

1313 Sherman Street, Room 215
Denver, CO 80203

May 7, 2020

Melvin Bickling

**RE: Permits M-1985-112, The Loloff Pit, M-2008-017 The Derr Pit
Response to complaints regarding impacts to Hydrologic Balance**

Greetings Mr. Bickling,

The Division of Reclamation, Mining and Safety (DRMS) has conducted a review of the complaints filed by you regarding possible hydrologic impacts to surrounding properties by the above referenced pits. Each complaint has been reviewed and this document represents the collective response to them. DRMS looked at the numerous documents you supplied and noted many of them are already contained in the public file. While the two sites are intertwined, the main differences is that the Loloff Pit is in final reclamation and the Derr Pit is beginning its next phases of mining.

The Loloff Pit has documented impacts to the hydrologic balance and some of the monitoring requirements were not met historically. However, a review indicates the operator did make attempts to minimize the impacts to the hydrologic balance by providing augmentation water to surrounding property owners. A slurry wall installation in 2017 further mitigated impacts and the current data indicates the groundwater levels are returning to near historic levels. Therefore, DRMS considers any issues regarding the Loloff as being mitigated currently, as final reclamation is underway. DRMS will be reviewing monitoring data as it is presented to ensure groundwater levels remain relatively stable in the vicinity of the Loloff pit.

The Derr Pit was amended on July 24, 2018 to permit an additional 106 acres. The Operator of the Derr Pit is required as a condition of the permit to conduct groundwater quality and quantity monitoring. Sufficient water level monitoring data has been provided by the operator for DRMS review. Data continues to be collected on a monthly basis by the operator and this information is made part of the public record upon submittal to DRMS.

A primary concern you have brought forward is the potential impacts for adverse impacts to the Koehler Property. During our conversations, you have asserted there has been an adverse impact of some kind to the Koehler well. However, the modeling and data DRMS currently have does not support that the initial dewatering at the Derr pit, initiated in January 2020, is the source of impacts beyond its permit boundaries. Shallow, sub-alluvial, unconfined aquifers are subject to dramatic fluctuations due to seasonal agricultural pumping and irrigation, yearly precipitation levels, and other possible non-mining related



factors. DRMS does not have sufficient groundwater monitoring data currently to determine potential impacts to the Koehler well. The construction of the proposed slurry wall and the monitoring plan execution will provide more useful data to monitor potential impacts to the hydrologic balance as the mining operation progresses. In addition, evaluating the construction and condition of a well itself, as well as documenting historic vs. current yields, are also important part of determining possible off-site impacts due to mining activity, and what, if any, mitigation is appropriate.

At this time, DRMS is standing by its original determinations that impacts to the hydrologic balance caused by the Loloff Pit have been mitigated to date. As noted above, the available data does not indicate the Derr Pit is currently impacting the hydrologic balance beyond its boundaries. DRMS will continue to monitor data submitted and should indications of a significant groundwater impact off site be noted, it will take appropriate measures at that time. If it can be demonstrated that activity at the Derr Pit has resulted in adverse impacts to the production capability of a well, DRMS and the Mined Land Reclamation Board can require that appropriate mitigation measures be implemented by the operator.

DRMS is aware that Weld County has stayed a decision on the special use permit in order for the surrounding property owners and the operator to negotiate some kind of resolution. DRMS is encouraging the parties to come to a consensus. DRMS staff has been instructed to be diligent in ensuring the groundwater monitoring requirements are adhered to and submittal of the required sampling data is provided in a timely manner.

Best Regards,



Russ Means
Program Director
Division of Reclamation, Mining and Safety

Cc: Michael Cunningham, Senior EPS Denver
Cc: Eric Scott, EPS Denver
Cc: Jared Ebert, Senior EPS
Cc: Peter Hays, EPS Denver