



COMMONWEALTH OF VIRGINIA
Department of Mines, Minerals and Energy
Division of Mined Land Reclamation

NPDES Permit Number: 1202064
Associated CSMO Permit Number: 1202064
Permit Application Number 1006112

Permit Original Issue Date: May 11, 2011
Permit Revision Effective Date: NA
Expiration Date: May 11, 2016


**AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND
THE VIRGINIA STATE WATER CONTROL LAW**

Pursuant to Authority under Section 45.1 -254 of the Code of Virginia, as amended, and the Virginia Pollutant Discharge Elimination System (VPDES) Regulation, Part X - Delegation of Authority to the Department of Mines, Minerals and Energy for Coal Surface Mining Operations (9VAC25-31-940), the following owner is authorized to discharge from the facility listed below 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 and in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Sections A, B, C, and D of this permit and the plans and requirements found in joint CSMO/NPDES permit number **1202064/0082064** and any and all subsequent approved permitting actions. For the purpose of this permit, NPDES and VPDES permits are synonymous.

Owner: MAGGARD BRANCH COAL LLC
Facility Name: OSAKA WILSON MINE
County: WISE
Facility Location: WEST OF OSAKA ON MUD LICK CREEK

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

Receiving Stream: Mud Lick Creek
Basin: Tennessee - Big Sandy
Subbasin: Powell River
Standards: None


Director, Division of Mined Land Reclamation

Date

5-23-2011

Permit Contents

The complete joint CSMO/NPDES permit consists of the following:

- I. The approved CSMO/NPDES Permit Application, and any and all subsequent approved permit revisions, renewals, midterms, anniversary reports, completion reports, and DMLR administrative actions.
- II. The CSMO/NPDES Permit Document, including
 - Permit Face Sheet
 - Section A – Effluent Limitations and Monitoring Requirements
 - Section B – Schedule of Compliance (if applicable)
 - Section C – Standard Terms and Conditions
 - Section D – Other Requirements
- III. The CSMO/NPDES Factsheet Document

Facility Information

Permittee Name: MAGGARD BRANCH COAL LLC
Address: P. O. BOX 1226
City: NORTON **State:** VA **Zip:** 24273
Facility: OSAKA WILSON MINE
Total permit acres: 26.70

Application Information:

Application Type: NEW JOINT CSMO/NPDES PERMIT

Application Description: New Underground R & P Permit in the Wilson Seam. 1236 underground mining acres are being added. NPDES outfalls 001, 002, and 004 will discharge to an unnamed tributary to Mud Lick Creek of Callahan Creek of the Powell River.

NPDES Outfall Description:

NPDES outfalls associated with this permit result from the control of surface water runoff resulting from precipitation and/or groundwater discharges from coal mining activities associated with underground mining. Treatment facilities may include sedimentation structures, chemical treatment such as the addition of neutralizing agents or flocculants, or no treatment (in the case of direct discharge of underground mine drainage when treatment is not required to meet applicable effluent limitations). The following details describe the treatment facility or source (reference the Facility Location field) associated with each approved outfall. Specific information regarding each outfall and facility is found in Section V and Section XII of the CSMO/NPDES permit.

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 storm water runoff from outfall numbers **NONE**.

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

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATION</u>		<u>MONITORING REQUIREMENTS</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD)	NL	NA	NA	NL	2/ Month*	Estimate
pH (standard units)	NA	NA	6.0	9.0	2/ Month*	Grab
Total Suspended Solids	35 mg/l	NA	NA	70 mg/l	2/ Month*	Grab
Total Dissolved Solids	NL	NA	NA	NL	2/ Month*	Grab
Total Iron	3.0 mg/l	NA	NA	6.0 mg/l	2/ Month*	Grab
Total Manganese	2.0 mg/l	NA	NA	4.0 mg/l	2/ Month*	Grab

NL= No Limitation, monitoring required

NA= Not Applicable

For pH, Maximum is instantaneous maximum. For all other parameters, Maximum is daily maximum.

Discharges shall comply with all elements of Virginia's narrative water quality standards.

Alternate Effluent limitations – refer to section D, (HH) for applicability.

*Samples are to be collected at least seven (7) days apart.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water from outfall number: **NONE**.

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

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATION</u>		<u>MONITORING REQUIREMENTS</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD)	NL	NA	NA	NL	2/ Month*	Estimate
pH (standard units)	NA	NA	6.0	9.0	2/ Month*	Grab
Total Suspended Solids	35 mg/l	NA	NA	70 mg/l	2/ Month*	Grab
Total Dissolved Solids	NL	NA	NA	NL	2/ Month*	Grab
Total Iron	3.0 mg/l	NA	NA	6.0 mg/l	2/ Month*	Grab
Total Manganese	2.0 mg/l	NA	NA	4.0 mg/l	2/ Month*	Grab
Acute Whole Effluent Toxicity	NA	NA	NA	NL	1/3 Months	Grab

NL= No Limitation, monitoring required

NA= Not Applicable

For pH, Maximum is instantaneous maximum. For all other parameters, Maximum is daily maximum.

Discharges shall comply with all elements of Virginia's narrative water quality standards.

Alternate Effluent limitations – refer to section D, (HH) for applicability.

See Section A (B) for additional monitoring and reporting requirements.

See Section A (C) for additional requirements regarding Whole Effluent Toxicity monitoring requirements.

*Samples are to be collected at least seven (7) days apart.

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 storm water runoff from outfall numbers: **001, 002 and 004**

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

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATION</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD)	NL	NA	NA	NL	2/ Month*	Estimate
pH (standard units)	NA	NA	6.0	9.0	2/ Month*	Grab
Total Suspended Solids	35 mg/l	NA	NA	70 mg/l	2/ Month*	Grab
Total Dissolved Solids	NA	NA	NA	NL	2/ Month*	Grab
Total Iron	3.0 mg/l	NA	NA	6.0 mg/l	2/ Month*	Grab
Total Manganese	2.0 mg/l	NA	NA	4.0 mg/l	2/ Month*	Grab
Total Recoverable Selenium	NA	NA	NA	NL	1/ Month*	Grab

NL= No Limitation, monitoring required
 NA= Not Applicable

For pH, Maximum is instantaneous maximum. For all other parameters, Maximum is daily maximum.
 Discharges shall comply with all elements of Virginia's narrative water quality standards.
 Alternate Effluent limitations – refer to section D, (HH) for applicability.
 *Samples are to be collected at least seven (7) days apart.

A. EFFLUENT 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 storm water from outfall number: **NONE**

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

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATION</u>		<u>MONITORING REQUIREMENTS</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD)	NL	NA	NA	NL	2/ Month*	Estimate
pH (standard units)	NA	NA	6.0	9.0	2/ Month*	Grab
Total Suspended Solids	35 mg/l	NA	NA	70 mg/l	2/ Month*	Grab
Total Dissolved Solids	NL	NA	NA	NL	2/ Month*	Grab
Total Iron	3.0 mg/l	NA	NA	6.0 mg/l	2/ Month*	Grab
Total Manganese	2.0 mg/l	NA	NA	4.0 mg/l	2/ Month*	Grab
Total Recoverable Selenium	20 µg/l	NA	NA	20 µg/l	2/ Month*	Grab
Acute Whole Effluent Toxicity	NA	NA	NA	NL	1/3 Months	Grab

NL= No Limitation, monitoring required
 NA= Not Applicable

For pH, Maximum is instantaneous maximum. For all other parameters, Maximum is daily maximum.
 Discharges shall comply with all elements of Virginia's narrative water quality standards.
 Alternate Effluent limitations – refer to section D, (HH) for applicability.
 See Section A (B) for additional monitoring and reporting requirements.
 See Section A (C) for additional requirements regarding Whole Effluent Toxicity monitoring requirements.
 *Samples are to be collected at least seven (7) days apart.

A. 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 storm water from outfall numbers: **NONE**

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

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATION</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD)	NL	NA	NA	NL	2/ Month*	Estimate
pH (standard units)	NA	NA	6.0	9.0	2/ Month*	Grab
Total Suspended Solids	35 mg/l	NA	NA	70 mg/l	2/ Month*	Grab
Total Dissolved Solids	NL	NA	NA	NL	2/ Month*	Grab
Conductivity	NL	NA	NA	NL	2/ Month*	Grab
Total Iron	3.0 mg/l	NA	NA	6.0 mg/l	2/ Month*	Grab
Total Manganese	2.0 mg/l	NA	NA	4.0 mg/l	2/ Month*	Grab
Total Recoverable Selenium	20 µg/l	NA	NA	20 µg/l	2/ Month*	Grab
Acute Whole Effluent Toxicity	NA	NA	NA	NL	1/3 Months*	Grab
Chronic Whole Effluent Toxicity	NA	NA	NA	NL	1/3 Months*	Grab

NL= No Limitation, monitoring required

NA= Not Applicable

For pH, Maximum is instantaneous maximum. For all other parameters, Maximum is daily maximum.

Alternate Effluent limitations – refer to section D, (HH) for applicability.

Discharges shall comply with all elements of Virginia's narrative water quality standards.

See Section A (B) for additional monitoring and reporting requirements.

See Section A (C) for additional requirements regarding Whole Effluent Toxicity monitoring requirements.

*Samples are to be collected at least seven (7) days apart.

B. OTHER REQUIREMENTS

The term Department refers to the Virginia Department of Mines, Minerals, and Energy

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 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. 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.
3. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
4. 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;
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (3) Five 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 nonroutine 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;
 - (2) One milligram per liter for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
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, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.
6. The permittee shall monitor the effluent that is representative of outfall **001** for the substances noted in **Table 1, "Water Quality Criteria Monitoring"** according to the indicated analysis number, quantification level, sample type and frequency. The monitoring shall begin within six months of completion of construction of the first sedimentation basin

serving any of these each of these two groups of outfall locations, or as soon as a measurable discharge occurs. Sampling and analysis of the representative outfalls is also required at permit midterm and renewal.

The data shall be submitted with the discharge monitoring report for the final month of the calendar quarter in which the sampled discharge occurred. The data shall also be submitted with the materials required for midterm review and permit 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 Department will use these 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 Table 1.

7. The permittee shall comply with the following reporting requirements for all Section A monitoring:

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

<u>Effluent Parameter</u>	<u>Quantification Level</u>
TSS	1.0 mg/l
TDS	1.0 mg/l
Iron	1.0 mg/l
Manganese	1.0 mg/l
Selenium	2.5 ug/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 Section C 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.

C. WHOLE EFFLUENT TOXICITY TESTING:

1. Acute Monitoring: Outfall [NONE]

- a. Commencing within 6 months of completion of the construction of the first referenced sediment basins listed above, the permittee shall perform quarterly acute toxicity tests until there are a minimum of 4 for each test required. The permittee shall collect representative grab samples from the first outfall to discharge active mine drainage (reference NPDES Definitions, (B)). The acute tests to use are:

48 Hour Static Acute test with *Ceriodaphnia dubia* (EPA Method 2002)
48 Hour Static Acute test with *Pimephales promelas* (EPA Method 2000)

These acute tests are to be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported on the DMR. The LC₅₀ should also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable.

- b. The test dilutions should be able to determine compliance with the following endpoint:

NOAEC = 100%

- c. The permittee shall submit the following information with the results of the toxicity tests:

- (1) An estimate of the total volume discharged and the duration of the discharge.
- (2) The time at which the discharge was initiated.
- (3) The time at which sampling was initiated.

- d. The permittee may provide additional samples to address data variability during the period of initial data generation. 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.

- e. The test data will be evaluated by statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of 1.a. may be discontinued.

- f. If after evaluating the data, it is determined that no limit is needed, the permittee shall continue acute toxicity testing (both species) of each outfall annually, as on the reporting schedule contained in Item 3. below. All applicable data will be reevaluated for reasonable potential at the end of the permit term.

- g. 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.
- h. If WET screening shows an exceedance of the specified triggers prescribed in the permit, the permittee will need to resample and test the effluent within 30 days. If that test shows compliance, the permittee will need to continue WET screening in accordance with the permit requirements. However, if that test shows an exceedance, the permittee will need to, within 60 days, submit a toxicity reduction plan, as referenced in the Aquatic Protection Plan section, identifying actions it will take to achieve compliance with the WET triggers. If, after four additional consecutive quarters, the permittee is still exceeding WET triggers, the permittee will also need to submit a permit modification to place WET limits in the permit.
- i. If WET testing shows noncompliance with the specified limitations prescribed in the permit, the permittee will need to resample and test the effluent within 30 days. If the second test shows compliance, the permittee will need to continue WET testing in accordance with the permit requirements. However, if the second test shows noncompliance, the permittee will need to, within 60 days, conduct a Toxicity Reduction Evaluation (TRE)/Toxicity Identification Evaluation (TIE) analysis identifying actions it will take to achieve compliance with the WET discharge limitations.

2. Acute and Chronic Monitoring: Outfalls [**NONE**]

- a. Commencing within 6 months of completion of the construction of the first referenced sediment basins listed above the permittee shall perform quarterly acute and chronic toxicity tests until there are a minimum of 4 for each test required. The permittee shall collect representative grab samples from the first outfall to discharge active mine drainage (reference NPDES Definitions, (B)). The acute tests to use are:

48 Hour Static Acute test with *Ceriodaphnia dubia* (EPA Method 2002)
48 Hour Static Acute test with *Pimephales promelas* (EPA Method 2000)

These acute tests are to be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported on the DMR. The LC₅₀ should also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable. The chronic tests to use are:

Chronic 3-Brood Survival and Reproduction Static Renewal Test with *Ceriodaphnia dubia* (EPA Method 1002)

Chronic 7-Day Survival and Growth Static Renewal Test with *Pimephales promelas* (EPA Method 1000)

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results

which cannot be quantified (i.e., a “less than” NOEC value) are not acceptable, and a retest will have to be performed. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for DMR reporting. Report the LC50 at 48 hours and the IC25 with the NOEC’s in the test report.

- b. The test dilutions should be able to determine compliance with the following endpoint:

Acute NOAEC = 100%
Chronic NOEC of 69% equivalent to a TU_c of 1.44

- c. The permittee shall submit the following information with the results of the toxicity tests:

- (1). An estimate of the total volume discharged and the duration of the discharge.
- (2). The time at which the discharge was initiated.
- (3). The time at which sampling was initiated.

- d. The permittee may provide additional samples to address data variability during the period of initial data generation. 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.

- e. The test data will be evaluated by statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of 2.a. may be discontinued.

- f. If after evaluating the data, it is determined that no limit is needed, the permittee shall continue acute and chronic toxicity testing (both species) of each outfall annually, as on the reporting schedule contained in Item 3. below. All applicable data will be reevaluated for reasonable potential at the end of the permit term.

- g. 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.
- h. If WET screening shows an exceedance of the specified triggers prescribed in the permit, the permittee will need to resample and test the effluent within 30 days. If that test shows compliance, the permittee will need to continue WET screening in accordance with the permit requirements. However, if that test shows an exceedance, the permittee will need to, within 60 days, submit a toxicity reduction plan, as referenced in the Aquatic Protection Plan section, identifying actions it will take to achieve compliance with the WET triggers. If, after four additional consecutive quarters, the permittee is still exceeding WET triggers, the permittee will also need to submit a permit modification to place WET limits in the permit.
- i. If WET testing shows noncompliance with the specified limitations prescribed in the permit, the permittee will need to resample and test the effluent within 30 days. If the second test shows compliance, the permittee will need to continue WET testing in accordance with the permit requirements. However, if the second test shows noncompliance, the permittee will need to, within 60 days, conduct a Toxicity Reduction Evaluation (TRE)/Toxicity Identification Evaluation (TIE) analysis identifying actions it will take to achieve compliance with the WET discharge limitations.

3. Reporting Schedule:

The permittee shall report the results of the toxicity tests on the appropriate DMR or other methods prescribed by the Department and supply one copy of the toxicity test reports specified in this Whole Effluent Toxicity Program. This data is to be provided within 30 days following the end of the calendar quarter in which the analysis was completed.

D. EVALUATION OF TMDL COMPLIANCE:

New outfalls 001, 002 and 004 proposed in permit application 1006112 discharge to the approved Callahan Creek TMDL watershed. The approved TMDL report identifies the stream stressors potentially attributable to historic mining operations as sediment (represented by Total Suspended Solids (TSS)) and Total Dissolved Solids (TDS). The approved TMDL report sets load limits for sediment (TSS) and for Total Dissolved Solids (TDS). Thus, new permits and permit revisions in the Callahan Creek watershed must be issued consistent with the waste load allocations contained in the approved TMDL.

The approved TMDL report originally contemplated the use of best management practices (BMP's) and remining as the primary means for addressing loads from mining operations. However, recent load tracking by DMLR, using reported Discharge Monitoring Report (DMR) data for existing NPDES points in the watershed, coupled with assumed loading rates for approved, non-constructed point sources, indicates the current total TSS and TDS loads in the Pawpaw Creek watershed may exceed the allowable load limits. Therefore, DMLR requires additional BMP's and a load offset project be utilized to ensure that the approval of the new permit in the watershed does not result in an increase in the current loading to the stream. In addition to the BMP's proposed and described in the permit, the permittee will use load credits from the Possum Trot Gob Pile Offset Project to offset additional loads created by the proposed operations. The permit will not be allowed to exceed the projected new annual TSS and TDS load (as described below) if the watershed exceeds the transient waste load allocation. This value is the same as the portion of the offset credits allocated to this permit.

Offset project credits must be generated prior to or concurrent with the mining activity. The permittee will report quarterly monitoring data as required in Item A, Effluent Limitations and Monitoring Requirement, to calculate an quarterly aggregate TSS and TDS loading for the permit. The aggregate loading is the sum of the loading of the all permitted outfalls. The quarterly aggregated loading for the permit is to be calculated using the following formula:

$$\text{Number of Days} \times \text{Flow (gpm)} \times \text{Concentration (mg/L)} \times 0.00545 = \text{Kg/Qtr}$$

The annual loading for the permit will be the summation of all of the quarterly aggregated loading, The quarterly aggregated loading will be converted to an rolling annualized loading [note 4 complete quarters]

1. The permit will not be allowed to exceed the projected new annual TSS and TDS load. Permit compliance will be determined by comparing the rolling annualized aggregated wasteload to the offset limitations; if the rolling annualized aggregated wasteload exceeds the offset limitation, then the permittee may request that additional offset credit be allocated to the permit. This additional offset credit will be taken from any available loading remaining if the watershed aggregate wasteload is less than the WLA. If no watershed loading is available, then the additional offset credit will be taken from any remaining value for the offset project.

OFFSET TSS LIMITATION

Projected New Annual TSS Load
1,219.75 kg

OFFSET TDS LIMITATION

Projected New Annual TDS Load
20,910.01 kg

TMDL Reopener Clause

This permit is subject to a TMDL Reopener Clause as described in the TMDL Special Conditions (a).

E. STREAM MONITORING CONDITIONS:

1. To ensure protection of sensitive species and to evaluate compliance with the narrative water quality standard, biological surveys utilizing accepted protocols are to be conducted semi-annually to determine the benthic health of **Mud Lick Creek** at locations **AS-4** and **AS-5** as described in Section 8.3 of the joint CSMO/NPDES permit and shown on the Geo/Hydro Map (Attachment 21.2.E).

In addition, all biologic sampling shall be done in accordance with the Virginia Department of Game and Inland Fisheries scientific collection permit and DEQ's Virginia Stream Condition Index ("VASCI") protocol. The DEQ has developed the following procedure.

- Conduct benthic sampling using Virginia benthic protocols including time of year restrictions for sample collection.
 - Collect organisms, laboratory subsample to 300 organisms in a gridded pan.
 - Identify organisms to genus level, excluding chironomids (midges)
 - Collapse data to family level
 - Statistically rarify data to 100 organisms; computer subsampling programs available.
 - Calculate the VASCI score
 - Provide raw 300 count genus-level data in electronic spreadsheet format.
2. To ensure protection of sensitive species and to evaluate compliance with the numeric water quality standards, the permittee shall conduct chemical surface water monitoring at instream locations **AS-4** and **AS-5** as described in Section 8.3 of the joint CSMO/NPDES permit and shown on the Geo/Hydro Map (Attachment 21.2.E). This monitoring is to be conducted concurrent with the biological surveys required under item E.1.

The permittee has the option of conducting metals analyses for total metals only even though instream water quality standards are based on dissolved metal concentrations. If total metal analyses concentrations exceed instream standards, the permittee may collect dissolved metal samples for those metals exceeding instream standards to confirm whether or not the instream standard has been met. Otherwise the total metals concentration will be used to determine compliance with the instream standard.

TABLE 1 - Parameters

Parameter
Flow (gpm)
Temperature (°C)
pH (std units)
TSS (mg/L)
Specific Conductance (uS/cm)
TDS (mg/L)
Sulfates (mg/L)
Chlorides (mg/L)
Aluminum (mg/L)
Iron (mg/L)
Manganese (mg/L)
Magnesium (mg/L)
Total Acidity (mg/L)
Total Alkalinity (mg/L CaCO ₃)

TABLE 1 – Parameters (cont.)

Parameter

Bicarbonate Alkalinity (mg/L)
Carbonate Alkalinity (mg/L)
Hardness (mg/L CaCO₃)
Total Zinc (ug/L)
Total Antimony (ug/L)
Total Arsenic (ug/L)
Total Beryllium (ug/L)
Total Cadmium (ug/L)
Total Chromium (ug/L)
Total Copper (ug/L)
Total Lead (ug/L)
Total Mercury (ug/L)
Total Nickel (ug/L)
Total Selenium (ug/L)
Total Silver (ug/L)
Total Thallium (ug/L)
Total Barium (μg/L)
Total Boron (μg/L)
Total Cobalt (μg/L)
Total Cyanide (μg/L)
Total Phenols (μg/L)
Nitrate (mg/L)
Nitrite (mg/L)
Dissolved Organic Carbon (mg/L)

3. The data provided to satisfy Section A will be evaluated upon each midterm review, major modification and permit renewal to determine the facility compliance with the narrative and numeric water quality standards. Should any of the data indicate that the discharges from this operation cause or contribute to a potential violation of either a numeric or narrative water quality standard, additional pollutant specific limits or whole effluent toxicity limits shall be imposed.

Section B
Schedule of Compliance

No schedule of compliance is required for this permit.

Section C
Standard NPDES Permit Terms and Conditions

The term Department refers to the Virginia Department of Mines, Minerals, and Energy.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. 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.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

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 Department.

C. Reporting Monitoring Results.

1. The permittee shall submit the results of the monitoring required by this permit not later than 30 days following the quarter in which monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Virginia Department of Mines, Minerals, and Energy
Attn: Water Quality Section
P.O. Drawer 900
Big Stone Gap, VA 24219

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 format specified by the Department, including electronic submittal.
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 Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Department 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 Department, 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 Section C (F); or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Section C (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. (details of any adverse affects on aquatic life and the known number of fish killed must also be reported to DEQ). 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 Section C (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 Department may waive the written report on a case-by-case basis for reports of noncompliance under Item 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 Item I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Item I 2.

NOTE: The immediate (within 24 hours) reports required in G, H and I may be made to the Department's Big Stone Gap Office Enforcement Section at (276) 523-8199 (voice). 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 Department shall be signed by a person described in Item 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 Item 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 Item 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 Item 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 Item 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 Department. The Department 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" (Item U), and "upset" (Item 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 Section C (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 Section C (I).
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Department 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 Section C (U.2).
 - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Section C (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 Section C (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 Section C (I); and
 - d. The permittee complied with any remedial measures required under Section C (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.

Permits are not transferable to any person except after approval of a succession application by the Department.

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.

NPDES Permit Definitions

- (A) The term “acid or ferruginous mine drainage” means mine drainage which, before any treatment, either has a pH of less than 6.0 or a total iron concentration equal to or more than 10 mg/l.
- (B) The term “active mine drainage” means the area actively being used or disturbed for the extraction, removal, or recovery of coal from its natural deposits. This excludes areas where reclamation and revegetation has been completed.
- (C) The term “alkaline mine drainage” means mine drainage which, before any treatment, has a pH equal to or more than 6.0 and a total iron concentration less than 10 mg/l.
- (D) “Application” means the EPA standard national forms for applying for a permit, including any additions or modifications to the forms; or forms approved by EPA for use in approved States, including any approved additions or modifications.
- (E) “Approved program or approved State” means a State administered NPDES program which has been approved or authorized by EPA under 40 CFR Part 123.
- (F) “Best management practices” (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- (G) “Coal preparation plant” means a facility where coal is crushed, screened, sized, cleaned, dried, or otherwise prepared and loaded for transit to a consuming facility. “Coal preparation plant associated areas” means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities. “Coal preparation plant water circuit” means all pipes, channels, basins, tanks, and all other structures and equipment that convey, contain, treat, or process any water that is used in coal preparation processes within a coal preparation plant.
- (H) The term “commingled discharge” means discharges of drainage from underground workings that are mixed or commingled with surface mine drainage.
- (I) “Composite sample” means a combination of individual samples of wastewater taken at 1 hour intervals, for eight (8) hours (or for the duration of discharge, whichever is less), to minimize the effect of variability of the individual samples. Individual samples must be of equal volume. (Example: one (1) liter per hour.)
- (J) The term “controlled discharge” means any surface mine drainage that is pumped or siphoned from the active mining area.
- (K) “CWA” means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) Public Law 92-500 as amended by Public Law 95-217, and Public Law 95-576, 33 U.S.C. 1251 et seq.
- (L) The “daily maximum” discharge means the total mass of a pollutant discharged during the calendar day. Where the pollutant is limited in terms other than mass, the daily maximum shall mean the average concentration or other measurement specified during the calendar day or other specified sampling day.
- (M) The “instantaneous maximum” means the level not to be exceeded at any time in any grab sample.
- (N) “Discharge (of a pollutant)” means any addition of any pollutant or combination of pollutants to waters of the United States from any point source; or any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
- (O) “Existing source or existing discharger (in the NPDES program)” means any source which is not a new source or new discharger.

- (P)** “Effluent limitation” means any restriction imposed by the Director on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.
- (Q)** “Effluent limitation guideline” means a regulation published by the Administration under Section 304(b) of the CWA to adopt or revise effluent limitations.
- (R)** “Environmental Protection Agency (EPA)” means the United States Environmental Protection Agency.
- (S)** “Estimate” means to be based on technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.
- (T)** “Grab sample” means an individual sample collected in less than 15 minutes.
- (U)** “Measured Flow” means any method of liquid volume measurement the accuracy of which has been previously demonstrated in engineering practices, or for which a relationship to absolute volume has been obtained.
- (V)** “Mine drainage” means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area. The abbreviation “ml/l” means milliliters per liter.
- (W)** The “monthly average” discharge means the total mass (and concentration if appropriate) of all daily discharges sampled and/or measured properly during a calendar month divided by the number of daily discharges sampled and/or measured properly during such month.
- (X)** The “monthly average” temperature means the arithmetic mean of temperature measurements made on an hourly basis, or mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month, or during the operating month if flows are of shorter duration.
- (Y)** “National Pollutant Discharge Elimination System (NPDES)” means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of CWA. The term includes an approved program.
- (Z)** “New discharger” means any building, structure, facility, or installation: (A) From which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972, it had never discharged pollutants; (B) Which has never received a finally effective NPDES permit for discharges at that site; and (C) Which is not a “new source”. This definition includes an indirect discharger, which commences discharging into waters of the United States. It also includes any existing mobile point source, such as an offshore oil drilling rig, seafood processing vessel, or aggregate plant that begins discharging at a location for which it does not have an existing permit.
- (AA)** “NA” means effluent limitations and monitoring requirements not required.
- (BB)** “NL” means no limitation on the affected parameters, however monitoring is required.
- (CC)** “Outfall” means a point source.
- (DD)** “Permit” means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR Parts 122, 123, and 124.
- (EE)** “Point source” means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

- (FF)** “Pollutant” means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. Section 2011 et seq.)), heat wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, and agriculture waste discharged into water.
- (GG)** The term “post-mining area” means: (1) A reclamation area or (2) the underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposit has ceased and prior to bond release.
- (HH)** The term “10-year, 24-hour precipitation event” means the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather service and Technical Paper No. 40, “Rainfall Frequency Atlas of the U.S.,” May 1961, or equivalent regional or rainfall probability information developed there from.
- (II)** The term “qualifying rainfall event” means the rainfall amounts as defined; active mine areas = 0.2”/24 hours, refuse areas = 2.5”/24 hours, controlled and commingled = 4.4”/24 hour.
- (JJ)** The term “reclamation area” means the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically seeding or planting) work has commenced. The term “pre-reclamation area” means the surface area of a coal mine prior to reclamation.
- (KK)** The term “settleable solids” is that matter measured by the volumetric method that is determined by the following procedure: (a) fill an imhoff cone to the one-liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cone as milliliters per liter. The method detection limit for coal mining point sources is 0.4 ml/l.
- (LL)** The terms “treatment facility” and “treatment system” means all structures which contain, convey, and as necessary, physically or chemically treat coal mine drainage, coal preparation process water, surface runoff from disturbed areas, or drainage from coal preparation plant associated areas, which remove pollutants regulated by the Part from such waters. This includes all pipes, channels, ponds, basins, tanks, and all other equipment serving such structures.
- (MM)** The terms “underground mine drainage or discharge” mean discharges from the underground workings of underground mines until SMCRA bond release.
- (NN)** The “weekly average” discharge means the total concentration and mass of all daily discharges sampled and/or measured during a calendar week divided by the number of daily discharges sampled and/or measured during such week.
- (OO)** The term “coal refuse disposal pile” means any coal refuse deposited on the earth and intended as permanent disposal or long term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.

Section D
Other Permit Requirements

NPDES Permit Special Conditions

(AA) Water Quality Monitoring

The Department may require every owner to furnish such plans, specifications, or other pertinent information as may be necessary to determine the effect of the discharge on the water quality or such information as may be necessary to accomplish the purposes of the CWA, including but not limited to chemical and biological testing. The permittee shall obtain and record such information on the receiving waters as requested by the Department. The information shall be subject to inspection by authorized State and Federal representatives and shall be submitted with such frequency and in such detail as requested by the Department.

(BB) Management Requirements

1. All discharges authorized by this NPDES permit shall be made in accordance with the terms and conditions of the permit. The Department must be notified at least thirty (30) days prior to all expansions, production increases, or process modifications that will result in new or increased discharge(s) of pollutant(s). Notification should be by submission of a new or revised CSMO/NPDES application, or, if such discharge(s) does not violate effluent limitations specified in the permit, by submission to the Department of notice of such new or increased discharge of pollutant(s). All expansions, production increases, or process modifications that will result in new or increased discharge(s) of pollutant(s) must be approved by the Department prior to implementation.
2. The discharge of any pollutant more frequently than, or at a level greater than that identified and authorized by this permit, shall constitute a violation of the terms and conditions of this permit.
3. The discharge of any pollutant(s) from this facility that enters into a water body with an existing and approved Total Maximum Daily Load (TMDL) must be made in compliance with the TMDL and any applicable TMDL implementation plan. If the discharge enters into a water body included on the state's current 303(d) list not having an existing and approved TMDL, the discharge of any pollutant(s) from this facility can not be the cause of the stream's impairment and 303(d) listing.

(CC) Availability of Reports

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms and conditions of this permit will be available for public inspection at the Department office. As required by the Act, effluent data will not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and in Section 62.1-44.32 of the Code of Virginia.

(DD) Permit Modification and Reissuance

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304 (b)(2), and 307 (a)(2) of the CWA, if the effluent standard or limitations so issued or approved:

- (i) Contain different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- (ii) Control any pollutant not limited in the permit; or

(iii) The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act as applicable.

(iv) Immediately after EPA's promulgation of applicable standards or limitations, a draft permit incorporating the new requirements shall be sent to the permittee.

(EE) State Law

1. Compliance with this permit during its term constitutes compliance with the Law and Act except for any standard imposed under Section 307 of the Act for a toxic pollutant injurious to human health.
2. State water quality standards contain an antidegradation policy that is applicable to this permit, facility, and discharge(s). Effluent limitations assigned to this permit require the operator to utilize the best available technology to treat all discharges and to protect water quality. As a condition of this permit, the permittee must take appropriate measures to comply with the antidegradation policy.
3. 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 Act.

(FF) Toxic Pollutants

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition. Any effluent standard or prohibition established under Section 307(a) for a toxic pollutant injurious to human health is effective and enforceable by the time set forth in the promulgated standard, even absent permit modification.

(GG) Chemical Treatment

Chemical treatment is not permitted unless specified in Section V of the CSMO/NPDES permit application or otherwise specifically authorized by the Department.

(HH) Alternate effluent limitations applicable to precipitation events

The permit includes a special condition which provides an exclusion of the TSS, total iron and total manganese limitations during periods of runoff from a qualifying precipitation event as referenced in 40 CFR 434.

The watershed has been designated as impaired (benthic impairment). Since the TMDL identifies TSS as a stressor, alternate effluent limitations for TSS are not applicable to the outfalls on this permit. Alternate effluent limitations for total iron and total manganese are applicable, consistent with 40 CFR 434.

CSMO Permit Special Conditions:

(a) Disposal of non-coal waste onsite is prohibited.

(b) Process water may be used on site for the purpose of dust suppression. Dust suppression shall be carried out as a best management practice provided that ponding or direct runoff from the site does not occur during

or immediately following its application. Dust suppression shall not be employed as a wastewater disposal method

(c) No disturbance is allowed within the watersheds of any jurisdictional waters whether water of the United States or waters of the Commonwealth of Virginia (including jurisdictional isolated waters) without first obtaining a Section 404 of the Clean Water Act (CWA) permit from the U.S. Army Corps of Engineers and / or a Section 401 of the CWA Certification from the Virginia Department of Environmental Quality.

(d) Prior to disturbing any area not included in the approved permit an application for a permit revision / amendment must be submitted to the Department of Mines, Minerals and Energy (DMME) / Division of Mined Land Reclamation (DMLR) and the application must be approved with appropriate fees and bond submitted to DMLR.

(e) The Department shall conduct reviews of the approved permit pursuant to 4VAC25-130-774.11. Based upon the Department review DMLR may order the revision of the permit pursuant to 4VAC25-130-774.11(b) and (c).

(f) Biological surveys utilizing accepted protocols are to be conducted semi-annually to determine the benthic health of **Mudlick Creek** as outlined in the joint CSMO/NPDES permit. If two consecutive same-season surveys in either stream indicate declines, then DMLR will determine whether corrective action will be necessary.

(g) To ensure continuing decrease in TDS for the Cumulative Impact Area, best management practices (BMPs), offsets, and/or mitigation activities proposed in the application to address TMDL issues, must be completed prior to or concurrent with commencement of mining on the proposed permit.

TMDL Special Conditions:

(a) TMDL Reopener Clause

This permit shall be modified or alternately revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or other conditions on the facility that are not consistent with the requirements of this permit.

The following conditions are only applicable for permits with discharges to TMDL watersheds:

(b) Numeric Effluent Limitation Consisting of Annual Wasteloads of TSS and TDS from Each Discharge Point

The permittee shall ensure that discharges from permitted point sources comply with the concentration based numeric effluent limitations assigned in Section A of the joint CSMO/NPDES Permit and that permitted point source discharges shall not exceed the numeric wasteloads of pollution (concentration x flow) allocated in any approved benthic TMDL for the receiving stream.

1. Exceedances of the wasteload allocation by the permitted point sources will be determined by including the annual wasteload from this permit into calculations of the total annual transient mining wasteload for the watershed. The total annual transient wasteloads will then be compared to the mining wasteload allocations for the watershed taken from the approved benthic TMDL and will consider approved pollution reducing offsets. Tracking of mining wasteloads, wasteload offsets, calculations of mining wasteloads, and comparisons of mining wasteloads to allocations will be performed by the Virginia Department of Mines, Minerals, and Energy's Division of Mined Land Reclamation's (Division's) TMDL software program.

Mining wasteload limitations shall be as follows:

- A) Discharges from this permit may not in aggregate, or alone, exceed the DMLR mining wasteload calculation within the respective TMDL watershed, and
 - B) Discharges from this permit may not alone, or in combination with all permitted mining discharges, exceed the DMLR mining wasteload calculation within the respective TMDL watershed.
2. If the Department determines that wasteloads from the permitted point sources result in exceedances of the numeric allocations as assigned in the TMDL, the “TMDL Watershed Mining Waste Load Reduction Actions” will be initiated.

(c) A Special Permit Condition Describing the Load Reduction Credit

The Department will use its existing TMDL database and software to maintain the accounting of load reduction credit tracking.

(d) A Monitoring Plan for Each NPDES Discharge Point

Reference section A of this permit.

(e) A Monitoring Plan for the Proposed Offset (if applicable)

The offset ratio for this permit is sufficient to assure that adequate pollution reductions will be accomplished without additional monitoring requirements beyond those previously identified in this joint permit.

The offset ratio is found in the TMDL Addendum in Section 6.1 of the joint CSMO/NPDES permit. The minimum offset ratio is 2:1.

(f) Special Conditions to Address Unanticipated Failure of the Offset (if applicable)

Prior to the release of any performance bond on this permit, the Department shall determine if the permittee has completed offset requirements. The offset completion timing is outlined in Section 6.1 of the joint CSMO/NPDES permit. If the permittee fails to complete the required offset, an alternative offset project must be approved by the Department and implemented prior to the release of any performance bond on this permit.

(g) Standard Provisions Stating Clearly that the Permittee is Responsible for Achieving All Effluent Limitations in the Permit

The permittee shall be responsible for achieving all concentration and loading based effluent limitations assigned by this permit. The permittee shall be responsible for implementing all best management practices required by this permit.

Total Maximum Daily Load (TMDL) Compliance and Documentation:

The Department finds that the permit will comply with the approved TMDL and the TMDL Waste Load Allocation (WLA). The permit is consistent with the TMDL WLA pursuant to 40 CFR 122.44 (d)(1)(viii)(B).