

August 14, 2020

Internal Memo

To: Janet Binns, DRMS
From: Tabettha Lynch, DRMS

Re: King I and II (Permit No. C-1981-035)
Permit Revision No. 10 (PR-10)
Hydrology Review

As requested I have reviewed the hydrology information pertaining to Permit Revision No. 10 (PR10) for the King I and King II Mine. This including reviewing the CHIA prepared by the Office of Surface Mining, January 2018, and the revised pages, maps and Appendices submitted to the Division with PR10. This revision proposes to include 5 additional parcels into the state mining permit. Most of the additional mining and potential subsidence affects proposed by PR10 appear to fall under the Federal mine permit boundary. The following are summary of the hydrologic situation in the affected area followed by bullet pointed adequacy items.

Geologic units above the coal-bearing unit are generally considered to be unsaturated. PR-10 documents state that the use or diversion of surface water resources would not increase due to proposed mininign. Groundwater resources are not utilized and will not be utilized in mining. The impacts of mining to the hydrologic regime would potentially be to alluvial drainages. The proposed mining would be undermining ephemeral and intermittent drainages.

- Please ensure the hydrology maps, specifically Map KII -004 and KII -012, accurately show the extent of the proposed mine workings.
- 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.
- 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. It is not clear if this will be located within the DRMS permit boundary. Please add the location of this disturbance to the hydrology map. 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.
- 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.