



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

December 27, 2022

Amy Veek
GCC Rio Grande, Inc.
3372 Lime Road
Pueblo, CO 81004

RE: Preliminary Adequacy Review; Technical Revision (TR-2) – Blasting Plan; Cedarwood Clay Mine, Permit No. M-1977-317

Dear Ms. Veek,

On December 15, 2022, the Division of Reclamation, Mining and Safety (Division/DRMS) received a request for Technical Revision (TR-3) to include a blasting plan into the permit for Cedarwood Clay Mine, Permit No. M-1977-317. Please be advised that on January 16, 2023, the application for TR-2 may be deemed inadequate and denied unless the following clarification(s) or items are addressed to the Division's satisfaction.

1. Pursuant to Rule 6.5(4) an operator who proposes blasting is required to provide an appropriate blasting, vibration, geotechnical and structural engineering analyses that off-site areas will not be adversely affected by blasting. While the Rules do not provide details of the exact type of analysis or demonstration that needs to be conducted, the Division typically follows the protective standards accepted by the Office of Surface Mining, Reclamation and Enforcement and the Colorado Dept. of Labor and Employment, Division of Oil and Public Safety Explosives Regulations (Colorado 7 C.C.R. 1101-9). In the application the operator states there is no need for a pre-blast survey as there are no structures within 300 feet of the mine. Currently, the Division uses a minimum distance of one half (1/2) mile from the permit boundary for a pre-blast survey. Please develop a pre-blast survey, a blast notification schedule, and a blast plan that addresses all structures, including water wells and public roads, within a ½ mile of the permit boundary.
2. Commit to generating and filing a Blast Report for each shot and retained for 3 years for inspection upon demand. The report shall contain the following:
 - a). Location date and time of blast,
 - b). Name, signature and license number of blaster-in-charge,
 - c). Identification, direction and distance in feet from the nearest blast hole to the nearest potentially affected structure, such as any dwelling, school, church, or community or institutional building either:
 - i). not located in the permit area; or
 - ii). Not owned nor leased by the person who conducts the mining operations
 - d). Weather conditions, including: temperature, wind direction, and approximate velocity,
 - e). Type of material blasted,



- f). Sketches of the blast pattern including number of holes, burden spacing, and delay pattern. Sketches shall also show decking, if holes are decked to achieve different delay times within a hole,
- g). Diameter and depth of holes,
- h). Types of explosives used,
- i). Total weight of explosives used per hole and maximum weight of explosives used per 8-millisecond period,
- j). Initiation system,
- k). Type and length of stemming,
- l). Mats or other protections used,
- m). Type of delay detonator and delay periods used,
- n). Number of persons in the blasting crew; and
- o). Seismographic records where required including:
 - i). Type of instrument sensitivity and the calibration signal of the gain setting or certification of annual calibration,
 - ii). Exact location of instrument, the blast date and time, and the instrument distance from the blast

This concludes the Division's preliminary adequacy review of your application. The Division reserves the right to further supplement this document with additional adequacy items and/or details as necessary.

The decision date for your application is set for **January 16, 2023**. If additional time is needed to respond, an extension request must be received by our Office by the decision date. If on the decision date, outstanding adequacy items remain, and no extension request has been received, your revision may be denied and the file terminated.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at patrick.lennberg@state.co.us.

Sincerely,



Patrick Lennberg
Environmental Protection Specialist

Attachment:

cc: Jared Ebert; DRMS
Amber Michels, DRMS

ec: Amy Veek, GCC Rio Grande, aveek@gcc.com