

Department of Natural Resources

1313 Sherman Street, Room 215 Denver, CO 80203

November 9, 2017

Mr. Paul Newman Colorado Legacy Land LLC 4601 DTC Blvd., Suite 130 Denver, CO 80231

RE: Schwartzwalder Mine; DRMS File No. M-1977-300; Request for Additional Information (SO01)

On October 17, 2017, the Division determined the Application Form for Transfer of Mineral Permit and Succession of Operators from Cotter Corporation to Colorado Legacy Land LLC was complete for review. The Division requests the following information prior to finalizing the financial warranty calculation:

- 1. The costs associated with Reverse Osmosis (RO) water treatment system have been outlined in the Schwartzwalder DRMS Bond Calculation table provided with the Succession of Operators application. The ten year treatment period has been separated into years 1-5 and years 6-10. According the cost estimate, the RO system will be operational half of the time and will be on standby status the other half of the time for the first five year term. Whereas, the RO system will be on standby status for the entire second five year term. Please provide clarification of what standby status entails and provide a justification for why the RO system will be on standby status for the second five year treatment period.
- 2. A Technical Memorandum addressing mine pool recharge rates was provided to the Division with the Succession of Operators application. The mine pool recharge rate was determined by evaluating the mine pool recharge during five different periods when the water treatment plant was shut down. The periods span from June 2017 to October 2017. The stated basis for evaluating this timeframe was because it was representative of recharge rates which will be experienced when the mine pool is maintained at or near 150 feet below the Steve Leve. To establish the amount of required financial warranty, it must be assumed that at the time of bond forfeiture the mine pool will have rebounded to a maximum post-mine water level elevation (6,590 feet). In addition, the recharge rates should be evaluated over a minimum of a one year period to account for seasonal fluctuation of recharge rates. Please provide an estimate of the mine pool recharge rates over a period of one year as well as the cost associated with dewatering the mine pool from 6,590 feet to 6,452 feet.
- 3. Please specify the number of times the submersible pump in the mine pool has been replaced since dewatering activities were reinitiated in 2010.
- 4. The costs associated with the Ion Exchange (IX) water treatment system have not been included in the Schwartzwalder DRMS Bond Calculation table. The IX system is currently a component of available water treatment options at the Schwartzwalder Mine. Therefore, the operation and maintenance costs associated with the IX system must be accounted for over a ten year treatment



period. Please provide the Division with the costs associated with operation and maintenance of the IX system over a ten year period.

- 5. Please specify the total amount of spent resin from the IX water treatment system which can be stored under the Radioactive Materials License #CO-369-06. In addition, please provide the Division with the costs associated with disposing of the spent IX resin at a licensed disposal facility.
- 6. The financial warranty estimate submitted to the Division did not include costs for ground water or surface water sampling. The water monitoring program is intended to meet the requirements of Rule 3.1.6 and Rule 3.1.7 and must be accounted for in the financial warranty estimate. The Division assumes the water monitoring program will continue until such time as the site is released from further reclamation liability. Please provide the annual costs associated with the ground water and surface water sampling program.
- 7. The financial warranty estimate submitted to the Division did not include costs for abandonment of ground water monitoring wells or alluvial sumps. Please provide costs associated with the abandonment of all ground water monitoring wells and alluvial sumps, including in-stream sump locations.
- 8. The revised Environmental Protection Plan, under Section 7 Facilities Evaluation, indicates there is remaining reclamation to be performed at the Minnesota Level and at the CV/Charley/Intakes area. Please specify the remaining reclamation tasks associated with these areas of the mine and provide the Division with the associated costs for reclamation.
- 9. The financial warranty estimate provided to the Division specifies the cost to excavate, haul and place the alluvial material is \$287,325.00. However, the cost associated with this reclamation task was determined to be \$650,760.00 under Technical Revision No. 23, Table 4-1. Please clarify this discrepancy.

The Division will complete the financial warranty calculation once all of the above adequacy issues have been addressed. Notice of an increase to the financial warranty will be sent under separate cover. The Prospective Successor will have 60 days from the date of notice to submit the increased financial warranty.

If you have any questions, please contact me at (303)866-3567 x8116.

Sincerely,

Michael A. Cunningham

**Environmental Protection Specialist** 

CC: Wally Erickson, DRMS

Jeff Fugate, AGO

Ken Mushinski, Cotter Corporation