

King II Mine
Federal Coal Lease COC-78825 Modification and Federal Mine
Permit CO-0106A Revision
Mining Plan Modification and Minor Permit Revision
Finding of No Significant Impact
La Plata County, Colorado



**United States Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Program Support Division**

Introduction

The Office of Surface Mining Reclamation and Enforcement (OSMRE) Western Region determined that modification to Federal Coal Lease COC-78825 at the King II Mine, operated by GCC Energy, LLC (GCCE), a subsidiary of Grupo Cementos de Chihuahua (GCC), would require a Federal Mining Plan Decision Document (MPDD) and Federal Mine Permit (CO-0106A) Minor Revision. Under the National Environmental Policy Act (NEPA) of 1969, as amended, OSMRE and the Bureau of Land Management's (BLM) completed an environmental assessment (EA) as joint-lead agencies to analyze the environmental effects of the modification to Federal Coal Lease (COC-78825) and Federal Mine Permit (CO-0106A) Minor Revision. BLM gave the EA the following tracking number DOI-BLM-CO-S010-2019-0003-EA. GCCE currently operates the King II Mine, which is an underground room-and-pillar coal mine located in Hesperus, La Plata County, Colorado. GCCE has been mining at the King II Mine since 2007. The King II Mine is made up of federal coal lease, private coal lease, and state coal lease.

On January 10, 2018, GCCE submitted a Lease-by-Application (LBA) for a proposed new federal coal lease to the BLM Colorado State Office, pursuant to regulations at 43 Code of Federal Regulations (CFR) Subpart 3425. GCCE submitted the highest competitive coal lease bid on April 10, 2020 and BLM issued the coal lease (COC78825) on June 1, 2020. The lease contains approximately 2,462 acres located adjacent to and immediately northwest of the King II Mine and existing federal coal lease COC-62920 (**EA Map A-2**). The proposed lease area underlies a mixture of BLM lands and private surface lands owned by the Ute Mountain Ute (UMU) Tribe, as well as other fee owners. The coal reserve within the proposed LBA area would be accessed utilizing the underground mining methods from the King II Mine.

The federal coal reserves comprise an approximate 2,462-acre block of coal north of the northern limits of GCCE's existing King II Mine. In addition, about 204 acres of non-federal coal would be mined beneath about 479 acres of UMU surface. Approximately 366 acres of federal coal in the LBA beneath three isolated private surface areas would be regulated by the Colorado Division of Reclamation Mining and Safety (CDRMS).

BLM calculations indicate that there are 9.54 million tons (mt) of recoverable federal coal in the proposed LBA area. This includes approximately 1.3 mt of recoverable private coal reserves, and approximately 2.5 mt of recoverable existing reserves still to be mined within the current mine permit area, for a total of 13.4 mt. GCCE estimates that there are an additional 3.6 mt of coal (i.e., inferred based on current geologic information) that may be recoverable in part through using a slightly higher recovery factor than BLM and from blending higher grade coal from the LBA with lower grade coal. For the purposes of determining the total coal to be mined and the life of the mine under the Proposed Action, GCCE is including: 1) the LBA confirmed recoverable federal coal reserves; 2) the confirmed privately owned recoverable coal reserves to be mined while accessing the federal coal; and 3) GCCE's slightly larger estimate of coal that could be minable, beyond BLM's calculations, for a total of approximately 17 mt proposed to be mined. If this 17 mt is mined in a continuous manner, and at the start of mining in the LBA area some of that coal is blended with the remaining coal in the lease modification area to improve coal quality, this would represent approximately 22 years of additional coal production at the King II Mine. The projected

mine life and operating plans of the King II Mine are anticipated to extend through the year 2043. Without the LBA, GCCE estimates that the mine life would only extend through the year 2022.

The UMU owns much of the split-estate surface in this area. While the split-estate surface owned by the UMU is not within a designated Indian Reservation, it does meet the definition of “Indian Lands” as defined by the Surface Mining Control and Reclamation Act (SMCRA), and as a result, the primary regulator of coal mining operations pursuant to SMCRA for those lands is the OSMRE.

Statement of Environmental Significance

OSMRE determined that the federal lease modification to add 2,462 acres of leased federal coal under privately owned surface land at the King II Mine and minor revision to federal mine permit CO-0106A would not constitute a major federal action significantly affecting the quality of the human environment within the meaning of the NEPA.

OSMRE reviewed GCCE’s Proposed Action 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 mt 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 would last 22 years and covers approximately 2,462 acres of underground mining with 20 acres of surface disturbance; however, the annual production rate would not exceed 5 mt per year. The mining operations at King II Mine were recently analyzed in a 2017 EA which is available on the OSMRE and BLM websites. Due to the limited surface disturbing activities, an annual production rate of 600,000 to 800,000 tons per year, and the recent EA, 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. The undersigned person has determined that approval of a federal mining plan

modification authorizing the continuation of mining operations for approximately 17 mt of recoverable federal coal reserves 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 GCCE's Permit Revision Application Package (PAP) submitted by GCCE to the CDRMS and OSMRE. Before GCCE may conduct underground mining and reclamation operations within the Federal Coal Lease COC-78825 modification area, and as proposed Federal Mine Permit CO-0106A revision application, federal approval of the mining plan modification and Permit Revision Application Package 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 GCCE to exercise its valid existing rights granted under Federal Coal Lease COC-62920 to extract coal from GCCE's leased federal coal under the MLA. The Proposed Action is to approve the mining of the coal within Federal Coal Lease COC-78825 and contribute to continued operations for approximately 17 mt of recoverable federal coal reserves.

The Proposed Action would modify the mining plan and revise the federal permit to authorize mining of approximately 17 mt of recoverable federal coal. There would be approximately 20 acres of surface disturbance within the mine permit boundary from the construction of a low cover crossing (10 acres) and future potential activities that would occur in scattered and currently unknown locations (10 acres) (**EA Section 2.2.3**). The Proposed Action would extend mining at King II Mine for approximately 22 years.

The No Action Alternative would not approve the mining plan modification or federal mine permit minor revision. The 17 mt of recoverable federal coal would be bypassed and the life of mine would not be extended for an additional 22 years. Production would end with depletion of the existing recoverable reserves currently approved. Reclamation operations would commence and continue until GCCE'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 and 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, including those identified in

comments received from the public during scoping. OSMRE takes full responsibility for the accuracy, scope, and the content of this document.

The undersigned has determined that the public involvement requirements of NEPA have been met. OSMRE conducted public scoping and received comments from February 8, 2019, through March 11, 2019. OSMRE released the EA and an unsigned FONSI for public comment and review on July 5, 2019 through August 5, 2019. OSMRE received 28 comment letters and prepared responses in Appendix B to this EA.

This finding is based on determining the significance as defined by the context and intensity 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 2043 by:

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

Approval of the Proposed Action is a site-specific action that would not cause any additional acres of disturbance. Under the No Action Alternative, production would end with depletion of the existing approved recoverable reserves as early as 2022 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 ten significance criteria 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. The overburden range for the proposed lease area is similar to the King Mine II area, ranging from 100 feet to 300 feet (**EA Section 3.4.6**). Assuming a coal seam thickness of 5 to 10 feet, surface lowering after retreat mining could be measurable and result in detectable surface subsidence impacts. Operations at the nearby King I Mine revealed minor subsidence averaging between 100 feet long and 1 foot wide. Monitoring of these features by GCCE contractors determined that they

are self-healing within two seasons and have not expanded in size. Fewer than six of these subsidence features have been identified since GCCE began mining in 2004 in King I and King II. Effects from subsidence are not expected to impact wildlife habitat, cultural resources, surface water, and groundwater.

Additional particulate matter, gaseous emissions, and hazardous air pollutants would be emitted for the additional mine life, but at minor levels similar to those currently experienced and within permitted limits (**EA Section 3.4.1**). Based on the maximum average daily coal truck trips allowable under the La Plata County Road Improvement Agreement, approximately 1,067,040 tons/year (yr) can be delivered to markets in the southwestern U.S. via the Gallup rail hub. Of the total, approximately 181,000 tons/yr are delivered to two GCC-owned and operated cement plants in Pueblo, Colorado (105,000 tons/yr) and in Tijeras, New Mexico (76,000 tons/yr) where the coal is used as a fuel source in the cement manufacturing process. Small coal volumes are sold to the Durango & Silverton Narrow Gauge Railroad (3,600 tons/yr), the Cumbres and Toltec Scenic Railroad in Chama, New Mexico (1,500 tons/yr), and locally (7,000 tons/yr) for home heating. The remaining approximately 873,940 tons is delivered by rail to GCC-owned cement plants in northern Mexico (240,000 tons/yr) and to variable buyers in Arizona and Texas (depending on markets, alternative fuels, and coal supply). Estimated greenhouse gases (GHGs) from the maximum 1.3 mt of coal allowed to be mined annually at King II Mine would be approximately 450.6 mt of carbon dioxide-equivalent for the 22-year life of the mine (**EA Section 3.4.1**).

Stipulations included in the lease reduce potential short- and long-term impacts to topography, air quality, water resources, vegetation, fish and wildlife, threatened and endangered species, cultural resources, visual resources, and soils. 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, water quality, and noise. Air and water impacts of the Proposed Action are discussed in the **EA in Sections 3.4.1 and 3.4.2**. Impacts on air quality would be minor to moderate (see Topic 1 on page 5). Impacts on water would be minor to moderate. Impacts on noise would be negligible to minor (**EA Section 3.4.4**).

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 (**EA Section 3.3**). Impacts on wetlands would be minor and short term from the ground disturbance associated with the construction of the East Alkali Gulch low cover crossing (**EA Section 3.4.5**).

Inventories of historic or cultural resources have been completed. Based on the results of these studies within the current lease and permit boundary, seven cultural resources sites have been identified within the Area of Potential Effect (APE):

Table 1. Cultural Resource Sites within the Area of Potential Effect

Site Number	Site Type	Cultural Affiliation	NRHP Evaluation	Potential Impact
5LP10572	Temporary Camp (hunting cabin)	Historic UMU	Not eligible	Negligible
5LP11383	Temporary camp	Historic UMU	Not eligible	Negligible
5LP11384	Artifact Scatter	Late Archaic	Potentially eligible (needs data)	Indirect
5LP11385	Artifact Scatter	Unknown historic	Not eligible	Negligible
5LP11386	Artifact Scatter	Late Archaic	Potentially eligible (needs data)	Indirect
5LP11387	Artifact Scatter	Middle to Late Archaic	Potentially eligible (needs data)	Indirect
5LP11388	Ranching facility	Historic UMU	Not eligible	Negligible

Of the seven sites within the APE, none would be directly impacted by the Project as no surface disturbance is proposed in the National Register of Historic Places (NRHP)-eligible site areas. Further, these sites, as well as the sites within the existing mine boundary, would be subject to cultural resource avoidance monitoring requirements. If future mining operations cannot avoid NRHP-eligible sites, a mitigation plan would be written, approved by OSMRE in consultation with the State Historic Preservation Office (SHPO), and implemented prior to planned mining activities. Any direct impacts to these sites would constitute an adverse, long-term effect. Cultural resources could be impacted by subsidence as they are located above proposed panels. This potential impact is expected to be negligible to minor as subsidence occurs very infrequently at King II Mine due to a variety of factors, such as the stability of the Cliff House sandstone (**EA Section 3.4.6**). OSMRE consulted with Colorado SHPO and the Advisory Council of Historic Properties under the National Historic Preservation Act (NHPA) and made a determination 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 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 and Permit Revision Application Package 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. OSMRE has experience implementing similar actions in similar areas.

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. 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, including the King II Mine operation, the transport of coal from the mine, the combustion of that coal, and ranching, recreation, and other mines in the cumulative effects analysis area. The indirect GHGs from coal combustion mined annually from the King II Mine were disclosed in the EA (**EA Section 3.4.1**). 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.*

Inventories of historic or cultural resources have been completed, which identified seven cultural resources sites within the APE. Cultural resources could be impacted by subsidence as they are located above proposed panels. This potential impact is expected to be negligible to minor as subsidence occurs very infrequently at King II Mine due to a variety of factors, such as the stability of the Cliff House sandstone (**EA Section 3.4.6**). OSMRE consulted with Colorado SHPO and the Advisory Council of Historic Properties under the National Historic Preservation Act (NHPA) and made a determination 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 initiated on February 23, 2019, with a determination that the Proposed Action would not adversely affect federally listed species. The USFWS agreed with this determination and responded with a concurrence letter on April 29, 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.

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