**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION III**
**1650 Arch Street**
**Philadelphia, Pennsylvania 19103-2029**

Mr. Thomas Clarke, Director
Division of Mining and Reclamation
West Virginia Department of Environmental Protection
601 57th Street
Charleston, West Virginia 25304

DEC 05 2012

Re: NPDES Permit No.WV1019911 – New
Coal-MAC, Inc. DBA Phoenix Coal-MAC Mining, Inc.
Pine Creek No. 2 Surface Mine
SMCRA No. S500809
EPA Receipt Date – November 6, 2012

Dear Mr. Clarke:

Pursuant to Section 402 of the Clean Water Act, 40 C.F.R. § 123.44 and the *Memorandum of Agreement Regarding the Administration and Enforcement of the National Pollutant Discharge Elimination System (NPDES) in West Virginia 1982* (MOA), the U.S. Environmental Protection Agency (EPA) Region III received the draft NPDES permit cited above. EPA has performed an initial review, and provides this notification of a general objection, pursuant to 40 C.F.R. § 123.44(b)(1).

This general objection letter serves as a time extension for the full 90-day review period, which will expire on February 4, 2013. Coal-MAC Inc. proposes to open and operate Pine Creek No. 2, a 696.8 acre surface mine with one (1) proposed valley fill.

EPA requires this additional time due to the complexity of this draft permit, and to review and discuss with WVDEP the Aquatic Ecosystem Protection Plan (AEPP) and best management practices (BMP) and how those plans would be implemented, among other issues. EPA will continue to work cooperatively with WVDEP to resolve any outstanding issues in an expedited matter.

Pursuant to 40 C.F.R. § 123.44(b)(2) and the MOA, EPA will provide any additional specific comments or objections, if any, to the issuance of this permit by February 4, 2013. Pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, WVDEP is prohibited from issuing the permit for this facility prior to this time without written EPA approval. In the interim, we will be providing you with comments and will be contacting you to discuss this permit in more detail.

If you have any questions concerning this matter, please contact Evelyn MacKnight, at (215) 814-5717 or Brian Hamilton, at (215) 814-5497.

Sincerely,

Jon M. Capacasa, Director
Water Protection Division

cc: Coal-MAC Inc.
Jeffrey Parsons, WVDEP

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*Customer Service Hotline: 1-800-438-2474*

## Parsons, Mark J

**From:** Parsons, Mark J
**Sent:** Friday, February 01, 2013 2:31 PM
**To:** MacKnight.Evelyn@epamail.epa.gov
**Cc:** Ward, Harold D; Clarke, Thomas L
**Subject:** WV1019911 - Coal-Mac -Pine Creek #2 - General Objection

Evelyn;

I discussed your concerns with the company and informed them you had requested a condition as worded below for the AEPP that will be placed as a Special Condition in the permit;

"This NPDES permit requires the permittee to implement the Aquatic Ecosystem Protection Plan (AEPP)."

I also discussed that you would like for the WET triggers to be changed to WET limitations in the permit. The company stated that, if this would satisfy EPA to allow the permit to be issued they would agree to these permit changes.

Jeff Parsons
West Virginia Department of Environmental Protection
Division of Mining and Reclamation - HPU

## Parsons, Mark J

**From:** Parsons, Mark J
**Sent:** Monday, February 04, 2013 3:01 PM
**To:** MacKnight.Evelyn@epamail.epa.gov
**Cc:** Ward, Harold D; Clarke, Thomas L
**Subject:** WV1019911 - Coal-Mac - revised Draft Permit
**Attachments:** WV1019911 - CoalMac - Revised Draft.pdf

Evelyn:

Please find attached the revised draft permit with the changes as per your request.

Jeff Parsons
West Virginia Department of Environmental Protection
Division of Mining and Reclamation - HPU

D. OTHER REQUIREMENTS

1. REPORTING SPILLS AND ACCIDENTAL DISCHARGES

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 established pursuant to Series 3, Section 1 of the Environmental Quality Boards regulations.

Attached is a copy of the West Virginia Spill Alert System for use in complying with Series 3, Section 1 of the regulations as they pertain to the reporting of spills and accidental discharges.

2. HAULAGEWAYS AND ACCESS ROADS

Haulageways and access roads shall be constructed and maintained in accordance with best management practices including, but not limited to, the performance standards contained in Title 38, Series 2, Section 4 of the West Virginia Surface Mining Reclamation Regulations.

3. RECEIVING STREAMS

The receiving streams shall be monitored by grab samples as required at the stream sampling points listed below, and the samples shall be analyzed for the parameters listed below. The flow of the stream shall also be estimated at the time of monitoring. Monitoring shall be done approximately at the same time as the discharge points are monitored as required under Section A of this permit. A quarterly report of the stream monitoring and flow shall be sent to the NPDES section in Charleston, on the enclosed forms along with the reports required under Section A. Based upon the stream monitoring flow data, water quality standards or other information, the Department may at any time modify the effluent limits in Section A of this permit for any of the discharge points if necessary, to insure compliance with water quality standards.

| STREAM STATION | LATITUDE | LONGITUDE | ELEV. |
|---|---|---|---|
| BAS-1 | 37° 45' 26.2660" | 82° 01' 09.5910" | 864 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Alkalinity, Total/ Total Suspended Solids/ Calcium, Total (as Ca)/ Magnesium,Tot (as Mg)/ Potassium, Total (as K)/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| BAS-2 | 37° 45' 30.5290" | 82° 01' 18.0240" | 873 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Alkalinity, Total/ Total Suspended Solids/ Calcium, Total (as Ca)/ Magnesium,Tot (as Mg)/ Potassium, Total (as K)/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| DCMDSCC | 37° 44' 48.0000" | 82° 00' 09.0000" | 845 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| DCMPC | 37° 45' 26.0000" | 82° 00' 00.0000" | 800 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| DCMVF5 | 37° 45' 26.0000" | 82° 01' 17.0000" | 880 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |

| STREAM STATION | LATITUDE | LONGITUDE | ELEV. |
|---|---|---|---|
| DSF4 | 37° 45' 26.0000" | 82° 02' 13.0000" | 925 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| DUTCC1 | 37° 43' 40.0000" | 82° 02' 20.0000" | 1065 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| UCMMOHB | 37° 44' 34.0000" | 82° 00' 44.0000" | 885 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |
| USPC | 37° 45' 16.0000" | 82° 03' 10.0000" | 970 |
| | Parameters: Stream Flow cfs/ Specific Conductance/ pH/ Total Sulfates (as S04)/ Selenium, Total Recoverable/ Iron, Total (as Fe)/ Manganese, Total (as Mn)/ Aluminum, Total (as Al)/ Aluminum, Diss. (as Al)/ Total Dissolved Solids (TDS) | | |

4. SURFACE MINES

If the coal mining operation has been granted Phase II revegetation release and all discharge points have been eliminated during the period this permit is in effect, the discharge limitations and monitoring requirements in Section A and Section D.3 stream monitoring shall not apply. The coal mining operation shall be maintained in accordance with best management practices including, but not limited to the applicable performance standards contained in Title 38, Series 2, West Virginia Mining Reclamation Regulation until the associated performance bond has been final released.

5. STORM WATER DISCHARGES

Such discharges shall comply with the applicable Water Quality Standards in 47 CSR 2. Activities consisting of discharges of storm water runoff or snow melt composed entirely of flows which are from conveyances used for collecting and conveying precipitation runoff, in accordance with 47 CSR 30, Section 3.1.a.6 and are authorized under Chapter 22, Article 3, are authorized by this permit. Such storm water discharges shall not involve any mineral removal, pumping of storm water, or storm water runoff commingled with mine drainage, refuse drainage, coal stockpile areas, preparation plant areas, loading areas or unloading areas. The activities shall be constructed and maintained in accordance with the issued Article 3 Permit Revision including incidental boundary revisions and with the best management practices and performance standards contained in 38 CSR 2 and Chapter 22, Article 3. These storm water discharges are authorized under this Condition upon issuance of the associated Article 3 application for the life of this permit. Updated NPDES permit application information will be submitted in the next reissuance application for activities covered under this Condition. The Director reserves the right to require any permittee to submit a NPDES modification when the Director determines that such receiving stream will be better protected by an individual NPDES modification.

6. SPECIAL EFFLUENT CHARACTERIZATION CONDITION

The permittee must perform Table 2-IV-A, B, C analyses within two (2) years of commencement of a new discharge. The permittee is also required to identify and analyze any potential pollutants not covered under 2-IV-A, B, C analyses which may be present due to use, manufacturing or byproduct. Representive outlets are acceptable for discharges which receive drainage from similar mining activities and are of the same outlet type. Two (2) copies of the Table 2-IV-A, B and C analyses and any additional potential pollutant analyses must be submitted to the regional office Permit Supervisor and Inspector Supervisor within two (2) years of commencement of discharge.

7. SPECIAL SAMPLING CONDITIONS

As set forth in the remainder of this condition, Permittee shall monitor following a qualifying event at the constructed on-bench outlet (precipitation induced) which has been disturbed by mining activity with the largest component drainage area and at the constructed on-bench outlet (precipitation induced) at the lowest elevation on the down dip portion of the operation that has been disturbed by mining activity* at the time of the qualifying event. The stream monitoring stations associated with the monitored outlets must also be monitored at approximately the same time. A qualifying event is defined as any event where 0.3 inches or more of rainfall occurs within a consecutive 24 hour period. The monitoring can be initiated at any point after rain gauge data indicates 0.3 inches of precipitation has occurred and shall be completed no later than eighteen (18) hours after cessation of the precipitation event. Once a qualifying event is sampled in a given calendar month, this condition is satisfied for that calendar month.

Monitoring at both the outlets and at the associated stream monitoring stations required by this condition shall be for flow, pH, total dissolved solids, specific conductivity and sulfates

In the event of a discharge from the precipitation induced outlets, the sample(s) may be substituted for one of the required semi-monthly samples for the outlet(s) and as such, must be analyzed for all parameters listed in Section A of the permit for each respective outlet and parameters listed in Section D.3 of the permit for the associated stream monitoring station(s). Samples collected from an event that are in addition to the required semi-monthly monitoring must be analyzed for total dissolved solids, sulfates, specific conductivity, flow and pH for each respective outlet and associated stream station(s).

Rain gauge information must be maintained during the term of the life of the permit and made available to the Director upon request. The Director may require additional sampling if necessary to document that narrative water quality standards are being achieved.

*Note: Outlets with technology-based post mining effluent limitations (flow, pH and settable solids) are exempt from this condition and shall not be sampled to fulfill the requirements of such.

Monthly reports must be maintained detailing which outlet(s) and stream monitoring station(s) were monitored for this condition. The reports must document that the outlet(s) sampled met the criteria defined in the special condition.

Each report must contain the following information:

Date, time and rain gauge reading for the event sampled.

Analytical results (flow, pH, total dissolved solids, specific conductivity and sulfates) for the outlet(s) stream monitoring station(s) sampled each month to fulfill the requirements of this condition.

These monthly reports must be submitted quarterly no later than twenty (20) days following the end of each quarter. In the event that the sample will be used to substitute for one of the required semi-monthly sampling requirements, the analysis must also be included in the discharge monitoring report for that given month.

Copies of the quarterly reports are to be submitted in a format prescribed by WVDEP to:

West Virginia Department of Environmental Protection
DMR – NPDES Program Manager
601 57th Street S.E.
Charleston, WV 25304
and
WVDEP – Regional Office - Permit Inspector

8. REOPENER CLAUSE

This permit may be reopened and modified, suspended, revoked and reissued or revoked at any time if information becomes available and demonstrates that the established controls do not attain and maintain the narrative water quality criteria at 47 CSR 3.2.e and 47 CSR 3.2.i.

9. BIO-MONITORING

The permittee shall conduct annual benthic survey(s) at the location of each biological monitoring station listed below. The benthic survey(s) shall be conducted between the dates of April 15th to October 15th. All biological survey(s) should be conducted as close to the anniversary date of the original survey as possible. The benthic survey shall be in accordance with the established and accepted protocols for the collection, analysis, documentation and presentation of biological data from Standard Conditions for Environment Assessments on Wadable Streams provided with the WVDNR Scientific Collection Permit and WVDEP's West Virginia Stream Condition Index ("WVSCI") protocol.

If the agency finds the condition of the aquatic ecosystem at the assessment stations prior to initiation of the permitted activity to be satisfactory, taking into account all potentially applicable criteria, then the acceptable future biological condition is a WVSCI score greater than or equal to the WVSCI value representing the 5th percentile of reference (currently 68.0). If the agency finds the condition of the aquatic ecosystem at the assessment stations is less than satisfactory (currently 68), taking into account all potentially applicable criteria, then the applicant shall identify existing conditions within the watershed that may be contributing to the problem. If a TMDL addressing biological impairment for ionic stress is not in effect, a WVSCI score greater than or equal to the baseline value would represent an acceptable future condition.

Biological Monitoring Stations:

| Station | Latitude | Longitude |
|---|---|---|
| x | | |
| BAS-1 | 37° 45' 26.2660" | 82° 01' 09.5910" |
| BAS-2 | 37° 45' 30.5290" | 82° 01' 18.0240" |

Within 90 days after conducting the benthic survey the permittee shall provide:

a. The West Virginia Stream Condition Index (WVSCI) benthic score (0 to 100 basis) and supporting metrics necessary for its calculation.

b. The corresponding stream habitat assessment scores RBP Visual-Based Habitat Assessment (0 to 200 basis) for the benthic stations.

c. Concurrent in-stream samples for specific conductivty, total dissolved solids (TDS), pH, sulfate, alkalinity, calcium, magnesium, sodium and potassium must be taken at the same locations along with the benthic samples.

d. Representative legible photography of the survey sites.

e. A narrative Executive Summary / Abstract stream characterization utilizing the benthic and habitat scores, water quality, photos, field work and other applicable information such as tier level, warm-water class, stream order, major/minor basins, pre-law mining impacts, logging activites, other land uses, etc.

(f) Benthic macroinvertebrate data. Data shall be entered into the Access database (Contractv3.4 or 3.5) provided to holders of WV Scientific Collection Permits. Data shall be submitted via the export queries built into the database. Minimum data to be provided: WVSCI score and associated metrics; raw data (identifications and count); and number of grids picked in order to get 200 organism subsample. Also, habitat and water quality data must be submitted via the export queries into the database.
All information to be provided shall be sent to the issuing WVDEP Regional Office - NPDES Supervisor and Environmental Resources Analyst and to WVDEP Headquarters (Address: West Virginia Department of Environmental Protection, DMR - NPDES Environmental Resources Analyst, 601 57th Street S. E., Charleston,
WV 25304).

10. WHOLE EFFLUENT TOXICITY LIMITS

The permittee shall quarterly perform chronic toxicity tests as described below, on the effluent from Outlet(s) 002

a. Such testing will determine if an appropriate dilute effluent sample affects the survival or reproduction of the test species. Grab samples of the effluent, as prescribed in Section A, shall be collected for testing. The first day of sampling must be limited to when there has been less than 0.3 inches of rain in the three days prior to sampling and less than 0.1 inches of rain in the 24 hours prior to sampling (this only applies to the first grab sample of the test). An appropriate statistical test shall be used to determine whether differences in control and effluent data are significant.

The permittee shall conduct a three brood (6-8 days) Ceriodaphnia Dubia survival and reproduction toxicity test on the final effluent diluted by appropriate control water. Toxicity will be demonstrated if there is a statistically significant difference at the 95 percent confident level in survival or reproduction between Ceriodaphnia Dubia exposed to an appropriate control water and the final effluent. All test solutions shall be renewed using an approved renewal schedule. DEP requires TDS, conductivity, sulfate, and bicarbonate analyses for each aliquot used in WET testing. If, in any control, more than 20% of the test organisms die, or less than 60% of surviving females in controls produced their third brood, that test shall be repeated.

b. Results shall be reported in terms of chronic toxic units (TUc) and shall be submitted with the corresponding monthly Discharge Monitoring Report (DMR).

TUc = 100/NOEC or NOEL

Where NOEC (or NOEL) is No Observed Effect Concentration (or Level), which is expressed as Percent (volume) effluent in dilution water. For Example, if NOEC is 10%, TUc= 100/10=10

When the effluent demonstrates no toxicity at 100% effluent (no observed effect), the permittee may report zero TUc.

c. The monitoring required, herein, shall be conducted in accordance with the sample collection, preservation, and analytical procedures specified in 40 CFR 136.

d. In addition to the monitoring data reporting requirements of 40 CFR 136, the exact age of the test organisms at the initiation of the test shall be reported. The range of the Ceriodaphnia Dubia used must be reported as a range in hours. All Ceriodaphnia Dubia used in the test must be less than 24 hours of age at test commencement. The age difference between the youngest and oldest Ceriodaphnia Dubia used in the test must not exceed eight(8) hours.

e. The chronic toxicity testing shall be performed on a quarterly (1/quarter) basis with at least thirty (30) days between tests. The first chronic toxicity testing shall be carried out within 3 months from the construction of the above specified Outlet(s).

f. If chronic effluent toxicity testing shows noncompliance with the specified limitations prescribed in Section A, the permittee shall immediately resample and test the effluent. This shall be performed within 30 days of the initial demonstration of noncompliance with the whole effluent toxicity discharge limitations prescribed herein. Copies of the retesting results shall be provided to the Director immediately upon completion of the test.

g. If the second test shows compliance, chronic effluent toxicity testing shall continue in accordance with the requirements, as prescribed herein. However, if the second test shows noncompliance, the permittee must, within 60 days, submit an adaptive management plan (AMP) identifying actions it will take to achieve compliance with the WET discharge limitations.

h. The Director may impose further requirements should the chronic effluent toxicity testing results demonstrate noncompliance.

All information to be provided shall be sent to the issuing WVDEP Regional Office - NPDES Supervisor and Environmental Resources Analyst and to WVDEP Headquarters (Address: West Virginia Department of Environmental Protection, DMR - NPDES Program Manager, 601 57th Street S. E. , Charleston, WV 25304).

11. Aquatic Ecosystem Protection Plan (AEPP)

This NPDES permit requires the permittee to implement the Aquatic Ecosystem Protection Plan (AEPP).The permittee shall implement the AEPP submitted on January 11, 2013, see Attachment (AEPP) which is incorporated by reference herein. The permittee shall retain a copy of the AEPP required by this permit at the facility, and it must be immediately available to WVDEP, EPA, or any other agency at the time of an onsite inspection or upon request. Failure to implement the AEPP shall constitute a violation of this permit and shall be grounds for revocation or suspension of this permit.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION III**
**1650 Arch Street**
**Philadelphia, Pennsylvania 19103-2029**

Mr. Jeffrey Parsons
West Virginia Department of Environmental Protection
Division of Mining and Reclamation
601 57th Street
Charleston, West Virginia 25304

FEB 04 2013

Re: NPDES Permit No.WV1019911 – New
Coal-Mac, Inc. – DBA Phoenix Coal-Mac Mining, Inc.
Pine Creek No. 2 Surface Mine
SMCRA No. S500809
EPA Receipt Date – November 6, 2012

Dear Mr. Parsons:

On December 5, 2012, the U.S. Environmental Protection Agency (EPA) Region III sent to you pursuant to Section 402 of the Clean Water Act (CWA); 40 C.F.R. § 123.44(b) (1) and the *Memorandum of Agreement Regarding the Administration and Enforcement of the National Pollutant Discharge Elimination System (NPDES) in West Virginia 1982* (MOA), a general objection letter to the above-referenced draft permit. The December 5, 2012 general objection letter served as a time extension request for the full 90-day period to review the draft permit. On February 4, 2013, EPA received a revised draft permit that included whole effluent toxicity (WET) effluent limits, rather than monitoring with a trigger to apply for a permit modification, The revised permit also included a special condition requiring the permittee to implement the Aquatic Ecosystem Protection Plan (AEPP) as part of the NPDES permit. Based on our review, we have no further comments for your consideration and action. Please note that this EPA review only addressed the terms and conditions of the NPDES permit authorized under Section 402. The considerations embodied in Sections 402 (NPDES) and 404 of the CWA are different. Accordingly, nothing in our review of the draft NPDES permit should be construed as a finding that this project does or does not satisfy the Section 404(b)(1) Guidelines.

Please forward a copy of the final permit when issued. Feel free to contact me at (215) 814-5717 if you any questions or call Brian Hamilton at (215) 814-5497.

Sincerely,

Evelyn S. MacKnight

Evelyn S. MacKnight, Chief
NPDES Permits Branch (3WP41)

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