West Elk Mine

Federal Coal Leases COC-1362 and COC-67232 Modification

Mining Plan Modification

Finding of No Significant Impact

Gunnison County, Colorado

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Introduction

The Office of Surface Mining Reclamation and Enforcement (OSMRE) Western Region determined that modification to Federal Coal Leases COC-1362 and COC-67232 at the West Elk Mine, operated by Mountain Coal Company, LLC (MCC), would require a Federal Mining Plan Decision Document (MPDD). Under the National Environmental Policy Act (NEPA) of 1969, as amended, OSMRE is completing an environmental assessment (EA) to analyze the environmental effects of the modification to Federal Coal Leases (COC-1362 and COC-67232). MCC currently operates the West Elk Mine, which is an underground longwall coal mine located near Somerset, Gunnison County, Colorado. The West Elk Mine has been in operation since 1981 and holds about 14,395 acres of federal coal leases and 3,656 acres of fee coal lands.

MCC submitted a permit revision (PR-15) to the Colorado Division of Reclamation, Mining, and Safety (CDRMS), the Regulatory Authority for coal mines in Colorado, to revise Colorado Permit C-1980-007 to modify its currently approved mining plan. The mining plan modification proposed to add 1,720 acres of federal coal acres to two federal coal leases, COC-1362 and COC-67232, which would include 51 acres of proposed surface disturbing activities to install mine ventilation boreholes, a methane emission control system, and associated roadways.

Under the Proposed Action (also referred to as Alternative 1 in the EA), approximately 10 million tons of coal in Federal lease modifications COC-1362 and COC-67232 would be mined extending the West Elk Mine life by about 2 years, including 51 acres of surface disturbance, and incinerating methane with the methane emission control system.

Statement of Environmental Significance

OSMRE determined that the proposed federal mining plan modification that would add 1,720 acres of federal coal at the West Elk Mine would not constitute a major federal action significantly affecting the quality of the human environment within the meaning of the NEPA.

OSMRE reviewed the Proposed Action (Alternative 1) against the Departmental Manual 516 13. Section 13.4 of the Manual lists Major Actions Normally Requiring an EIS which include: 1) approval of the Abandoned Mine Land Reclamation Program; 2) Promulgation of the permanent regulatory program for surface coal mining and reclamation operations; 3) approval of a proposed mining and reclamation plan that includes any of the following (a) mountaintop removal, (b) mining within high use recreation areas, (c) mining that will cause population increases that exceed the community's ability to absorb the growth, (d) mining that would require a major change in existing coal transportation facilities; (4) approval of a proposed mining and reclamation plan for a surface mining operation that meets the following (a) the environmental impacts of the proposed mining operation are not adequately analyzed in an earlier environmental document covering the specific leases or mining activity, (b) the area to be mined is 1,280 acres or more, or the annual full production level is 5 million tons or more, and (c) mining and reclamation operations will occur for 15 years or more. If for any of these actions

it is proposed not to prepare an EIS, an EA will be prepared and handled in accordance with Section 1501.4(e)(2).

OSMRE recognizes that the Proposed Action (Alternative 1) would last 2 years and covers approximately 1,720 acres of underground mining with 51 acres of surface disturbance; however, the annual production rate would not exceed 8.5 million tons per year based on MCC's existing air permit and the total amount of recoverable coal within the 1,720 acres is approximately 10 million tons. MCC's annual average production rate is 4.5 million tons. The mining operations at West Elk Mine were recently analyzed in a 2017 EIS which is available on the Bureau of Land Management (BLM) and Forest Service (USFS) websites. Due to the limited surface disturbing activities, an annual production rate of 4.5 million tons per year, and the recent SFEIS, OSMRE has determined that an EIS is not required. Departmental Manual 516 13 explicitly recognizes that OSMRE may choose not to prepare an EIS for any of the listed actions "If for any of these actions it is proposed not to prepare an EIS, an EA will be prepared and handled in accordance with Section 1501.4(e)(2))". Thus, there is nothing in the Departmental Manual that diminishes OSMRE's discretion to follow the NEPA requirements in order to determine whether any particular action is significant.

Pursuant to 30 CFR Part 746, OSMRE is recommending selection and approval of the Proposed Action Alternative (Alternative 1) without mitigation measures. The undersigned person has determined that approval of a federal mining plan modification authorizing the continuation of mining operations for approximately 10 million tons of recoverable federal coal reserves including a voluntary measure to incinerate methane gas from Methane Ventilation Boreholes using two mobile flare units would not have a significant impact on the quality of the human environment under Section 102(2)(C) of the NEPA, 42 USC 4332(2)(C).

Reasons for a Finding of No Significant Impact

The purpose of the action is established by the Mineral Leasing Act of 1920 (MLA) and SMCRA, which requires the evaluation of MCC's Permit Revision Application Package (PAP) submitted by MCC to the CDRMS and OSMRE. Before MCC may conduct underground mining and reclamation operations within the Federal Coal Leases COC-1362 and COC-67232 modification areas, federal approval of the mining plan modification must be granted. Per 30 CFR, Part 746, OSMRE is the agency responsible for making a recommendation to the Assistant Secretary for Land and Minerals Management (ASLM) to approve, disapprove, or approve with conditions the proposed mining plan modification. The ASLM will decide whether the mining plan modification is approved, disapproved, or approved with conditions. The need for the action is to provide the opportunity for MCC to exercise its valid existing rights granted under Federal Coal Lease modification COC-1362 and COC-67232 to extract coal from MCC's leased federal coal under the MLA. The Proposed Action is to approve the mining of the coal within Federal Coal Leases COC-1362 and COC-67232 and contribute to continued operations for approximately 10 million tons of recoverable federal coal reserves.

The Proposed Action would modify the mining plan to authorize mining of approximately 10 million tons of recoverable federal coal. There would be approximately 51 acres of surface disturbance within the mine permit boundary from the construction of mine ventilation boreholes with a mobile flare unit and associated roadways (**EA Section 2.3**). The Proposed Action would extend mining at West Elk Mine for approximately 2 years.

The No Action Alternative would not approve the mining plan modification. The 10 million tons of recoverable federal coal would be bypassed and the life of mine would not be extended for an additional 2 years. Production would end with depletion of the existing recoverable reserves currently approved. Reclamation operations would commence and continue until MCC's obligations for reclamation under SMCRA and the federal lease terms were met.

The EA considers a reasonable range of alternatives and, in conjunction with the previously completed NEPA reviews, discloses the potential environmental effects. These reviews provide sufficient evidence and support for a FONSI.

The EA was prepared by a third-party consulting firm at the direction of OSMRE. During the development of the EA, OSMRE independently reviewed the document to ensure compliance with 43 CFR Part 46, Subpart D and all Council of Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), and other program requirements. This independent review included OSMRE's evaluation of all environmental issues analyzed in the EA. OSMRE takes full responsibility for the accuracy, scope, and the content of this document.

This finding is based on determining the significance as defined by the context and intensity found in 40 CFR 1508.27 of effects from the Proposed Action.

a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

The Proposed Action would meet demand for coal and continue mine operations through at least 2022 by:

- Securing a federal mining plan modification approval authorizing mining of leased federal coal; and,
- Continuing to mine, process, and ship coal to customers in need of coal.

Approval of the Proposed Action is a site-specific action that would cause 51 acres of surface disturbance. Under the No Action Alternative, production would end with depletion of the existing approved recoverable reserves as early as 2020 and reclamation would commence. The effects of the action have been analyzed at the local and regional scale.

b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity.

OSMRE has considered the 10 Significance Criteria in the federal regulations at 40 CFR 1508.27 in evaluating the severity of impacts.

1. Impacts that may be both beneficial and adverse.

Beneficial and adverse impacts from the Proposed Action are described in the EA. As described in the FS 2017 Supplemental Final Environmental Impact Statement (SFEIS) and incorporated by reference in the EA, the average mining height of coal is expected to be 11 feet within the Proposed Action. Generally, through the mining process the overburden is subsided 70% of the mining height. So in mined portions of the modification area, expect the land to be subsided up to 8 feet. Other than lowering the land surface, the long-term effects of subsidence on surface topography would be minimal, and even unnoticeable to most casual observers. Overall, the topography above subsided longwall mining workings would be similar to the pre-mining topography, albeit lower in elevation. Effects from subsidence are not expected to impact wildlife habitat, surface water, and groundwater (EA Sections 3.4 and 3.5).

For air quality impacts under the Proposed Action, the area around the mine can be expected to remain within ambient air quality standards for PM₁₀ and no other criteria pollutant emissions associated with the mine's stationary sources would be considered to be significant with respect to their potential to degrade area air quality (**EA Section 3.3.2.1**). Estimated greenhouse gases (GHGs) from the maximum 8.5 million tons of coal allowed to be mined annually at West Elk Mine would be approximately 976,818 tons of carbon dioxide-equivalent per year (**EA Table 5**). As shown in **Table 10 of the EA**, the use of the portable methane flare(s) under the Proposed Action would reduce GHGs by 58-63% depending on the global warming potential coefficient used.

Stipulations included in the lease reduce potential short- and long-term impacts to topography (subsidence), air quality, water resources, wetlands, fish and wildlife, threatened and endangered species, cultural resources, and visual resources (**EA Appendix B**). Additionally, the air permit includes measures to reduce impacts on air quality.

None of the environmental effects from the Proposed Action discussed in the EA are considered to be significant.

2. The degree to which the Proposed Action affects public health or safety.

Effects from the Proposed Action that could affect health and safety are air quality and water quality. Air and water impacts of the Proposed Action are discussed in the **EA in Sections 3.3** and **3.4**. Impacts on air quality and water would not be significant (see response # 1 on page 5).

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.

There are no parklands, prime farmlands, wild and scenic rivers, or ecologically critical areas within the project area (**Table 3 of the EA**). Impacts on wetlands were analyzed in the USFS 2017 SFEIS and incorporated by reference into this EA. **Appendix B of the EA** includes lease stipulations to reduce potential short- and long-term impacts.

To date, three cultural resource inventories have occurred within the project area and no historic properties were located. Therefore the mining plan modifications are found to have no potential to affect cultural resources, as defined in regulations 36 CFR 800. The addition of the standard lease clause by FS will protect currently undiscovered sites (SFEIS Section 3.31). Site-specific resource surveys have been completed for exploration disturbance, and must be conducted prior to any post-lease ground disturbing activities in coordination with FS (Appendix B, SFEIS Table 2-1). OSMRE previously received concurrence from the State Historic Preservation Office (SHPO) on October 10, 2018 as part of its decision which was remanded. OSMRE has reevaluated potential impacts of the Proposed Action under Section 106 of National Historic Preservation Act and consulted with Colorado State Historic Preservation Office (SHPO). On December 19, 2019, Colorado SHPO concurred that the effect finding remains unchanged from previous consultation. Previous consultation was completed on October 3, 2018 by OSMRE and Colorado SHPO concurred with a recommended effect finding of *no historic properties affected*.

4. The degree to which the impacts on the quality of the human environment are likely to be highly controversial.

As a factor for determining within the meaning of 40 CFR 1508.27(b)(4) — whether or not to prepare a detailed environmental impact statement — "controversy" is not equated with "the existence of opposition to a use." *Northwest Environmental Defense Center v. Bonneville Power Administration*, 117 F.3d 1520, 1536 (9th Cir. 1997). The term "highly controversial" refers to instances in which "a substantial dispute exists as to the size, nature, or effect of the major federal action rather than the mere existence of opposition to a use." *Hells Canyon Preservation Council v. Jacoby*, 9 F.Supp.2d 1216, 1242 (D. Or. 1998).

Federal approvals of the mining plan decision document have been made in the area for several decades and are not considered to be highly controversial.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no effects on the human environment that are highly uncertain or involve unique or unknown risks. The Marshall County Mine in West Virginia is an active coal mine currently using flaring technology to control methane emissions from MVBs. McElroy Green Marketing, LLC owns and operates the MVB flare system at the Marshall County Mine (**EA Section 3.3.2.1**). As shown in **Table 10 of the EA**, the use of the portable methane flare(s) under the Proposed

Action would reduce GHGs by 58-63% depending on the global warming potential coefficient used.

Methane flares are also used at other mines in the U.S including the Green River Trona Mine in Wyoming and the inactive Golden Eagle Mine in southern Colorado. There are also other examples of methane flare use at mines outside the U.S. including the United Kingdom, Germany, China, Mexico.^{1,2} Therefore the use of methane flares for mines is not unique and does not present unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principal about future consideration.

This decision is not precedent setting. As mentioned in response # 5, methane flares are currently used in mines in the U.S. and abroad and therefore recommendation of approval of a Proposed Action that includes a methane flare would not be precedent setting. The issues considered in the EA were developed within the context of past, present, and reasonably foreseeable actions. Significant cumulative impacts are not anticipated.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts—which include connected actions regardless of land ownership.

The EA evaluated the possible issues in context of past, present, and reasonably foreseeable actions. The indirect GHGs from coal combustion mined annually from the West Elk Mine were disclosed in the EA (**EA Section 3.3.1.6 and 3.3.5**). There were no significant cumulative effects identified.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

To date, three cultural resource inventories have occurred within the project area and no historic properties were located. Site-specific resource surveys have been completed for exploration disturbance, and must be conducted prior to any post-lease ground disturbing activities in coordination with FS (**EA Table B-1** and Appendix B, SFEIS Table 2-1). OSMRE has reevaluated potential impacts of the Proposed Action under Section 106 of National Historic Preservation Act and consulted with Colorado State Historic Preservation Office (SHPO). On

² Colorado Energy Office. 2016. Coal Mine Methane in Colorado Market Research Report. Available at: https://www.colorado.gov/pacific/sites/default/files/atoms/files/Coal%20Mine%20Methane%20Report%202016%20FI NAL%203 2016.pdf. Accessed: December 5, 2019.

¹ Environmental Protection Agency. 2014. Coal Mine Methane Flaring: Technology and Case Studies. Available at: https://www.epa.gov/sites/production/files/2016-03/documents/cmm-flaring-flyer-sept-2014.pdf. Accessed: December 5, 2019.

December 19, 2019, Colorado SHPO concurred that the effect finding remains unchanged from previous consultation. Previous consultation was completed on October 3, 2018 by OSMRE and Colorado SHPO concurred with a recommended effect finding of *no historic properties affected*.

9. The degree to which an action may adversely affect a threatened or endangered species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Consultation with the US Fish and Wildlife Service (USFWS) was completed previously for the OSMRE decision on August 8, 2018 which was remanded and it was completed as part of the FS 2017 SFEIS on June 16, 2010. OSMRE has re-evaluated potential impacts of the Proposed Action under Section 7 of Endangered Species Act and determined that impacts would remain the same as previously consulted. USFWS agreed that no further consultation was necessary on December 9, 2019.

10. Whether the action threatens a violation of a federal, state, local, or tribal law, regulation, or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements.

The Proposed Action would not violate any known federal, state, local, or tribal law or requirement imposed for the protection of the environment. The Proposed Action is consistent with applicable plans, policies, and programs.

Marcelo Calle, Manager Program Support Division Date