

"Safety as a Value"

August 31, 2020

State of Colorado

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

Attn: Janet Binns, Environmental Protection Specialist III

Re: GCC Energy, LLC, King II Mine CDRMS Permit # C-1981-035 Permit Revision No. 10 (PR-10) Preliminary Adequacy Review Response

Ms. Binns:

In response to your letter of August 28, 2020, "King I and II Mine, C1981035, PR10, Preliminary Adequacy Review", please consider the following responses. Division concerns are shown in italics, GCC Energy responses are shown in bold font.

1. Please ensure the hydrology maps, specifically Map KII -004 and KII -012, accurately show the extent of the proposed mine workings.

## GCC Energy, 08/31/2020: Maps King II-004 (PR-10 PAR) and King II-012 (PR-10 PAR) have been revised to accurately show the extent of the proposed mine workings associated with CDRMS Permit Revision PR-10.

2. It appears East Alkali Gulch will be impacted by the mining proposed in PR-10, however MW-7-EAA and MW-8-EAA, the two monitoring points for that drainage, are both located down-gradient of proposed new mining. Please add an up-gradient monitoring location or provide rational as to why one would not be needed.

GCC Energy, 08/31/2020: Maps King II-004 (PR-10 PAR) and King II-012 (PR-10 PAR) have been revised to show the locatation of the low-cover crossing which is located on Ute Mountain Ute Tribal lands within OSMRE Permit C-0106C. MW-7-EAA is an alluvial monitoring well located directly up-gradient of the low cover crossing. MW-8 Monitoring Well Cluster consists of MW-8-EAA (alluvial monitoring well) as well as bedrock monitoring wells MW-8-MI (bedrock Menefee Formation), MW-8-LM (bedrock Lower Menfee Formation) and MW-8-PL (bedrock Point Lookout Formation) which are located directly downgradient of the low-cover crossing. Monitoring wells MW-1 Cluster and MW-5 Cluster are located up-gradient near the upper reaches of East Alkali Gulch. An addional monitoring well cluster (MW-6 Cluster) has also been added on GCC Energy property upgradient of the Vista de Oro subdivision. A complete description of regional



"Safety as a Value"

## and local ground water and the functions of the various monitoring wells can be found in "C-1981-035 GCC Energy 2019 Annual Hydrology Report 2019 12 26". submitted to the Division 12/26/2019.

3. Appendix 15 discusses the trenching of East Alkali Gulch to construct a low-cover crossing, but the location of this is not provided on the hydrology maps. Please add the location of this disturbance to the hydrology map in relation to its proximity to the DRMS permit. It appears there will be surface disturbance associated with the trenching and staging areas. Please specify if any of these disturbance areas fall within the DRMS permit boundary.

GCC Energy, 08/31/2020: Maps King II-004 (PR-10 PAR) and King II-012 (PR-10 PAR) have been revised to show the locatation of the low-cover crossing which is located on Ute Mountain Ute Tribal lands within OSMRE Permit C-0106C. None of the surface disturbance areas associated with the low-cover crossing fall withing the existing or proposed DRMS permit boundaries.

4. It is not clear if there will be any subsidence monitoring. Or if there is a plan to monitor while undermining drainages. Please provide additional information on the subsidence monitoring plan.

## GCC Energy, 08/31/2020: Section 2.05.6 page 19, August 31, 2020 (PR-10 PAR), has been revised to include a discussion of subsidence monitoring within the parcels added by this permit revision.

5. King II Map-001, Permit and Adjacent Areas, uploaded 6/25/2020, (Map date 6/12/2020) is incomplete.. It appears that only a portion of this map uploaded to the Division's laserfiche file. Please resubmit the entire proposed permit area map.

## GCC Energy, 08/31/2020: Map King II-001 is re-submitted as requested.

6. King I 2.03.8 p.1 (7/1/2020) and King II 2.03.8 p.1. Both of these tables are in agreement with each other. However, the row for TR-22 Drill Holes disturbed area =2.1 acres. Yet the row for TR-22 Drill Holes Affected areas =0.22 acres. The disturbed acreage cannot be greater than the affected. Disturbed area is a subset of affected area. These two values may be equal, but if acreage is approved to be disturbed, it is also approved to be affected. Please review and correct these values.

GCC Energy, 08/31/2020: In King I & King II Sections 2.03.8, the affected area for TR-22 drill holes decreased with TR-29 because, prior to TR-29, four of the individual drill sites that were included in the affected area total as separate acreages are now within the TR-29 enlarged affected area boundary. Not decreasing the total would have resulted in double counting of the drill site affected areas.



"Safety as a Value"

Please find enclosed:

- King II Section 2.05.6 page 19, August 31, 2020 (PR-10 PAR)
- Map King II-001, Permit and Adjacent Areas (PR-10) 2020 06 12
- Map King I-004, Geology-Hydrology (PR-10 PAR) 2020 08 31
- Map King II-004, Geology-Hydrology (PR-10 PAR) 2020 08 31
- Map King II-012, Water Monitoring (PR-10 PAR) 2020 08 31

Certified copies of the maps will be submitted once Division reviews have been completed (prior to final approval).

Please contact Tom Bird at  $970.385.4528 \ge 6503$  or 970.769.1160 (cell) with questions or comments.

Sincerely,

Tom Bird GCC Energy, LLC tbird@gcc.com