II U), and "upset" (Part II 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 II 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 II 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 II 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 II 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 II 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 II I; and
   d. The permittee complied with any remedial measures required under Part II 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 II 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 II 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 II 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.

ATTACHMENT A
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:
http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7440-38-2	Arsenic, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7440-39-3	Barium, dissolved	(3)	1000 ug/L		G or C	1 / 6 Months
7440-43-9	Cadmium, dissolved	(3)	1.0 ug/L		G or C	1 / 6 Months
16065-83-1	Chromium III, dissolved [6]	(3)	5.0 ug/L		G or C	1 / 6 Months
18540-29-9	Chromium VI, dissolved [6]	(3)	5.0 ug/L		G or C	1 / 6 Months
7440-50-8	Copper, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7439-89-6	Iron, dissolved	(3)	250 ug/L		G or C	1 / 6 Months
7439-92-1	Lead, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7439-96-5	Manganese, dissolved	(3)	100 ug/L		G or C	1 / 6 Months
7439-97-6	Mercury, dissolved	(3)	0.1 ug/L		G or C	1 / 6 Months
7440-02-0	Nickel, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7782-49-2	Selenium, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7782-49-2	Selenium, Total Recoverable	(3)	5.0 ug/L		G or C	1 / 6 Months
7440-22-4	Silver, dissolved	(3)	5.0 ug/L		G or C	1 / 6 Months
7440-28-0	Thallium, dissolved	(3)	0.20 ug/L		G or C	1 / 6 Months
7440-66-6	Zinc, dissolved	(3)	10 ug/L		G or C	1 / 6 Months
PESTICIDES/PCBs						
309-00-2	Aldrin	608/625	0.05		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
57-74-9	Chlordane	608/625	0.2		G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	622	(4)		G or C	1/5 YR
72-54-8	DDD	608/625	0.1		G or C	1/5 YR
72-55-9	DDE	608/625	0.1		G or C	1/5 YR
50-29-3	DDT	608/625	0.1		G or C	1/5 YR
8065-48-3	Demeton (synonym = Dementon-O,S)	622	(4)		G or C	1/5 YR
333-41-5	Diazinon	622	(4)		G or C	1/5 YR
60-57-1	Dieldrin	608/625	0.1		G or C	1/5 YR
959-98-8	Alpha-Endosulfan (synonym = Endosulfan I)	608/625	0.1		G or C	1/5 YR
33213-65-9	Beta-Endosulfan (synonym = Endosulfan II)	608625	0.1		G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608/625	0.1		G or C	1/5 YR
72-20-8	Endrin	608/625	0.1		G or C	1/5 YR
7421-93-4	Endrin Aldehyde	608/625	(4)		G or C	1/5 YR
86-50-0	Guthion (synonym = Azinphos Methyl)	622	(4)		G or C	1/5 YR
76-44-8	Heptachlor	608/625	0.05		G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	608/625	(4)		G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608/625	(4)		G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608/625	(4)		G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC (syn. = Lindane)	608/625	(4)		G or C	1/5 YR
143-50-0	Kepone	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
121-75-5	Malathion	614	(4)		G or C	1/5 YR
72-43-5	Methoxychlor	608.2	(4)		G or C	1/5 YR
2385-85-5	Mirex	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
56-38-2	Parathion (synonym = Parathion Ethyl)	614	(4)		G or C	1/5 YR
1336-36-3	PCB, total	608/625	7.0		G or C	1/5 YR
8001-35-2	Toxaphene	608/625	5.0		G or C	1/5 YR
BASE NEUTRAL EXTRACTABLES						
83-32-9	Acenaphthene	610/625	10.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
120-12-7	Anthracene	610/625	10.0		G or C	1/5 YR
92-87-5	Benzidine	625	(4)		G or C	1/5 YR
56-55-3	Benzo (a) anthracene	610/625	10.0		G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	610/625	10.0		G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	610/625	10.0		G or C	1/5 YR
50-32-8	Benzo (a) pyrene	610/625	10.0		G or C	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	625	(4)		G or C	1/5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	625	(4)		G or C	1/5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0		G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		G or C	1/5 YR
91-58-7	2-Chloronaphthalene	625	(4)		G or C	1/5 YR
218-01-9	Chrysene	610/625	10.0		G or C	1/5 YR
53-70-3	Dibenzo (a,h) anthracene	610/625	20.0		G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
91-94-1	3,3-Dichlorobenzidine	625	(4)		G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0		G or C	1/5 YR
131-11-3	Dimethyl phthalate	625	(4)		G or C	1/5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0		G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	625/ 8270C/8270D	(4)		G or C	1/5 YR
206-44-0	Fluoranthene	610/625	10.0		G or C	1/5 YR
86-73-7	Fluorene	610/625	10.0		G or C	1/5 YR
118-74-1	Hexachlorobenzene	625	(4)		G or C	1/5 YR
87-68-3	Hexachlorobutadiene	625	(4)		G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	625	(4)		G or C	1/5 YR
67-72-1	Hexachloroethane	625	(4)		G or C	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	610/625	20.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	REPORTING RESULTS	SAMPLE TYPE(2)	SAMPLE FREQUENCY
78-59-1	Isophorone	625	10.0		G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0		G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	625	(4)		G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	(4)		G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	625	(4)		G or C	1/5 YR
129-00-0	Pyrene	610/625	10.0		G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		G or C	1/5 YR
VOLATILES						
107-02-8	Acrolein	624	(4)		G	1/5 YR
107-13-1	Acrylonitrile	624	(4)		G	1/5 YR
71-43-2	Benzene	602/624	10.0		G	1/5 YR
75-25-2	Bromoform	624	10.0		G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	1/5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	602/624	50.0		G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0		G	1/5 YR
67-66-3	Chloroform	624	10.0		G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	624	(4)		G	1/5 YR
78-87-5	1,2-Dichloropropane	624	(4)		G	1/5 YR
542-75-6	1,3-Dichloropropene	624	(4)		G	1/5 YR
100-41-4	Ethylbenzene	602/624	10.0		G	1/5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	(4)		G	1/5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0		G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	(4)		G	1/5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10.0		G	1/5 YR
10-88-3	Toluene	602/624	10.0		G	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
79-00-5	1,1,2-Trichloroethane	624	(4)		G	1/5 YR
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0		G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0		G	1/5 YR
RADIONUCLIDES						
N/A	Beta Particle & Photon Activity (mrem/yr)	(3)	(4)		G or C	1/5 YR
N/A	Gross Alpha Particle Activity (pCi/L)	(3)	(4)		G or C	1/5 YR
N/A	Combined Radium 226 and 228	(3)	(4)		G or C	1/5 YR
N/A	Uranium	(3)	(4)		G or C	1/5 YR
ACID EXTRACTABLES						
95-57-8	2-Chlorophenol	625	10.0		G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	625	(4)		G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	625	(4)		G or C	1/5 YR
25154-52-3	Nonylphenol	ASTM D 7065-06	(4)		G or C	1/5 YR
87-86-5	Pentachlorophenol	625	50.0		G or C	1/5 YR
108-95-2	Phenol	625	10.0		G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		G or C	1/5 YR
MISCELLANEOUS						
776-41-7	Ammonia as NH3-N	350.1	200		C	1/5 YR
16887-00-6	Chloride	(3)	1000 ug/L		C	1 / 6 Months
7782-50-5	Chlorine, Total Residual	(3)	100		G	1/5 YR
57-12-5	Cyanide, Free [8]	ASTM 4282-02	10.0		G	1/5 YR
N/A	Sulfate (mg/L)	(3)	(4)		C	1/5 YR
N/A	Total Dissolved Solids (mg/L)	(3)	(4)		C	1/5 YR
471-34-1	Hardness (mg/L as $CaCO_3$)	(3)	(4)		G or C	1 / 6 Months

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Name of Principal Executive Officer or Authorized Agent & Title

_____

Signature of Principal Executive Officer or Authorized Agent & Date

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. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour **(PW - Revise as required to require same composite duration as BOD_5)** composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from (i) any approved method presented in 40 CFR Part 136 or (ii) any alternative EPA approved method, provided that all analyses are in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

(4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a “<[QL]” shall be reported where the actual analytical test QL is substituted for [QL].

(5) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).

(6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL

listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(7) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(8) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].