



July 10th, 2025

State of Colorado Division of Reclamation, Mining & Safety 1313 Sherman St., Room 215 Denver, CO 80203

Attn: Environmental Protection Specialist

Re: GCC Energy, LLC, King II Mine CDRMS Permit # C-1981-035 Minor Revision 54: Midterm Permit Review (MT-9) Response

Mr. Wein:

Please find attached the pages addressing the items identified in Section VI of the Midterm Permit Review (MT-9), dated May 21, 2025.

- Item #1 has been addressed in accordance with Section 2.05.6 of the Code of Colorado Regulations, Division of Reclamation, Mining and Safety.
- Item #2 includes the necessary clarification regarding the section in question.

Also updated in this revision is Page 5 of Section 2.04.11. This has been amended to include Gray Wolves in the PAP's endangered species list. Appendix 8(9) has also been added to support this update.

Regarding Section VII of MT-9, King II respectfully requests to be notified when the Division initiates the Surety Increase Revision process.

If you have any questions or require additional information, please don't hesitate to contact me at 970.909.4022.

Sincerely,

Michael Dickson

Michael Dickson

MONITORING WELL DRILLING, TR-26

GCC proposes to drill 4 monitoring well "clusters" of 3 wells each, numbered MW-1 thru MW-4 as shown in King II Appendix 4 (9), Baseline Monitoring Well Specifications, and one alluvial monitoring well in Hay Gulch, upgradient from the King I mine site (MW-HGA-4) as shown in King II Appendix 4 (13). MW-1, MW-3, MW-4 and MW-HGA-4 are outside of the existing permit area. MW-2 is within the existing permit area. Each of the monitoring well clusters (MW-1, MW-2, MW-3, and MW-4) will consist of three boreholes. The first will be drilled into the Cliff House overburden, terminating just above the "A" coal seam, and will be designated as "MW-#-C". The second will be completed within the "A" seam and labeled "MW-#-A". The third, labeled "MW-#-MI", will extend below the "A" seam to a depth just above the "B" seam within the Menefee Intraburden. Additionally, a single alluvial well, MW-HGA-4, will be drilled into the Hay Gulch Alluvium.

See King II Appendix 4(9), Bedrock Cluster Monitoring Well Specifications, for schematics and construction details of the bedrock cluster wells and Appendix 4(13) for schematics and construction details of the Alluvial Monitoring Well. Drilling will be with air, air with water injection or water. Cuttings pits will be necessary at all locations drilled by conventional methods (see drawing at Appendix 4(4)). Cuttings pits are excavated by a back-hoe and are approximately 6 feet wide by approximately 10 feet long. The pits are unlined and construction is the same for all drilling methods used. Locations of proposed holes and existing access roads are shown on the attached topography and drill hole locations map.

A small cutting pit will be constructed to capture the cuttings. During final reclamation, all drill holes will be sealed by filling with cement to an elevation above the coal seam encounter, then replacing cuttings or other suitable media in the hole and placing a suitable plug 10 feet below the ground surface for support of a cement plug to within 3 feet of the ground surface. The plug will be covered with like material as in road base or topsoil depending which is present. Tracks will be raked or brushed to remove obvious signs of activity.

Where topsoil is encountered within the area to be disturbed at a drill pad, the topsoil will be salvaged by scraping the suitable soil horizons to the upgradient side of the drill pad where they will be temporarily stockpiled. Topsoil will be salvaged to the depths described in Section 2.04.9 for the soil type encountered at the drill pad. As the time required for drilling is short, less than a few days per hole, stockpiled topsoil will not be seeded or otherwise actively stabilized. Topsoil will be replaced, stabilized, and reseeded after drilling, as described in the reclamation plan in Section 2.05.4.

Given the small size and temporary nature of the drill pads, GCC requests that these areas be granted SAE (small area exemption) status with regard to sediment control. To ensure minimal impact from water erosion, each drill pad will have straw wattle erosion "logs" installed along the downgradient side or sides of the drill pad (See drawing in Appendix 4(4)). The straw wattles will filter any surface water runoff from the temporary drill pad during operations and will be left in place until reclamation of the drill pad is complete.

GCC Energy, LLC Section 2.04.6 Page 9 King II Mine

July 10, 2025 (MR-54)

PROTECTION OF HYDROLOGICAL BALANCE

Within the Probable Hydrologic Consequences section of this application it was concluded that there would not be significant effects to the hydrologic balance of the project site or adjacent areas. The lack of significant groundwater and surface water resources in the immediate and adjacent area precludes the potential for significant impacts from a small underground mining operation.

Preventive and protective measures to be employed during and after the mining operation include; isolation of the pre-mining surface water drainages through rerouting and/or piping beneath or through the disturbed area, collection and control of sediment and other constituents from runoff at the disturbed area in a sediment pond, isolation of the Hay Gulch irrigation ditch from disturbed area contamination through berming and silt fencing (if necessary), watering of roadways and surface areas to reduce ambient dust, and graveling or hard surfacing roadways, parking areas, washout areas, and other locations susceptible to accumulation of sediments or materials.

No losses of quantity or quality of water are anticipated from the King II Mine. There are no known uses of groundwater or surface water in the project or affected area that may be affected by the mining operation. As noted above, the Hay Gulch irrigation ditch will be protected from contamination. Water required for mine use or washing will be obtained from water augmentation plan (See Appendix 2(6)).

Measures for the protection and control of surface and groundwater are further detailed in the operations and reclamation plans.

PROBABLE HYDROLOGIC CONSEQUENCES

The "Cumulative Hydrologic Impact Assessment for Hay Gulch, La Plata County Colorado, Revised October 2006" is included in this permit package as Appendix 4(7). This document was prepared by Tom Kaldenbach, Environmental Protection Specialist for the Colorado Division of Minerals and Geology. Mr. Kaldenbach's assessment concludes that "Neither the King Coal Mines nor the Blue Flame Mine is expected to significantly degrade ground water quality or reduce ground water supply; therefore, no cumulative impact to ground water is predicted for Hay Gulch."

Norwest Corporation performed a geohydrology study of the King II mine area (See Section 2.04.7 and Appendix 4(6)). This report corroborates Mr. Kaldenbach's report of no significant hydrologic impacts.

In response to MT-9, Monitoring Well Cluster MW-3 is designated as the Point of Compliance (POC) for the King II Mine, based on the probable hydrologic consequences determination. Positioned downgradient of the mine, MW-3 effectively represents the site's hydrologic conditions. Well specifications are provided in Appendix 4(9), and the hydrologic monitoring plan—including monitoring locations, parameters, sampling frequency, and evaluation methods—is detailed on Pages 6 through 15 of this section.

GCC Energy, LLC Section 2.05.6 Page 4 King II Mine

July 10, 2025 (MR-54)

WATER MONITORING

Groundwater monitoring has been conducted since 2004 at three baseline alluvial wells, "Wiltse Well Monitoring Station", "Up-Gradient Monitoring Station", and "Down-Gradient Monitoring Station". Surface water monitoring has been conducted at "Hay Gulch Ditch, Downgradient Monitoring Station". Existing monitoring stations will continue to be sampled on a quarterly basis.

TR-26 added an additional Hay Gulch Ditch monitoring station up-gradient from the King I mine, "Hay Gulch Ditch, Up-gradient Monitoring Station" at the confluence of Hay Gulch and Roberts Canyon. Four bedrock monitoring well "clusters" (3 wells each in the Cliffhouse Formation, "A" coal seam into the interburden between the "A" & "B" coal seams) were also added (MW-01 thru MW-04). MW-3 cluster has been designated as the King II POC's. One additional alluvial monitoring station was added up-gradient from the King I mine site "King I Up-gradient Monitoring Station" (MW-HGA-4). All water monitoring locations are shown on Maps King II-006A and King II-012. All sampling locations will continue to be sampled until the requirement is waived by the Division of Reclamation, Mining & Safety.

Monitoring parameters are split into a groundwater group (GW), a surface water group (SW), and a springs & seeps group (S&S). A nearly consistent analytical suite of parameters across groundwater, surface water and spring and seep monitoring locations is used in order to best inter-relate surface water and alluvial and bedrock groundwater. However, there are a few exceptions:

- Total Suspended Solids (TSS), Oil and Grease and dissolved oxygen is only for surface water samples, but specifically exclusive of spring and seep samples. This is consistent with the CDRMS Guidelines.
- Sodium Adsorption Ratio analysis only for surface water samples. This is consistent with CDRMS Guidelines.
- Ammonia analysis as one-time only via field kit, sampling at all locations only to establish absence, conducted in the fall season (2016Q4).
- Phosphate analysis as one-time only, sampling at all locations only to establish absence, conducted in the fall season (2016Q4).

The proposed baseline water quality monitoring parameters have been divided into three appropriate suites to be distinguished by the analytical laboratory and field sampling personnel and presented as Tables 1-3.

King II Mine

July 10, 2025 (MR-54)

TR-30 Old Barn Staging Area and Construction Access Road

The Colorado Natural Areas Program (CNAP) at Colorado State University conducted a search of their database of natural heritage elements ("occurrences of significant natural communities and rare, threatened or endangered plants and animals") for the area within and 1.5 miles outside the permit area. The results of that search identified the wolverine (presumed extirpated in Colorado since 1979) and the Townsend's big-eared bat (a species of concern for the BLM and Forest Service). No candidate or federally listed species were identified within or adjacent to the permit area. The June 15, 2017 CNAP report can be found in Appendix 8(3).

An endangered species field assessment for the construction access road was performed on October 22, 2018 by SME Environmental Consultants as part of an OSMRE permit revision addressing a lowcover crossing and access route. The access route included the section of road beginning at the Old Barn and ending at the boundary of CDRMS permit C-1981-035. This report is included as King II Appendix 8(8).

This report concluded:

In summary, SME personnel did not observe suitable habitat for any species listed under the Endangered Species Act of 1973 in the project area for the proposed low cover crossing, along the access route to the low cover crossing site, or in the vicinity (minimum 330 feet) of the project area or access route. SME feel that the project is unlikely to have any impact on the New Mexico meadow jumping mouse or southwestern willow flycatcher.

Gray Wolves Reintroduction to Colorado

Proposition 114, now codified as state law (33-2-105.8), was passed in November 2020 and directed Colorado Parks and Wildlife to reintroduce and manage gray wolves. Since their release in December 2023, several wolves have been tracked near the La Plata County line (see Appendix 8(9)). GCCE will continue to monitor their presence and will coordinate with the appropriate State and Federal agencies to assess any potential impacts.

Appendix 8(9) King II (MR-54)

