

COLORADO OPERATIONS Henderson Mine and Mill P.O. Box 68 Empire, CO 80438 Phone (303) 569-3221 Fax (303) 569-2830

October 30, 2012

Via Email and Hand Delivery

Mr. Peter S. Hays Division of Reclamation, Mining and Safety 1313 Sherman St., Rm. 215 Denver, CO 80203 RECEIVED

OCT 3 0 2012

Re: Climax Molybdenum Company, Henderson Mine, Permlt #M-1977-342 Technical Revision No. 18 (TR-18) Adequacy Review Response

Dear Mr. Hays:

Climax Molybdenum Company (CMC) has received your letter dated October 18, 2012 concerning the Division of Reclamation, Mining and Safety's (Division) adequacy review of Climax Molybdenum Company, Henderson Mine's (Henderson) Environmental Protection Plan (EPP), TR-18. The following responds to the Division's comments.

- 1. Henderson agrees with the Division that the correct reference should be "Appendix D and E" on Page 2 of the EPP instead of "Appendix C and D". Henderson has revised the EPP to reflect this change and has included Page 2 of the EPP as an attachment to this letter.
- 2. Henderson agrees with the Division that the mill tailings impoundment is regulated by the DRMS and therefore exempt from the Colorado State Engineer's Rules. However, the East Branch Reservoir and Ute Creek Reservoir dams are regulated by the Colorado State Engineer's Rules. Henderson has revised the EPP to provide additional clarification by referencing these two dams and has included Page 6 of the EPP as an attachment to this letter.
- 3. The Mine EPF 1.2 Storm Water Diversion System is a valid EPF and is appropriate for inclusion in the EPP.
- 4. Henderson agrees with the Division that the "3-Dam Seep Water Collection Area" should be part of the monitoring plan associated with Mill EPF 1.5 – Seep Water Collection and Return System. Henderson had already implemented routine monitoring in this area prior to submittal of the EPP. As such, Henderson revised the EPP to reflect this monitoring and has included the revised Page 19 as an attachment to this letter.

Henderson has also included a CD with this submittal that contains an updated PDF of the entire EPP submittal package with the above referenced revisions.

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Please contact me at (303) 569-3221, ext. 1233 or Bryce Romig (ext. 1204) if you have any questions or concerns.

Sincerely,

Miguel Ant

Miguel Hamarat Chief Environmental Engineer Climax Molybdenum Company Henderson Operations

Enclosures:

- 1. Attachment 1 Revised Pages to EPP
- 2. CD with pdf file of revised EPP

cc (via email):

T. Kaldenbach, DRMS

B. Romig, Climax

T. Haynes, Climax

Attachment 1

Revised Pages to EPP

Amendment – means a change in the permit or an application which increases the acreage of the affected land, or which has a significant effect upon the approved or proposed Reclamation or Environmental Protection Plan.

Modification - means any amendment or revision of any previously granted permit, including permit transfers, increases or decreases of the amount of financial warranty required by the Board, and declarations regarding temporary cessation, which is either:

- a. initiated by the Board pursuant to Subsection 3.3.2 as necessary to bring the operation into compliance with the provisions of these Rules or the Act, or
- b. the subject of a petition for a formal hearing granted by the Board pursuant to Section 34-32-114 of the Act.

Facility improvements have occurred since the initial EPP filing. Please refer to Appendix D and E for a list of Permit Amendments and Technical Revisions in place or in progress at the site.

1.1.3. Emergency Response Plan

An Emergency Response Plan is required as a component of the EPP to comply with Sections 34-32-103 (4.9) and 34-32-116.5(5), C.R.S 1984 and Section 8.3 of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal and Designated Mining Operations (Rules) for designated chemicals. An electronic copy of the Spill Prevention, Control, and Countermeasure/Materials Containment Plan (SPCC/MCP) and Incident Response Manual (IRM) for the Mine and Mill are included in Appendix A in compact disc format. These documents have been developed to provide procedures to protect, prevent, control, and mitigate releases of chemicals to the environment in the unlikely event of a spill or release of designated chemicals or toxic or acid-forming materials and include, in accordance with Section 8.3, the following:

- Designation of personnel, such as mine manager, shift foreman or safety office, who will be on site and in charge in case of an emergency. A minimum of two key response individuals, with up-to-date phone numbers, who can be contacted by the Office on a 24-hr basis;
- An outline of response procedures to be followed by mine or plant personnel in the event of an emergency involving designated chemicals, acidic or toxic materials, or uranium or uranium by-products;
- A list of designated chemicals and maximum quantities to be stored or used on site at any one time (included in Table 1 of this document and the SPCC Plan); and
- A list and location map of materials, supplies and equipment stored on the property and readily available for containing, controlling and cleaning up excursions or releases of designated chemicals.

Generally, the IRM directs communications to the Hoist House (Ext. 1320) at the Mine and the Mill Control Room (Ext. 2310) with default to the Boiler Operator at the Mill. The Operator at the Hoist House, Mill Control Room or Boiler will then contact the on call Duty Manager. In the event of an emergency at the Mine dial 1911; and at the Mill dial 2911.

The controlled versions of all environmental documents are maintained on Henderson's Environmental SharePoint site. The SPCC/MCP and IRM are reviewed on an annual basis as

3. OTHER AGENCY ENVIRONMENTAL PROTECTION MEASURES AND MONITORING

3.1. General Information

The Henderson Mine and Mill are subject to additional environmental statutes, regulations and permitting requirements including those promulgated by:

- Colorado DRMS;
- Colorado Department of Public Health and Environment (CDPHE);
 - Air Pollution Control Division (APCD);
 - Water Quality Control Division (WQCD);
 - o Hazardous Materials and Waste Management Division (HMWMD);
- Colorado State Engineer [water dam stability (i.e. East Branch Reservoir and Ute Creek Reservoir), and water rights];
- U.S. Environmental Protection Agency (EPA);
- U.S. Army Corp of Engineers; and
- U.S. Forest Service (related to two parts of the site: area underlying the conveyor system, and the area just above the portal).

Permits and authorizations related to environmental protection measures and monitoring are discussed in Section 4.0 below.

Tailings storage has been designed, and is being operated, with effective engineering controls and redundancies, including seep water collection and return, a groundwater interceptor system, and regular internal and external monitoring and inspections.

Monitoring: Routine monitoring associated with the tailings storage facility includes the following:

- Routine inspections are performed on a daily basis by Henderson Tailings personnel and include visual observations of the Mill site, Tailings Dam Storage facility Shop, #1 Dam, #3 Dam, the East Branch Dam, East Branch Reservoir, East Branch Pump House, #1 Dam Seep Water Collection Area, Interceptor Canals, Interceptor Roads and the Ute Park pump station.
- Monthly piezometer monitoring and data assessment.
- Completion of a detailed monthly inspection of the tailings storage facility and the Seep Water Collection and Return System.

Maintenance and/or updates to facilities, systems, equipment, or procedures are performed as needed to be protective of the environment and to prevent releases. Additional Coherex treatments may also be applied on an as needed basis.

<u>Mill-EPF 1.5 – Seep Water Collection and Return System:</u> Contact water seeping from the base of the tailings storage facility dams may be acidic and is not discharged to the environment without treatment. Therefore, a system to collect this seepage and return it to the process water and tailings circuit was designed and installed during construction in the 1970s and has been modified through TR-04 related changes, TR-09,, TR-10, and TR-14. The system collects and contains dam seepage and it lowers the phreatic surface in the tailings storage facility and dams. The system is comprised of trenched and piped collection and conveyance structures including foundation drains, horizontal drains, pipelines and ditches that extract and direct seep water to the Ute Park pump station.

Effectiveness: This EPF is one of several engineering controls and redundancies to prevent releases of acidic waters and has been effectively operated (as amended and improved) since the beginning of Mill operations in 1976.

Monitoring: Routine monitoring associated with the Seep Water Collection and Return System includes the following:

- Routine inspections are performed on a daily basis by Henderson Tailings personnel and include visual observations of the Mill site, Tailings Dam Storage facility Shop, #1 Dam, #3 Dam, the East Branch Dam, #1 and #3 Dam Seep Water Collection Areas, Interceptor Canals, Interceptor Roads and the Ute Park pump station.
- Completion of a detailed monthly inspection of the tailings storage facility and the Seep Water Collection and Return Systems.
- Annual leakdown piping integrity test is performed on piping used to convey seep water from #3 Dam to the Ute Park pump station.

Maintenance and/or updates to facilities, systems, equipment, or procedures are performed as needed to be protective of the environment and to prevent releases.