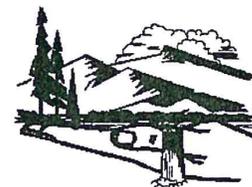




# Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.*



Matthew H. Mead, Governor

Todd Parfitt, Director

January 25, 2016

Mr. Randall Atkins  
 Chairman, Chief Executive Officer  
 Ramaco Wyoming Coal Co., LLC  
 1101 Sugarview Dr  
 Sheridan, WY 82801

Exhibit 29

Permit No. **P0019732**

Dear Mr. Atkins:

The Division of Air Quality of the Wyoming Department of Environmental Quality has completed final review of Ramaco Wyoming Coal Company, LLC's application to establish the Brook Mine, a surface and highwall coal mine which is projected to produce two (2) million tons of coal per year (MMtpy). The Brook mine is to be located approximately six (6) miles north of Sheridan, in Sheridan County, Wyoming.

Following this agency's proposed approval of the request as published December 23, 2015 and in accordance with Chapter 6, Section 2(m) of the Wyoming Air Quality Standards and Regulations, the public was afforded a 30-day period in which to submit comments concerning the proposed new source, and an opportunity for a public hearing. No comments have been received. Therefore, on the basis of the information provided to us, approval to construct the Brook Mine as described in the application is hereby granted pursuant to Chapter 6, Section 2 of the regulations with the following conditions:

1. That authorized representatives of the Division of Air Quality be given permission to enter and inspect any property, premise or place on or at which an air pollution source is located or is being constructed or installed for the purpose of investigating actual or potential sources of air pollution and for determining compliance or non-compliance with any rules, standards, permits or orders.
2. That all substantive commitments and descriptions set forth in the application for this permit, unless superseded by a specific condition of this permit, are incorporated herein by this reference and are enforceable as conditions of this permit.
3. That a permit to operate, in accordance with Chapter 6, Section 2(a)(iii) of the WAQSR, is required after a 120-day startup period in order to operate this facility.
4. That all notifications, reports and correspondences associated with this permit shall be submitted to the Stationary Source Compliance Program Manager. Submissions may also be done electronically through <https://airimpact.wyo.gov> to satisfy requirements of this permit.
5. That written notification of the anticipated date of initial startup, in accordance with Chapter 6, Section 2(i) of the WAQSR, is required not more than sixty (60) days or less than thirty (30) days prior to such date. Notification of the actual date of startup is required within fifteen (15) days after startup.

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ADMIN/OUTREACH (307) 777-7937	ABANDONED MINES (307) 777-6145	AIR QUALITY (307) 777-7391	INDUSTRIAL SITING (307) 777-7369	LAND QUALITY (307) 777-7756	SOLID & HAZ. WASTE (307) 777-7752	WATER QUALITY (307) 777-7781
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6. That the date of commencement of construction shall be reported to the Administrator within thirty (30) days of commencement. In accordance with Chapter 6, Section 2(h) of the WAQSR, approval to construct or modify shall become invalid if construction is not commenced within twenty-four (24) months after receipt of such approval or if construction is discontinued for a period of twenty-four (24) months or more. The Administrator may extend the period based on satisfactory justification of the requested extension.
7. That performance tests be conducted, in accordance with Chapter 6, Section 2(j) of the WAQSR, within thirty (30) days of achieving a maximum design rate but not later than ninety (90) days following initial startup, and a written report of the results be submitted. The operator shall provide fifteen (15) days prior notice of the test date. If a maximum design rate is not achieved within ninety (90) days of startup, the Administrator may require testing be done at the rate achieved and again when a maximum rate is achieved.
8. Initial performance testing, as required by Condition 7 of this permit, shall be conducted on the following sources:
  - i. Atomizer/fogger and PEC systems associated with the coal loadout:  

<u>Opacity:</u>	Performance testing shall follow the requirements of Chapter 5, Section 2(i) of the WAQSR.
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  - ii. Truck Dump Baghouse:  

<u>PM<sub>10</sub> Emissions:</u>	Testing shall consist of three (3) 1-hour tests following EPA Reference Methods 1-4 and 5 (front half only).
<u>Opacity:</u>	Performance testing shall follow the requirements of Chapter 5, Section 2(i) of the WAQSR.

A test protocol shall be submitted for review and approval prior to testing. Results shall be submitted to the Division within forty-five (45) days of completing the tests.
9. That the following requirements shall be met for all atomizer/fogger systems and passive enclosure control (PEC) systems at the Brook Mine:
  - a. The atomizer/fogger systems and PEC systems shall be operated and maintained so the system enclosure exhibits no visible emissions as determined by Method 22 of appendix A, 40 CFR part 60.
  - b. That the atomizer/fogger systems and PEC systems and associated monitoring equipment shall be operated during all times that the respective coal preparation facilities are in operation.

- c. Ramaco Wyoming Coal Co., LLC shall conduct, at minimum, daily visual observations of the atomizer/fogger systems and PEC systems to determine the presence of visible emissions on any day the respective coal preparation facilities are in operation. Records shall be kept documenting whether visual emissions are noted and the corrective action taken. These records shall be maintained for a period of five (5) years and shall be made available to the Division upon request.
  - d. Ramaco Wyoming Coal Co., LLC may utilize 40 CFR §60.255(f) of Subpart Y in lieu of utilizing (c) of this condition to demonstrate continuous compliance with (a) of this condition.
- 10. That the feeder/breaker system associated with the coal preparation plant shall be controlled with an atomizer/fogger system.
  - 11. That conveyor transfer points associated with the coal preparation plant shall be controlled with atomizer/fogger systems or passive enclosure control (PEC) systems.
  - 12. That the truck dump enclosure baghouse shall be limited to the following:

IMPACT ID	PM <sub>10</sub>		
	gr/dscf	lb/hr	tpy
LUD001	0.005	1.3	5.6

- 13. That the truck dump enclosure shall be limited to no visible emissions as determined by Method 22 of 40 CFR part 60, appendix A.
- 14. The truck dump baghouse shall be limited to an opacity limit of ten percent (10%) as determined by Method 9 of 40 CFR part 60, appendix A.
- 15. That all permanent haul roads shall be treated with a chemical dust suppressant at least two (2) times per year in addition to water to control fugitive dust emissions, and shall be maintained continuously to the extent that such treatment remains a viable control measure.
- 16. That all temporary haul routes, including pit floor haul routes, shall be treated with water and/or chemical dust suppressants to control fugitive dust emissions, on a schedule such that treatment remains a viable control measure.

17. That Ramaco Wyoming Coal Co., LLC shall submit to the Division by April 1<sup>st</sup> of each year, a report addressing road dust control measures employed during the past year and a disturbed acreage report for the year. This plan shall include the following:
  - a. A map based on the past year end conditions with the following information:
    - All roads existing at the end of the calendar year, which have been treated with water and/or dust suppressant.
    - Locations of active operations, treated disturbed areas, and reclaimed areas.
  - b. Type and annual quantity of dust suppressants used for the past year and a description of the general application procedures and schedule.
  - c. Number of water trucks, capacities of each water truck, and quantity of water used for the past year.
  - d. Operating hours by water truck and total water truck fleet hours for the past year.
  - e. Total length in miles of permanent and temporary haul roads existing at the end of the calendar year, which have been treated with water and/or dust suppressant.
  - f. Overburden and coal production rates for the past year.
  - g. A table summarizing the acreages and control measures or BMP uses/applied by active operations, treated disturbed areas, and reclaimed areas.
- 18a. Topsoiled areas greater than 150 contiguous acres that will not be revegetated within 60 days of completion of topsoil laydown and regraded backfill areas greater than 150 contiguous acres that will not be topsoiled within 60 days, shall be ripped or chiseled to create a roughened surface, seeded with a temporary vegetative cover, or otherwise effectively stabilized against wind erosion.
- 18b. Topsoiled areas less than 150 contiguous acres that will not be immediately revegetated and regraded backfill areas less than 150 contiguous acres that will not be topsoiled for an extended period of time, shall be ripped or chiseled to create a roughened surface, seeded with a temporary vegetative cover, or otherwise effectively stabilized against wind erosion as soon as feasible.
19. That Ramaco Wyoming Coal Co., LLC shall utilize a program to mitigate coal fires that result from spontaneous combustion. Attempts to extinguish coal fires must be initiated within twenty-four (24) hours of discovering the fire and pursued until the fire is extinguished, unless operational safety issues are present. For all coal fires where efforts to extinguish the fire were not initiated within twenty-four (24) hours, or for fires which were not extinguished within twenty-four (24) hours of the initial attempt to extinguish the fire, Ramaco Wyoming Coal Co., LLC shall document the measures taken to extinguish the fire and the reasons for any delays.
20. That Ramaco Wyoming Coal Co., LLC shall operate, in accordance with the requirements of 40 CFR parts 50 and 58 an approved ambient monitoring program that includes an ambient PM<sub>10</sub> monitoring network at the Brook Mine to demonstrate compliance with the ambient PM<sub>10</sub> standards in Chapter 2, Section 2 of the WAQSR. Ramaco Wyoming Coal Co., LLC shall maintain a quality assurance plan for the monitoring network, as required by 40 CFR part 58. The quality assurance plan for the monitoring network, and any proposed changes to the plan or to the monitoring network, shall be approved by the Division's Air Quality Monitoring Section prior to implementation.

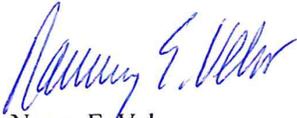
21. Ramaco Wyoming Coal Co., LLC shall comply with all commitments made in the quality assurance plan for the ambient PM<sub>10</sub> monitoring network in Condition 20 for the Brook Mine, and the data generated by the ambient PM<sub>10</sub> monitoring network shall be submitted in a Division approved format on a quarterly basis, within 60 days following the end of the quarter.
22. Ramaco Wyoming Coal Co., LLC shall not emit pollutants in a manner that would cause any monitor in the ambient monitoring network described in Condition 20 to exceed the ambient air quality standards, in accordance with 40 CFR Part 50 and as described in Chapter 2 of the WAQSR.
23. Ramaco Wyoming Coal Co., LLC shall notify the Division within 15 days of a monitored exceedance at any of the continuous monitors, and within 30 days of a monitored exceedance at any filter based monitor in the ambient PM<sub>10</sub> monitoring network at the Brook Mine.
24. That annually, Ramaco Wyoming Coal Co., LLC shall submit to the Division, a demonstration that the ambient PM<sub>10</sub> monitoring network is sufficient for monitoring impacts and demonstrating compliance with the ambient particulate standards in Chapter 2, Section 2 of the WAQSR from current as well as future (5-year projection) mining activities. This demonstration shall consist of a discussion of the ambient monitoring network along with an annual windrose, and current UTM coordinate locations of the monitors. In addition, a map showing current monitor locations in relation to active mining areas along with projected mining areas shall be included. The ambient monitoring network demonstration shall be submitted along with the annual report required for dust control measures in Condition 17, and a copy shall be submitted to the Air Quality Monitoring Program located in Cheyenne. The Administrator may require Ramaco Wyoming Coal Co., LLC to modify their ambient monitoring network, including monitor locations, based on a review of the demonstration.
25. That Ramaco Wyoming Coal Co., LLC shall submit, if required by the Administrator, a contingency action plan for high particulate events at the Brook Mine. Upon approval, the contingency action plan shall be considered part of this permit, and may be revised without administratively amending the permit, but revisions shall be approved by the Division prior to implementation.
26. That Ramaco Wyoming Coal Co., LLC shall maintain a meteorological station at the Brook Mine acceptable to the Division. Surface air meteorological data measurements shall be collected at the Brook Mine, as specified in the EPA document: Meteorological Monitoring Guidance for Regulatory Modeling Applications. The meteorological data measurements shall consist of hourly observations of:
  - a. Wind speed using an anemometer height of 10 meters
  - b. Wind direction
  - c. Ambient temperature
  - d. Vertical temperature difference (delta-temperature) between 2 meters and 10 meters
  - e. Solar radiation
27. The meteorological data specified in Condition 26 shall be submitted in an electronic format on a quarterly basis along with the ambient monitoring data in Condition 17.

28. The maximum coal production by year at the Brook Mine shall not exceed a total production rate of 2 million tons as described in the mine plan contained in the application. Mining may continue through the twelfth (12<sup>th</sup>) year after startup as described in the mine plan contained in the application for this permit. Annual coal and overburden production rates shall be reported with the annual report required for dust control measures by Condition 17.
29. That Ramaco Wyoming Coal Co., LLC shall retain, at the Brook Mine, records of inspections, observations, and support information as required by this permit for a period of at least five (5) years from the date such records are generated and the records shall be made available to the Division upon request.

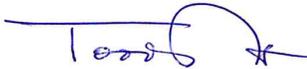
It must be noted that this approval does not relieve you of your obligation to comply with all applicable county, state, and federal standards, regulations or ordinances. Special attention must be given to Chapter 6, Section 2 of the Wyoming Air Quality Standards and Regulations, which details the requirements for compliance with Conditions 3, 5, 6 and 7. Any appeal of this permit as a final action of the Department must be made to the Environmental Quality Council within sixty (60) days of permit issuance per Section 16, Chapter I, General Rules of Practice and Procedure, Department of Environmental Quality.

If we may be of further assistance to you, please feel free to contact this office.

Sincerely,



Nancy E. Vehr  
Administrator  
Air Quality Division



Todd Parfitt  
Director  
Dept. of Environmental Quality