

State of New Mexico  
Energy, Minerals and Natural Resources Department

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Mining and Minerals Division



**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

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November 2, 2015

Bruce D. Taylor, Manager  
Freeport-McMoRan-Cobre Mining Company  
P.O. Box 10  
Bayard, New Mexico 88023

**RE: Status of Technical Approvable Determination, Application for Continental Mine Permit Revision 14-1, Cobre Haul Road New Unit Expansion, Permit GR002RE**

Dear Mr. Taylor:

The Mining and Minerals Division (“MMD”) has been processing an application submitted by Freeport-McMoRan - Cobre Mining Company (“Cobre”) for a revision to the Continental Mine Permit No. GR002RE, that proposes to increase the permit boundary and design limits to facilitate the construction of a haul road between Cobre and Freeport-McMoRan Chino Mines Company, linking the two mining facilities. The application identifies the haul road as the Cobre Haul Road (“CHR”) and will expand the Cobre Permit Boundary by approximately 31 acres and will expand the Cobre design limits to encompass approximately 100 additional acres. The application included a closeout plan for the expansion area. Pursuant to 19.10.5.508 and 19.10.5.506.G NMAC, MMD has conducted a technical review of the application and closeout plan to determine if it is approvable. At this time, the technical approvable determination of the closeout plan will require further information as described in this letter. MMD provides the following comments based on Cobre’s July 27, 2015, response to MMD comments on the application and requests that you respond to them within 30 days following your receipt of this letter.

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Cobre's response to MMD Comment No. 5 does not provide a cost estimate for removing culvert diversions where practicable. Condition J.4(a) of Permit GR002RE Rev. 01-1 requires that culverts shall be removed on all haul roads where practicable.

Cobre's response to MMD Comment No. 10 indicates that it will provide no additional specific details regarding the engineering and design of the drainage diversions. Neither the application nor Cobre's response provides a map indicating the proposed culvert locations. Therefore, MMD requires further description of the proposed culverts including a map showing the locations, size, length, slope, available upstream height of road above culvert invert, and description of the type of culverts that will support these diversions in addition to describing the scale of the watersheds that feed them. Cobre indicates that it intends to provide this information after initiation of actual construction of the CHR and indicates that Appendix B of the Revision Application includes adequate preliminary designs for the CHR. MMD has reviewed Appendix B and found that it provides a limited view of only the proposed culvert diversion at Hanover Ck., and the USFS Access Road and doesn't provide any useful information regarding other more critical specific design criteria. For example, there appear to be other proposed culvert diversions located at several more problematic areas of the CHR where it is difficult to understand how Cobre intends to divert the ephemeral drainages into culverts under the CHR. Our review of the drawings indicates that at least 20 significant ephemeral drainages and their watersheds are affected by the position of the CHR; the most problematic of those appear to be located at the following elevations along the CHR: 6720-6680 (4 drainages), 6650-6630 (multiple drainages), 6710 (2 drainages), 6700 (2 drainages), 6660-6640 (2 drainages), 6505-6510 (1 drainage). MMD asserts that this information is critical toward understanding and maintaining the hydrologic balance and compliance with 19.10.5.508 B (4). Cobre must provide additional final design specifications and watershed metrics/calculations to show that the culvert design will pass the peak run-off specified in 508.B(4) and (5) NMAC. Additionally, information regarding the proposed construction of these diversions and how they are to be reclaimed, as well as a cost estimate for removing and reclaiming any ephemeral drainages that are not proposed to leave culvert diversions permanently in place, shall be provided.

Cobre's response to MMD Comment No. 11 doesn't completely address certain aspects of the comment. Specifically, Cobre addresses how the design and operation of the haul road prevents water from cascading over the outside toe berms. MMD's comment was geared toward understanding how Cobre intends to comply with 508.B(7) to prevent sediments from extending beyond the toe of the steep, angle of repose out slopes of the CHR. Because the road will be continually maintained and regraded and materials from the CHR are integrated from the road into the berms, this is anticipated to cause the toe to extend out beyond its currently proposed design limits. As material is added to the berms over time this material experiences erosional rilling on the steep slopes, therefore how does Cobre intend to hold these angle of repose out slope materials at the toe and not increase disturbance acreage beyond the edge of the out slopes?

Cobre's response to MMD Comment No. 12 couches the concern within the generic SWPPP document and simply indicates that grade changes along the CHR will be minimized and the channels along the CHR will be adequate to prevent flooding situations across the roadbed and that it will direct stormwater to BMP's and outfalls identified in the SWPPP; however, MMD has

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not had the opportunity to review information in the SWPPP, or information taken from the SWPP. Therefore, MMD cannot make any determinations regarding the effectiveness of the proposed BMP's or any other stormwater and erosion controls that may be used along the CHR pursuant to complying with 19.10.5.508 (A) or 508 (B)(4), 508 (B)(9), or 508 (D). Cobre must address the requirements of 19.10.508 and simply referencing the SWPPP is insufficient. MMD will need specific information addressing stormwater BMPs, either extracted from the SWPP, or some other source dealing specifically with stormwater controls related to the CHR.

Cobre's response to MMD's Comment No. 14 regarding the diversion of stormwater runoff from the CHR states that Cobre will comply with the concerns outlined in MMD's comment through Cobre's Multi-Sector General Permit ("MSGP") and SWPPP and that the SWPPP will identify site-specific measures to control off-site transport of sediments; however, Cobre's statement provided no additional specific details, aside from citing its MSGP and the SWPPP and thus, provides MMD with no ability to evaluate the overall effectiveness of control measures. Please address the pertinent requirements of 508 by referencing specific conditions and details from the MSGP and the SWPPP in its response to MMD.

Cobre's response to MMD's Comment No. 15 in regard to salvaging and storage of topsoil resources from the CHR indicates that Cobre intends to salvage topsoil only where it exists in volumes greater than 300 yd<sup>3</sup> and if available, this material will be placed adjacent to the CHR with no further explanation of where or how and what engineering controls or BMPs will be in place to ensure proper storage and protection of this material. Cobre must explain the reasoning for storing topsoil adjacent to the CHR and why there is no consideration of stockpiling salvaged topsoil material elsewhere at designated overburden stockpiles, i.e. East Overburden Stockpile or any of the Overburden Stockpiles: 1, 2, 3, 4, or 5.

Cobre's response to MMD's Comment No. 16 indicates that Cobre cannot accurately predict how much salvageable topsoil will be encountered within the CHR footprint prior to construction but encourages interested agencies to inspect the process during construction, in order to find out. Cobre must provide an estimate of how much topsoil will be salvaged, how Cobre intends to maintain the topsoil stockpile to protect it from erosion, mass movement and operational impacts.

Cobre's response to MMD's Comment No. 20 indicates that Cobre will clear and grub timber and brush as part of normal site preparation activities and, as appropriate, will place grubbed timber and brush in piles to be located around the perimeter of the CHR for use during operations. Please explain what operational uses Cobre plans for this material and describe why this material should not be stored with topsoil and other overburden materials at other designated overburden stockpiles, i.e. East Overburden Stockpile or any of the Overburden Stockpiles: 1, 2, 3, 4, or 5. MMD believes that storing this material in piles along the perimeter of the CHR could represent an attractive nuisance and could lure wildlife to these piles, and, ultimately, onto the CHR corridor.

Cobre's response to MMD's Comment No. 26 indicates that Cobre will provide relevant approval documents when they become available from the BLM. Pursuant to 19.10.5.506 J (4)

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NMAC, the Director can approve an application if the appropriate land management agency approves or acknowledges the proposed closeout plan.

Cobre's response to MMD's Comment No. 29 indicates that the cross sections provided in the application for the crossing at Hanover Creek are adequate to address MMD's concerns with our lack of knowledge about specific design of several other diversions and culverts at the more complex drainage areas where Cobre intends to divert the natural drainages under the CHR. In order for MMD to understand the adequacy of the CHR design and to interpret whether or not the proposed haul road will effectively divert stormwater, MMD must have additional cross sections and designs depicting the more complex areas where drainages are diverted under the CHR, the most problematic of those appear to be located at the following elevations along the CHR: 6720-6680 (4 drainages), 6650-6630 (multiple drainages), 6710 (2 drainages), 6700 (2 drainages), 6660-6640 (2 drainages), 6505-6510 (1 drainage).

If you have any questions concerning this letter, please contact me at (505) 476-3436 or via email at: [james.hollen@state.nm.us](mailto:james.hollen@state.nm.us).

Sincerely,



James Hollen, Permit Lead, Permit GR002RE  
Mining Act Reclamation Program ("MARF")  
Mining and Minerals Division

**cc:** Holland Shepherd, Program Manager, MARP/MMD  
Kurt Vollbrecht, Program Manager, NMED/GWQB-MECS  
Matthew Wunder, Ph.D., Chief, Conservation Services Division, NMDG&F  
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