

**U.S. DEPARTMENT OF THE INTERIOR
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT
FINDING OF NO SIGNIFICANT IMPACT**

for

Bull Mountains Mine No. 1, Amendment 3
Federal Coal Lease MTM 97988
Federal Mining Plan Modification Decision Document

A. Introduction

Signal Peak Energy, LLC (SPE) owns and operates the Bull Mountains Mine No.1 underground coal mine located in the Bull Mountains of south central Montana. The mine operates in accordance with a State mine permit (C1993017) approved by the State of Montana's Department of Environmental Quality (MDEQ). The mine permit includes Federal coal reserves leased to SPE under Federal Lease MTM 97988. A Federal mining plan approved by the Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) on August 2, 2013, authorizes SPE to mine 140 acres of Federal Coal Lands, which is only a portion of Federal Lease MTM 97988. On November 22, 2013, SPE requested approval of a mining plan modification that would authorize expanded underground mining operations into the remaining 2,539.76 acres of Federal Lease MTM 97988 as described in the approved State mine permit.

Under the Mineral Leasing Act of 1920, the Assistant Secretary, Land and Minerals Management, must approve, approve with conditions, or disapprove the proposed new mining plan modification for Federal Lease MTM 97988. Pursuant to 30 CFR Part 746, the OSMRE is recommending approval of the mining plan modification without special conditions.

B. Statement of Environmental Significance of the Proposed Action

The undersigned person has determined that approval of a Federal mining plan modification authorizing expanded underground mining operations into 2,539.76 acres of Federal Lease MTM 97988 would not have a significant impact on the quality of the human environment under section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2)(C), and therefore, an Environmental Impact Statement is not required.

C. Reasons

OSMRE prepared the EA titled *Bull Mountains Mine No. 1 Federal Mining Plan Modification, Musselshell County, Montana, Environmental Assessment*, (hereafter the "Federal Mining Plan Modification EA") to satisfy the OSMRE's requirements under the NEPA. The *Federal Mining Plan Modification EA* analyzed the potential impacts associated with modifying the mining plan to authorize mining of five additional tracts of Federal coal totaling 2,539.76 acres that would allow the mine to continue producing coal at the current rate instead of ceasing production as recoverable private coal reserves are exhausted. The proposed action would mine a total of 2,679.76 acres of Federal coal, 140 acres of which was previously authorized

with approval of the current mining plan using underground mining methods.

This finding of no significant impact (FONSI) is based on the attached *Federal Mining Plan Modification EA*, which was prepared by the OSMRE Program Support Division in Denver, Colorado. The *Bureau of Land Management Environmental Assessment DOI-BLM-MT-CO10-2009-0010-EA and associated FONSI and Decision Record (DR)* (the *Coal Lease EA*) was previously prepared by BLM's Billings Montana Field Office of the Montana BLM and is incorporated by reference into the *Federal Mining Plan Modification EA*. OSMRE is adopting the *Coal Lease EA* and takes full responsibility for the accuracy, scope and the content of the *Coal Lease EA*. Both the *Coal Lease EA* and the *Federal Mining Plan Modification EA* incorporate prior analyses including the Bull Mountains Exchange Final EIS (BLM 1990) and the Bull Mountains Mine No. 1 EIS (MDSL 1992), which analyzed the effects of proposed mining and connected actions.

In complying with its responsibilities under NEPA, the OSMRE did not reevaluate potential impacts previously analyzed as part of the *Coal Lease EA*, which included analysis of all federal coal lands identified in the proposed mining plan modification. Rather, the *Federal Mining Plan EA* considered potential changes to the extent or nature of those impacts, based on the current mine permit approved by the MDEQ, and also considers issues not previously analyzed using new data and or updated information. Because the *Coal Lease EA* thoroughly described the environmental setting of the Bull Mountains Mine No. 1 mine permit area and mining operations, it was incorporated by reference on multiple occasions in the *Federal Mining Plan Modification EA*.

The *Federal Mining Plan Modification EA* was prepared in accordance with the requirements of NEPA of 1969 and the Council on Environmental Quality (CEQ) and Department of Interior's regulations and guidance regarding implementing NEPA. OSMRE is the lead Federal agency responsible for development of this EA because it has the decision-making authority regarding the proposed mining plan modification under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). As such, this EA follows the OSMRE's 516 DM 13, which is the department manual guiding the OSMRE's implementation of the NEPA process. The undersigned has determined that OSMRE's public involvement requirements for the EAs have been met. The *Federal Mining Plan Modification EA* and unsigned FONSI were made available to the public during a 22-day comment period prior to the decision.

The *Federal Mining Plan Modification EA* was prepared by a consulting firm, at the direction of OSMRE. During the development of the *Federal Mining Plan Modification EA*, OSMRE independently reviewed the document to ensure compliance with 43 CFR Part 46, Subpart D and all relevant provisions of the CEQ regulations, and other program requirements. This independent review of the *Federal Mining Plan Modification EA* included OSMRE's evaluation of all environmental issues discussed therein. OSMRE takes full responsibility for the accuracy, scope and the content of this document.

The attached *Federal Mining Plan Modification EA* considers a reasonable range of alternatives to the Proposed Action, discusses the potential environmental effects of the Proposed Action and provides sufficient evidence and analysis for this FONSI. The

undersigned person has determined that the above-named Proposed Action would not have a significant impact on the quality of the human environment under section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2)(C), and therefore, an Environmental Impact Statement is not required.

This finding is based on the context and intensity of the project as described in the following paragraphs.

Context: SPE proposes to meet demand for coal and continue mine operations through approximately 2025 by:

1. Securing a Federal mining plan modification authorizing mining of leased Federal coal within the current Bull Mountains Mine No. 1. permit boundary; and,
2. Continuing to mine, process, and ship coal from the mine.

The Proposed Action Alternative would authorize SPE to conduct underground coal mining on approximately 2,679.76 acres of Federal coal lands, including the 140 acres previously approved. In connection with the Federal mining plan modification, SPE would continue to mine the adjacent private and State coal. Relative to the No Action Alternative, mining would continue 9 more years and 100 million more tons of coal would be recovered. At the anticipated ratio of raw to clean coal, SPE would produce and ship 80 million more tons of clean coal than would be produced under the No Action Alternative. In addition to the mining of adjacent private and State coal, other actions that would be conducted in association with the Proposed Action (i.e., connected actions) include facilities for waste disposal; construction of roads, boreholes and powerlines, installation of ventilation fans, and other surface disturbances. The Proposed Action is needed to allow the lessee to exercise their right to mine leased coal resources.

The approval of the Federal mining plan modification is a site-specific action involving lands that are entirely within the boundaries of the Bull Mountains Mine No. 1 MDEQ State mine permit. The effects of the action have been analyzed at the local and regional scale.

Intensity: The following discussion is organized around the 10 Significance Criteria described within the federal regulations at 40 CFR 1508.27. The following have been considered in evaluating the severity of impact for this proposal:

1. *Impacts that may be both beneficial and adverse:*

Beneficial and adverse effects of the Proposed Action Alternative were described in the *Federal Mining Plan Modification EA*. Mitigating measures to reduce potential short-term and long-term adverse impacts to topography, geology, air quality, water resources, soils, vegetation, wildlife, sensitive species, ownership and use of land, cultural

resources, noise, visual resources, transportation facilities, and hazardous and solid waste were incorporated in the design of the Proposed Action and are required by the State-approved mine permit and stipulations to the Federal coal lease. The project would make a minor contribution to small amounts of airborne particulate matter and release minor amounts of greenhouse gases (GHGs) at the surface facilities. Additional GHGs would be released in conjunction with offsite transport and combustion. Undiscovered cultural and paleontological resources may be affected by surface disturbing activities. Local residents would experience noise levels of approximately 50 to 59 dBA, above ambient conditions. The topography at the location of a new Waste Disposal Area (WDA) #2 would be permanently altered due to placement of the waste material. Mining related activities would likely increase the spread of noxious weeds. Benefits of the project would be continuation of gainful employment at the mine, royalty and tax revenues. None of the environmental effects discussed in the EA are considered to be significant.

2. *The degree to which the proposed action affects public health or safety:*

The Proposed Action Alternative is designed to control the limited public traffic that may occur in the project area of the existing surface facilities. All mine activities with potential public exposure would also be subject to State mine permit approval and review by the Mine Safety and Health Administration, which include safety standards. Precautions for public health and safety would also be implemented during transport of equipment along public roads to and from the project area. Construction and operation of road crossings associated with the proposed WDA #2, would be subject to County approval. Mine subsidence would be monitored and mitigation measures would be implemented when subsidence would occur in the area of roads or other structures. Emissions are within approved standards, as required by State permits, thereby limiting potential impacts to public health. Noise levels at the nearest residences would be below levels that would affect human health. Potential risks to public health and safety would be low and would occur over limited, brief periods.

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.*

The *Federal Mining Plan Modification EA* considers potential changes to the extent or nature of only those impacts associated with the Federal mining plan modification; additional resource areas were included in the *Coal Lease EA FONSI*. There are no park lands, prime farmlands or wild and scenic rivers within the mine permit boundaries. Inventories have been completed for historic and cultural resources in the area and no potential impacts to important historic or cultural resources have been identified. Additional surveys would be performed in areas of potential disturbance as required by the State mine permit and Federal coal lease stipulations and all discovered sites would be evaluated in accordance with Section 106 of the National Historic Preservation Act, ensuring that unmitigated disturbances of potentially significant sites do not occur. Fifteen resource areas were analyzed in detail in the *Coal Lease EA*. Best

Management Practices (BMPs) and mitigation measures were identified for those elements that could be affected. None of these elements would be significantly impacted because BMPs and mitigation measures would reduce any potential effects to either minor, or no impacts.

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

The Bull Mountains Mine No. 1 plan to mine Federal coal and its effects are not unique. Approvals of Federal mining plans have been made in this region for many years. There is no scientific controversy over the nature of the impacts. There is some scientific uncertainty regarding the long-term effects of subsidence and how these effects can be managed. Proposed mitigation and reclamation procedures should be successful in reducing impacts and mitigating impacts in a manner that ensures land uses are restored in a timely manner. The potential intensity of these effects on the quality of the human environment is minimal.

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

The Bull Mountains Mine No. 1 plan to mine Federal coal is not unique or unusual. The OSMRE has experience implementing similar actions in similar areas. The environmental effects to the human environment are fully analyzed in the *Federal Mining Plan Modification EA* and the *Coal Lease EA*, which is incorporated by reference. The observations of actual mining operations since the *Coal Lease EA* was prepared and environmental monitoring improve the certainty with regard to projected impacts as discussed in the *Federal Mining Plan Modification EA*. There are no anticipated effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.

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

This decision is not precedent setting. The issues considered in the Proposed Action Alternative were developed by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not anticipated. A complete analysis of the direct, indirect, and cumulative effects of all alternatives is described in Chapter 4 of the *Federal Mining Plan Modification EA* and the *Coal Lease EA*, which is incorporated by reference.

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 interdisciplinary team evaluated the possible issues in context of past, present and reasonably foreseeable actions. Present and future mining activities in the area were

considered and significant cumulative effects are not anticipated. A complete disclosure of the effects of the project is contained in Chapter 4 of the *Federal Mining Plan Modification EA* and the *Coal Lease EA* which is incorporated by reference.

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.*

Subsidence over mined areas could result in localized cracking, sloughing or rock toppling, particularly in areas of steep slopes. Additionally, construction of surface facilities and subsidence repair would result in surface disturbance.

The surface above the Federal coal lease area was surveyed for cultural resources. No resources eligible for the National Register have been documented; however, three sites have been recommended for further testing because of the potential for deeply buried cultural deposits. Until these sites are evaluated, they would be treated as eligible sites. Preliminary indication is that there may be an eligible site near the perimeter of the proposed WDA #2 area; when a report is final, SPE would determine what actions, if any, need to be taken prior to disturbance.

SPE would continue to conduct cultural resource surveys in areas of potential surface effects as required by the State mine permit and coal lease stipulations. If potentially eligible cultural resources are identified that may be affected by mining, site-specific treatment plans would be developed in consultation with the State Historic Preservation Office and Bureau of Land Management, as appropriate, and implemented prior to disturbance.

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

No adverse impacts to endangered or threatened species (or species proposed for listing as threatened or endangered) or their habitat have been identified. Under the Proposed Action Alternative, other wildlife present in the mine permit area and immediate vicinity, would be affected by subsidence in the manner described in the *Coal Lease EA* and would also be affected by surface disturbances, new facilities (e.g., boreholes and roads), and associated mining activities. Most of the direct effects would be limited to the vicinity of proposed disturbances, which would occur on approximately seven percent of the mine permit area. Surface traffic related to such actions and environmental monitoring would potentially affect wildlife elsewhere in the permit and any effects would continue for some period of time even after mining ceases. Most indirect effects likely would be limited to the area undermined or reclaimed in association with surface disturbances, and the immediate vicinity.

The State-approved mine permit and associated mining regulations specify mitigation measures for wildlife, including minimization of disturbance, reclamation of habitats and

raptor-safe powerline construction. The measures specified in the permit and enforced by MDEQ ensure compliance with the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and the Endangered Species Act, thereby ensuring impacts to those protected wildlife species would not be significant.

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 project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment. During the *Coal Lease EA*, state, local, and tribal interests were given the opportunity to participate in the environmental analysis process. In addition, the project is consistent with applicable plans, policies, and programs.



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Date