



March 20, 2017

Pennsylvania Department of Environmental Protection
Southwest Regional Office
Bureau of Oil and Gas Management
400 Waterfront Drive
Pittsburgh, PA 15222

Re: Rice Energy, Cosgray Wells, 1, 3, 5, 7, 9, 11, 13 and 15

To Whom It May Concern:

This letter is submitted to confirm that Emerald Contura, LLC consents to the proposed location of the above-referenced gas well, as shown on the attached exhibit.

Emerald Contura, LLC has received the Well Location Plat for the above-referenced wells and compared the proposed well locations in relation to its mine plans and consents to the above referenced well locations, provided the well location does not change.

If you have any questions about this letter, please feel free to contact me at 724-627-4511.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Cappucci", is written over the word "Sincerely,".

James A. Cappucci
Vice President
Emerald Contura, LLC

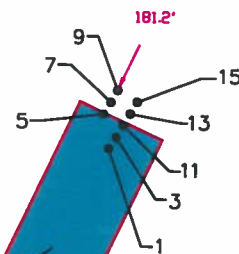
Enclosure

EMERALD MINE - SEALED

D1 LONGWALL

D BLEEDER

Rice
Cosgray Pad



FREEPORT RESERVE

Previous Agreed Pad Location
with Vantage

PROPOSED WELL LOCATIONS

NOTES / REVISIONS

PROPERTY LINES ARE TAKEN FROM COUNTY
TAX MAPS AND NOT ACTUALLY SURVEYED
LAT / LON ARE BASED ON NAD27 DATUM

DRAWN
03.17.17 e.wilson

REVISED

APPROVED



EMERALD CONTURA, LLC

RICE DRILLING B LLC
PROPOSED GAS WELL LOCATIONS
COSGRAY FARM
WELLS 1, 3, 5, 7, 9, 11, 13 and 15

GREENE COUNTY, PENNSYLVANIA

ADDRESS: 156 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

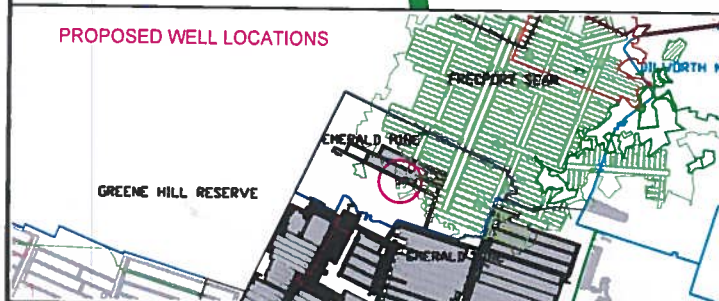
DATUM: NAD 27 PA-SOUTH

DRAWING NO: NUMBER

CONFIDENTIAL

This document and any information contained
herein is the property of Emerald Contura, LLC
and shall be kept confidential and shall not be
reproduced or copied without expressly
written authorization.

Scale: 1"=200'



APR 14 2017

Certified Mail #7016 2070 0001 1229 4215

Ms. Lori Dayton
Emerald Contura, LLC
158 Portal Road, PO Box 1020
Waynesburg, PA 15370

Re: Operation Name: Emerald Mine No. 1
Permit No.: 30841307
Franklin Township, Greene County
Permit Transfer

Dear Ms. Dayton:

We have enclosed a transferred Coal Mining Activity Permit and NPDES Permit No. PA0213438 A-1 for the above operation. This proposal was accepted for technical review on November 3, 2016.

The permit has been revised to transfer the permit to Emerald Contura, LLC.

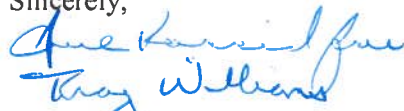
Please refer to Page E-18, Special Condition No. 74, Revision No. 135, which identifies the approved changes.

The enclosed information supersedes the original issued permit and should be incorporated on a page-by-page basis.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board, 35 P.S. Section 7514, and the Administrative Agency Law, 2 PA C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 1.800.654.5984. Appeals must be filed with the Environmental Hearing Board within thirty (30) days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you have any questions about the permit, please contact me at 724.769.1100.

Sincerely,



Troy A. Williams, P.E.
Environmental Group Manager
Bureau of District Mining Operations

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BITUMINOUS COAL MINING ACTIVITY PERMIT

No. 30841307

Permittee Name: Emerald Contura, LLC
and Address: 158 Portal Road, PO Box 1020
Waynesburg, PA 15370
Operation Name: Emerald Mine No. 1

Location of Operation
Municipality: Franklin Township
County: Greene

This permit approves the following activities as indicated by an "X":

☒ Operation of an Underground Coal Mine	☒ Coal Preparation	☐ Coal Refuse Disposal
☒ Other: <u>Stream Encroachment</u>	☒ Discharge of Wastewater as Specified in NPDES Permit	
☒ Subsidence Control Plan	<u>No. PA0213438</u>	

This permit is for 571.78 acres of surface area, 23,735.65 acres of subsurface area, and 19,715.22 acres of subsidence control plan area.

This approval (as indicated by an "X") is subject to the attached LIMITS OF AUTHORIZATION and:

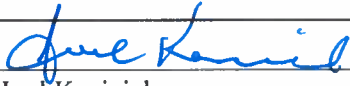
☒ PART A - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (See NPDES Permit)
☒ PART B - MANDATED NPDES PERMIT CONDITIONS AND REQUIREMENTS (See NPDES Permit)
☒ PART C - MANDATED COAL MINING ACTIVITY PERMIT CONDITIONS AND REQUIREMENTS
☒ PART D - BOND DESCRIPTIONS
☒ PART E - SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION
☒ PART F - SPECIAL CONDITIONS REGARDING SUBSIDENCE CONTROL

This permit is hereby issued in accordance with the provisions of the Surface Mining Conservation and Reclamation Act, Act of May 31, 1945 (P.L. 1198, No. 418), as amended, 52 P.S. §§1396.1 et seq., the Clean Streams Law, Act of June 22, 1937 (P.L. 1987, No. 394), as amended, 35 P.S. §§691.1 et seq., and the Air Pollution Control Act, Act of January 8, 1960 (1959) (P.L. 2119, No. 787), as amended, 35 P.S. §§4001 et seq., and the regulations promulgated pursuant to these Acts. This permit is also issued in accordance with the following statutes and regulations promulgated pursuant to these statutes, as indicated by an "X":

☒ Bituminous Mine Subsidence and Land Conservation Act, Act of April 27, 1966 (P.L. 31, as amended, 52 P.S. §§1406.1 <u>et seq.</u>), and the regulations promulgated pursuant to this Act.
☐ Coal Refuse Disposal Control Act, Act of September 24, 1968 (P.L. 1040, No. 318), as amended, 52 P.S. §§30.51 <u>et seq.</u> , and the regulations promulgated pursuant to this Act.
☒ Dam Safety and Encroachments Act, Act of November 26, 1978 (P.L. 1375, No. 325), as amended, 32 P.S. §§693.1 <u>et seq.</u> , and the regulations promulgated pursuant to this Act.
☒ Solid Waste Management Act, Act of July 7, 1980 (P.L. 380, No. 97), 35 P.S. §§6018.101 <u>et seq.</u> , and the regulations promulgated pursuant to this Act.

The permittee is hereby authorized to conduct coal mining activities as described in the approved permit application numbered 30841307 and approved revisions, and in accordance with, the laws and regulations and terms and conditions referenced above. A violation of any provision of the referenced laws, regulations, terms and conditions is a violation of this permit. Any modifications to the permitted facilities necessary to meet the terms and conditions of this permit require the prior written approval of the Department.

Original Permit Issuance Date: July 9, 1986
Latest Permit Renewal Date: September 16, 2013
Latest Permit Revision Date: APR 14 2017
Permit Expiration Date: July 9, 2016
(Renewal Pending)

By 
Joel Koricich

Title District Mining Manager

SECTION C. MANDATED COAL MINING ACTIVITY PERMIT CONDITIONS AND REQUIREMENTS

1. Except to the extent that the Department otherwise directs in the permit that specific actions be taken, the permittee shall conduct coal mining activities as described in the approved application. 86.41(1)
2. The permittee shall affect by coal mining activities only those lands specifically approved in the permit for which a bond has been filed with the Department in accordance with 25. Pa. Code, Chapter 86, Subchapter F (relating to bonding and insurance requirements). 86.41(3)
3. The permittee shall allow the authorized representatives of the Commonwealth, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to areas in which coal mining activities will or are being conducted. 86.41(2)
4. The permittee shall take all possible steps to prevent an adverse impact to the environment or public health and safety resulting from non-compliance with any term or condition of this permit including:
 - a. Any accelerated or additional monitoring necessary to determine the nature and extent of non-compliance and the results of the non-compliance;
 - b. Providing warning, as soon as possible after learning of the non-compliance, to a person whose health and safety is in imminent danger due to the non-compliance. 86.42(1)
5. The permittee shall conduct the activities in accordance with measures specified in this permit as necessary to prevent environmental harm or harm to the health or safety of the public. 86.42(2)

SECTION D. BOND DESCRIPTION

I. MINING AND RECLAMATION BOND

- (1) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bonds ☒ Permit Transfer
b. ☒ Surety Bond No. 1141623 dated February 7, 2017
in amount of \$7,340,820.00
with (as surety) Lexon Insurance Company
- (2) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bonds ☒ Permit Transfer
b. ☒ Surety Bond No. 09223235 dated February 7, 2017
in amount of \$325,976.00
with (as surety) Fidelity and Deposit Company of Maryland
- (3) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bond ☒ Permit Transfer
b. ☒ Surety Bond No. 5827740 dated February 7, 2017
in amount of \$68,005.00
with (as surety) Western Surety Company

II. SUBSIDENCE BOND

- (1) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bond ☒ Permit Transfer
b. ☒ Surety Bond No. 1141622 dated February 7, 2017
in amount of \$5,375,555.00
with (as surety) Lexon Insurance Company
c. ☒ Additional Remarks
(1) The subsidence bond is based on the permittee's obligation to remedy subsidence damage to structures and surface features as required by the Subsidence Control Regulations. The subsidence bond may be revised as mining progresses.
- (2) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bond ☒ Permit Transfer
b. ☒ Surety Bond No. 58727741 dated February 7, 2017
in amount of \$297,537.35
with (as surety) Western Surety Company
c. ☒ Additional Remarks
(1) The subsidence bond is based on the permittee's obligation to remedy subsidence damage to structures and surface features as required by the Subsidence Control Regulations. The subsidence bond may be revised as mining progresses.

SECTION D. BOND DESCRIPTION

III. WATER SUPPLY REPLACEMENT BOND

- (1) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bond ☐ Permit Transfer
b. ☒ Bruce Rohrer – A MEMORANDUM OF POST-MINING WATER SUPPLY DAMAGE SETTLEMENT AGREEMENT AND RELEASE between Bruce R. Rohrer and Barbara E. Rohrer and Emerald Coal Resources, L. P. dated 11th day of October, 2016 was submitted in lieu of water supply bond.
- (2) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bond ☐ Permit Transfer
b. ☒ Chris Eisminger (WL0743)- A MEMORANDUM OF POST-MINING WATER SUPPLY DAMAGE SETTLEMENT AGREEMENT AND RELEASE between Christopher L. Eisiminger & Kimberly Eisiminger and Emerald Coal Resources, L. P. and Cumberland Land Coal Resources, L.P. dated 6th day of December, 2010 was submitted in lieu of water supply bond.
- (3) a. ☐ Original Bond ☐ Additional Bond ☐ Replacement Bond ☒ Permit Transfer
b. ☒ Surety Bond No. 09223236 dated February 7, 2017 – Ralph Wilson (P0906)
in amount of \$14,049.17
with (as surety) Fidelity and Deposit Company of Maryland

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

1. Requirement to submit oral reports and written materials:

- a. The permittee shall submit to the Department's District Mining Office all electronic reports and written materials required by this permit *except for the materials related to the Subsidence Control Plan that may be referred to in Section F of this permit*. Unless specified otherwise by the Department, single copies of written materials must be submitted to the District Mining Office except for outfall and hydrologic monitoring points which must be submitted in duplicate on two compact discs (CDs). These electronic reports and written materials must be submitted to the District Mining Office at:

Department of Environmental Protection
New Stanton District Mining Office
131 Broadview Road
New Stanton, PA 15672
Phone: 724-925-5500

- b. In addition to submitting two copies of monitoring data to the Department's District Mining Office as required by Subsection a. above, the permittee shall also submit one CD of the monitoring data that identifies the name of the company, the mining permit number, and the monitoring period to the Department's California District Mining Office at:

Department of Environmental Protection
District Mining Operations
25 Technology Drive
California Technology Park
Coal Center, PA 15423
Phone: 724-769-1100

2. Discharge self-monitoring shall be conducted by the permittee as required by Section A of this permit. Monitoring results obtained during each month shall be summarized for that month and reported on the attached discharge monitoring report (DMR) for each outfall. The permittee shall submit the DMRs to the Department's District Office and the California District Office no later than the 28th day from the last day in the quarter for which samples are taken, e.g. samples taken during the second quarter (April/May/June) are to be submitted by July 28th.
3. For each hydrologic monitoring point, the permittee shall monitor for the listed parameters on the monitoring point's hydrologic monitoring report (HMR). Unless otherwise required by this permit, each monitoring point need be monitored only once per quarter. Monitoring results obtained during each quarter shall be summarized for that quarter and reported on the HMR. For the purposes of this permit, the quarters are defined as January/February/March, April/May/June, July/August/September, and October/November/December. The permittee shall submit the HMRs to the Department's District Office and California Office no later than the 28th day of the month following the reporting quarter (i.e. April 28, July 28, October 28, January 28).
4. The permittee shall notify the Mine Conservation Inspector from the Bureau of Mining and Reclamation at least ten days prior sealing any borehole associated with the mining activity authorized by this permit. Within ten (10) days of borehole sealing, a certificate of borehole/sealing procedure form must be submitted to the California District Office and the Mine Conservation Inspector.
5. Each pond authorized by this permit shall be designed and inspected during construction under the supervision of, and certified to the Department upon completion of construction by, a registered professional engineer that the pond was constructed as approved in the permit application. Within 30 days after pond construction, the permittee shall submit a completed POND CERTIFICATION (attached) to the Department's California Office, and submit a copy of the certification to the Department's mine conservation inspector.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

6. Any surface blasting associated with this mining activity shall be conducted in accordance with Section 87.64 and 87.124 - 87.129 of the Department's regulations. Accordingly, the permittee shall conduct blasting only after the Department approves the blasting plan.
7. The Department is granting a variance to conduct surface mining operations within 100 feet of Stewart Run (at the Air Shaft #5 site), and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
8. The Department is granting a variance to conduct surface mining operations within 100 feet of unnamed tributary to Dyers Fork, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
9. The Department is granting a variance to conduct surface mining operations within 100 feet of unnamed tributary to Laurel Run, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
10. The Department is granting a variance to conduct surface mining operations within 100 feet of Coal Lick Run and the unnamed tributaries to Coal Lick Run, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
11. The Department is granting a variance to conduct surface mining operations within 100 feet of Frosty Run, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
12. This Coal Mining Activity Permit 30841307 supersedes in its entirety the Coal Mining Activity Permit 30841307 issued on July 9, 1986. All of the following application materials are made part of the official documentation for this Permit 30841307: a. the application material that was submitted in support of the Permit 30841307 issued on July 9, 1986; b. the application materials that were submitted in support of all the revisions approved under the Permit 30841307; c. the application material submitted in support of this Permit 30841307 to transfer the permit from RAG Emerald Resources Corporation to RAG Emerald Resources, L.P.
13. All private water supplies within 1,000 feet of the permitted borehole sites must be sampled two (2) months before construction and during installation and two (2) months after drilling boreholes. Each time a well or spring is monitored, the permittee shall monitor for flow (at springs), static water elevation (at wells), field and laboratory pH, alkalinity, acidity, iron, manganese, sulfates, specific conductance and field temperature and the permittee shall submit copies of the results in accordance with Section E.1 of this permit.
14. ~~This permit is conditionally issued based on continued compliance under the Enterprise settlement for violations of Manning Coal (KY 510680 Permit #8670346).~~ Permit condition 14 removed with Special Condition No. 65, revision No. 111 issued on August 29, 2012.
15. The permittee shall provide for 0.17 acre(s) of wetland replacement resulting from No.4 and No. 8 Shaft construction by making a monetary contribution of \$1,000.00 to the National Fish and Wildlife Foundation, Pennsylvania Wetland Replacement Project, ID Number 95-096.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

16. The permittee shall not commence site construction activities for the No. 4, No. 8, and No. 7 Bleeder Shaft until all erosion and sedimentation control facilities have been installed, certified by a registered professional engineer, and approved in writing by the Department. The construction certification must be submitted to the following address:

Pennsylvania Department of Environmental Protection
Bituminous Mine Permit Section
25 Technology Drive
California Technology Park
Coal Center, PA 15423
17. No surface activities associated with the construction of the No. 7 Shaft shall be conducted within 125 feet of the gas well identified as W-79 until the well is fully cemented in accordance with the requirements of Oil and Gas Regulation. A copy of the "Certificate of Plugging" must be submitted to the California District Office for review and approval prior to affecting within the barrier area.
18. Mining activities may be conducted within 300 feet of Clara Lou Zollars residence, in accordance with the agreement between Cyprus Emerald Resources Corporation and Clara Lou Zollars dated 11/20/97.
19. Liner certifications must be submitted in conjunction with the site and pond certifications.
20. This permit transfers all rights and liabilities of RAG Emerald Resources Corporation, Permit 30841307 to RAG Emerald Resources, L.P. RAG Emerald Resources, L.P. by application and affidavit dated April 12, 2000 assumes all liability for reclamation, water pollution, planting, and all other responsibilities under the law, the Rules and Regulations, and the terms and conditions of the aforementioned permit.

SPECIAL CONDITIONS 21-31 APPLY TO THE 105 PERMIT APPROVED (March 6, 2002)

21. ~~The permittee shall develop a detailed design plans for the restoration plan of Laurel Run. The plan must address replacement of the pool/rifle/run sequence, substrate, sinuosity, belt width, floodplain elevation and other factors necessary to successfully restore Laurel Run from the impacts associated with the mining activity. The restoration plan shall contain a detailed schedule of activities with milestones for interim steps that results in restoration of Laurel Run being completed in the timeframes described in Conditions 21 and 22 and 23 below. Three copies of the restoration plan shall be submitted to the California District Mining Office for review and approval. Permit condition # 21 removed with revision # 83 issued on March 27, 2006.~~
22. ~~The restoration plan for the reach of Laurel Run that is over Panel 8 and related gated areas shall be submitted to the Department within 90 days of undermining that portion of Panel 9 that lies under Laurel Run. Prior to submission of the restoration plan, the permittee shall conduct an assessment of the affected portion of Laurel Run to identify the impacts on the stream and stream ecology resulting from underground mining. This post mining assessment will utilize the same methodology used for the assessment presented in the permit application and also use the same sampling stations. Restoration of the reach of Laurel Run that is over panel 8 shall be completed no later than the completion of full extraction mining under panel 10 or within 6 months of the approval of the restoration plan by the Department, whichever occurs first. Permit condition # 22 removed with revision # 83 issued on March 27, 2006.~~

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

23. ~~The restoration plan for the reach of Laurel Run that is over panels 9 and 10 and related gated areas shall be submitted to the Department within 90 days of undermining that portion of Panel 10 that lies under Laurel Run. Prior to submission of the restoration plan, the permittee shall conduct an assessment of the affected portion of Laurel Run to identify the impacts of the stream and stream ecology resulting from underground mining. This post-mining assessment will utilize the same methodology used for the assessment presented in the permit application and also use the same sampling stations. Restoration of the reach of Laurel Run that is over panels 9 and 10 shall be completed no later than the completion of full extraction mining is completed under the next panel at the Emerald Mine subsequent to panel 10 or within 6 months of the approval of the restoration plan by the Department, whichever occurs first. Permit condition # 22 removed with revision # 83 issued on March 27, 2006.~~
24. ~~If the permittee fails to mine panels 9 and 10, the restoration plans required under conditions 22 and 23 shall be submitted within 90 days from the completion of mining under panels 8 or 9 respectively. Permit condition # 24 removed with revision # 83 issued on March 27, 2006.~~
25. ~~The permittee shall conduct post-mining habitat and benthic macroinvertebrate monitoring in Laurel Run for a period of five (5) years above each undermined panel, commencing the first spring following full extraction mining. Surveys must be conducted during the months of April or May. The post-mining survey will utilize the same methodology used for the assessment presented in the permit application and also use the same sampling stations. If it is determined that there is additional adverse impacts to Laurel Run, the permittee will be required to submit a restoration plan to mitigate those impacts. Three copies of an annual report shall be submitted to California District Mining Office. Permit condition # 25 removed with revision # 83 issued on March 27, 2006.~~
26. ~~The permittee shall monitor the 4.03 acres of wetland identified in the Emerald permit revision application in the surface areas above panels 8, 9 and 10 once a year for a period of five (5) years during the months of March through August each year following the completion of the undermining of each panel. Annual reports shall be submitted to California District Mining Office. The wetlands shall be assessed in accordance with the 1987 ACOE delineation manual for size, vegetative community and maintenance of existing functions and values. The data collected shall be compared to the wetland data provided in the permit application. Permit condition # 26 removed with revision # 83 issued on March 27, 2006.~~
27. ~~If it is determined that there is a permanent impact, compensatory wetland replacement is required at a ratio of 1:1 for area and functions and values. A wetland replacement plan must be submitted within six (6) months of the Department's request. The wetland replacement plan shall contain a detailed schedule of activities with milestones for interim steps that results in restoration or replacement of any permanently impacted wetlands. Permit condition # 27 removed with revision # 83 issued on March 27, 2006.~~
28. ~~The wetland restoration or replacement plan required by condition 27 shall be implemented within six (6) months of the Department's approval of the plan. Permit condition # 28 removed with revision # 83 issued on March 27, 2006.~~
29. ~~Temporary stream crossing(s) shall be constructed of suitable non-erodible material. Where temporary crossings cannot be avoided, the crossing must be removed and the wetlands must be restored. Permit condition # 29 removed with revision # 83 issued on March 27, 2006.~~
30. ~~Three copies of a detailed stream restoration plan for those portions of Laurel Run that overlie the Emerald Mine longwall panels 1, 3, 4, 5, 6 and 7; must be submitted to the Department's California District Office as a Chapter 105 permit application prior to June 30, 2002. The plan must address replacement of the pool/riffle/run sequence, substrate, sinuosity, belt width, floodplain elevation and other factors necessary to successfully restore Laurel Run from the impacts associated with the mining activity. The restoration plan shall contain a detailed schedule of activities with milestones for interim steps that results in restoration of Laurel Run. Permit condition # 30 removed with revision # 83 issued on March 27, 2006.~~

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

31. The Department shall consult with the Pennsylvania Fish and Boat Commission, the Pennsylvania Game Commission, the United States Army Corp. of Engineers, the United States Fish and Wildlife Service and other relevant state and federal agencies in making decisions on the restoration plans required by this permit.
32. ~~The permittee shall comply with the terms and conditions of the Consent Order and Agreement between the Department and the permittee executed on November 27, 2001.~~ Permit condition no. 32 removed with revision no. 119 issued on January 8, 2014.
33. Full extraction longwall mining shall not be conducted within the 408.18 acres transferred from the Cumberland Mine on June 10th, 2002. This condition will remain in effect until the permittee submits a Chapter 105 permit application to the Department, and receives Department approval to conduct full extraction mining beneath any perennial or intermittent stream.
34. A variance to affect within 100 feet of SR2022 approved 5/1/02 is filed with this permit.
35. A variance to affect within 100 feet of SR2011 (Frosty Run) approved February 15, 2005 is filed with this permit.

SPECIAL CONDITION 37 APPLIES TO THE 105 PERMIT FOR PANELS 1 – 7 NORTH

36. Wetland monitoring is required in the Chapter 105 permit approval of the Laurel Run stream restoration plans for panels 1 through 7 north. Monitoring shall be conducted in accordance with the “Wetland Monitoring Plan”, dated 10/10/02.
37. Permittee has satisfied the requirements of Special Condition No. 36 of this Section E with respect to panel no. 11 North. Full extraction mining has been approved in this panel.
38. If the mining activity site is activated before a phase I archaeological study has been conducted, and if an archaeological site is discovered; the permittee shall cease the mining activity and complete a phase I study.
39. The Department is granting a variance to conduct surface mining operations within 100 feet of South Fork of Ten Mile Creek, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.

SPECIAL CONDITIONS 42 THROUGH 46 APPLY TO THE PROPOSED WETLAND MITIGATION RESULTING FROM THE CLEAN COAL BATCH WEIGH SYSTEM CONSTRUCTION

40. The plans for the mitigation of 0.99 acres of wetlands as presented in the approved permit must be initiated prior to or at the commencement of site development.
41. ~~Certified “as built” of the constructed wetlands must be submitted to the California District Office within 30 days of completing construction.~~ Permit condition #41 removed with revision #114.
42. ~~The permittee shall monitor the mitigated wetlands for at least five years. A monitoring report shall be submitted to the California District Mining Office every six months for the first two years after construction and annually for three years thereafter. The reports shall be submitted in conjunction with the quarterly certification of the facility design and construction. The monitoring reports shall contain: a) information describing the success of the site at the time of inspection, b) an inventory of the surviving plant species and percent area coverage, c) photographs of the mitigated wetlands with plans showing the location and orientation of each of the photographs, and d) plans to correct any deficiencies identified during the monitoring phase.~~ Permit condition #42 removed with revision #114.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

43. ~~Remedial work is to be conducted after two years from completion of the constructed wetlands should the establishment of the wetlands prove unsuccessful. The replacement wetlands shall be considered successful when 85 percent of the planted hydrophytic vegetation has survived following two growing seasons. Permit condition #43 removed with revision #114.~~
44. A variance to affect within 100 feet of SR188 approved October 24, 2007 is filed with this permit.
45. Mining activities may be conducted within 300 feet of Parcels 0707139 and 0707139-A, but no closer than one (1) foot in accordance with the agreement between Pennsylvania Land Holdings Corporation and Emerald Coal Resources, LP dated April 23, 2007.
46. A variance to affect within 300 feet of the Franklin Township Route 188 Park Soccer Field, approved by Joseph Pizarchik, Director, Bureau of Mining and Reclamation in an email dated November 21, 2007, is filed with this permit.
47. A variance to affect within 300 feet of the Franklin Township Sewage Treatment Plant approved by Joseph Pizarchik, Director, Bureau of Mining and Reclamation, in an email dated November 21, 2007, is filed with this permit.

SPECIAL CONDITIONS 50 THROUGH 52 APPLY TO THE 4.85 ACRE REVISION ISSUED ON JANUARY 18, 2008 TO ADD 12 VENTILATION BOREHOLES

48. The Department is granting a variance to conduct surface mining operations within 100 feet of: Dutch Run at three locations, an unnamed tributary to Dutch Run at one location, and an unnamed tributary to Mt. Phoebe Run at one location.
49. A variance to affect within 100 feet of Temple Ridge Road (T-596) approved November 30, 2007, is filed with this permit.
50. A variance to affect within 100 feet of Quiet Valley Road (T-570) approved November 30, 2007, is filed with this permit.
51. Mining activities may be conducted within 300 feet of the occupied dwellings on property 2901-116 in accordance with the agreement between Emerald Coal Resources, LP and Emerald Coal Resources, LP dated December 14, 2007.
52. The Department is granting a variance to conduct surface mining operations within 100 feet of an unnamed tributary to Muddy Creek for Boreholes 1C2, 1C3, and 2C3.
53. The Department is granting a variance from approximate original contour for the 4.45 surface acres at the No. 5 airshaft site as depicted on Exhibit 18.1: Land Use and Reclamation Map, stamp dated October 15, 2008.
54. ~~This permit is conditionally issued based upon Amfire Mining Co LLC's continued compliance with Consent Order and Agreement #104029 issued on May 25, 2010 against CMAP #17070103. Permit condition # 54 removed with revision # 58 issued on November 2, 2010.~~
55. ~~This permit is conditionally issued based upon Amfire Mining Co LLC's continued compliance with Consent Order and Agreement #103031 issued on May 27, 2010 against CMAP #32961302. Permit condition # 55 removed with revision # 58 issued on November 2, 2010.~~

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

56. No. 8 Bleeder Shaft Conditions:

- a) The permittee shall not commence clearing and grubbing, site grading activities and construction of the bleeder shaft, pad area and access road until the diversion ditches DC-1 thru DC-3, collection ditches CC-1 thru CC-6, upgrade of existing road ditch, sediment traps ST-1 thru ST-4 and sediment pond SB-1 has been installed as Stated in Module 11.1 and depicted on Exhibit 9.1, Sheets 1 and 2 dated November 12, 2009. The sediment pond #1 must be certified by a registered professional engineer, and approved in writing by the Department before proceeding with the item I in Module 11.1a.-Site Preparation on page 11-1. The construction certification must be submitted to the following address:

Pennsylvania Department of Environmental Protection
Bituminous Mine Permit Section
25 Technology Drive
California Technology Park
Coal Center PA 15423

56. b) The following conditions are with respect to the cuttings pond:

- 1) The **pond must be lined** with a 30 mil HDPE geomembrane liner as specified in Module 14 and constructed in accordance with Exhibit 13.1, Sheet 2. If a leak occurs prior to site reclamation, then the shaft cuttings must be removed offsite to an approved coal refuse disposal facility and the shaft backfilled with borrow material.
 - 2) During drilling operations, the cuttings pond water must be recycled for shaft or borehole drilling only.
 - 3) During and after drilling operations, the cuttings pond water must be taken to an approved water treatment facility for disposal. Cuttings pit water **must not discharge** onto the site.
 - 4) While converting the cuttings pond to an equipment storage area, the cuttings material must be taken to an approved coal refuse facility **only if** the material **can not** be stabilized for the design load bearing capacity as specified in Module 11.1a: Shaft Construction item B.
- b) The Department is granting a variance to conduct surface mining activities within 100 feet of three (3) Unnamed Tributaries as listed below and as depicted on Exhibit 9.1-Sheets 1 and 2 dated November 12, 2009. The Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent and mitigate adverse hydrologic or water quality impacts as a result of the variance that could result from conducting operations within 100 feet of the following streams.
- 1) Unnamed Tributary 7 (UNT 7) to Toll Gate Run (Stream 40491): The variance begins approximately 3195 feet south of the intersection of Toll Gate Road (TR-726) and State Route 19 (SR-19) and from Toll Gate Road proceed due west 141 feet to the confluence of UNT 7/Toll Gate Run. From the UNT 7 mouth, proceed approximately 730 feet upstream (northwest) where the variance originates and continues another 185 feet upstream (northwest) along UNT 7.
 - 2) Unnamed Tributary (UNT 3) to Wisecarver Run (Stream 40493): The stream variance originates where the stream crosses Water Dam Road (SR-4035) at approximately 2000 feet northeast of the intersection of Water Dam Road (SR-4035) and Browns Creek Road (SR-18) and continues another 250 feet upstream (east).
 - 3) Unnamed Tributary (UNT 2) to Wisecarver Run (Stream 40493): The stream variance originates where the stream crosses Water Dam Road (SR-4035) at approximately 2750 feet northeast of the intersection of Water Dam Road (SR-4035) and Browns Creek Road (SR-18) and continues another 645 feet upstream (east).

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

- c) The Department is granting a road variance to encroach within 100 feet of the right of way to Water Dam Road (SR-4035) beginning approximately 2000 feet north from the intersection of Water Dam Road (SR-4035) and Browns Creek Road (SR-18) proceeding approximately another 780 feet north along Water Dam Road (SR-4035) as depicted on Exhibit 9.1-Sheet 2 dated November 12, 2009.
- e) All mine openings, (other than boreholes that are authorized by this permit), are to be sealed in accordance with the closure plan detailed in the permit application and Bureau of Mine Safety requirements. Permittee is to contact representatives of **both** the Bureau of Mine Safety and the Bureau of District Mining Operations (California District Mining Office), at least ten (10) days before the start of mine seal construction of the underground openings. These openings are to be sealed in the presence of representatives from both the Bureau of Mine Safety and the Bureau of District Mining Operations (California District Mining Office). Both Department personnel signatures must be on a closure document for bond release to occur.

57. This permit is conditionally issued based upon compliance under the Pittston settlement agreement including violations of Glory Coal Co.'s (U035700 WV, and U074400 WV), issued on December 2, 1985.

58. Stream Restoration Special Conditions

The permittee is required to address conditions a. through g., prior to conducting stream restoration activities (including minor forms of stream restoration).

- a. Right-of-entry must be obtained and a demonstration of such provided to the Department for all effected properties. Note: The right-of-entry demonstration need not be provided if previously included in an approved permit.
- b. PA One call must be notified, as required by law.
- c. Stream restoration activities must be conducted in accordance with the Department's Technical guidance document number: 562-2112-503 "Coal surface Mining and Blasting near underground utilities and pipelines". Utility owner notifications/agreements and property owner agreements (when necessary) must be completed in a timely manner to not impede the expeditious implementation of the stream restoration plans, as required by permit approval.
- d. Required Army Corps of Engineers approvals must be obtained in a timely manner to not impede the expeditious implementation of stream restoration plans.
- e. The Compliance Manager at the DEP California District Mining Office (724-769-1100) and the PA Fish and Boat Commission (814-359-5117) are to be notified at least 10 days prior to the planned commencement of stream restoration work.
- f. Before restoration work begins at each stream restoration site: (1) Delineate and clearly mark wetlands, (2) Assess potential wetland impacts from surface disturbances, and (3) Submit mitigation plans for any wetland impacts. Modules 15.4 and 15.5 shall be submitted to address items (2) and (3).
- g. Submit complete PNDI search results before beginning any form of minor stream restoration, if PNDI searches were not submitted for the minor restoration area(s) during the application process.
- h. Site specific plans shall be submitted to the Surface Subsidence Agent Supervisor for approval before implementing minor forms of stream restoration, unless field approval, which is confirmed within 48 hours by an email or letter, is received by the permittee from the Department.
- i. Site specific conditions for Revision #119 – Dutch Run, UNT 41252 to Dutch Run, UNT 41239 to Frosty Run, and Muddy Creek.
 - 1. If the stream restoration site is activated before a Phase I archaeological study has been conducted, and if an archaeological site is discovered, the permittee shall cease the stream restoration activity and complete a Phase I study.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

59. The Department has determined that full extraction mining in the longwall panels known as the “D” district will cause mining induced effects to the stream system in that area. The permittee has proposed an adequate mitigation plan; however, has not provided documentation of its right to access all of the surface properties that must be accessed to implement the plan. Specifically, the permittee has not provided documentation demonstrating that it has the right to access the property of Luther T. and Jeannette Renner (property ID 07-02-183) or the property of James March (property ID 07-02-179) in order to perform mitigation. The permittee is prohibited from performing any full extraction in any panel(s) that contains either the Renner or the March property, including Panel D 3, unless and until the permittee has provided the Department with appropriate documentation demonstrating its right to access the Renner and March surface properties for the purpose of performing mitigation, and the Department has evaluated the documentation and approved it in writing.
60. The Department is granting a variance to conduct surface mining operations within 100 feet of Sugar Run, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
61. The Department is granting a variance to conduct surface mining operations within 100 feet of Unnamed Tributaries (40450-R2, 40450-R4, 40450-L3b and 40450-L3b1) to Sugar Run, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
62. The Department is granting a variance to conduct surface mining operations within 100 feet of Unnamed Tributaries (40461-R1, 40465, 40465-R2, 40465-L2, 40465-L1c, 40466, 40466-R3 and 40473) to Smith Creek, and the Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent adverse hydrologic or water quality impacts that could result from conducting operations within 100 feet of the stream.
63. A variance to affect within 100 feet of T-511 (Cabin Hill Road) approved October 21, 2010 is filed with this permit.
64. The Department is granting a variance to reduce the barrier distance to 100 foot radius around gas wells (W-221) for the coal mine permittee to conduct surface mining activities. The mine operator must comply with the gas well protection plan submitted and approved in the permit application.
65. The Department is granting a variance from approximate original contour at the No. 6 Bleeder Shaft Site as depicted on Exhibit 18.1: Land Use Reclamation Map, stamp dated August 20, 2012.
66. This permit is conditionally issued based upon Emerald coal Resources, LP’s continued compliance with Administrative Order No. 136001SA executed on April 1, 2013. Failure to comply with this administrative order will result in suspension of this permit.
67. **Three (3) Degasification Boreholes 4C-1, 4C-2 and 4C-6 in the C4 Panel in Jefferson Township: Revision #118:**
 - a. The Department is granting a stream variance to conduct surface mining activities within 100 feet of Muddy Creek #41014: (BH-4C-1) and its Unnamed Tributaries as depicted on Exhibit 9.1 stamp dated May 2, 2013. The stream crossing is located on the eastern side of Haines Hollow Road (TR-608). The variance area starts approximately 800 feet south from the intersection of Haines Hollow Road (TR-608) and E. Roy Furman Highway (SR-21) and continues another 50 feet downstream towards SR-21. The Department hereby orders the permittee to employ the methods and techniques described in the application material to prevent and mitigate adverse hydrologic or water quality impacts as a result of the variance that could result from conducting operations within 100 feet of the stream.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

- b. For construction of the access road for degas borehole 4C-6, the permittee must follow the pipeline crossing agreement (PCA-S) with Equitrans LP on pages 10-39 thru 10-48 in Revision #118 when mining activity occurs within the gas company right-of-way as depicted on Exhibit 9.1 stamp dated May 2, 2013.
 - c. The access road stream crossing for Borehole 4C-1 must be performed as stated in Modules 15.1 and 15.2 and the Construction Drawings in Appendix E. The stream crossing must also be constructed in accordance with Army Corps of Engineers Nationwide Permit #21, Project #2013-564.
 - d. The permittee shall notify the Mine Conservation Inspector from the Bureau of District Mining Operations at least ten days prior sealing any borehole associated with the mining activity authorized by this permit. Within ten (10) days of borehole sealing, a certificate of borehole/sealing procedure form must be submitted to the California District Mining Office and the Mine Conservation Inspector.
68. **Degasification boreholes D1-6, D1-7, D1-8, and D1-9: Revision #121**
- a) Mining activities may be conducted within 300 feet of Pennsylvania Land Holdings Company, LLC dwelling(s) located on their property: Tax Map #07-02-178, to within 0 feet that does not include blasting, in accordance with the waiver signed by James A. Cappucci dated February 26, 2014.
 - b) In addition to this mining activity meeting Title 25, Chapter 87.173(b), the permittee must follow the Columbia Gas Transmission and Peoples Natural Gas conditions stated in their emails dated December 5, 2013 on page 10-14 and dated March 3, 2014 on page 10-23 for gas lines Columbia 800 and Peoples G-58 in Module 10 of revision #121 for the access roadway to boreholes D1-6 and D1-7.
69. An approved restoration bond in the amount of \$210, 623.00 for Longwall Panels C2 – C5 must be provided within 30 days of the issuance date for permit revision No. 125.
70. This permit is conditionally issued based upon Emerald Coal Resources continued compliance with Administrative Order (Tracking No. 156001SA) dated March 16, 2015 on CMAP No. 30841307. Failure to comply with Administrative Order (Tracking No. 156001SA) will result in the suspension of this permit.
71. This permit is conditionally issued based upon Emerald Coal Resources continued compliance with Compliance Order (Tracking No. 156002) dated September 17, 2015 on CMAP No. 30841307. Failure to comply with Compliance Order (Tracking No. 156002) will result in the suspension of this permit.

TRANSFER TO EMERALD CONTURA, LLC FROM EMERALD COAL RESOURCES, LP CONDITIONS NOS. 72 and 73

72. This permit transfers all rights and liabilities of Emerald Coal Resources, LP, Permit 6543-30841307 July 9, 1986 to Emerald Contura, LLC. Emerald Contura, LLC by application and affidavit dated September 6, 2016, assumes all liability for reclamation, water pollution, planting, and all other responsibilities under the law, the Rules and Regulations, and the terms and conditions of the aforementioned permit.
73. This Coal Mining Activity Permit 30582-30841307; supersedes in its entirety the Coal Mining Activity Permit 6543-30841307; issued on July 9, 1986 . All of the following application materials are made part of the official documentation for this Permit 30582-30841307: a. the application material that was submitted in support of the Permit 6543-30841307; issued on July 9, 1986 ; b. the application materials that were submitted in support of all the revisions approved under the Permit 6543-30841307; c. the application material submitted in support of this Permit 30582-30841307; to transfer ownership from Emerald Coal Resources, LP to Emerald Contura, LLC.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(1)	January 23, 1987	Gob Ventilation Borehole #12.
(2)	April 23, 1987	Six (6) Gob Ventilation Boreholes 13, 14, 15, 16, 17 and 18.
(3)	January 22, 1988	Air Shaft #5.
(4)	March 21, 1988	No. 1 Bleeder Shaft.
(5)	April 21, 1988	Five (5) Gob Ventilation Boreholes E1, E2, E3, E5 and E7.
(6)	October 3, 1988	Degasification Boreholes 19, 20, 21, 22 and E4.
(7)	June 7, 1989	Three (3) Degasification Boreholes E6, E8 and E5A.
(8)	August 2, 1989	Install Demonstration Borehole.
(9)	June 8, 1990	Add 1560 Acres to Subsidence Control Plan Boundary.
(10)	August 7, 1990	Install Ventilation Borehole 4G3.
(11)	February 12, 1991	Add 523 Acres to Subsidence Control Plan Boundary.
(12)	April 16, 1991	Install fifteen (15) Gob Ventilation Boreholes: 5 Gate No. 1, 5 Gate No. 2, 5 Gate No. 3, 6 Gate No. 1, 6 Gate No. 2, 7 Gate No. 1, 7 Gate No. 2, 8 Gate No.1, 8 Gate No. 2, 20 Right No. 1, 20 Right No. 2, 21 Right No. 1, 21 Right No. 2, 22 Right No. 1 & 22 Right No. 2.
(13)	March 20, 1992	Renewal and 6265 Acres Underground Permit Addition.
(14)	August 4, 1992	No. 2 Bleeder Shaft.
(15)	September 16, 1992	Addition of 2732 Acres to the Subsidence Control Plan Area.
(16)	February 23, 1993	Acreage Deletion for Cumberland Mine (2-23-93).
(17)	May 28, 1993	Install twelve (12) ventilation boreholes and one (1) gravel borehole: A+1, A+2, A-1, A-2, A-3, A-4, A-5, B-1, B-2, B-3, B-4, B-5 and gravel borehole #1.
(18)	November 5, 1993	To construct No. 6 Intake and No. 6 Return Shaft.
(19)	May 10, 1994	Installation of Four (4) Gob Ventilation Boreholes.
(20)	November 18, 1994	Installation of Ten (10) Gob Ventilation Boreholes.
(21)	November 18, 1994	Deletion of 1753 acres of permit.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(22)	November 15, 1995	Revise mining plans in accordance with Act 54.
(23)	January 26, 1996	Installation of Bleeder Shaft Number 3.
(24)	February 26, 1996	Revise operation plans for bleeder shaft No. 3.
(25)	February 28, 1996	Add 925 acres to the mining permit subsidence control plan.
(26)	April 4, 1996	Add thirteen (13) gob ventilation and two (2) pressure relief boreholes.
(27)	March 27, 1997	Approval to relocate gob ventilation boreholes G-2 and G-3.
(28)	August 14, 1997	Revision adding No. 7 shaft to the mine permit.
(29)	February 2, 1998	Approval to Install Ten (10) Gob Ventilation Boreholes (J-1, J-2, J-3, J-4, K-1, K-2, 1NE1, 1NE2, 2NE1, 2NE2) and One (1) Dewatering Borehole.
(30)	March 4, 1998	Renew Permit No. 30841307 and Add Permit and Subsidence Control Plan Boundary Acreage.
(31)	July 16, 1998	Install No. 8 Shaft and No. 4 Bleeder Shaft.
(32)	July 23, 1998	Add 1,954 Acres to the Underground Permit Boundary and Extend the Subsidence Control Plan Boundary.
(33)	November 3, 1998	Revision to Add 24 Ventilation Boreholes, 1 Dewatering Borehole and 1 Degasification Borehole.
(34)	April 29, 1999	Approval to install eight (8) boreholes and relocate one ventilation borehole, one dewater borehole, and one access road.
(35)	May 6, 1999	Transfer No. 3 bleeder shaft and Outfall 010 to Cumberland Mine, Permit No. 30831303.
(36)	July 20, 1999	Transfer No. 2 bleeder shaft and Outfall 008 to the Cumberland Mine, Permit No. 30831303.
(37)	November 3, 1999	Revision to Permit for Company Name Change from Cyprus Emerald Resources Corp. to RAG Emerald Resources Corp.
(38)	November 3, 1999	Permit Revision for the Sealing Procedure for the Ventilation Shafts under this permit.
(39)	January 18, 2000	Permit Revision to change the post mining land use at the No. 4 Shaft Portal to industrial/commercial.
(40)	January 28, 2000	Revision to Permit for Company Name Change from RAG Emerald Resources Corp. to RAG Pennsylvania Coal Holding Company.
(41)	April 28, 2000	Permit Revision to Install Ten (10) Ventilation Boreholes.
(42)	July 14, 2000	Revise mining plan beneath the Kent (Williams) Farm.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(43)	September 21, 2000	Revision approval to add blasting to the approved permit for the #8 shaft, approved by James Brahosky, Greensburg District Mining Manager, on 7/24/00 and Fred Ulishney, Greensburg District Mining Blasting Inspector, on 7/25/00.
(44)	October 18, 2000	Revision approval for Phase II construction of the #8 shaft.
(45)	November 28, 2000	Revision approval to transfer permit #30841307 from RAG Emerald Resources Corporation to RAG Emerald Resources, L.P., with Bond Replacement, and add 72 acres of surface permit to the preparation plant area, expand coal storage area, expand pond No. 6 and move Outfall 003.
(46)	April 9, 2001	Transfer underground acreage from the Emerald Mine Permit No. 30841307 to the Cumberland Mine Permit No. 30831303.
(47)	May 3, 2001	Revision approval for insignificant boundary revision to the Subsidence Control Plan of 9.4 acres (No change in total acreage area).
(48)	July 19, 2001	Revision approval to add the following boreholes: WSM-01, WSM-02, WEM01, WEM02, Freshwater EC, W6BLD, 5NE4, 7NE1, 7NE2, 7NE3, 7NE4, 8NE1, 8NE2, 8NE3, 8NE4, 9NE1, 9NE2, 9NE3, 9NE4, W8N, W9N, GH-6, GH-7, GH-2, GH-3, No. 4 Bleeder Shaft Compressor, No. 4 Bleeder Shaft Water BH1, No. 4 Bleeder Shaft Water BH2, No. 4 Bleeder Shaft Power, No. 4 Bleeder Shaft Rockdust, No. 8 Shaft Diesel, GH-4, GH-5.
(49)	September 27, 2001	Revision approval for insignificant boundary revision to the Subsidence Control Plan of 19.65 acres (No change in total acreage area).
(50)	November 29, 2001	Revision approval to reflect a deletion of underground permit area by 764 acres, surface permit area by 11.8 acres and subsidence control plan area by 525 acres due to an acreage exchange that occurred May 6, 1999.
(51)	November 29, 2001	Revision approval for insignificant boundary revision to the Subsidence Control Plan of 27.65 acres (No change in total acreage area).
(52)	January 2, 2002	Revision approval for bleeder shaft no. 6 and water injection holes.
(53)	March 6, 2002	Renew the Emerald Mine Permit No. 30841307 and Approval of Chapter 105 Permit for Laurel Run.
(54)	March 6, 2002	Revision approval to add 3,817 acres underground and 3,967 acres subsidence control plan to the permit, and delete 150 acres from both the underground and subsidence control plan permit areas.
(55)	April 9, 2002	Revision approval to change site plan for Bleeder Shaft No. 6.
(56)	April 24, 2002	Emergency permit to reduce flooding hazard on Dean property from Laurel Run.
(57)	June 10, 2002	Approval to add (transfer) 408.18 underground permit acres to the Emerald Mine from the Cumberland Mine.
(58)	June 26, 2002	Acceptance of engineering analysis for longwall mining of Panels 9 North and 10 North beneath the unnamed tributary to Dyers Fork.
(59)	August 1, 2002	Revision approval to install no. 5 bleeder shaft on approximately 10.87 acres.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(60)	October 23, 2002	Chapter 105 approval for Laurel Run stream restoration plans, longwall panels 1 through 7 north.
(61)	December 10, 2002	Revision approval to add the following boreholes: 11NE6, 11NE5, 2B5, 1B4, 2B4, VVB3-1, PCB3, 1B3, VVEAST1, PCEAST1, VVB1-1, PCB-1, PCB-2, VVB2-1, 1B2, 2B2, 3B2, 1B-1, 2B-1, 3B-1, 5BS1, VVSM03, VVSM04, PC10N, VV10N, VV11N, PC11N, 10NE5, 10NE4, 10NE3, 11NE4, 10NE2A, 11NE3, 10NE1, 11NE2ALT, 11NE2, 11NE1, 2B3, 6BS#1, 6BS#2, 10NE2A.
(62)	February 27, 2002	Acceptance of engineering analysis for longwall mining of Panel 11 North beneath the unnamed tributaries to Dyers Fork in Whiteley Township, Greene County, Pennsylvania.
(63)	March 12, 2003	Revision to remove sulfate limitations from outfalls 014, 015, and 016. Regulation change December 14, 2002, PA Bulletin [25 PA Code 96.3 (d)].
(64)	March 14, 2003	Approved the mitigation technique for Laurel Run (Panel 7 and 8).
(65)	July 22, 2003	Revision approval to relocate Borehole No. PC11N from the previous permitted location.
(66)	November 10, 2003	Eliminate Special Condition E-21, (requiring submission of a Chapter 105 Permit), from the March 6, 2002 permit revision.
(67)	December 4, 2003	Relocate Permitted Borehole VVEAST1
(68)	December 16, 2003	Eliminate Special Condition E-20 (referencing partial mining) from the March 5, 2002, permit revision.
(69)	June 16, 2004	Installation of five (5) additional ventilation boreholes in Whiteley Township.
(70)	August 12, 2004	Relocate Permitted Boreholes VVB2-1 and VVB3-1
(71)	October 21, 2004	Relocate Permitted Borehole 2B3.
(72)	November 11, 2004	Emergency permit to repair a slip, which occurred above the unnamed tributary to Coal Lick Run, diverting the original stream channel.
(73)	January 31, 2005	Company name change from RAG Emerald Resources, LP to Emerald Coal Resources, LP.
(74)	February 14, 2005	Installation of fifteen (15) ventilation boreholes.
(75)	April 12, 2005	Install No. 7 Bleeder Shaft and 5 associated boreholes.
(76)	July 13, 2005	Revision approval for insignificant boundary revision to the permit and subsidence control plan of 19.0 acres (no change in total acreage area).
(77)	September 16, 2005	Revision approval for insignificant boundary revision to the permit and subsidence control plan of 27.0 acres (no change in total acreage area).
(78)	October 17, 2005	Chapter 105 approval for panels B1 through B4: Coal Lick Run, Coal Lick Run Tributaries I and II, Frosty Run, and Dutch Run.
(79)	October 26, 2005	Delete 92.0 acres from the underground mine permit area and delete 62.0 acres from the subsidence control plan boundary.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(80)	November 2, 2005	Revision approval to add 11.5 surface activity site acres for the Clean Coal Batch Weigh System.
(81)	February 10, 2006	Revision approval for insignificant boundary revision to the permit and subsidence control plan of 10.35 acres (no change in total acreage area).
(82)	February 14, 2006	Revision approval for insignificant boundary revision to the permit on the surface acreage.
(83)	March 27, 2006	Revision approval to add 2,392 acres (longwall panels C1-C5) to the underground mine permit boundary. In addition, the permittee has complied with special conditions 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30.
(84)	September 21, 2006	Revision to add 143 underground and subsidence control plan acres.
(85)	October 4, 2006	Revision to replace surety bond 4404544 (Quanta Indemnity Company) with surety bond 8205-64-04 (Federal Insurance Company) and to replace surety bonds 4404353/4409595 (Quanta Indemnity Company) with surety bond 8205-63-96 (Federal Insurance Company).
(86)	September 10, 2007	Permit revision to delete 1,255 acres from the underground permit area and to delete 1,511 acres from the subsidence control plan.
(87)	November 29, 2007	Water supply operation and maintenance bond posted for Mr. Bruce Rohrer for \$80,571.16.
(88)	November 29, 2007	Revision to install No. 9 shaft.
(89)	January 18, 2008	Revision approval to install 12 ventilation boreholes on 4.85 surface acres.
(90)	February 14, 2008	Permit revision to add .10 surface acres for the installation of Borehole 1C1.
(91)	April 30, 2008	Permit revision to add 2.93 surface acres for the installation of ventilation boreholes 1C2, 1C3, 1C4, 1C5, 1C6, 2C1, 2C2, 2C3, 2C4, 2C5 and 2C6.
(92)	September 12, 2008	Permit revision to change portions of two internal access roads for the Emerald No. 9 air shaft and associated haul road erosion and sedimentation controls.
(93)	March 17, 2009	Permit revision to change the land use on 4.45 surface acres at the No. 5 airshaft site from pastureland to industrial/commercial use (refer to Special Condition #53). Deletion of 4.45 surface acres that consisted of the entire No. 5 airshaft site from the underground permit. Also, deletion of Outfall 007 from the Emerald Mine.
(94)	August 18, 2009	Revision approval for insignificant boundary revision to the permit and subsidence control plan of 12.4 acres (no change in total acreage area).
(95)	January 5, 2010	Revision approval for insignificant boundary revision to the permit and subsidence control plan of 12.5 acres (no change in total acreage area). This 12.5 acres reflects a 12.08 acre adjustment to the subsidence control plan boundary, and an 0.42 acre adjustment to the permit boundary and the subsidence control plan boundary.
(96)	February 22, 2010	Revision to add 5.09 surface acres for 6 gob vent holes, 2 vertical vent holes, and 2 concrete boreholes.
(97)	March 25, 2010	Water supply operation and maintenance bond posted for Mr. Chris Eisiminger (\$25,896).

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(98)	May 4, 2010	Revision approval for insignificant boundary revision to the subsidence control plan boundary of 10.4 acres (no change in total acreage area).
(99)	June 3, 2010	Revision to add 932 subsidence control plan acres ("E" District). Includes an acreage adjustment based on AutoCAD mapping correction.
(100)	October 7, 2010	Permit revision to install borehole EM1DW1 and EM1DW2.
(101)	November 2, 2010	Permit revision to add 61 surface acres for the No. 8 Bleeder Shaft Facility (refer to Special Condition No. 56).
(102)	November 16, 2010	Permit revision approval to add 3,071 acres ("D" District) to the underground mine permit boundary and subsidence control plan boundary.
(103)	December 7, 2010	Bond replacement – replace Travelers' Surety Bond No. 104396950 dated 12/15/04 with US Specialty Ins. Co. Bond No. 100831373 dated 11/15/10.
(104)	January 18, 2011	Permit revision to add 10.81 surface acres for the installation of ventilation boreholes E1-1, E1-2, E2-1, E2-2, E2-3, E3-1, E3-2, E3-3, E4-2, E4-3, E5-1, E5-2, E5-3.
(105)	May 19, 2011	Permit revision to allow modifications to Rohanna Pond for underground mining.
(106)	September 12, 2011	Revision approval for insignificant boundary correction to the permit and subsidence control plan boundaries of 8.9 acres (no change in total acreage).
(107)	October 31, 2011	Permit revision to change the monitoring point identifiers.
(108)	N/A - See Revision No. 117	
(109)	December 7, 2011	Permit revision to delete protective cover requirements on the cuttings pit liner at the No. 8 Shaft.
(110)	January 17, 2012	Permit revision to add 0.51 surface acres for the installation of borehole E4-1.
(111)	August 29, 2012	Permit revision to approve stream pooling mitigation plans for Mt. Phoebe Run located in longwall panel B7 (Barclay property).
(112)	August 29, 2012	Permit revised to relocate the access road to ventilation borehole E2-3. See also permit revision No. 104.
(113)	September 11, 2012	Permit revision for a post-mining land use change at the No. 6 Bleeder Shaft Site to allow the borehole and shaft pad areas, Buildings A and B, roads and upper pond to remain. Refer to Special Condition No. 65.
(114)	November 14, 2012	To eliminate the monitoring requirements for Special Conditions 41 – 44, for the constructed wetland resulting from the clean coal batch weigh system construction.
(115)	February 21, 2013	Water supply Operation and Maintenance Bond posted for Mr. Ralph Wilson in the amount of \$14,049.17 (Surety Bond No. 09077513).
(116)	September 16, 2013	Bond Replacement – Replace US Specialty surety bond no. 10000831373 dated 11/15/2010 with Atlantic Specialty Ins. Co. bond no. 800002405 dated 4/22/2013.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(117)	September 16, 2013	Renew Coal Mining Activity Permit No. 30841307, and approve stream restoration plan in longwall panels B6 and B7 for Mt. Phoebe and Dutch Run. This approval will delete from the monitoring program the following monitoring points: SW-40, WE-11, M-1, M-2, M-3, M-4, M-4a, M-4b, M-4c, M-5, M-6, M-7, M-8, 531-S5, 531-S6, 531-S7, PZ5, PZ6, 211-W2, 511-S2, 512-W2, 513-W3, 521-W9, 522-S3, 522-S7, 523-W1, 524-W4, 633-S1, 643-S4, AW-6, and 541-W5.
(118)	November 8, 2013	Install three (3) boreholes on panel C4; 4C-1, 4C-2, and 4C-6. Refer to Special Condition 67.
(119)	January 8, 2014	Stream restoration areas within Dutch Run, UNT 41252 to Dutch Run, UNT 41239 to Frosty Run, and Muddy Creek above longwall panels B1, B2, B6, B7, and C1.
(120)	March 28, 2014	Bond Replacement - Atlantic Specialty Ins Co surety bond Nos. 00002484 and 800002485 replaced Fed Ins Co surety bond Nos. 82056418 and 82153380, respectively.
(121)	May 8, 2014	Permit revision to add 2.62 surface acres for four (4) gob ventilation boreholes D1-6, D1-7, D1-8, and D1-9 in Panel D1 (refer to special condition No. 68).
(122)	May 27, 2014	Permit revision to add 1.88 surface acres for gob ventilation boreholes D1-3, D1-4, D1-5.
(123)	July 14, 2014	Permit revision to add 20.88 subsidence control plan acreage for development mining.
(124)	September 30, 2014	Permit revision to add 5.4 surface acres to install degas borehole D2-1, D2-2, D2-3, D2-4, D2-5, D2-6, D2-7, D2-8 into the D2 longwall panel.
(125)	October 6, 2014	Permit revision for stream restoration above Longwall Panels C2 – C5. See also permit condition No. 69.
(126)	December 18, 2014	Permit revision to delete 42.7 acres from the permit boundary.
(127)	June 1, 2015	Bond Replacements-Lexon Ins Co bond no's 1098515 & 1098514 replaced Fed Ins Co bond no 8205-64-04 & 8205-63-96. Westchester Fire Ins Co bond no's K09054054, K09054042 & K09054066 replaced Fed Ins Co bond no's 82153381, 82153373 & 82140407, respectively.
(128)	April 1, 2016	Revision to NPDES Permit No. PA0213438 per a Settlement Agreement.
(129)	April 6, 2016	Revision to approve stream restoration in Jackson Run above the D1 Panel.
(130)	August 2, 2016	Bond Replacement – A Western Surety Company Bond No. 58727717 replaced Westchester Fire Insurance Bond No. K09054054.
(131)	August 30, 2016	Revision to install three (3) boreholes: UIB #23 at the No. 8 Airshaft, UIB #24 at the No. 9 Airshaft, UIB #25 at the No. 8 Bleeder Shaft.
(132)	September 30, 2016	Revision to approve stream restoration in Jackson Run above the D2 panel.
(133)	October 20, 2016	Bond Replacement – Four (4) bond replacements as shown in Section D.

SECTION E. SPECIAL CONDITIONS REGARDING OPERATION AND RECLAMATION

74. The following revisions are included with this mining activity permit:

Revision No.	Date of Approval	Description
(134)	November 30, 2016	Approve bank stabilization downstream of the previously approved Jackson Run D2 gate cut.
(135)	APR 14 2017	Transfer of Permit to Emerald Contura, LLC from Emerald Coal Resources, LP.

SECTION F. SPECIAL CONDITIONS REGARDING SUBSIDENCE CONTROL

1. The six-month mining map shall be submitted to the Department every six months. All six-month mine maps, receipts, and notifications related to the Subsidence Control Plan must be submitted to the Department's California Office at:

Department of Environmental Protection
Bureau of Mining and Reclamation
25 Technology Drive
California Technology Park
Coal Center, PA 15423
Phone: (724) 769-1100

2. No mining shall be conducted within 150 feet of an oil or gas well until:
 - a. The pillar plan is depicted on the six-month mining map or described in the legend;
 - b. The California District Office approves the six-month map; and
 - c. The Bureau of Oil and Gas Management has approved the pillar plan by issuing a pillar permit.
3. Gas Pipelines.
 - a. No mining that will or is likely to result in subsidence of a natural gas pipeline and/or any appurtenant facilities (Pipelines) is authorized unless and until the Department has received information from the Permittee documenting that measures have been taken to minimize damage, destruction, or disruption of utility service provided by the Pipelines. In order to obtain timely authorization to mine coal in a manner that will or is likely to result in subsidence of a Pipeline, the Permittee shall adhere to the following guidelines for submitting information to the Department.
 - i. At least 90 days prior to conducting any underground mining that will or is likely to result in subsidence of the Pipelines, the Permittee shall submit evidence to the Department showing that the Permittee has reached an agreement with the Pipeline Operator or provides other satisfactory evidence (for example a court or administrative order or ruling) that requires the performance, prior to undermining, of appropriate mitigation measures that will minimize damage, disruption or destruction of utility service provided by the Pipelines after they have been undermined, and which describes those mitigation measures; and
 - ii. At least two weeks prior to conducting any underground mining that will or is likely to result in subsidence of the Pipelines, the Permittee shall submit evidence to the Department showing that the appropriate mitigation measures have been taken.
 - b. In support of the obligation to minimize damage, destruction, or disruption in service provided by Pipelines, the Permittee shall engage in the following communication protocol with the Pipeline operator.

SECTION F. SPECIAL CONDITIONS REGARDING SUBSIDENCE CONTROL

- i. Upon issuance of this permit, the Permittee shall promptly provide to a person designated by the Pipeline Operator as its representative (Pipeline Representative) a mine map which depicts the location of the Pipelines in relationship to mining as then planned and projected. The mine map shall show the months during which mining is anticipated to occur beneath the Pipelines for a period of at least 24 months henceforth. This notice shall inform the Pipeline Representative of the name and address of the representative of the Permittee (Permittee's Representative) to whom all future communications between the Pipeline Operator and the Permittee should be directed, including any questions concerning the mining plans and/or mining rights of the Permittee. The Permittee shall update and provide this mine projection map and specified information to the Pipeline Representative any time the map is changed and as often as necessary to maintain effective communication with the Pipeline Operator, and at minimum intervals not to exceed one year.
- ii. The Permittee shall provide an updated mine map to the Pipeline Representative at least 90 days prior to the commencement of longwall mining in each successive longwall panel. The mine map shall display surveyed distances across the longwall panel such that the location of the long wall face position can be plotted in relationship to the Pipelines.
- iii. Upon issuance of this permit, the Permittee shall promptly provide to the Pipeline Representative routine updates of the longwall face position in a manner that relates to the surveyed distances that are displayed on the mine map of the longwall panel that is referenced above in subsection 4(b)(i). The routine updates shall be provided to the Pipeline Representative in a manner and time frame to allow the Pipeline representative to effectively monitor the long wall face position. The Permittee shall continue to provide the Pipeline Representative with the routine update of the longwall face position during each longwall panel.
- c. The Permittee shall provide to the Department copies of all information and correspondence that it is required to send to the Pipeline Representative pursuant to this Condition, and shall send to the Pipeline Operator copies of all information and correspondence that it is required to send to the Department pursuant to this condition.
- d. Nothing contained in these provisions shall be construed as limiting the Department's power to issue orders to enforce Section 9.1(a) of the Bituminous Mine Subsidence and Land Conservation Act.

LIMITS OF AUTHORIZATION

1. The issuance of 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 any invasion of personal rights.
2. Nothing herein contained shall be construed to be an intent on the part of the Department to approve any act made or to be made by the permittee which is inconsistent with the permittee's lawful powers or with existing laws of the Commonwealth regulating coal mining activities and the practice of professional engineering. This permit shall not be construed to sanction any act otherwise forbidden by federal or state law or regulation, or by local ordinance, nor to preempt any duty to obtain state or local assent required by law for the coal mining activity.
3. The permittee's failure to comply with the laws of the Commonwealth and the rules and regulations of the Department regarding coal mining activities or failure to comply with the terms and conditions of this permit, may result in an enforcement action, in permit termination, suspension, revocation and reissuance, or modification, or in denial of a permit renewal application. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee of any responsibilities, liabilities, or penalties to which this permit is issued or any other applicable provision of law.
4. The permittee is responsible for complying with local ordinances adopted pursuant to the Municipalities Planning Code, and all zoning ordinances in existence before January 1, 1972. Nothing in this permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under any Federal, State, or Local laws.

Operator: Emerald Contura, LLC
Operation Name: Emerald Mine No. 1
Permit #: 30841307

Mark parameters to be measured with an ω^2 -

Biosensing Point ID (4 digit max.)	Location Description	Grid Map ID	Latitude/Longitude	Substrate Component ID	Type**	Flow (GPM)	Water Elev.	Fluid pH	Lab pH	Temperature (in °C)	Acidity (mg ions CaCO ₃ /L)	Alkalinity (mg/L)	From (mg/L)	Manganese (mg/L)	Ammonia (mg/L)	Nitrate (mg/L)	Diss. Silica (mg/L)	Spec. Cond. (µS/cm)	Oxidative Potential (mV)	Chlorides (mg/L)	Sed. Conc.	Freq.	Notes	
BT4-333	Period 07-02-134 BPA/PA Stream	3-3-3	38° 54' 36.15" / 80° 12' 32.15"	1015	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT5-333	Period 07-02-134 BPA/PA Stream	3-3-3	38° 54' 28.34" / 80° 12' 28.88"	1008	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT11-332	Period 07-16-241 Buena Stream	3-3-2	38° 54' 36.48" / 80° 12' 07.14"	1099	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT12-332	Period 07-18-241 Buena Stream	3-3-2	38° 54' 36.18" / 80° 12' 07.13"	1099	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT5-30	Period 07-01-128B Fresh Veg. - Stream	6-3-3	38° 54' 17.34" / 80° 09' 01.87"	920	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT10-343	Period 07-02-128A McHenry - Stream	3-3-3	38° 55' 20.37" / 80° 12' 27.08"	999	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT10-312	Period 07-01-121 Henderson - Stream	3-1-2	38° 55' 35.59" / 80° 10' 48.30"	1005	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT10-342	Period 07-01-111 McCrawley - Stream	3-4-2	38° 54' 28.97" / 80° 10' 48.80"	1000	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT11-623	Period 07-09-208 Kowdich - Stream	6-2-3	38° 54' 21.52" / 80° 08' 08.90"	941	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BT13-321	Period 07-02-184 Shig - Stream	3-3-1	38° 55' 38.07" / 80° 11' 13.58"	1051	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-1	Period 07-03-129 PA Lines - Surface Water	2-2-2	38° 53' 45.08" / 80° 15' 03.90"	940	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-2	Period 07-03-173A PA Lines - Surface Water	2-1-2	38° 53' 31.67" / 80° 11' 38.11"	820	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-14	Period 07-03-173B Emerald - Surface Water	2-1-2	38° 55' 08.32" / 80° 11' 27.48"	940	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-15	Period 07-02-164 Emerald - Surface Water	3-3-4	38° 53' 50.89" / 80° 11' 54.38"	920	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-25	Period 07-08-125B Riggs - Surface Water	6-3-3	38° 53' 07.88" / 80° 09' 43.45"	964	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-26	Period 07-07-169 Palmetto - Surface Water	6-3-4	38° 53' 08.74" / 80° 08' 08.37"	1039	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-30	Period 07-24-114A Clark - Surface Water	3-4-4	38° 52' 20.36" / 80° 10' 28.54"	979	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-38	Period 28-02-168E Regiment - Surface Water	6-4-4	38° 52' 25.64" / 80° 07' 22.38"	1090	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-41	Period 28-02-168E Regiment - Surface Water	6-4-2	38° 51' 21.67" / 80° 07' 28.80"	1342	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring
BNV-42	Period 28-02-168E Regiment - Surface Water	5-4-1	38° 51' 02.02" / 80° 06' 18.64"	1139	STRM	*		*	*	*	*	*	*	*	*	*	*	*	*		X	XX	X	General Monitoring

FORM 8.15A
MONITORING PROGRAM SUMMARYOperator: Emerald Contura, LLC
Operation Name: Emerald Mine No. 1
Permit #: 30841307

Mark parameters to be measured with an asterisk.

Monitoring Point ID (if different from location description)	Location Description	Overall Size (ft)	Latitude/Longitude	Surface Elevation (ft)	Type**	Flow (GPM)	Water Elev.	Field pH	Temp - Max (°C)	Alkalinity (mg CaCO3/L)	Acidity (mg CaCO3/L)	Iron (mg/L)	Manganese (mg/L)	Ammonia (mg/L)	Phosphate (mg/L)	Diss. Solids (mg/L)	Specific Conductance (µmhos/cm)	Diss. Solids (mg/L)	Diss. Solids (mg/L)	Chlorides (mg/L)	Start Date	End Date	Frequency	Notes	
B-1	Point 07-05-102A PA Holdings - Stream	2-1-3	38° 52' 57.10" / 107° 11' 45.78"	948	STROM	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
B-2	Point 07-05-100 Upper Stream	2-1-3	38° 52' 53.10" / 107° 11' 38.40"	960	STROM	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
BP23-324	Point 07-05-100 Mid - Spring	3-2-4	38° 54' 53.54" / 107° 11' 13.22"	1118	SPRNG	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
BP44-313	Point 07-05-108B Spring - Spring	3-1-3	38° 58' 10.84" / 107° 10' 35.54"	1148	SPRNG	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
SPW5-222	Point 07-05-146 Main - Spring	3-3-2	38° 58' 55.17" / 107° 12' 00.00"	1068	SPRNG	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
WE-1	Point 07-05-184 Emerald Well	2-2-1	38° 53' 47.16" / 107° 11' 58.34"	930	MPWEL		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
WE-2	Point 07-05-184 Emerald Well	3-3-4	38° 53' 45.72" / 107° 11' 44.78"	928	MPWEL		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
WE-3	Point 07-05-184 Emerald Well	2-2-1	38° 53' 38.70" / 107° 11' 55.82"	1020	MPWEL		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring
W28-823	Point 07-05-180 Rush - Well	6-2-3	38° 54' 43.70" / 107° 09' 04.84"	1009	MPWEL		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	X	XX	X	General Monitoring

* - Parameters to be measured.

X - Monitoring will commence one year prior to mining in the area of the sample location. Monthly samples will be taken until six months of data are available. Monitoring then will be quarterly.

XX - Monitoring will cease 6 months after the area of the sample location has been mined.

[*]Type:

ADDIT - Ambient Location
DMOOS - Deep Mine Opening Discharge
DRLHO - Dike Hole
LYNMR - Lyometer
MPEED - Mine Drain Seep
MPLUP - Mine Drain Seep
LCHOR - Leachate Drain
MPSRD - Sediment Pond
SPRNG - Spring
STRM - Stream

MPOGW - Oil & Gas Well
PZOMIT - Piezometer
MFTRM - Treatment Facility
MPWEL - Well
MFWEL - Monitoring Well
PDWEL - Private Drinking Well
UNK - Unknown
SF - Sub Facility
UDGRF - Underdrain for Coal Refuse
PF - Primary Facility

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF DISTRICT MINING OPERATIONS

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
INDIVIDUAL PERMIT

NPDES PERMIT NO.:	<u>PA0213438 A-1</u>	PERMITTEE NAME:	<u>Emerald Contura, LLC</u>
CMAP NO.:	<u>30841307</u>	OPERATION NAME:	<u>Emerald Mine No. 1</u>
MUNICIPALITY:	<u>Franklin Twp.</u>	COUNTY:	<u>Greene</u>

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection (Department) hereby approves the discharge to the following surface water(s):

Outfall 002, 003 – SF Tenmile Creek; 004 – UNT Smith Creek; 012 – UNT Laurel Run; 013 – UNT Coal Lick Run; 017 – Grimes Run; 018 – UNT Toll Gate Run

subject to all effluent limitations, monitoring and reporting requirements and other terms, conditions, criteria, and special requirements for the discharge as defined in this permit, to surface waters of the Commonwealth.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms, conditions, or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 40 CFR 122.41(a)
3. A complete application for renewal or reissuance of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. 40 CFR 122.41(b) 122.41(d). In the event that a timely and complete application for renewal or reissuance has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. 25 Pa. Code 92.9.
4. The permit may be terminated prior to the expiration date upon notice to and approval by the Department.
5. No condition of this permit shall release the operator from any responsibility or requirement under Pennsylvania, or Federal environmental statutes, and regulations or local ordinances.

PERMIT ISSUANCE DATE:	<u>09/16/2013</u>	PERMIT EFFECTIVE DATE:	<u>09/16/2013</u>
PERMIT AMENDMENT ISSUANCE DATE:	<u>APR 14 2017</u>	PERMIT AMENDMENT EFFECTIVE DATE:	<u>MAY 01 2017</u>
PERMIT EXPIRATION DATE:	<u>07/09/2016</u> <u>(Renewal Pending)</u>	ORIGINAL PERMIT ISSUANCE DATE:	<u>07/09/1986</u>

AUTHORIZED BY:



Joel Korcich, District Mining Manager
California District Mining Office

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 30841307

NPDES # PA0213438 A-1

1. MINE DRAINAGE TREATMENT FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 002
DISCHARGE TO: South Fork Tenmile Creek
FROM: Prep Plant Ponds
LAT: 39° 53' 49.2" LONG: 80° 11' 50.4"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b, c.}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	1.5	3.0	3.8	2/month	grab
Manganese	(mg/l)	1.0	2.0	2.5	2/month	grab
Aluminum	(mg/l)	0.75	0.75	0.75	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Osmotic Pressure	(mos/kg)	50	50	50	2/month	grab
Chlorides	(mg/l)	567	1133	1416	2/month	grab
Sulfates	(mg/l)	250	250	250	2/month	grab
Total Dissolved Solids	(mg/l)	500	779	974	2/month	grab
Selenium	(mg/l)	-	-	REPORT	2/month	grab
Bromide	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE.
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING
- The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 30841307

NPDES # PA0213438 A-1

2. EROSION AND SEDIMENT CONTROL FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 003
DISCHARGE TO: South Fork Tenmile Creek
FROM: Runoff Pond
LAT: 39° 53' 49" LONG: 80° 11' 53.9"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b, c}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	3.0	6.0	7.0	2/month	grab
Manganese	(mg/l)	2.0	4.0	5.0	2/month	grab
Aluminum	(mg/l)	-	-	REPORT	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Sulfates	(mg/l)	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	REPORT	2/month	grab
Bromide	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE.
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING
- The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 30841307

NPDES # PA0213438 A-1

2. EROSION AND SEDIMENT CONTROL FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 004
DISCHARGE TO: UNT Smith Creek
FROM: Portal #1 Runoff Pond
LAT: 39° 53' 14" LONG: 80° 11' 33"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b. c.}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	3.0	6.0	7.0	2/month	grab
Manganese	(mg/l)	2.0	4.0	5.0	2/month	grab
Aluminum	(mg/l)	-	-	REPORT	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Sulfates	(mg/l)	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	REPORT	2/month	grab
Bromide	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE.
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING
- The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAP # 30841307

NPDES # PA0213438 A-1

2. **EROSION AND SEDIMENT CONTROL FACILITIES**

- a. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL** 012
 DISCHARGE TO: UNT Laurel Run
 FROM: No. 7 Shaft Sedimentation Pond
 LAT: 39° 52' 38.5" LONG: 80° 09' 59.7"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b. c.}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	3.0	6.0	7.0	2/month	grab
Manganese	(mg/l)	2.0	4.0	5.0	2/month	grab
Aluminum	(mg/l)	-	-	REPORT	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Sulfates	(mg/l)	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE.
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING
- The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 30841307

NPDES # PA0213438 A-1

2. **EROSION AND SEDIMENT CONTROL FACILITIES**

a. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL** 013

DISCHARGE TO: UNT Coal Lick Run

FROM: Pond 2

LAT: 39° 52' 23.1"

LONG: 80° 07' 34.3"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b. c.}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	3.0	6.0	7.0	2/month	grab
Manganese	(mg/l)	2.0	4.0	5.0	2/month	grab
Aluminum	(mg/l)	-	-	REPORT	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Sulfates	(mg/l)	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	REPORT	2/month	grab
Bromide	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE.
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- The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 30841307

NPDES # PA0213438 A-1

2. **EROSION AND SEDIMENT CONTROL FACILITIES**

- a. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL** 017
DISCHARGE TO: Grimes Run
FROM: No. 9 Shaft Sedimentation Pond
LAT: 39° 54' 16" **LONG:** 80° 09' 06"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b. c.}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	3.0	6.0	7.0	2/month	grab
Manganese	(mg/l)	2.0	4.0	5.0	2/month	grab
Aluminum	(mg/l)	-	-	REPORT	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Sulfates	(mg/l)	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	REPORT	2/month	grab
Bromide	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
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PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAP # 30841307

NPDES # PA0213438 A-1

2. **EROSION AND SEDIMENT CONTROL FACILITIES**

a. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL**

018

DISCHARGE TO: UNT Toll Gate Run

FROM: Sediment Basin SB-1

LAT: 39° 54' 47"

LONG: 80° 12' 16"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b, c.}			MONITORING REQUIREMENTS	
		Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	2/month	measured
Iron	(mg/l)	3.0	6.0	7.0	2/month	grab
Manganese	(mg/l)	2.0	4.0	5.0	2/month	grab
Aluminum	(mg/l)	-	-	REPORT	2/month	grab
Total Suspended Solids	(mg/l)	35	70	90	2/month	grab
Sulfates	(mg/l)	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
- pH not less than 6.0 or greater than 9.0 standard units at all times.
 - Alkalinity must exceed acidity at all times.
 - The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
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**PART B:
MANDATED STANDARD CONDITIONS FOR NPDES PERMITS**

1. DEFINITIONS

The following definitions apply within this permit. Appropriate reference citations are given from 40 CFR as noted.

- (a) “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. 122.41(m)(1)(i)
- (b) “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production 122.41(m)(1)(ii)
- (c) “Average monthly” discharge limitation means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month. 122.2
- (d) “Maximum daily” discharge limitation means the highest allowable “daily discharge.” 122.2
- (e) “Daily discharge” means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “Daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day. 122.2
- (f) “Average” refers to the use of an arithmetic mean, unless otherwise specified in this permit. 122.41(I)(4)(iii)
- (g) “Instantaneous Maximum” means the level not to be exceeded at any time in any grab sample.
- (h) “Composite Sample” means a combination of individual samples obtained at regular intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval (for constant volume samples) is proportional to the flows rates, over the time period used to produce the composite. The maximum time period between individual samples shall not exceed two hours, except that for wastes of a uniform nature the samples may be collected on a frequency of at least twice per working shift and shall be equally spaced over a 24-hour period (or over the operating day if flows are of a shorter duration).
- (i) “Grab Sample” means an individual sample collected at a randomly-selected time over a period not to exceed 15 minutes.
- (j) “Measured Flow” means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.
- (k) “At Outfall XXX” means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line XXX, or where otherwise specified.
- (l) “Estimate” means to be based on a technical evaluation of the sources contributing to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.
- (m) “Toxic Pollutant” means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act. 122.2
- (n) “Hazardous Substance” means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. 122.2
- (o) Best Management Practices (BMPs) – Activities, facilities, measures, or procedures used to protect and maintain the quality of waters, and existing and designated uses within this Commonwealth. BMPs include E&S Plans, Reclamation Plans, Storm Water Management Act Plans, and other treatment requirements, operating procedures, and practices to control project site runoff, spillage or leaks, and other drainage from the mining activity.

- (p) Erosion and Sediment Control Plan (“E&S Plan”) – A site-specific plan included with the mining permit or authorization application identifying BMPs to minimize accelerated erosion and sedimentation and which meets the requirements of 25 Pa. Code Chapter 102.
- (q) Point Source – Any discernable, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, landfill leachate collection system, from which pollutants are or may be discharged.
- (r) Operator – Person(s) or entity conducting mining activity that seek to be covered by this general permit or are approved for coverage under this general permit. The operator name must match the “Permittee” in relation to their mining permit or exploration activity approval and also that of “Operator” in the associated mine operator’s license.
- (s) Reclamation Plan – Approved documentation made part of a permit or exploration notice that describes how the permittee will restore the land surface as required by the appropriate regulations to meet an approved post-mining land use. This plan includes activities such backfilling, regrading, soil stabilization, and revegetation. Once the permittee completes the reclamation plan, reclamation bond(s) are released for a permitted mine site.
- (t) Stormwater – Surface runoff and drainage resulting from precipitation events, including ice and snow melt runoff.

2. STANDARD FEDERAL CONDITIONS

40 CFR Sec. 122.41 and 122.42 requires that the following conditions are applied to all permits.

- (a) *Duty to comply.* The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - (1) 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 CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - (2) The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
 - (3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II

violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

- (b) *Duty to reapply.* If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- (c) *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.
- (d) *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.
- (e) *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 adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- (f) *Permit actions.* This permit 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.
- (g) *Property rights.* This permit does not convey any property rights of any sort, or any exclusive privilege.
- (h) *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 permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
- (i) *Inspection and entry.* The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department, EPA or County Conservation District), upon presentation of credentials and other documents as may be required by law, to:
 - (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
- (j) *Monitoring and records.*
 - (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
 - (3) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;

- (ii) The individual(s) who performed the sampling or measurements;
- (iii) The date(s) analyses were performed;
- (iv) The individual(s) who performed the analyses;
- (v) The analytical techniques or methods used; and
- (vi) The results of such analyses.

- (4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR subchapters N or O.
- (5) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(k) *Signatory requirement.*

- (1) All applications, reports, or information submitted to the Department shall be signed and certified. (See §122.22)
- (2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(l) *Reporting requirements —*

- (1) *Planned changes.* 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:
 - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in §122.29(b); or
 - (ii) 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 in the permit, nor to notification requirements under §122.42(a)(1).
 - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (2) *Anticipated noncompliance.* 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.
- (3) *Transfers.* This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See §122.61; in some cases, modification or revocation and reissuance is mandatory.)
- (4) *Monitoring reports.* Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
 - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
 - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (5) *Compliance schedules.* 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.

- (6) *Twenty-four hour reporting.*
- (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; 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 steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - (ii) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See §122.41(g).
 - (B) Any upset which exceeds any effluent limitation in the permit.
 - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours. (See §122.44(g).)
 - (iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(ii) of this section if the oral report has been received within 24 hours.
- (7) *Other noncompliance.* The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.
- (8) *Other information.* Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(m) Bypass —

- (1) *Definitions.*
- (i) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (2) *Bypass not exceeding limitations.* 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 paragraphs (m)(3) and (m)(4) of this section.
- (3) Notice —
- (i) *Anticipated bypass.* If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (ii) *Unanticipated bypass.* The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).
- (4) *Prohibition of bypass.*
- (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) 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
 - (C) The permittee submitted notices as required under paragraph (m)(3) of this section.
 - (ii) 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 paragraph (m)(4)(i) of this section.

(n) *Upset* —

- (1) *Definition.* Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (2) *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (3) *Conditions necessary for a demonstration of upset.* A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated; and
 - (iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).
 - (iv) The permittee complied with any remedial measures required under paragraph (d) of this section.
- (4) *Burden of proof.* In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. (Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.)) [48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39620, Sept. 1, 1983; 49 FR 38049, Sept. 26, 1984; 50 FR 4514, Jan. 31, 1985; 50 FR 6940, Feb. 19, 1985; 54 FR 255, Jan. 4, 1989; 54 FR 18783, May 2, 1989; 65 FR 30908, May 15, 2000; 72 FR 11211, Mar. 12, 2007]

(o) *Existing manufacturing, commercial, mining, and silvicultural discharges.* In addition to the reporting requirements above, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

- (1) 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 the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) One hundred micrograms per liter (100 µg/l);
 - (ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7); or
 - (iv) The level established by the Department in accordance with §122.44(f).
- (2) 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 the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) Five hundred micrograms per liter (500 µg/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
 - (iv) The level established by the Department in accordance with §122.44(f).

3. **STANDARD STATE CONDITIONS**

- (a) All discharges authorized by the NPDES permit shall be consistent with the terms and conditions of the permit; that facility expansions, production increases or process modifications which result in new or increased discharges of pollutants shall be reported by submission of a new application or, if the discharge does not violate effluent limitations specified in the NPDES

permit, by submission to the Department of notice of the new or increased discharges of pollutants, that the discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by the permit shall constitute a violation of the terms and conditions of the permit.

- (b) The permittee shall allow the Department or an authorized representative, upon presentation of that representative's credentials, to:
 - (1) Enter upon permittee's premises in which an effluent source is located or in which records are required to be kept under terms and conditions of the permit.
 - (2) Have access to and copy records required to be kept under terms and conditions of the permit.
 - (3) Inspect monitoring equipment or method required in the permit.
 - (4) Sample a discharge of pollutants.
- (c) The permittee shall maintain in good working order and operate as efficiently as possible facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit.
- (d) The discharger may not discharge floating materials, oil, grease, scum, sheen and substances that produce color, taste, odors, turbidity or settle to form deposits.
- (e) Dischargers must comply with applicable water quality standards, including the narrative standards set forth in 25 PA Code, Section 93.6.
- (f) The immediate notification requirements of § 91.33 (relating to incidents causing or threatening pollution) supersede the reporting requirements of 40 CFR 122.41 (l)(6).

4. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLANS

- (a) Persons subject to this permit shall maintain a Preparedness, Prevention and Contingency (PPC) plan.
- (b) The permittee shall periodically review, update and amend the PPC Plan at least once a year and whenever the information submitted in the plan is no longer accurate.
- (c) The permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a PPC Plan.
- (d) This permit does not authorize and discharge (stormwater or non-storm water), which contains any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environmental due to its quantity or concentration.
- (e) Operator personnel shall conduct site compliance evaluations using the Annual Inspection Form at least once a year. All areas shall be visually inspected for evidence of, or the potential for pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed. Stormwater management measures, E & S plan measures and other structural pollution prevention measures shall be observed to ensure that they are operating correctly. The PPC Plan shall be revised as needed within 15 days of such inspection with implementation of any changes occurring not more than 90 days after the inspection.

5. OPERATIONS AND MAINTENANCE OF EROSION AND SEDIMENTATION PLAN

- (a) Operation and Maintenance of Erosion and Sedimentation Plan
 - (1) The permittee shall implement an approved erosion and sediment control plan.
 - (2) The permittee shall be responsible for the inspection, maintenance and repair of the erosion and sedimentation control BMPs to ensure that the proposed system continues to function as designed until final bond release occurs for the mine site.

- (3) All BMPs shall be inspected by the responsible entity on a regularly scheduled basis and, at minimum, once a quarter and after all major storm events (greater than 0.5 inch in 24 hours). A qualified representative of the operator must perform inspections of the facilities. The inspections shall determine the operational condition, safety, and the effectiveness of the BMP. Based on the inspection results, an inspection report shall generate a listing of maintenance needs or repairs required. The permittee shall keep a listing of the repairs needed and a schedule for corrective action. Corrective actions shall be performed within the schedule. Written records shall be kept of all inspections and maintenance work performed related to the discharge management facilities.

- (b) The permittee is responsible to renew this NPDES permit until such time that the area is stabilized and no further earth disturbance will occur.

6. Special Conditions

(a) Effluent Characterizations and Reporting Requirements

- (1) The permittee shall provide analysis of samples collected from all facility outfalls for the parameters listed in 40 CFR 122, Appendix D, Tables III and IV in compliance with 40 CFR 122.21 (G)(7). Samples data must be provided within 90 days after NPDES permit issuance.
- (2) The permittee shall provide analysis of samples collected from all sediment control facility outfalls in Compliance with 40 CFR 122.26(c). Sample data must be provided within 90 days after commencement of discharge from each facility.
- (3) The permittee shall REPORT instantaneous maximum values for the parameters indicated at the frequencies indicated in Part A.
- (4) The permittee shall provide six weeks of stream data for the receiving stream for Outfall 012.
- (5) The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- (6) The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.

(b) Selenium

(1) Selenium Monitoring and Reporting Requirements

This permit includes reporting requirements, twice monthly, for selenium. The permittee shall sample for selenium using an analytical method with a Method Detection Limit no greater than 2 micrograms per liter. This permit is subject to modification pursuant to 40 CFR 122.62(a) specifically for the purpose of imposing an applicable water quality based effluent limit for selenium if the sampling data for selenium submitted by the permittee indicate values of 4.6 micrograms per liter or greater for any of the permitted outfalls.

7. Compliance Schedule

- (a) Effluent limitations for sulfates, osmotic pressure, chlorides and total dissolved solids set in Part A are assigned to protect the receiving stream uses designated in the Department's rules and Regulations.

- (b) The permittee shall achieve compliance with the discharge limitations for sulfates, osmotic pressure, chlorides and total dissolved solids, according to the following compliance schedule:

1.	Complete preliminary engineering and design of selected treatment facility.	February 14, 2014
2.	Submit complete application(s) for necessary permitting for the treatment system, excluding a Water Quality Management (WQM) permit application to DEP.	April 25, 2014
3.	Submit Mining and NPDES permit applications for modification of Cumberland and Emerald mining operations to reflect collection of wastewater for treatment and discharge to Monongahela River	October 1, 2014
4.	Complete final engineering and design and submit a complete WQM permit application to DEP.	November 21, 2014
5.	Initiate construction of permitted treatment facility.	30 Days Following DEP's Issuance of WQM Permit
6.	Achieve mechanical completion of construction of the treatment system. For purposes of this milestone, "mechanical completion" shall mean that the treatment system has been constructed and the equipment has been installed such that the plant is ready to begin commissioning.	April 22, 2016
7.	Complete the commissioning stage of the treatment system construction during which equipment shall be tested and adjusted as necessary to ensure that the treated discharge consistently meets effluent limits and complete training of treatment system operators in proper operation of the plant to ensure that the treated discharge consistently meets effluent limits.	September 15, 2016
8	Achieve compliance with final effluent limitations.	October 1, 2016

C. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to DEP a written notice of compliance or non-compliance with the specific schedule requirement. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance.
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.
3. A description of any factors which tend to explain or mitigate the non-compliance.
4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.