



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

Memo

Date: December 11, 2024
To: Amy Yeldell, DRMS
From: Lucas West, DRMS
CC: Travis Marshall, DRMS

Re: Response to Request for Assistance, Whirlwind Mine, Permit No. M-2007-044, Technical Revision 2 – Water Treatment System Add-on

Amy,

On December 4, 2024 you submitted a request for Technical Assistance for the evaluation of chemicals proposed to be used at the Whirlwind Mine in Mesa County. The chemicals requested for evaluation were Hydrochloric Acid, Sodium Hydroxide, Sulfuric Acid, Sodium Metabisulfite, Barium Chloride and Ferric Sulfate. Though some of these chemicals would be considered Designate Chemicals, the proposed use of the chemicals is for water treatment operations, not for use in the Extractive Metallurgical Process. In accordance with the attached Designated Chemicals Evaluation Guidance Document, chemicals used for water treatment operations are exempt from review. Therefore, the above listed chemicals cannot be evaluated for their status as a Designated Chemical pursuant to Hard Rock and Metals Mining Rule 1.1(19).

If you have any questions or concerns, please feel free to contact me.

Sincerely,

Lucas West
Environmental Protection Specialist

Encl. Designated Chemical Evaluation Guidance Document

Ec: Travis Marshall, DRMS





GUIDANCE DOCUMENT

To: DRMS Minerals Staff and Operators

From: Russ Means, Minerals Program Director
Michael Cunningham, Senior Environmental Protection Specialist

Subject: Designated Chemicals Evaluation

The Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rules) requires the Division to evaluate chemicals that are used or proposed to be used in extractive metallurgical processing. Rule 1.1(19) defines a designated chemical as a toxic or acidic chemical used within the permit area in extractive metallurgical processing, the use of which, at certain concentrations, represents a potential threat to human health, property or the environment.

Designated Chemicals List

To assist mine Operators in the permitting process, the Division has developed a Designated Chemicals List (DCL) consisting of chemicals which have been evaluated for use in metallurgical processing. The DCL includes chemicals that have been determined to be designated chemicals as well as those chemicals that are exempt from additional permitting requirements. The DCL is not a comprehensive list of all chemicals that may be utilized at a mine site, but rather a list of all chemicals which have been proposed for use in metallurgical processing and which have been evaluated by the Division. The DCL will be updated as new chemicals are evaluated. The Division reserves the right to reevaluate chemicals on the DCL at any time. The DCL does not include fuel, oil, lubricants, pesticides, or deicers. Other chemicals that may be present at a mine site, but are otherwise not used in metallurgical processing are exempt from review such as those for water treatment and other mine operations. Minor amounts of chemicals used in bench scale testing are exempt from the designated chemicals evaluation process.

Chemicals that are proposed for use in metallurgical processing will be evaluated on their potential to affect human health, property or the environment; taking into consideration the size of the project, the expected concentrations and fate of such chemicals.

Designated Mining Operations

Operators must identify any chemicals that are used in metallurgical processing when an application is filed for a new mining operation or through a permit revision for permitted mining operations. The use of designated chemicals at a mining operation is only allowed for operations which are



permitted as Designated Mining Operations (DMO). All DMOs must include an Environmental Protection Plan (EPP) which contains a discussion of the types, quantities, and concentrations of designated chemicals within the permit area. In addition, a Designated Chemicals and Material Handling plan must be included in the EPP which describes how all designated chemicals will be handled during active mining operations, during periods of Temporary Cessation, and shall fully describe the procedures for secondary containment, emergency spill notification procedures, the disposal, decommissioning, detoxification or stabilization of designated chemicals at the conclusion of operations so as to comply with all applicable environmental protection and reclamation standards and regulations.

The authorization to use designated chemicals at a permitted mine site does not include a risk based health standard for measuring exposure limits, nor does it address the use of personal protection equipment. It shall be the Operator's responsibility to follow the safety guidelines listed in Safety Data Sheets and to remain in compliance with other regulatory entities that have oversight of the use of chemicals at a mining operation.

Designated Chemicals Evaluation

The Division will evaluate chemicals that are proposed to be used in extractive metallurgical processing when an application is filed for a Designated Mining Operation or through the Technical Revision process for existing operations. The use of chemicals in extractive metallurgical processing without prior approval from the Division is prohibited. The Division is available for designated chemical consultations upon request.

For additional information on designated chemicals and designated mining operations please see Rules 1.1(19), 1.1(20), 1.4.2, 1.4.5, 1.4.6, 6.1.2, 6.1.4, 6.3, 6.4.21 and 7.