



Cynthia Gulde
EMC Regulatory Manager, Questa Mine

October 19, 2020

Mr. Clint Chisler
Mr. Holland Shepherd
Mining and Minerals Division
Energy, Minerals and Natural Resources Department
Wendell Chino Building
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Request for Modification to Questa Mine Permit No. TA001RE

Dear Mr. Chisler and Mr. Shepherd,

Chevron Mining Inc.(CMI) requests to apply for a Permit Modification to Permit TA001RE for the following sections:

- **Request to modify Modification 17-1 Section 5A**, which authorizes placement of approved waste material in the pit. In Section 5 (17-1) approved material is defined as:

“tailing associated with the tailing pipeline, historic tailing, sediment from stormwater catchments, and construction and/or demolition debris, generated during closure activities at the mine. These Materials can originate from removal operations at the Mill Area, the tailing pipeline corridor, and other locations at the mine, where approved closure activities have been identified, in the permit.”

CMI requests the definition of approved materials to be modified to include waste rock material and other demolition debris (e.g. concrete, reinforced concrete, PVC, and wood) associated with the Group 1 Waste Rock Pilot Project and future Group 2 waste rock pile remediation projects. Estimated quantities of material for the Group 1 WRP Pilot project were included in the *Group 1 Waste Rock Pile Draft Final Design Report* and will be included in the Final Design Report submitted to MMD, NMED and EPA for approval. Material from Group 2 WRP projects will be included in future design reports. CMI will provide notice to MMD (and NMED) of debris from any other closure project prior to disposal in the pit.

- **Request to modify Post Mining Land Use (PMLU) Section 6A.** On November 15, 2017, CMI submitted Permit Modification 17-2 to request changes to the post mining land use (PMLU) at the Questa Mine from forestry and water management to wildlife habitat and industrial/commercial. Following discussion with MMD, the November 15, 2017 request for modification was withdrawn to allow the discussions for the Group 1 Waste Rock Pile Pilot Design to progress. With this letter CMI would like to request the PMLU for the Questa Mine site be modified to wildlife habitat and industrial/commercial to better align with the closure requirements under CERCLA. As part of the Group 1 Waste Rock Pile Pilot Project design effort, sufficient evidence was presented and discussed to support MMD agreeing that a wildlife habitat PMLU was a better alternative

for the mine site. This agreement was documented in the Meeting Summary from the November 18, 2014 Scoping Meeting. The wildlife PMLU has also been identified in the *Group 1 Waste Rock Pile Project Draft Final Design Report* without comment. In the former mill area, there is a CERCLA requirement for a water treatment plant to treat collected waters. In this area the PMLU should be modified to industrial/commercial. CMI requests these modifications be made the permit.

- **Request to Modify Vegetation Management Objectives and Standards Section 6 Q and R).** As part of the previous November 15, 2017 Permit Modification discussions, MMD and CMI were updating section 6 of the Permit. Attachment 1 is a copy of a redlined version of the proposed edits prior to CMI withdrawing the Modification request. CMI requests to continue to work with MMD on updating the selected text. Specifically, CMI request to modify Section 6, item Q and R, the Vegetation Management Objectives and Standards. As part of the Group 1 Pilot project design effort, performance criteria for the pilot project have been discussed with MMD and included in the *Group 1 Waste Rock Pile Project Draft Final Design Report* without comment. CMI requests modifications be made the permit to be consistent with the performance criteria identified in the Group 1 Pilot project. Additional proposed edits have been added in redline to Attachment 1.

CMI appreciates MMD's consideration regarding the permit modification. Enclosed is the Modification Application fee of \$1000. Should you have any questions or require additional information please contact me at 832-586-5984.

Sincerely,



Cynthia Gulde
EMC Project Manager

Cc:

Anne Maurer, NMED

New permit language for Sections 6 and 9, Permit TA001RE, Revision 96-2

Section 6. Closeout Plan Summary

Revegetation Monitoring

- K. The Permittee shall perform vegetation monitoring of reclaimed areas during the 12-year financial assurance monitoring period, which will commence after the last year of augmented seeding, fertilization, or irrigation. The minimum 12-year monitoring period will determine whether, or not the permit area has been reclaimed to a condition that allows for the re-establishment of a Self-Sustaining Ecosystem (19.10 NMAC, Part 12, 19.10.12.1204.A).
- L. The Permittee will implement a systematic, statistically based monitoring program to confirm that the "site is reclaimed to a condition that allows for re-establishment of a Self-Sustaining Ecosystem appropriate for the life zone of the surrounding areas" (19.10 NMAC, Part 5, 19.10.5.507).
- M. The Permittee will implement a Revegetation Monitoring Program that will evaluate growth medium condition and development, plant establishment and growth performance, to verify that the plant community is developing into a Self-Sustaining Ecosystem. Additionally, the program will provide a mechanism for implementing corrective actions if the revegetation plan goals are not being met. The Revegetation Monitoring Program will consist of the following activities:
- Collecting ~~annual~~ substrate, meteorological, and vegetation performance data on the reclaimed areas.
 - Documenting trends in substrate and vegetation parameters over time through annual qualitative inspections, an interim quantitative survey in year 6 of the reclamation and quantitative surveys in two of the last four years of the responsibility period to demonstrate the reclamation has met performance standards.
 - Identifying areas where substrate and vegetation development may be performing below expectation.
 - Providing recommendations for monitoring revegetated areas. Data to be collected shall include diversity, woody plant density, and total canopy cover .
- N. If after the implementation of the approved revegetation plan, a reclaimed area does not exhibit the potential to achieve the revegetation performance standards described above, the Permittee shall prepare a report which describes the area in question, the situation as identified, probable causes, and a corrective action plan. This report shall be submitted to MMD in a timely manner. The corrective actions to be taken include, but need not be limited to, addition of soil amendments, reseeding or interseeding of herbaceous and/or shrub species, planting of trees, shrubs, and sub shrubs, or other appropriate land husbandry practices. Revegetated areas will be qualitatively evaluated on an annual basis

Commented [GC1]: Substrate monitoring was a function of the old reclamation plan for forestry and not needed

Commented [GC2]: I am not sure exactly what is meant by this or why it was added?

Commented [GC3]: This was for the forestry PMLU. These will be seeded. No containerized plant materials are proposed

to determine the extent of colonization by invasive species. Detailed plans for weed control will be developed as needed.

Revegetation of Disturbed Areas

- O. Implementation of the revegetation plan will achieve the vegetation performance objective to reduce erosion rates by the planting and establishment of grasses, forbs, and woody plants and establish an ecosystem capable of providing food and cover for wildlife species. This will be implemented through simultaneous establishment of shrub and herbaceous cover. The permittee can request release of the site from a vegetation success perspective no sooner than 12 years after seeding, pending a demonstration of success.
- P. The Permittee will apply a mixture of grasses, forbs and selected woody species to establish the vegetation cover for erosion and infiltration control on covered areas. Reclamation seed mixes, including alternate or substitute species, will be approved by the MMD. Vegetation established in drainage channels may be restricted to herbaceous species only, although selected native woody species of high evapotranspiration potential may also be established. Preliminary mixtures and application rates of grasses and forbs for herbaceous cover establishment are provided in the closeout plan in Tables 3-3 through 3-5 and have been further refined with on-going and proposed studies, such as, the Spring Gulch Cover Trials and Goat Hill North Pilot project. Final species selection will be based upon thorough characterization of the in-place cover material, availability of seed, and recommendations derived from site-specific performance data.

Vegetative Management Objectives and Standards

Q. The final vegetation standards shall be:
 A woody plant density equal to or greater than 320 stems per acre comprised of 4 species of shrubs, sub-shrubs, and/or trees. Volunteer vegetation can be included towards meeting vegetation success. ~~Total herbaceous and woody canopy cover technical standard = 30 percent (total canopy cover is the percentage of the ground surface area covered by the vertical projection of the canopy). The proportional numerical standard for total canopy cover shall be 70 percent of the technical standard. The performance standard for total canopy cover shall be 40% of the technical standard of 30% canopy cover, calculated following completion of the 5-year monitoring period. At the completion of the 10-year monitoring period, the performance standard for total canopy cover shall be 70% of the technical standard of 30% canopy cover.~~ The canopy cover standard may be refined pending the results of on-going field trials and projected pilot studies in consultation with MMD.

Commented [GC4]: Updated to match the discussion between Chevron and MMD prior to the submittal of the Draft Final Group1 WRP Design report.

R. A diversity standard of at least ~~3~~⁴ perennial grasses, 3 biennial or perennial forbs, 4 woody species including shrubs, sub-shrubs, conifers and/or deciduous trees. Minimum relative cover levels by life form for the diversity standard will be:

Commented [GC5]: This is 3 based on discussions we had prior to the submittal of the Draft Final Group 1 WRP Design report.

Life Form	Number of Species	Minimum Occurrence (% relative cover)
Perennial Grasses	3 ⁴	1 % combined
Forbs	3	1 % combined

Shrubs, subshrubs and trees	4	5 % combined
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The diversity standard may be refined pending the results of on-going field trials and projected pilot studies in consultation with the MMD.

- U. The Permittee shall take the following reclamation measures to help stabilize portions of the pit where practicable and meet applicable federal and state regulations:
 - 1). Broadcast seeding on accessible slopes and the pit bottom;
 - 2). Aerial seeding will be performed on other portions of the pit slope and benches;
 - 3). Surface water run-on diversion ditches around the north side of the pit will be constructed as a source control of runoff from natural/undisturbed ground; and
 - 4). Trees and shrubs may be manually planted

Commented [RD6]: Not proposing containerized stock

Section 9. Conditions

Post-Mine Land Use

- D. Pursuant to §19.10.1.7. P.(5) of the Rules, the post-mine land uses for the Questa Mine site are wildlife and industrial/commercial. All areas of the site, other than E below, that have not been waived from the requirement to achieve a Self-Sustaining Ecosystem or are subject to the variance approved on May 24, 2002, shall be developed to allow for the establishment of a self-sustaining ecosystem.
- E. Other portions of the site shall be designated as an industrial/commercial post-mining land use to accommodate a permanent water management system for the site including a water treatment plant, sludge repository and other ancillary support facilities in the mill site area (see Map 2). Additionally, areas designated as wildlife may contain wells, impoundments, and drainage and conveyance systems necessary for water management.

Revegetation

- O. The Permittee shall submit for MMD approval seed mixtures and planting rates for all areas to be revegetated as part of the Closeout Plan. The proposed seed mixtures and planting rates shall be provided to MMD, within 6 months after completion of on-going and proposed studies, such as, the Spring Gulch Cover Trials and Goat Hill North Pilot project.
- P. The Permittee shall provide a revised revegetation plan, for MMD approval, within 6 months after completion of the on-going and proposed studies, such as, the Spring Gulch Cover Trials and Goat Hill North Pilot project. The revegetation studies will be used to describe how borrow material will be amended with fertilizer and/or organic material to assist in the establishment of self-sustaining plant communities of the types described by the Permittee in the Closeout Plan.

Commented [GC7]: The current Closeout plan will need to be updated. It describes the forestry PMLU. Wildlife PMLU will have a different plant community.

Q. The Permittee's revised revegetation plan shall include the methods to be used to collect vegetation data on reclaimed areas once closeout of the site has been initiated. The plan shall include the statistical methods to be used to verify sampling confidence and adequacy.

Revegetation, Meteorological, and Wildlife Monitoring

R. The Permittee shall provide the results of qualitative or quantitative revegetation monitoring to MMD in the vegetation report due on ~~February-November~~ 1st of each year in years that it is performed ~~unless submitted for CERCLA~~. Revegetation monitoring shall include a description of plant diversity, woody plant density, and total canopy cover, ~~and shrub and tree survival and growth~~.

Commented [GC8]: Under the CERCLA schedule the annual reports will be submitted by October 30 each year. MMD will be included in the distribution. Chevron would like to only submit one report to maintain consistency with different agency requirements.

Commented [RD9]: No containerized stock proposed and not required for a wildlife PMLU