COMMONWEALTH OF VIRGINIA
Virginia Department of Energy
Division of Mined Land Repurposing

NPDES Permit Number: 0082382
Associated CSMO Permit Number: 1402382
Permit Application Number: 1011520

Permit Original Issue Date: 12/22/83
Application Approval Date: 11/13/24
Expiration Date: 12/22/28

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

Pursuant to Authority under Section 45.2-1029 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 1402382/0082382 and any and all subsequent approved permitting actions. For the purpose of this permit, NPDES and VPDES permits are synonymous.

Owner:	SOUTHWEST VIRGINIA MINING COMPANY, LLC
Facility Name:	ENGLISH BRANCH PREP PLANT
County:	BUCHANAN
Facility Location:	0.95 MILE W OF PILGRIMS KNOB ON DISMAL CREEK

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

Stream Name	Stream Basin	Stream Subbasin	Stream Tier
DISMAL CREEK	BIG SANDY	LEVISA FORK - DISMAL CREEK	Tier I

Marshall Moore Digitally signed by Marshall Moore
Date: 2024.11.14 21:45:18 -05'00'

Director, Division of Mined Land Repurposing

Date

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 Signature Page
Section A – Effluent Limitations and Monitoring Requirements
Section B – Schedule of Compliance (if applicable)
Section C – Standard Terms and Conditions
Section D – Other Requirements

Facility Information

Permittee Name: SOUTHWEST VIRGINIA MINING COMPANY, LLC
Address: 520 FORSYTHE ROAD
City: BRISTOL **State:** VA **Zip:** 24202
Facility: ENGLISH BRANCH PREP PLANT
Total permit acres: 192.79, BUCHANAN

Application Information:

Application Type: REN/REISSUE C/N

Application Description: CSMO/NPDES Permit Renewal

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 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 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.

Section A
Permit Requirements

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall 001 MPID 5984895

Parameter	*Monthly Avg.*	*Maximum*	*Minimum*	*AEL Qualifying Event*	*Sample Rate/Interval*
Flow	NL GPM	NA	NA	NA	6/Quarter
pH	NL Std	9.0 Std	6.0 Std	NA	6/Quarter
Total Suspended Solids	35.0 mg/l	70.0 mg/l	NA	0.2 In	6/Quarter
Total Dissolved Solids	NL mg/l	NA	NA	NA	6/Quarter
Iron, Total	3.5 mg/l	7.0 mg/l	NA	0.2 In	6/Quarter
Manganese, Total	2.0 mg/l	4.0 mg/l	NA	0.2 In	6/Quarter
Settleable Solids	NL ml/l	0.5 ml/l	NA	NA	6/Quarter

Outfall 002 MPID 5984896

Parameter	*Monthly Avg.*	*Maximum*	*Minimum*	*AEL Qualifying Event*	*Sample Rate/Interval*
Flow	NL GPM	NA	NA	NA	6/Quarter
pH	NL Std	9.0 Std	6.0 Std	NA	6/Quarter
Total Suspended Solids	35.0 mg/l	70.0 mg/l	NA	0.2 In	6/Quarter
Total Dissolved Solids	NL mg/l	NA	NA	NA	6/Quarter
Iron, Total	3.5 mg/l	7.0 mg/l	NA	0.2 In	6/Quarter
Manganese, Total	2.0 mg/l	4.0 mg/l	NA	0.2 In	6/Quarter
Settleable Solids	NL ml/l	0.5 ml/l	NA	NA	6/Quarter

Outfall 004 MPID 5984898

Parameter	*Monthly Avg.*	*Maximum*	*Minimum*	*AEL Qualifying Event*	*Sample Rate/Interval*
Flow	NL GPM	NA	NA	NA	6/Quarter
pH	NL Std	9.0 Std	6.0 Std	NA	6/Quarter
Total Suspended Solids	35.0 mg/l	70.0 mg/l	NA	>1Yr/24Hr	6/Quarter
Total Dissolved Solids	NL mg/l	NA	NA	NA	6/Quarter
Iron, Total	3.0 mg/l	6.0 mg/l	NA	>1Yr/24Hr	6/Quarter
Manganese, Total	2.0 mg/l	4.0 mg/l	NA	>1Yr/24Hr	6/Quarter
Settleable Solids	NL ml/l	0.5 ml/l	NA	NA	6/Quarter
Rep Chem	RMR	NA	NA	NA	1/Permit Term
Acute WET	RWETMR TUa	NA	NA	NA	1/Quarter
Chronic WET	RWETMR TUc	NA	NA	NA	1/Quarter

Outfall 006 MPID 5984900

Parameter	*Monthly Avg.*	*Maximum*	*Minimum*	*AEL Qualifying Event*	*Sample Rate/Interval*
Flow	NL GPM	NA	NA	NA	6/Quarter
pH	NL Std	9.0 Std	6.0 Std	NA	6/Quarter
Total Suspended Solids	35.0 mg/l	70.0 mg/l	NA	>1Yr/24Hr	6/Quarter
Total Dissolved Solids	NL mg/l	NA	NA	NA	6/Quarter
Iron, Total	3.0 mg/l	6.0 mg/l	NA	>1Yr/24Hr	6/Quarter
Manganese, Total	2.0 mg/l	4.0 mg/l	NA	>1Yr/24Hr	6/Quarter
Settleable Solids	NL ml/l	0.5 ml/l	NA	NA	6/Quarter

Outfall 007 MPID 5984901

Parameter	*Monthly Avg.*	*Maximum*	*Minimum*	*AEL Qualifying Event*	*Sample Rate/Interval*
Flow	NL GPM	NA	NA	NA	6/Quarter
pH	NL Std	9.0 Std	6.0 Std	NA	6/Quarter
Total Suspended Solids	35.0 mg/l	70.0 mg/l	NA	0.2 In	6/Quarter
Total Dissolved Solids	NL mg/l	NA	NA	NA	6/Quarter
Iron, Total	3.5 mg/l	7.0 mg/l	NA	0.2 In	6/Quarter
Manganese, Total	2.0 mg/l	4.0 mg/l	NA	0.2 In	6/Quarter
Settleable Solids	NL ml/l	0.5 ml/l	NA	NA	6/Quarter

A) The collection method is to be a grab sample for all measurements except for flow, which may be either measured or estimated.
B) Samples for parameters required at a rate of 6/Quarter shall be collected twice per calendar month, at least seven days apart. Samples for parameters required at a rate of 3/Quarter shall be collected once per calendar month, at least seven days apart.
C) Monthly Avg. is to be the arithmetic mean of all samples collected in a calendar month. Max is to be a daily maximum and min is to be daily minimum for all measured parameters except for pH, which is to be measured as an instantaneous maximum and instantaneous minimum. All limits are followed by the units in which they are to be measured.
D) NL indicates monitoring is required with no limitations (No Limit). NA indicates the parameter does not apply to the particular outfall (Not Applicable).
E) RMR stands for Representative Monitoring Required. RWETMR stands for Representative Whole Effluent Toxicity Monitoring Required.
F) The AEL Qualifying Event is the minimum rainfall event necessary for AELs (alternate effluent limitations) to apply to the specified parameter for the given outfall. The utilization of AELs is optional. Settleable solids analysis is required only if AELs are claimed.
G) TSS and TDS, when listed in an above table, are to be collected and reported at all times, even when an AEL is utilized.
H) For any outfall designated as commingled (surface runoff/underground mine drainage) with an AEL precipitation minimum equivalent to a 10Y/24H event, if the treatment structure(s) are not controlling any underground mine drainage and contain only surface runoff (other than refuse areas) then a 0.2 inch AEL minimum shall apply. Application of the AEL is subject to all other conditions of 40 CFR 434. The permittee is responsible for maintaining such records necessary to meet the burden of proof for the AEL, including the date that underground mine dewatering, either pumped or gravity, last occurred.

B. OTHER REQUIREMENTS

The term Department refers to the Virginia Department of 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 waste load allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes waste load allocations, limits or conditions on the facility that are not consistent with the permit requirements.

3. This permit may be modified or alternatively revoked and reissued to incorporate appropriate limits in the event effluent monitoring indicates the need for any water quality-based limits.

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 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;
      (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(s) 004 for the substances noted in Part II, Section A.E.2, Table 1 according to the indicated analysis

number, quantification level, sample type and frequency. The outfalls listed above may be representative of a group of substantially similar outfalls on this mining operation.

Effluent characterization data for outfall(s) 004 (MPID 5984898) was provided in Renewal Application 1011520 (sample date 08/28/2023). The effluent characterization requirement for Application 1011520 has been satisfied. Additional effluent characterization will be required if the permittee chooses to renew the permit for a subsequent permit term. Additional effluent characterization may also be required if the permit is revised or if a substantive change to the nature of the effluent occurs.

For new and proposed mining operations, the monitoring shall begin within six months of completion of construction of the first sedimentation basin serving any of each of these groups of substantially similar outfall locations, or as soon as a measurable discharge occurs. If the representative outfall is not constructed first or is not the first outfall of the group represented to discharge active mine drainage [Part II Section C NPDES Definitions, (B)], the first discharging outfall within a substantially similar group should be utilized. The sampled outfall will then serve as the representative outfall for this group unless otherwise determined by the Division. The permittee should send notification to the Division prior to sampling if the designated representative outfall is not utilized.

Sampling and analysis of the representative outfalls is also required at permit 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 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 Part II, Section A.E.3, 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:

Effluent Parameter	Quantification Level
TSS	1.0 mg/l
TDS	1.0 mg/l
Iron	1.0 mg/l
Manganese	1.0 mg/l
Selenium	2.5 µg/l

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the

responsibility of the permittee to ensure that proper quality assurance and 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 with the required precision. The permittee shall use any method in accordance with Part II Section C of this permit. The permittee shall use a VELAP certified analytical laboratory for all submitted analyses.

b. **Monthly Average --** Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part II Section A of this permit condition shall be determined as follows: All concentration data below the QL given in Part II Section B.7.a will be treated as zero. All concentration data equal to or above the QL used for the analysis should be treated as reported. An arithmetic average is to be calculated using all reported data for the month, including the defined zeros. This arithmetic average must be reported on the Discharge Monitoring Report (DMR). If all measured values are below the QL used for the analysis, then the arithmetic average is to be defaulted to ½ of the QL. If a quantified report is required on the DMR and the reported monthly average concentration is less than the QL, the monthly average is to be recorded as ½ of the QL value. If a quantified report is required on the DMR and the reported monthly average is greater than the QL, the actual reported data including defined zeroes is to be used along with flow data for each sample day to determine the daily averages. The monthly average is then to be reported as the arithmetic mean of the daily averages.

Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part II Section 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 mean 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 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 Part II Section B.7.a), the maximum value of the daily averages shall be reported numerically as ½ of the QL. If a quantified measurement is required on the DMR and the reported daily maximum is less than the QL, the daily maximum for the measured parameter is to be reported as ½ of the given QL. In all other cases, the reported daily average concentrations (including the defined zeros) and corresponding daily flows are to be used in daily mean calculations.

Single Datum - Any single datum required shall be reported numerically as ½ of the QL if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in Part II Section A.B.7.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(s) (None)

a. The permittee shall monitor effluent that is representative of Outfall(s) (None) within 6 months of approval of this NPDES permit for acute toxicity tests until there are a minimum of 4 for each test required. The permittee shall perform these tests quarterly.

For new and proposed mining operations, the monitoring shall begin within six months of completion of construction of the first sedimentation basin serving any of each of these groups of substantially similar outfall locations, or as soon as a measurable discharge occurs. If the representative outfall is not constructed first or is not the first outfall of the group represented to discharge active mine drainage [Part II Section C NPDES Definitions, (B)], the first discharging outfall within a substantially similar group should be utilized. The sampled outfall will then serve as the representative outfall for this group unless otherwise determined by the Division. The permittee should send notification to the Division prior to sampling if the designated representative outfall is not utilized.

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 LC_{50} 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 assembled data will be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if such evaluation is requested by

the permittee or if toxicity has been demonstrated over the course of sampling. Should evaluation of the data indicate that a limit is needed, WET limits and associated compliance schedules will be imposed and the permittee may cease the toxicity tests outlined in Part II Section C.1.a.

f. If evaluation of the assembled data results in the conclusion that no limit is needed, the permittee shall perform an acute WET test for each species of each representative outfall at permit renewal as defined on the reporting schedule contained in Part II Section C.3. 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.

2. Acute and Chronic Monitoring: Outfall(s) 004

a. The permittee shall monitor effluent that is representative of Outfall(s) 004 within 6 months of approval of this NPDES permit for acute and chronic toxicity tests until there are a minimum of 4 for each test required. The permittee shall perform these tests quarterly.

For new and proposed mining operations, the monitoring shall begin within six months of completion of construction of the first sedimentation basin serving any of each of these groups of substantially similar outfall locations, or as soon as a measurable discharge occurs. If the representative outfall is not constructed first or is not the first outfall of the group represented to discharge active mine drainage [Part II Section C NPDES Definitions, (B)], the first discharging outfall within a substantially similar group should be utilized. The sampled outfall will then serve as the representative outfall for this group unless otherwise determined by the Division. The permittee should send notification to the Division prior to sampling if the designated representative outfall is not utilized.

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 LC_{50} 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 C*eriodaphnia 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 within 30 days of the test it is replacing. Express the test NOEC as TUc (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). Estimate of the total volume discharged and the duration of the discharge.
(2). Time at which the discharge was initiated.
(3). 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 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 Part II Section C.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 representative outfall at renewal, as on the reporting schedule contained in Part II Section C.3. 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.

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:

To be consistent with the assumptions and requirements of the applicable Total Maximum Daily Load (TMDL) and any mining waste load allocations contained in the TMDL, the permittee shall implement best management practices (BMPs) as established in any compliance schedule included in the permit for this facility.

The BMPs and other requirements of the compliance schedule shall serve as water quality-based effluent limitations for this facility.

TMDL Reopener Clause

This permit is subject to a TMDL Reopener Clause as described in Part II Section D TMDL Special Conditions (a).

E. STREAM MONITORING CONDITIONS:

1. Biological surveys are to be completed once annually during the fall collection season to determine the benthic health of DISMAL CREEK at locations DC3, DC2, and DC1 as outlined in the joint CSMO/NPDES permit (Part I, Sections 8.3 and 21.2). DEQ's Virginia Stream Condition Index (VASCI) will be utilized to determine a score for each monitoring location. The Department may also consider applicable VASCI scores generated by DEQ. The stream habitat scores and chemical data will also be collected at these locations. All biologic sampling shall be done in accordance with applicable protocols as described below. Biological survey results will need to be submitted by March 1st of the next calendar year following the date the survey was conducted.

   The benthic surveys shall be conducted annually each year in the fall season period determined by DEQ, avoiding to the maximum extent practicable times when the sample location is influenced by abnormal conditions, including drought and/or scouring flood. All biological surveys should be conducted as close to the anniversary date of the original surveys as possible. In addition, all biologic sampling shall be done in accordance with the Virginia Department of Wildlife Resources 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 200 +/- 10% (220-180) organisms in a gridded pan.
   - Identify organisms to genus level, excluding chironomids (midges) and any organisms which cannot be accurately identified to genus, which are instead identified to family level. All organisms, whether identified to genus or family level, are included in the count going forward.
   - Collapse data to family level
   - Statistically rarify data to 110 +/- 10% (99-121) organisms; computer subsampling programs available.
   - Calculate the VASCI score
   - Provide raw 200 +/- 10% (220-180) count genus-level data in electronic spreadsheet format.

2. The permittee shall conduct chemical surface water monitoring at instream locations DC1, DC2, and DC3 as described in Section 8.3 of the joint CSMO/NPDES permit and shown on the applicable map (Attachment 21.2.E). This monitoring is to be conducted concurrent with the biological surveys required under item Part II Section A.E.1. Fall chemical monitoring will need to be submitted by March 1st of the next calendar year following the fall collection date. 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.

3. The data provided to satisfy Part II Section A, at a minimum, will be evaluated upon each major modification and permit renewal to determine whether permit modifications are necessary. Should any of the data indicate that the discharges from this operation have the potential to cause or contribute to a violation of either a numeric or narrative water quality standard, additional pollutant specific limits or whole effluent toxicity limits shall be imposed.

TABLE 1 - Parameters

Parameter
Flow (gpm)
Temperature (°c)
pH (std units)
TSS (mg/L)
Specific Conductance (µS/cm)
TDS (mg/L)
Sulfates (mg/L)
Bromide (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 CaCO3)
Bicarbonate Alkalinity (mg/L)
Carbonate Alkalinity (mg/L)
Hardness (mg/L CaCO3)
Total Zinc (µg /L)
Total Antimony (µg /L)
Total Arsenic (µg /L)
Total Beryllium (µg /L)
Total Cadmium (µg /L)
Total Chromium (µg /L)
Total Copper (µg /L)
Total Lead (µg /L)
Total Mercury (µg/L)
Total Nickel (µg /L)
Total Selenium (µg/L)
Total Silver (µg /L)
Total Thallium (µg /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)
Hydrogen Sulfide (mg/L)[1]
PCBs

[1] This parameter need only be analyzed for underground mine discharges.

Section B
Schedule of Compliance

A schedule of compliance is not required.

Section C
Standard NPDES Permit Terms and Conditions

The term Department refers to the Virginia Department of 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. 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, excluding records of monitoring information required by this permit related to sewage sludge use and disposal activities, which shall be retained for a period of at least five years. 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 Energy
   Attn: DMLR Water Quality Section
   3405 Mountain Empire Rd
   Big Stone Gap, VA 24219

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

NOTE: The immediate (within 24 hours) reports required in Part II Section C (**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 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 Part II Section C.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 Section C.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 Section C.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 Section C.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 Part II Section C.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 Coal Surface Mining Operation permit, 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" Part II Section C. U, and "upset" (Part II Section C.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 sludge

Solids, sludge 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 Part II Section C.U.2 and 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 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 Part II 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 Part II 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 Part II 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 Part II Section C.I; and
   d. The permittee complied with any remedial measures required under Part II 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 permitted 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 Coal Surface Mining Operation permit, 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 to the remainder of this permit shall not be affected thereby.

AA. Water Quality Criteria Reopener

This permit may be modified or alternatively revoked and reissued to incorporate appropriate limits provided regular or conditional effluent monitoring indicates the need for any water quality-based limitations.

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 approve 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 limited in the permit 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 cannot 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 Clean Water Act (CWA), 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 CWA 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 Virginia State Law and CWA except for any standard imposed under Section 307 of the CWA 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 CWA.

(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 CWA 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 Part I Section 5.15 of the CSMO/NPDES permit application or otherwise specifically authorized by the Department. Treatment chemicals will be utilized in accordance with manufacturer's specifications and in quantities not harmful to aquatic life.

(HH) Alternate effluent limitations applicable to precipitation events

The permit includes a condition which provides an exclusion of the TSS, total iron and total manganese concentration limitations during periods of runoff from a qualifying precipitation event as referenced in 40 CFR 434. However, TSS is required to be collected and reported for discharges utilizing the alternate effluent limit. The reported TSS analyses will be utilized by DMLR for waste load calculation only.

For discharges to TMDL watersheds with TSS identified as a stressor, the permit shall also comply with the applicable TMDL consistent with its assumptions and requirements. Best management practices requirements and/or offsets will be used to establish any necessary reductions to meet the

transient/aggregate waste load allocation as established in the compliance schedule included in this permit. This requirement is in addition to the technology-based effluent limitations of 40 CFR 434.

CSMO Permit Special Conditions:

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

(b) Water from sediment control ponds 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 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 Virginia Department of Energy / Division of Mined Land Repurposing(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 will be conducted in accordance with the language in Part II Section A.E Stream Monitoring Conditions of the NPDES permit.

(g) To ensure continuing decrease in TDS for the Cumulative Impact Area, best management practices (BMPs), verified offsets, and/or mitigation activities proposed in Part II Section A.D of the NPDES permit should 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 waste load allocation procedure, pursuant to Section 303(d) of the CWA, imposes waste load allocations, limits or other conditions on the facility that are not consistent with the requirements of this permit.

(b) Numeric Effluent Limitation - Annual Wasteloads

The permittee shall ensure that discharges from permitted point sources comply with the concentration based numeric effluent limitations assigned in Part II Section A of the joint CSMO/NPDES Permit and that permitted point source discharges shall not exceed the numeric waste loads of pollution defined in this permit.

1. Tracking of mining waste loads, waste load offsets, calculations of mining waste loads, and comparisons of mining waste loads to allocations will be performed by the Department's TMDL system. Discharges resulting in a total waste load which exceeds TMDL limits will be determined as described in the factsheet associated with this permit.

2. If the Department determines that waste loads from the permitted point sources have resulted in or will result in a waste load in excess of the TMDL WLAs, the Department will require the permittee to conduct additional monitoring according to a schedule established by the Department. Based upon the monitoring results, the Department will confer with the permittee to develop reduction actions that may include revised and additional BMPs, as well as flow measurements and other monitoring. If within 90 days of receipt of the final required monitoring results the Department and the permittee cannot come to agreement on the necessary reduction actions and a schedule for their implementation, then the Department may modify or revoke and reissue the NPDES permit to assign permit-specific reduction actions and an implementation schedule. Failure by the permittee to comply with any such permit requirements will constitute grounds for enforcement.

(c) Waste load Offset Credit

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

(d) NPDES Discharge Monitoring Plan

Referenced in Part II Section A

(e) Offset Monitoring Plan (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 Part I Section 6.1 of the joint CSMO/NPDES permit. The minimum offset ratio is 2:1.

(f) Unanticipated Failure of 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 Part I 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) Responsibility to Achieve All Effluent Limitations in 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 and/or TMDL Waste load Reduction Actions required by this permit.

(h) Best Management Practices

The permittee shall be responsible for implementing applicable BMPs as noted in DMLR Guidance Memorandum 14-05 and/or BMPs included in Sections 5.15 and 6.1 of the joint permit application.

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).

VIRGINIA DIVISION OF MINED LAND REPURPOSING
Joint CSMO/NPDES Permit Factsheet
Application Number 1011520
CSMO: 1402382
NPDES: 0082382

This document gives pertinent information concerning the joint Coal Surface Mining Operation (CSMO)/ National Pollutant Discharge Elimination System (NPDES) permit listed below. This permit is being processed as a **Minor Source** industrial permit. The industrial discharge(s) result from the control of surface water runoff and/or groundwater discharges associated with coal mining activities.

The permit process consists of: developing permit limitations based upon the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR 434, the State Water Quality Standards, Total Maximum Daily Load (TMDL) Regulations, and Storm Water guidelines.

The effluent limitations contained in this permit will maintain all applicable state and federal standards, including the Water Quality Standards of 9 VAC 25-260-00 et seq., the Virginia Coal Surface Mining and Reclamation Regulations, and TMDLs.

1. Facility Information

Permittee Name: SOUTHWEST VIRGINIA MINING COMPANY, LLC
Address: 520 FORSYTHE ROAD
City: BRISTOL **State:** VA **Zip:** 24202
Facility: ENGLISH BRANCH PREP PLANT

Location:

Description: 0.95 MILE W OF PILGRIMS KNOB ON DISMAL CREEK
NAD 83 Virginia State Plane South Northing: 3632474
NAD 83 Virginia State Plane South Easting: 10486043
County: BUCHANAN
USGS 7.5' Quadrangle: KEEN MOUNTAIN, PATTERSON

Type of Mining

AF-Prep Plant
AF-Refuse Disp
Undergrd. - R P

2. CSMO/NPDES Permit Number:

CSMO: 1402382
NPDES: 0082382
Permit Expiration Date: 12/22/28
Former NPDES Permit Number: N/A
Former CSMO Permit Number: N/A

3. Owner Contact:

Operator:	**Telephone:**
SOUTHWEST VIRGINIA MINING COMPANY, LLC	(276)669-8599

4. Administrative Dates:

Administratively Complete Date: 11/14/23
NPDES Reviewer: TRACI YEARY
NPDES Reviewer Phone: 276-523-8100
Review Begin Date: 11/14/23
Public Comment Beginning Date: 12/14/23 (1st publication, VIRGINIA MOUNTAINEER (Grundy))
Public Comment Ending Date: 02/10/24 (30 days following last publication, VIRGINIA MOUNTAINEER (Grundy))
Informal Conference Dates: N/A
Application Approval Date: 11/13/24
Original Permit Issue Date: 12/22/83

5. Application Information:

Application Type: REN/REISSUE C/N
Application Description: CSMO/NPDES Permit Renewal

6. Receiving Waters Classification:

Stream Name	Stream Code	Watershed	Basin
DISMAL CREEK	751	LEVISA FORK - DISMAL CREEK	BIG SANDY

7. Ambient Water Quality Description

Background/baseline ambient water quality information on receiving streams is located in Section 5.9 of the joint permit application. None of the outfalls are limited by receiving stream flows, therefore drought flow frequencies are not provided. Available instream statistics from 06/30/21 to 06/30/24 are summarized below.

Instream Statistics for DC-DS						
Parameter	Num. Samples	Average	Std. Dev	Median	Min.	Max.
Flow (GPM)	37	56,990.22	55,855.61	38,599.00	4,489.00	250,000.00
Temperature (C)	37	12.76	5.30	13.00	3.00	21.00
pH (Std)	37	7.56	0.93	7.20	6.30	9.40
Total Suspended Solids (mg/l)	37	29.57	150.75	1.90	0.00	933.00
Conductivity (uS/cm)	37	360.89	93.11	371.00	157.00	536.00
Total Dissolved Solids (mg/l)	37	221.08	60.31	226.00	92.00	342.00
Iron, Total (mg/l)	37	0.90	3.06	0.30	0.20	19.20
Manganese, Total (mg/l)	37	0.05	0.13	0.00	0.00	0.80
Sulfates (mg/l)	37	58.24	15.31	62.00	27.00	81.00
Alkalinity (mg/l)	37	115.68	38.40	116.00	38.00	177.00
Acidity (mg/l)	37	0.00	0.00	0.00	0.00	0.00

Instream Statistics for QMP-3						
Parameter	Num. Samples	Average	Std. Dev	Median	Min.	Max.
Flow (GPM)	38	476.16	858.01	185.50	0.00	4,937.00

Instream Statistics for QMP-2						
Parameter	Num. Samples	Average	Std. Dev	Median	Min.	Max.
Flow (GPM)	32	322.47	495.19	157.50	0.00	2,693.00

Instream Statistics for QMP-1						
Parameter	Num. Samples	Average	Std. Dev	Median	Min.	Max.
Flow (GPM)	30	168.53	220.36	61.00	0.00	898.00

Instream Statistics for DC-US						
Parameter	Num. Samples	Average	Std. Dev	Median	Min.	Max.
Flow (GPM)	37	55,446.70	54,720.10	35,000.00	5,835.00	245,000.00
Temperature (C)	37	13.16	5.31	13.00	3.00	21.00
pH (Std)	37	7.64	0.86	7.40	6.50	9.50
Total Suspended Solids (mg/l)	37	50.95	276.95	2.20	0.00	1,712.00
Conductivity (uS/cm)	37	358.73	96.35	364.00	158.00	537.00
Total Dissolved Solids (mg/l)	37	214.11	65.65	224.00	36.00	310.00
Iron, Total (mg/l)	37	0.97	3.31	0.40	0.20	20.80
Manganese, Total (mg/l)	37	0.06	0.15	0.00	0.00	0.90
Sulfates (mg/l)	37	57.65	14.71	59.00	26.00	79.00
Alkalinity (mg/l)	37	114.86	37.56	117.00	38.00	176.00
Acidity (mg/l)	37	0.00	0.00	0.00	0.00	0.00

8. Permit Characterization/Special Conditions/Effluent Limitations:

☒ Narrative Water Quality Standards Applicable
9VAC25-260-20
Discharges from this operation must not cause the violation of any applicable narrative instream water quality standards.

☒ Technology-based Effluent Limitations Applicable
40 CFR 434

☒ Numeric Water Quality based Effluent Limitations Applicable
9VAC25-260-140
Discharges from this operation must not cause the violation of any applicable numeric instream water quality standards.

☒ SMCRA Performance Standard
4VAC25-130-816.42 and/or 4VAC25-130-817.42

☒ Standard Permit Conditions Applicable
40 CFR 122.41 and 9VAC25-31-190
The outfalls, discharges, and related activities associated with the proposed operation must individually and in aggregate remain in compliance with the requirements stated in sections 318, 402, and 405 of the Clean Water Act. Additionally, the permittee must comply with all conditions attached to the permit, including but not limited to the effluent standards established under 307(a) of the Clean Water Act. The permittee is bound to all duties, procedures, and requirements laid out in both Federal Regulation 40 CFR 122.41 and State Regulation 9VAC25-260.

☒ Special Permit Conditions – TMDL Watershed
40 CFR 130 and CWA 303(d)
The application includes outfalls and/or discharges falling within established boundaries of the TMDL Watershed(s) Levisa River due to established stressor(s) TSS. Therefore, special permit conditions as defined in the regulations cited above are applicable to the permit.

☒ Special Permit Conditions – SMCRA
4VAC25-130-773-17

☐ Special Permit Conditions – Alternate Effluent Limitations: Remining
4VAC25-130-825

☐ Discharges limited based on receiving stream flow – Mixing Zone
9VAC260-20

☐ Possible Interstate Effect
This permit is not permitted to cross state boundaries or otherwise require Virginia interstate regulations.

9. NPDES Effluent Limitation Basis

The monitoring frequency and sample type have been established after considering the consistency and nature of these operations, the existing analytical data and the potential environmental risk and consequences of the discharges. Reporting of monitoring data is required quarterly.

Parameter	Basis
Iron, Total	Iron limitations are based on 40-CFR-434.
Flow	Report only, no limit. Monitoring required by federal effluent guidelines (40 CFR Part 434).
Manganese, Total	Manganese limitations are based on 40-CFR-434.
pH	The pH limitation is based upon Virginia's water quality standards and federal effluent guidelines (40 CFR Part 434).
Settleable Solids	SS limitations are based on federal effluent guidelines for coal mining (40 CFR Part 434).
Total Dissolved Solids	Monitoring required for informational purposes. TDS is also load-limited based upon the approved TMDL, if applicable. For discharges to TMDL watersheds with TDS identified as a stressor, the permit shall also comply with the applicable TMDL consistent with its assumptions and requirements. Best management practices requirements and/or offsets will be used to establish any necessary reductions to meet the transient/aggregate wasteload allocation.
Total Suspended Solids	TSS limitations are based on federal effluent guidelines for coal mining (40 CFR Part 434). TSS is also load-limited based upon the approved TMDL, if applicable. For discharges to TMDL watersheds with TSS identified as a stressor, the permit shall also comply with the applicable TMDL consistent with its assumptions and requirements. Best management practices requirements and/or offsets will be used to establish any necessary reductions to meet the transient/aggregate wasteload allocation.
Acute WET	WET limitations are based on 9 VAC 25-31-220 D criteria for surface water.
Chronic WET	WET limitations are based on 9 VAC 25-31-220 D criteria for surface water.

10. Permit or Proposed Permit Area Questions

Check all that apply:	
☐	A. The area contains a publicly owned treatment works which discharge into the waters of the United States.
☐	B. The facility treats, stores, or disposes of hazardous wastes.
☐	C. Fluids are injected at this facility which are: (1) brought to the surface in connection with conventional oil or natural gas production; (2) used for the enhanced recovery of oil or natural gas; or (3) for storage of liquid hydrocarbons.
☐	D. The area contains a concentrated animal feeding operation or aquatic animal production facility that discharges into the waters of the United States.
☐	E. This facility will inject industrial effluent below the lower most stratum containing, within 1 quarter mile of the well bore, underground sources of drinking water.

11. NPDES Outfall Description:

Sediment control structures and the associated NPDES outfalls for surface coal mining operations primarily receive precipitation runoff from mined areas and treat the runoff by settling sediment particles prior to discharge to the receiving stream. Precipitation runoff from mined areas also dissolves portions of exposed fresh rock and carries the associated ions in solution. These ions may not be reduced in the sedimentation process prior to discharge. Certain dissolved ions or the combined concentration of these ions may cause benthic impairment depending on their makeup and/or abundance.

NPDES discharges associated with this permit are from the control of surface water runoff resulting from precipitation and/or groundwater discharges associated with coal mining activities. Typically, discharges are only treated by sedimentation, but in limited circumstances treatment may include chemical treatment such as the addition of neutralizing agents or flocculants.

- It is not anticipated that chemical treatment of the sediment basins will be required. However, in the event the sediment basins require chemical treatment, chemicals will be utilized in accordance with the manufacturer's specifications and not used at quantities that are harmful to aquatic life. Chemicals that could be used at the sediment basins include Enact #7883 purchased from NALCO which assists in the treatment of sediment load by coagulation and sodium hydroxide 20-50% caustic soda purchased from Brenntag Inc. or other qualified distributor which is used for the treatment of iron and manganese.
- Chemical treatment will be required in the preparation plant for coal cleaning operations. These chemicals include FLOMIN F 140-00 (used as a processing aid), FLOPAM EMA 23 (used as a processing aid), FLOQUAT FL 4820 (used as a processing aid), No. 2 Diesel Fuel, Low Sulfur, All Grades (used as a processing aid), and Magnetite (used as a processing aid).

There are 5 outfalls associated with this permit. Of all total outfalls, 5 were previously approved, and of all previously approved outfalls, 4 have been constructed. The constructed outfalls are 001, 002, 004, and 007. Outfall 001 has historically discharged 0.0% of the time over 76 measurements. Outfall 002 has historically discharged 0.0% of the time over 76 measurements. Outfall 004 has historically discharged 98.7% of the time with an estimated flow of 156.5 GPM over 78 measurements. Outfall 007 has historically discharged 0.0% of the time over 76 measurements.

Proposed Discharges

There are no outfalls added by revision. There are no outfalls deleted by this revision.

The following tables present details for each proposed and/or existing outfall. Specific information, including location, regarding each outfall and facility is also found in Section 5, Section 12, and Section 21 of the CSMO/NPDES permit.

MPID Number: 5984901	Action:	Sampling Freq/Qtr: 6	Location Number: 007
Elevation: -999.00	Facility Location: SB-6A	Quad: KEEN MOUNTAIN	Northing: 3,632,206.6081
Easting: 10,485,620.7139	Watershed Acres: 1.4	Disturbed Acres: 0.2	Receiving Stream: DISMAL CREEK

MPID Number: 5984900	Action:	Sampling Freq/Qtr: 6	Location Number: 006
Elevation: -999.00	Facility Location: SED POND 8	Quad: KEEN MOUNTAIN	Northing: 3,629,466.4555
Easting: 10,483,328.2941	Watershed Acres: 82.1	Disturbed Acres: 45.3	Receiving Stream: DISMAL CREEK

MPID Number: 5984898	Action:	Sampling Freq/Qtr: 6	Location Number: 004
Elevation: 1,546.00	Facility Location: POND 4, 5	Quad: KEEN MOUNTAIN	Northing: 3,632,041.4490
Easting: 10,485,735.2824	Watershed Acres: 169.2	Disturbed Acres: 63.3	Receiving Stream: DISMAL CREEK

MPID Number: 5984896	Action:	Sampling Freq/Qtr: 6	Location Number: 002
Elevation: -999.00	Facility Location: SED POND 2	Quad: KEEN MOUNTAIN	Northing: 3,632,217.1407
Easting: 10,485,731.2194	Watershed Acres: 2.3	Disturbed Acres: 2.3	Receiving Stream: DISMAL CREEK

MPID Number: 5984895	Action: C	Sampling Freq/Qtr: 6	Location Number: 001
Elevation: 1,554.00	Facility Location: SED POND 1	Quad: KEEN MOUNTAIN	Northing: 3,630,710.9827
Easting: 10,486,211.7800	Watershed Acres: 10.7	Disturbed Acres: 10.7	Receiving Stream: DISMAL CREEK

12. Instream Monitoring Description:

Instream monitoring requirements and locations are addressed in Sections 5.7, 5.10, and 21.2 of the joint CSMO/NPDES permit. Location details for each instream monitoring site are tabulated below:

MPID Number: 0008847	Action:	Sampling Freq/Qtr: 0	Location Number: DC1
Facility Location: DOWNSTREAM	Quad: KEEN MOUNTAIN	Northing: 3,633,773.6000	Easting: 10,485,869.9600
Stream: DISMAL CREEK			

MPID Number: 0008848	Action:	Sampling Freq/Qtr: 0	Location Number: DC2
Facility Location: UPSTREAM	Quad: KEEN MOUNTAIN	Northing: 3,630,837.0880	Easting: 10,487,676.9660
Stream: DISMAL CREEK			

MPID Number: 0011653	Action:	Sampling Freq/Qtr: 0	Location Number: DC3
Facility Location: Downstream	Quad: KEEN MOUNTAIN	Northing: 3,632,653.7600	Easting: 10,485,941.3600
Stream: DISMAL CREEK			

MPID Number: 0007570	Action:	Sampling Freq/Qtr: 3	Location Number: DC-DS
Facility Location: DOWNSTREAM	Quad: KEEN MOUNTAIN	Northing: 3,634,033.0000	Easting: 10,485,525.0000
Stream: DISMAL CREEK			

MPID Number: 0004091	Action:	Sampling Freq/Qtr: 3	Location Number: QMP-3
Facility Location: FLOW ONLY	Quad: PATTERSON	Northing: 3,633,418.7610	Easting: 10,479,394.6570
Stream: HORSESHOE BRANCH			

MPID Number: 0003795	Action:	Sampling Freq/Qtr: 3	Location Number: QMP-2
Facility Location: FLOW ONLY	Quad: KEEN MOUNTAIN	Northing: 3,626,720.7465	Easting: 10,487,754.5119
Stream: BILL KEEN BRANCH			

MPID Number: 0003794	Action:	Sampling Freq/Qtr: 3	Location Number: QMP-1
Facility Location: FLOW ONLY	Quad: KEEN MOUNTAIN	Northing: 3,626,792.5445	Easting: 10,486,208.5004
Stream: BILL KEEN BRANCH			

MPID Number: 0007571	Action:	Sampling Freq/Qtr: 3	Location Number: DC-US
Facility Location: UPSTREAM	Quad: KEEN MOUNTAIN	Northing: 3,630,813.0000	Easting: 10,487,060.0000
Stream: DISMAL CREEK			

13. Ground Water Monitoring:

Ground water monitoring requirements and locations are addressed in Sections 5.3, 5.6, and 21.2 of the joint CSMO/NPDES permit.

14. Climatological Monitoring Description:

Climatological monitoring requirements and location information are addressed in Sections 5.12 and 21.2 of the joint CSMO/NPDES permit.

15. Threatened/Endangered Species

For additional information regarding Threatened/Endangered Species, refer to Section 8.7 of the joint CSMO/NPDES permit application.

16. Site Inspection:

Site inspections are required under the Surface Mining Control and Reclamation Act (SMCRA) permit under 4 VAC 25-130-840.11.

17. Storm Water Discharges Associated with Industrial Activity:

All outfalls from the facility which contain storm water runoff will be subject to the storm water provisions of the NPDES program as governed by 9 VAC 25-31 et seq. The Surface Mining Control and Reclamation Act (SMCRA) permit authorized under 4 VAC 25-130 and issued jointly with this NPDES permit contains extensive storm water monitoring and management requirements which are incorporated into this NPDES permit by reference.

The management and control of all storm water discharges not covered under 9 VAC 25-31 et seq is governed by the storm water management and drainage control provisions proposed in the SMCRA permit and meet or exceed the Storm Water Pollution Prevention Plan requirements of 9 VAC 25-151-80.

18. Anti-Degradation Review:

Stream Tier Designation(s):
There is 1 stream designated as an affected surface water for this permit.
Dismal Creek has a designation of Tier I.

The State Water Control Board's Water Quality Standards includes an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is

better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

19. Anti-Backsliding:

For permit renewals and(or) permit modifications, the effluent limitations included in the permit are at least as restrictive as those in the preceding permit.

20. Permit Conditions:

Refer to the standard conditions and special conditions contained in the joint CSMO/NPDES permit.

The following special conditions are proposed to be included in Sections C and D of the NPDES permit:

a. **Industrial Reopener.** The permit includes a standard reopener to address potential changes in the permit which may be required as a result of changes in effluent standards or limitations promulgated or approved under Section 307(a)(2) of the Clean Water Act. (Part I.B.1) [Section C]

Rationale: 40 CFR 122.44 requires all permits for primary industrial categories to include the requirements of Section 307(a)(2) of the Clean Water Act.

b. **Notification Levels:** The permit includes a special condition which requires the permittee to notify the Department if they discharge certain toxic pollutants above established concentrations. [Section C]

Rationale: Required by VPDES Permit Regulation, 9 VAC 25-31-200 A for all manufacturing, commercial, mining, and silvicultural dischargers.

c. **TMDL Reopener.** The permit includes a standard reopener to address potential changes in the permit which may be required as a result of a new or revised TMDL. [Section D]

Rationale: Section 303(d) of the Clean Water Act requires that Total Maximum Daily Loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other waste load allocation prepared under section 303 of the Act.

It is believed that the joint CSMO/NPDES permit effluent limitations and special conditions will maintain State water quality standards.

21. Materials Storage:

See Special Condition (p) 2 of the standard NPDES Permit Conditions in the NPDES Permit, Section C.

22. NPDES Permit Rating Worksheet:

The staff has completed the NPDES Permit Rating Worksheet and has determined that the facility meets the criteria to be classified as a Minor Source. The completed worksheet is included in Appendix V.
Total Score: 45

23. Detailed Description - Location of Discharge Point(s)

Reference the mapping included in Section 21.2 of the permit application.

24. Public Participation:

Public Notice Information:

Public Notice required.

A copy of the application materials is made available for public inspection and comment at the designated public office. A copy of the draft NPDES permit and fact sheet are available for public inspection and comment at the Division's Big Stone Gap office.

☐ NPDES Permit Renewal/Modification

Public notice requires publication for 1 week in a newspaper of general circulation. The public comment period runs 30 days following the date of publication. Refer to Sections 2.6 and 2.7 of the joint CSMO/NPDES permit.

☒ New Joint Permit, CSMO/NPDES Permit Renewal, or Significant Revision

Public notice requires publication for 4 consecutive weeks in a newspaper of general circulation. The public comment period runs 30 days following the date of last publication. Refer to Sections 2.6 and 2.7 of the joint CSMO/NPDES permit.

Public Comment Beginning Date:

12/14/23 (1st publication, VIRGINIA MOUNTAINEER (Grundy))

Public Comment Ending Date:

02/10/24 (30 days following last publication, VIRGINIA MOUNTAINEER (Grundy))

Public Comment Information:

Any person whose interests are or may be adversely affected by the proposed operation, or an Officer, or Head of any Federal, State, or local government agency or authority may within 30 days of the date of fourth publication may submit written comments or objections to the Division of Mined Land Reclamation concerning the proposed operation (and may also request, in writing, that the Division hold an Informal Conference concerning the application).

Any relevant comments received during the public comment period or provided during an Informal Conference are addressed in writing and provided to those who comment. Comments that were received after the public comment period were considered during the technical review process.

Procedures for requesting an informal conference:

A request for an informal conference shall follow the requirements of 4 VAC 25-130-773.13(c) of the Virginia Coal Surface Mining Reclamation Regulations.

All correspondence concerning the application should be submitted to:

Virginia Department of Energy
Attn: DMLR Permit Section
3405 Mountain Empire Rd
Big Stone Gap, VA 24219

Telephone: (276) 523-820 - Attn: DMLR Permit Section

Written comments and a request for informal conference may be e-mailed to the Division at dmlrpublicnotice@dmme.virginia.gov

Procedures for requesting a formal hearing:

4VAC25-130-775.11(g)
Administrative review:
Within 30 days after an applicant or permittee is notified of the decision of the division concerning an application for approval of exploration required under Part 772, a permit for surface coal mining and reclamation operations, a permit revision, a permit renewal, or a transfer, assignment, or sale of permit rights, the applicant, permittee, or any person with an interest which is or may be adversely affected by the decision may request, in writing, a formal public hearing to contest such action with the Director of the Division of Mined Land Reclamation:

Virginia Department of Energy
Attn: Director of the Division of Mined Land Repurposing
3405 Mountain Empire Rd
Big Stone Gap, VA 24219

Procedures for judicial review:

4VAC25-130-775.13:
Judicial review
(a) General. Any applicant, or any person with an interest which is or may be adversely affected by the final administrative decision and who has participated in the administrative hearings as an objector may appeal as provided in subsection (b) of this section if—
(1) The applicant or person is aggrieved by the director or his designee's final order under 4VAC25-130-775.11; or
(2) Either the division or the director failed to act within time limits specified in 4VAC25-130-775.11.
(b) Judicial review. The final order of the division pursuant to subsection (a) of 4VAC25-130-775.11 shall be subject to judicial review as provided by the Virginia Administrative Process Act and the rules of the Supreme Court of Virginia as promulgated thereto. The availability of such review shall not be construed to limit the operation of the rights established in Section 520 of the Federal Act.

(c) All notices of appeal for judicial review of a hearing officer's final decision, or the final decision on review and reconsideration, shall be filed with the Director, Division of Mined Land Reclamation:

Virginia Department of Energy
Attn: Director of the Division of Mined Land Repurposing
3405 Mountain Empire Rd
Big Stone Gap, VA 24219

25. Variances

This permit has applicable waiver variances. The permit standards with waivers and variances are as follows:
STREAM BUFFER ZONE
100 FT. OF A PUBLIC ROAD
Variance from drainage control on small area
Small area drainage variance (4 VAC 25-130-816.46 (e))

26. Staff Comments

Staff comments and applicant responses are located in Section 21.3 of the joint CSMO/NPDES permit.

27. Impaired Segments/TMDL Watersheds

TMDL Wasteload Evaluation:

Aggregate/transient mining wasteloads for each TMDL watershed and stressor are calculated on a quarterly basis by the DMLR staff using reported monitoring data (including measurements taken when utilizing applicable AELs) .These wasteload evaluations include each permit's contribution to the total TMDL wasteload. If the total TMDL wasteload exceeds the wasteload balance provided in the approved TMDL document, individual wasteload reductions for each permit are also calculated.

Wasteload evaluations for TMDL watersheds applicable to this permit are summarized in this factsheet. Full wasteload evaluation documents are posted on the web at: https://www.dmme.virginia.gov/DMLR/TMDLWasteLoadEvaluation.shtml.

TMDL Summary for Permit 1402382 / 0082382 :

There is 1 TMDL area which contains a wasteload allocation for active coal mining facilities affected by the outfalls of this permit - Levisa River. The outfalls 001, 002, 004, 006, and 007 on this permit are previously approved to discharge into the Levisa River Watershed. There are no proposed discharges to the Levisa River Watershed for this application.

Levisa River TSS TMDL Summary

Levisa River TSS Wasteload Evaluation Summary for Q1 2024 04/01/23 to 03/31/24	
Watershed Wasteload Allocation for Mining Operations (kg/year):	418,860.00
Current Watershed Wasteload from Mining Operations (kg/year):	81,405.14
Mining Wasteload Balance (kg/year):	337,454.86
Permit Wasteload (kg/year):	1,125.96
Permit Wasteload Reduction Target (kg/year):	0.00
Est. Wasteload Change Due to this Application (kg/year):	0.00
Permit Offset Required (kg/year):	0.00

Based on the Levisa River TSS wasteload evaluation from 04/01/23 to 03/31/24, the aggregate/transient mining wasteload does not exceed the wasteload allocation. Therefore, the

associated NPDES permit does not require the permittee to implement BMPs and/or offsets to reduce future TSS wasteloads in the Levisa River watershed.

There is no proposed wasteload change due to this application revision. Therefore, an offset is not required.

TMDL Offset Tracking and Evaluation

If an offset is required, the Department will track approved offset balances for this permit utilizing the Department's TMDL system. If the permit is required to have a mining waste load offset in order to discharge, then the following requirements will also be applied.

1. Permit compliance will be determined by comparing the rolling annualized aggregate mining waste load to the offset limitations. The permit will not be allowed to exceed the mining waste load offset amount credited to this permit except as described below:
   a. Provided excess mining waste load is available when the aggregate watershed mining waste load is compared to the TMDL mining waste load allocation, the excess may be applied to the permitted waste load for that particular quarter.
   b. On the condition of the rolling annualized aggregate waste load exceeding the offset limitation, then the permittee may request that additional available offset credit be applied to the permit.
2. If no excess mining waste load is available and no existing offset credit is available, then the excess mining waste load amount from this permit must have an additional offset. The additional offset must be reviewed and approved by the Department.

Future Growth

The Department will track the future growth balance for TMDL watersheds. The future growth allocation will be managed in a manner similar to an offset where new applications will draw from future growth if mining waste load is not available for the watershed. If the future growth is utilized as well as the mining waste load for the watershed, the permit will be required to have a mining waste load offset in order to discharge.

PCBs

PCBs were widely used as dielectric and coolant fluids in transformers, capacitors, and electric motors from approximately 1920 until regulated by the Toxic Substance Control Act in 1978. Subsequently, production was banned in the United States in 1979 and equipment containing PCBs was required to be registered by EPA. Most PCB use in the Virginia coalfields would be associated with power reticulation and industrial electrical applications of which underground mining and prep plants would have been included.

PCBs were sampled at Outfall 004 (sample date 09/28/2023) with the sum of all chemical speciations of PCB of 144 pg/L. Based on flow data from the last 5 years (210 gpm), the reported PCB output is 60 mg/yr which is below the PCB TMDL wasteload allocation of 66.65 mg/yr for this permit (succeeded 1300425).

List of Appendices

1. Appendix I: Representative Sampling/Effluent Screening
2. Appendix II: Evaluation of Effluent Limitations
3. Appendix III: Reasonable Potential Analysis
4. Appendix IV: Evaluation of Alternate Effluent Limitations- Remining
5. Appendix V: NPDES Major/Minor Permit Rating Worksheet
6. Appendix VI: TMDL Wasteload Change Estimations

Appendix I. Representative Sampling/Effluent Screening:

Representative Sampling

Typical surface mine discharges can be divided into three categories based on the area controlled and whether the outfall is expected to discharge continuously, intermittently, or rarely/never.

Discharges within each of the three categories are located in the same geological strata and receive precipitation runoff from the same sources. Due to the similarities between discharges within each classification, the Department is allowing representative sampling from one outfall of each class with the exception of outfalls expected to rarely/never discharge, which require no representative sampling. Initial permit conditions will be imposed based on the representative data. Permit limits will be modified as appropriate at renewal once discharge data is collected from the outfall when constructed. If any outfalls begin to have frequent discharges then representative sampling will be required and any necessary permit limits will be developed. If the representative outfall is not constructed first or is not the first outfall of the type represented to discharge, the first discharging outfall should be utilized.

There is one class of outfall:

Class I: Representative outfall is 004; mine portal area, coal loading area, coal stockpile area, refuse area, prep plant area; 001, 002, 004, 006, 007.

Effluent Screening

WET Assays – Effluent

WET assays are utilized as a screening tool to determine if a reasonable potential for effluent toxicity exists. Acute and/or chronic bioassays as appropriate will be utilized to measure whole effluent toxicity in discharge samples for four consecutive quarters. Effluents demonstrating toxicity will receive appropriate WET limits for the discharge. Discharges not exhibiting toxicity will not receive WET limits and will only be required to submit additional WET tests at renewal and/or mid-term. Characterization will be conducted by a qualified laboratory per DEQ protocol. WET assays will utilize standard WET testing organisms and toxicity will be determined utilizing the results from such testing.

Acute and chronic WET testing is required at outfall 004.

Chemical Analyses – Effluent

The permit requires sampling for the parameters in Table 1 within 6 months of commencing the permitted activity and at renewal for each representative outfall, and in receiving streams. If any outfalls begin to have frequent discharges then representative sampling will be required and any necessary permit limits will be developed. If the representative outfall is not constructed first or is not the first outfall of the type represented to discharge, the first discharging outfall should be utilized This chemical effluent screening data will be utilized for the RP and appropriate numerical limits will be applied if necessary. These parameters will be compared to instream baseline data and numerical water quality standards to determine whether numerical limits and/or mixing zones are required. The chemical analyses for effluent screening are in addition to the currently required bi-weekly sampling required for NPDES monitoring compliance purposes.

Outfall 004 is designated as the representative outfall for effluent screening.

TABLE 1 - Parameters

Parameter
Flow (gpm)
Temperature (ºC)
pH (std units)
TSS (mg/L)
Specific Conductance (uS/cm)
TDS (mg/L)
Sulfates (mg/L)
Bromide (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 CaCO3)
Bicarbonate Alkalinity (mg/L)
Carbonate Alkalinity (mg/L)
Hardness (mg/L CaCO3)
Total Zinc (µg/L)
Total Antimony (µg/L)
Total Arsenic (µg/L)
Total Beryllium (µg/L)
Total Cadmium (µg/L)
Total Chromium (µg/L)
Total Copper (µg/L)
Total Lead (µg/L
Total Mercury (µg/L)
Total Nickel (µg/L)
Total Selenium (µg/L)
Total Silver (µg/L)
Total Thallium (µg/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)
Hydrogen Sulfide (mg/L)[1]
PCBs

[1] This parameter need only be analyzed for underground mine discharges.

Appendix II: Evaluation of Effluent Limitations

Sediment control structures and the associated NPDES outfalls for surface coal mining operations primarily receive precipitation runoff from mined areas and discharge in response to precipitation events. Technology-based effluent limitations per 40 CFR 434 apply.

None Requested.

Appendix III: Reasonable Potential Analysis

DMLR must perform a Reasonable Potential Analysis (RPA) (9VAC 25-31-220 D.1) for each proposed discharge in determining which permit conditions are needed for a new or expanded discharge permit. This analysis is based primarily on the potential for the permit's sediment control structures to discharge and upon the nature of the discharge, whether or not dilution is available in the receiving streams, mining practices, including the geology, drainage area, etc. DMLR may utilize applicable WET screening data, effluent chemical monitoring data, instream chemical data, and instream biological survey data in conducting the RPA. As part of any RPA, DMLR will consider whether or not there are representative discharges that can be used to determine the RP for a given outfall. In TMDL watersheds, DMLR will consider whether discharges will comply with the TMDL as a portion of the RPA.

In summary, Virginia's approach will include some or all of these measures to address the potential impact of mining discharges and to address Virginia's Narrative Water Quality Standards.

1. The potential for discharge, including both flow rate and duration
2. Chemical characterization of discharges and receiving streams
3. Instream biologic characterization including benthic surveys, fish surveys, chemical water quality analyses, and habitat surveys to address effects on sensitive species
4. WET assays to determine effluent toxicity when deemed necessary by DMLR

Effluent characterization data for outfall(s) 004 (MPID 5984898) was provided in Renewal Application 1011520 (sample date 09/28/2023). Evaluation of the effluent characterization data indicated no concerns. PCBs were analyzed with the sum of all chemical speciations as 144 pg/L. Based on flow data from the last 5 years (210 gpm), the reported PCB output is 60 mg/yr which is below the PCB TMDL wasteload allocation of 66.65 mg/yr for this permit (succeeded 1300425). There is no reasonable potential for discharges from this permit to cause or contribute to a violation of instream water quality standards.

Acute and chronic WET testing were provided for Renewal Application 1011520 (collected 4th quarter 2020, 1st quarter 2021, 2nd quarter 2021, and 3rd quarter 2021) showing no signs of toxicity. The WET testing requirement for Renewal Application 1011520 has been met. Based upon past TDS effluent data, acute and chronic WET testing for Outfall 004 is required.

It is not anticipated that chemical treatment of the sediment basins will be required. However, in the event the sediment basins require chemical treatment, chemicals will be utilized in accordance with the manufacturer's specifications and not used at quantities that are harmful to aquatic life. Chemicals that could be used at the sediment basins include Enact #7883 purchased from NALCO which assists in the treatment of sediment load by coagulation and sodium hydroxide 20-50% caustic soda purchased from Brenntag Inc. or other qualified distributor which is used for the treatment of iron and manganese.

Chemical treatment will be required in the preparation plant for coal cleaning operations. These chemicals include FLOMIN F 140-00 (used as a processing aid), FLOPAM EMA 23 (used as a processing aid), FLOQUAT FL 4820 (used as a processing aid), No. 2 Diesel Fuel, Low Sulfur, All Grades (used as a processing aid), and Magnetite (used as a processing aid).

Instream Biological Surveys

Biological Monitoring Plan ☒

Biological surveys are to be completed to determine the benthic health of DISMAL CREEK at locations DC3, DC2, and DC1 as outlined in the joint CSMO/NPDES permit. Fall annual biological monitoring at Biological Aquatic Stations DC1, DC2, and DC3 is required (See Part I Section 8.3 and the applicable map in Part I Section 21.2 in the DMLR Electronic Permit Application for location information). The

Virginia Stream Condition Index (VASCI) protocol will be used. Also, stream habitat scores and chemical data will be collected at these locations. All biologic sampling shall be done in accordance with the Virginia Department of Wildlife Resources scientific collection permit requirements.

Appendix IV: Evaluation of Alternate Effluent Limitations: Remining
None Requested.

Appendix V: NPDES Permit Rating Worksheet

Date: 14 November 2024
DMLR Application No: 1011520
DMLR Permit No: 1402382
VPDES Permit No: 0082382

FACTOR 1 Toxic Pollutant Potential

Determine the *Total Toxicity* potential:

SICCode	Permit Has Prep Plant	Total Toxicity Group	Points
1221		5	25
1221	X	5	25
1222		5	25
1222	X	6	30

Factor 1 Score: 30

FACTOR 2 Flow/Stream Flow Volumes
Coal industry discharges are always Type III

Sum of average discharges for each outfall for permit: 0.59 MGD

Flow Class	Code	Points
< 1 MGD	31	0
< 5 MGD	32	10
<10 MGD	33	20
>10 MGD	34	30

Factor 2 Score: 0

FACTOR 3 Conventional Pollutants
TSS load for all outfalls on permit

Flow (gpm):	30.00
Concentration (mg/L):	35.00
Days:	1
Load (lbs/day):	171.54

Load Class	Code	Points
< 100 lbs/day	1	0
< 1000 lbs/day	2	5
<5000 lbs/day	3	15
>5000 lbs/day	4	20

Factor 3 Score: 5

FACTOR 4 Public Health Impact
Is a public drinking water intake located within 50 miles downstream of discharge?

Answer	Points
No	0
Yes	See below

If yes, determine the *human health* toxicity potential:

SICCode	Permit Has Prep Plant	Human Health Toxicity Group	Points
1221		5	5
1221	X	6	10
1222		5	5
1222	X	6	10

Factor 4 Score: 0

FACTOR 5 Water Quality Factors

A) Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a waste load allocation been assigned to the discharge?

Answer	Code	Points
Yes	1	10
No	2	0

Factor 5a Score: 10

B) Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

Answer	Code	Points
Yes	1	0
No	2	5

Factor 5b Score: 0

C) Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

Answer	Code	Points
Yes	1	10
No	2	0

Factor 5c Score: 0

Factor 5 Total Score: 10

Factor 6 Proximity to Near Coastal Waters
Is the permit within 50 miles of near coastal waters?

Answer	Points
Yes	5
No	0

Factor 6 Score: 0

Worksheet Score (factors 1 through 6): 45

Appendix D (Coal Facility Discretionary Major Weighting Factor Guideline)

1) Annual Coal Mined or Processed

Tons/year	Points
≥ 1,500,000	4
≥ 500,000 and < 1,500,00	2
< 500,000	0

Factor D1 Score: 0

2) Coal Origin

Is the coal mined from an acidic seam?

Answer	Points
Yes	5
No	0

Factor D2 Score: 5

3) Average Discharge Rate

Discharge	Points
≥ 1,500 GPM	5
< 1,500 and ≥ 500 GPM3	3
< 500 GPM	1

Factor D3 Score: 1

4) Receiving Stream

Classification	Points
Trout (cold-water fishery)	5
Other high quality	3
Other	0

Factor D4 Score: 0

5) Average Discharge to TMDL Watershed(s)

TMDL Discharge	Points
≥ 500 GPM	10
< 500 GPM	0

Factor D5 Score: 0

Appendix D Score: 6

Score Summary

If the worksheet score for factors 1 through 6 is less than 80 and the Appendix D score is greater or equal to 15, add 500 points to worksheet score.

Final Worksheet Score : 45
Major or Minor Source: Minor Source

Appendix VI: TMDL Wasteload Change Estimations

There are no estimated wasteload changes to outfalls in applicable TMDL watersheds for this permit/application.

Appendix VII: TMDL Offset Balances

There is no associated offset information for this permit/application.

Renewal Application

Application No: 1011520 **Approval Date:** 11/13/2024
CSMO No: 1402382 **NPDES No:** 0082382

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I. APPLICANT INFORMATION

Name: SOUTHWEST VIRGINIA MINING COMPANY, LLC **Facility:** ENGLISH BRANCH PREP PLANT
Address: 520 FORSYTHE ROAD **Location:** 0.95 MILE W OF PILGRIMS KNOB ON DISMAL CREEK

City: BRISTOL **State Plane - North:** 3632474.0000
State: VA **Zip:** 24202 **State Plane - East:** 10486043.0000
Telephone: (276)669-8599 **Total Acres:** 192.79
Operator: JAMES O. BUNN, II **Inspector:** LAIL DEEL

Types of Mining
AF-Prep Plant
AF-Refuse Disp
Undergrd. - R P

County
BUCHANAN

Quadrangle
KEEN MOUNTAIN
PATTERSON

Receving Stream	Code	Watershed	Wtr #	Basin
DISMAL CREEK	751	LEVISA FORK - DISMAL CREEK	LF59	BIG SANDY

II. CONTRACT LABORATORY SERVICES

Laboratory Services will be performed by:

Laboratory Name: ENV. MONITORING,INC.(EMI)
Address: 5730 Industrial Park Rd.
City: NORTON **State:** VA **Zip:** 24273
Telephone: (276)679-6544

Comments: [11/14/2024, dmmetay]TJ APPNO 1011520-4 APPROVED 11/13/2024 AS CSMO/NPDES PERMIT RENEWAL 1402383/0082383. SOUTHWEST VIRGINIA MINING COMPANY, LLC - ENGLISH BRANCH PREP PLANT. NPDES CHANGED: 001 (5984895).
[5/30/2023, dmmeaxh]SJ APPNO 1011379 ISSUED 05/04/2023 AS CSMO/NPDES PERMIT 1402382/0082382. SOUTHWEST VIRGINIA MINING COMPANY, LLC - PREPARATION PLANT #3/DOMINION MINE #39. SUCCESSION TO PERMIT 1300425. GROUNDWATER ADDED: G-4 (5944893) , U-1 (5954894) , G-2 (5944891) INSTREAM ADDED: QMP-1 (0003794) , QMP-2 (0003795) , QMP-3 (0004091) , DC-DS (0007570) , DC-US (0007571) , DC1 (0008847) , DC2 (0008848) , DC3 (0011653) NPDES ADDED: 001 (5984895) , 002 (5984896) , 004 (5984898) , 006 (5984900) , 007 (5984901) RAIN GAUGE ADDED: JEWELL SMK (0000173)
[5/20/2020, dmmeazb]APPNO 1010540-9 APPROVED 05/18/2020, RENEWAL C/N 1300425/0080425 INSTREAM BIOLOGICAL/CHEMICAL MONITORING POINT ADDED: DC3 (0011653)
11/7/2016 NPDES OUTFALL 003
(MPID 5984897) DELETED BY INSPECTION JAK0001534 - 0235268
EFFECTIVE DATE 10/31/2016 (Sediment Structures Removed). prb.
05/29/2015: BOND REDUCTION APPNO 1009373-3/1300425 APPROVED 04/20/15 FOR PHASE III BOND RELEASE ON INCREMENT #2 AND TO DELETE THE RELATED 0.75 ACRE WITH NO REDUCTION IN BOND, TO INCLUDE INCREMENTAL BONDING BASED ON THE PMLU, TO DELETE RAIN GAUGE (MPID #0000320) AND ADD RAIN GAUGE (MPID #0000660). TO CHANGE THE POST MINING LAND USE ON THE 0.75 ACRE TO PUBLIC USE FOR THE WHITEWOOD RESCUE SQUAD BUILDING. AXH
05/19/2015: TJ APPNO 1008947-5 APPROVED 03/31/15 AS CSMO/NPDES PERMIT
RENEWAL 1300425/0080425, JEWELL SMOKELESS COAL CORPORATION

- PREPARATION PLANT #3/DOMINION MINE #39.
EXTENDS THE TEMPORARY CESSATION STATUS ON 1.85 ACRES AT THE DEEP MINE PORTAL AREAS UNTIL THE MID-TERM DATE OF 06/22/2016. ADD SURFACE WATER IN-STREAM MONITORING POINTS DC1 & DC2 MPID# 0008847 & 0008848 BIOLOGICAL/CHEMICAL MONITORING REQUIRED. AYB
LAB: EMI. SIGNING DMR'S: JOEL M. SINGELTON & C. WAYNE HAWLEY
11/06/2014: RA APPNO 1008706-3/1300425 APPROVED 03/26/14 TO UPDATE DETAILS ON NPDES MONITORING POINTS 001, 002, 004, 006, & 007 (MPID #5984895, 5984896, 5984898, 5984900, & 5984901), TO MODIFY THE CONFIGURATION OF PONDS 1, 4, & 5 DUE TO PROPOSED GRADING AND SITE WORK. RYB/AXH
03/05/2012: MT APPNO 1007628-2/1300425 APPROVED 12/19/12 AS MID-TERM REVIEW INCLUDING THE FOLLOWING COMMENT: IN ORDER TO ADDRESS REASONABLE POTENTIAL ANALYSIS (RPA) AND NARRATIVE WATER QUALITY STANDARDS (per 40 CFR 122.41(d)(1), 9VAC25-31-220(D)(1), and 9VAC25-31-190(H)), BIOLOGICAL MONITORING, TOXIC AND CHEMICAL INSTREAM MONITORING, AS WELL AS WET ANALYSES AND CHEMICAL EFFLUENT SCREENING AT REPRE-SENTATIVE OUTFALLS, MUST BE INCLUDED, AT A MINIMUM, WITH THE FIRST SUBMITTAL OF THE PERMIT RENEWAL APPLICATION. YOU MAY CONTACT THE DIVISION DIRECTLY IF YOU WISH TO SCHEDULE A MEETING TO DISCUSS REPRESENTATIVE MONITORING FOR SUBSTAN-TIALLY SIMILAR DISCHARGES. THE NEED FOR CONDUCTING EFFLUENT SCREENING OF DISCHARGE(S) MAY CONSIDER THE HISTORY/LIKELI-HOOD OF DISCHARGE/NO DISCHARGE. ADD 2 SURFACE WATER IN-STREAM MONITORING POINTS DC-DS & DC-US (MPID NO'S 0007570 & 0007571). JKW/MMH
01/19/2011: RA APPNO 1006490-9/1300425 APPROVED 11/22/10 TO REVISE NPDES OUTFALL 004 IN ORDER TO ALOW PUMPING OF A MINE WATER DISCHARGE INTO SEDIMENT BASIN #4. PRB/MMH
06/11/2009: PLAN MOD JDR0003021/1300425 DATED 02/22/08 TO REMOVE SB-7, NPDES OUTFALL 005, MPID 5984899. SEE 7-25094 TJ APPNO 5301017. PRB/CFS
03/11/2009: TJ APPNO 1005579-2 APPROVED 03/09/09 AS CSMO/ NPDES PERMIT RENEWAL 1300425/0080425, JEWELL SMOKELESS COAL CORPORATION - PREPARATION PLANT #3/DOMIINION MINE #39. UPDATE DETAIL INFORMATION FOR ALL NPDES OUTFALLS. PRB/MMH
LAB: EMI (1) SIGNING DMRS: JOEL MARK SINGLETON AND RICHARD WADDELL
05/30/2008: RP APPLICATION #1004885-5/1300425 APPROVED 05/30/08 TO ADD 128 PMU ACRES IN THE JAWBONE SEAM. NO MONITORING CHANGES. PRB/MMH
07/26/2006: MID-TERM REVIEW APPLICATION 1003675-1/1300425 APPROVED 07/12/06 WITH NO MONITORING CHANGES. PRB/MMH
04/16/04: TJ APPNO 1001699-3 APPROVED 04/09/04 AS CSMO/NPDES PN 1300425/0080425, JEWELL SMOKELESS COAL CORPORATION - PRE-PARATION PLANT #3/DOMINION MINE #39. REACTIVATE NPDES OUT-FALL 005 (MPID #5984899), SB-7 WAS APPROVED FOR DELETION 07/25/94 BUT STRUCTURE WAS NEVER REMOVED (MONITORING CON-TINUED). UPDATE LIMITS OF OUTFALLS 007 from 21-13 to 21-05, 004 FROM 21-05 TO 21-21 AND 006 FROM 21-05 TO 21-21 (REFUSE AREA) BASED ON CONVERSATION WITH MARK SPROLES. PRB/MMH
LAB: ENVIRONMENTAL MONITORING, INC. (1) POB 1190, NORTON, VA 24273, 276-679-6544, SIGNING DMRS: MARK SINGLETON & RICHARD WADDELL
02/24/04: RP APPNO 1001770-1/1300425 APPROVED 02/23/04 TO ALLOW MINE DISCHARGE FROM HORIZONTAL DEWATERING HOLE ON PN 1201015, DOMINION COAL CORP., BE PIPED UNDER ROUTE 638 AND BE TREATED IN SB-3 (OUTFALL 003, MPID #5984897). CHANGE LIMITS FROM 21-05 TO 21-25 (COMMINGLED). (NOTE: FIELD

APPROVED ON 02/05/04 BY LARRY ODUM). PRB/MMH
02/24/2004: RP APPNO 1001771-1/1201015 FOR OPERATOR TO TREAT WATER FROM PN 1201015 ON PN 1300425 AT NPDES OUTFALL 003 (MPID #5984897) AND CHANGE LIMITS FROM 21-05 TO 21-25 (FIELD APPROVED 02/05/04 BY LARRY ODUM). CSW/MMH
02/27/2001: RP APPNO 9308396/1300425 TO AMEND 330 ACRES TO THE PMU IN THE JAWBONE SEAM. ADD INSTREAM POINT QMP-3 (MPID 0004091, FLOW-ONLY). PRB/MMH
06/08/2000: RP APPNO 9308144/1300425 APPROVED 06/07/00 TO ADD INSTREAM SITES QMP-1 AND QMP-2 (MPID #'S 0003794 & 0003795, FLOW ONLY), AMEND APPROXIMATELY 200 ACRES FOR PMU IN THE JAWBONE SEAM. PRB/MMH
06/14/1999: TJ APPNO 5301655 APPROVED 06/04/99 AS CSMO/ NPDES PERMIT RENEWAL 1300425/0080425, JEWELL SMOKELESS COAL CORP. - PREPARATION PLANT #3. NO MONITORING CHANGES. MM
LAB: ENVIRONMENTAL MONITORING, INC. (1) POB 1477, COEBURN, VA 24230, 540-395-3661, SIGNING DMRS: JOEL MARK SINGLETON.
07/25/1994: TJ APPNO 5301017 APPROVED AS CSMO/NPDES PERMIT 1300425/0080425, JEWELL SMOKELESS COAL CORP. - PREP. PLANT NO. 3. NUTRIENTS DELETED FROM GROUNDWATER MONITORING. NPDES OUTFALL 005 (MPID 5984899) DELETED AND STORN WATER SUBMITTED FOR NPDES OUTFALL 003 AND 004. CSW/MMH
LAB: CERTIFIED MINE SERVICES, INC. (2) 6700 HURRICANE ROAD, WISE, VA 24293, 540-328-8683.
12/14/1989: TJ APPNO 5300296 APPROVED AS CSMO/NPDES PERMIT RENEWAL 1300425/0080425, JEWELL SMOKELESS COAL CORP. - PREP PLANT #3. CHANGING GROUND WATER MONITORING, DELETE G-3 (MPID 5944892) AND GW-6 (5904889), G-4 REMAINS; FREQUENCY QUARTERLY ONLY. CHANGE NPDES OUTFALLS 001 THRU 006 LIMITS FROM 21-7 TO 21-5. VARIANCE GRANTED IN-STREAM MONITORING.MT
12/17/86: RP APPNO 9301515/1300425 TO ADD NPDES OUTFALL 007 (MPID 5984901) WITH 21-13 LIMITS. GJO/MMH
05/22/1986: RP APPNO 9301450/1300425 TO ADD GW SITE GW-6 (MODIFY METHOD OF SAMPLING OUTFALL 004 TO ACCOUNT FOR POND SEEPAGE FOR APPROXIMATELY 6 MONTHS.)
12/22/1983: NJ APPNO 0300358 ISSUED AS CSMO/NPDES PERMIT 1300425/0080425, JEWELL SMOKELESS COAL CORPORATION - PREP. PLANT NO. 3. TRANSFER EX. DMLR #3336-AF (333603X) JEWELL SMOKELESS COAL CORP. (ISSUED 07/15/81, RELEASED 01/25/84). ADD 6 NPDES OUTFALLS 001 THRU 006 (MPID #'S 5984895 THRU 5984900) WITH 21-7 EFFLUENT LIMITATIONS; 5 GROUNDWATER SITES G-1 THRU G-4 & U-1 (MPID #'S 5944890 THRU 5954894); AND RAINFALL MONITORING (JEWELL SMOKELESS ENGINEERING OFFICE). JOHN BURSON/MMH
09/06/83: ACREAGE INCREASE ON 1ST RE-SUBMITTAL.
LAB: JEWELL SMOKELESS (7) POB 70, VANSANT, VA 24656, 540-935-8810.

III. NPDES DISCHARGE SITES

MPID	Outfall Facility	State Plane N State Plane E	Stream Name	Quad Section	Added Deleted	Limit	Stat
5984895	001 SED POND 1	3630710.982700 10486211.780000	751 DISMAL CREEK	KEEN MOUNTAIN 8	5/4/2023	30-05	ND
5984896	002 SED POND 2	3632217.140700 10485731.219400	751 DISMAL CREEK	KEEN MOUNTAIN 8	5/4/2023	30-05	ND
5984898	004 POND 4, 5	3632041.449000 10485735.282400	751 DISMAL CREEK	KEEN MOUNTAIN 2	5/4/2023	30-21	A
5984900	006 SED POND 8	3629466.455500 10483328.294100	751 DISMAL CREEK	KEEN MOUNTAIN 2	5/4/2023	30-21	NC

MPID	Outfall Facility	State Plane N State Plane E	Stream Name	Quad Section	Added Deleted	Limit	Stat
5984901	007 SB-6A	3632206.608100 10485620.713900	751 DISMAL CREEK	KEEN MOUNTAIN 8	5/4/2023	30-05	ND

IV. GROUNDWATER MONITORING SITES

MPID	Outfall Facility	State Plane N State Plane E	Elevation Type	Quad Section	Added Deleted	Stat
5944891	G-2	3630961.425600 10486044.549300	1555.00 WELL	KEEN MOUNTAIN 2	5/4/2023	A
5944893	G-4	3630595.684400 10484679.670200	2030.00 WELL	KEEN MOUNTAIN 2	5/4/2023	A
5954894	U-1 FILL	3630727.289600 10485508.148200	1600.00 UNDERDRAIN	KEEN MOUNTAIN 2	5/4/2023	A

V. IN-STREAM MONITORING SITES

MPID Mp Is No	Outfall Facility	State Plane N State Plane E	Stream Name	Quad Section	Added Deleted	Stat
0003794	QMP-1 FLOW ONLY	3626792.544500 10486208.500400	937 BILL KEEN BRANCH	KEEN MOUNTAIN 2	5/4/2023	A
0003795	QMP-2 FLOW ONLY	3626720.746500 10487754.511900	937 BILL KEEN BRANCH	KEEN MOUNTAIN 2	5/4/2023	A
0004091	QMP-3 FLOW ONLY	3633418.761000 10479394.657000	934 HORSESHOE BRANCH	PATTERSON 8	5/4/2023	A
0007570	DC-DS DOWNSTREAM	3634033.000000 10485525.000000	751 DISMAL CREEK	KEEN MOUNTAIN	5/4/2023	A
0007571	DC-US UPSTREAM	3630813.000000 10487060.000000	751 DISMAL CREEK	KEEN MOUNTAIN	5/4/2023	A
0008847	DC1 DOWNSTREAM	3633773.600000 10485869.960000	751 DISMAL CREEK	KEEN MOUNTAIN	5/4/2023	A
0008848	DC2 UPSTREAM	3630837.088000 10487676.966000	751 DISMAL CREEK	KEEN MOUNTAIN	5/4/2023	A
0011653	DC3 Downstream	3632653.760000 10485941.360000	751 DISMAL CREEK	KEEN MOUNTAIN	5/4/2023	A

VI. RAINFALL MONITORING SITES

MPID	Facility	State Plane N	State Plane E	Added	Deleted	Stat
0000173	Plant 2	3629066.272000	10447756.620000	5/4/2023		A