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New Mexico Copper Corporation Response to NM MMD's April 21st, 2017 Technical Comments on NMCC's Updated Mining Operations and Reclamation Plan (MORP), Copper Flat Mine, Sierra County Permit Tracking No. SIO27RN July 17, 2017

Agency Review of Updated MORP

Reviewer: David (DJ) Ennis, P.G.
Agency: NM Mining and Minerals Division
Review Date: April 21st, 2017

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MMD Comment 1	MORP Update, Page 2-6, second paragraph	Permit Area Boundary	Page 2-6, second paragraph, states that "there may be some additional acreage disturbance on lands outside the permit area boundary related to ancillary facilities such as the well field, the substation and power line, and the water pipeline." The permit area under MMD's consideration is comprised of the boundary around the project (i.e., the pit, plant site, waste rock disposal facilities and tailings impoundment), the water well production field, the water pipeline corridor, and the various 5-acre mill site claims. The only related area not being considered a part of the Copper Flat permit area is the proposed electrical substation and associated power line due to anticipated ownership by the electrical company post-mining. The permit area being considered by MMD is best reflected in Figure 2-20 of the Updated MORP, with the exception of the proposed substation area. Under the Mining Act, only disturbance within the permit area is allowed, and any additional disturbance outside the permit area boundary could result in MMD issuing a notice of violation. Please commit to disturbance only within the permit area boundary applied for by NMCC.
	NMCC Response		*NMCC commits to limiting its disturbances only within the permit area. The statement made on page 2-6 to which MMD refers requires some clarification and revision. The "additional acreage disturbance on lands outside the permit area boundary related to ancillary facilities" referred to are, in fact, within the permit area under MMD's consideration, not outside. MMD identifies Figure 2-20 as best reflecting the permit area being considered by MMD. Figure 2-20 is a figure that depicts "Post-Quintana Watershed Areas". As such NMCC believes that MMD may have been referring to Figure 2-12 on page 2-20. This figure identifies the boundary around the project (i.e., the pit, plant site, waste rock disposal*

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	NMCC Response (Cont.)		*facilities and tailings impoundment), the water well production field, the water pipeline corridor, and the nine 5-acre mill site claims. Two of the 5-acre mill site claims (one on Section 25 and one on Section 28 shown in yellow) have no disturbances associated with them and NMCC has no current plans to conduct any disturbance related to the mine on these properties. NMCC will obtain any required approvals from MMD should it become necessary to utilize them in conducting its mining operations in the future. Pages 2-6 has been revised and provided with these responses for MMD's replacement in the Updated MORP.*
MMD Comment 2	MORP Update, Figure 2-14, page 2-25	Location & Reclamation of Stormwater Conveyance Channels at WRSP-3	Figure 2-14, page 2-25: the reclamation of the stormwater conveyance channel generally east and south of WRSP-3 that drains to Impacted Stormwater Impoundment C is not described. This channel is not shown on Figures C-009 and C-010 making it difficult to compare and contrast what happens to this channel during reclamation. However, during an informal conversation with NMCC on the Updated MORP on February 15, 2017, NMCC stated that the push-down of WRSP-3 during reclamation likely covers this conveyance channel. Upon additional review, it appears this could be the case for portions of the conveyance channel, but not the entirety of the conveyance channel, especially north and south of Impoundment C. Additionally, it appears that the proposed footprint of GMSP-3 during operation may overlap with portions of this conveyance channel based on Figure C-009. Please clarify the proposed location of this conveyance channel relative to GMSP-3 and describe how this channel will be reclaimed.
	NMCC Response		*The purpose of Figure 2-14 as noted on page 2-12 of the Updated MORP is to depict the watershed areas that NMCC will develop at the site during operations. Figure 2-14 and drawing C-009 have been revised to show the location of the stormwater conveyance channels around WRSP-3, including the proposed location of the channel relative to GMSP-3. Drawing C-010 has been revised to show the location of reclaimed conveyance channels. Drawing C-010 shows that a small portion of the storm water conveyance channel located at the foot of GMSP-3 will be backfilled with clean fill and consolidated as the fill is placed. The backfilled conveyance channels will not require additional cover unless sufficient native growth media is not present in the backfilled areas. If areas contain insufficient residual growth media, an additional 6 inches of growth media material will be added to promote vegetative growth. The*

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	NMCC Response (Cont.)		*backfilled channels will be graded to drain, the surfaces re-contoured to blend into the natural topography and ripped to a depth of between 12 and 18 inches. The areas will then be seeded to reestablish vegetation using a seed mix approved by the BLM and MMD. Section 2.2.2 of the Reclamation Plan (Appendix E) has been revised to reflect this information. These revisions more clearly show the relationship between GMSP-3 and the toe of WRSP-3.In addition, the reviewer is pointed to Appendix B, Impoundment Design Report, of the Updated MORP which contains the detailed designs for the storm water impoundments and the attendant conveyance channels.*
MMD Comment 3	MORP Update, Page 2-54	Wildlife Impacts Contingency Plan	Page 2-54, Wildlife Impacts Contingency Plan: This section does not adequately describe a contingency plan if there is an emergency or accidental discharge of toxic substances that may impact wildlife. This section states that a Spill Prevention, Control and Countermeasure ("SPCC") plan will provide contingencies to mitigate potential impacts for an accidental release. Please either provide the SPCC for MMD's review or excerpt portions of the SPCC describing how wildlife impacts will be mitigated upon an accidental release of toxic substances.
	NMCC Response		*NMCC has revised Section 2.3, Wildlife Contingency Plan to address MMD's concerns. It contains a general description of preventative, containment, and cleanup measures to be taken in the event of an emergency or accidental discharge of toxic substances that may impact wildlife. 19.10.6.602.D.(15)(d) NMAC requires that an applicant provide a detailed description of the proposed mining operation and reclamation plan including a contingency plan to mitigate impacts to wildlife when there has been an emergency or accidental discharge of toxic substances that may impact wildlife. 19.10.6.603(4).(a) NMAC requires the operations be designed so that non-point source releases of acid or other toxic substances be contained within the permit area. Section 4.3.4 of the Updated MORP, at pages 4-23 and 4-24, describe how NMCC has designed the Copper Flat facility such that no releases of acid or other toxic substances will occur. Appendix A, B, C and D of the Updated MORP provide the design details to manage and contain the unlikely occurrence of emergency or accidental discharge of toxic substances. An SPPC Plan is not typically a document that is prepared at this stage of permitting as it is not a document as it is not a document that requires regulatory review and*

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	NMCC Response (Cont.)		*approval. Rather, EPA requires that a site plan be prepared and implemented in advance of construction and operations. SPCC plans are typically prepared after all permits for a project are obtained and final detailed designs for the facility have been prepared. NMCC's SPCC Plan will be available for inspection in the future but is not available now. The basic elements of the Wildlife Impacts Contingency component will include 1) Identification of the source or the release, 2)Action necessary to eliminate hazards and ensure the safety of response personnel, 3) Action necessary to protect/exclude wildlife from the area, 4) Actions necessary to stop and clean up the release.*
MMD Comment 4	Appendix E General Comment	Reclamation Alternatives & Geomorphic Considerations	NMCC has proposed a bench-and-terrace design for waste rock stockpile reclamation. In previous comments on the Original MORP, dated February 18, 2013, MMD requested: a. a description of the different reclamation alternatives considered and how the proposed reclamation plan was developed and designed using the most appropriate technology; b. a description about the use of geomorphic reclamation techniques and how they might be integrated into the reclamation plan for the waste rock piles and the tailings. Pursuant to the performance standards and requirements of §19.10.6.603.A NMAC, please provide this requested information.
	NMCC Response		*Section 19.10.6.602.D.(15) identifies the requirements of the content of the MORP. Section 19.10.6.603 NMAC requires that the permit area be reclaimed to achieve a self-sustaining ecosystem appropriate for the life zone of the surrounding areas following closure unless conflicting with the approved post-mining land use. It stipulates that each reclamation plan must be developed to meet the site-specific characteristics of the mining operation and the site. Section 19.10.6.603.A requires that the mining operation and reclamation plan be designed and operated using the most appropriate technology and the best management practices. NMCC is unaware of any Mining Act Regulations that require an applicant to describe the different reclamation alternatives considered or a description of the geomorphic techniques utilized in design of the reclamation plan. NMCC believes that the reclamation design proposed, including the waste rock stock piles (WRSP) and tailings storage facility (TSF) utilizes the most appropriate technology and best management practices of industry for meeting the requirements of the Mining Act and the NMED Copper Rules. The Copper Flat operation is designed for reclamation and closure utilizing geomorphic concepts such as shaping reclaimed*

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	NMCC Response (Cont.)		*areas to approximate the shape of nearby land forms within the framework of meeting the NMED Copper Rules. As provided in NMCC's responses to NMED Request For Information (RFI) dated June 21, 2016, a copy of which was provided to MMD, NMCC addressed this issue in its response to comment No. 18 as restated herein; NMCC's approach to reclamation is to meet the requirements of the Copper Rules for closure which are specific and prescriptive and to meet the requirements of the Mining Act, which are less prescriptive but require significant engineering protocols. Section 20.6.7.33 NMAC contains the prescriptive requirements for closure of the WRSPs and TSF. To the extent that application of these requirements at the Copper Flat site results in reclaimed WRSPs and TSF that blend into the surrounding environment (as much a practicable), then it can be said the NMCC will be using a geomorphic approach to reclamation. However, this is not a commitment to a strict geomorphic approach.*
MMD Comment 5	Appendix E Table E1 & Section 2.1.2, Updated MORP	Detention Basins	Table El proposes two small detention basins at the base of EWRSP-1, and Section 2.1.2 further describes the detention basins. No details on the anticipated depth of these basins or anticipated storage volume is provided. These basins seem unlikely to provide wildlife or riparian habitat since it is likely that any water conveyed to these basins would be ephemeral. However, these basins may inadvertently allow infiltration which could facilitate an acid water seep on the pit wall and/or eventually weaken the pit wall to the point of failure. This is acknowledged as a possibility in Section 2.1.2 of the Updated MORP, which proposes to compact the soils at the bottom of the basins to minimize percolation. MMD suggests consolidation of waste rock at the southern tail to EWRSP-1 or rerouting stormwater so that these basins are unnecessary. Please address.
	NMCC Response		*Based on MMD concerns NMCC has eliminated the proposed detention basins and Golder has prepared a revised grading plan for the area located east and south of EWRSP-1 to direct storm water flows to proposed toe channel TC-2. The revised grading plan is included in revised Drawing C-002. Table E1 and Section 2.1.2 of the Reclamation Plan (Appendix E) have also been revised to reflect this change.*
MMD Comment 6	Appendix E, Table E1	TSF Surface Reclamation Slope	Table El and Appendix E2 propose a 1% top surface reclamation slope on the tailing storage facility, which is reiterated in Section 2.3.2 on page 15. However Figure C-012 shows a 0.5% top surface slope at reclamation. MMD's previous letter on the Original MORP, dated February 18, 2013, required a minimum of 1% slope. Please address.

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	NMCC Response		*The top surface of the TSF will be regraded to a minimum slope of 1%. Drawing C-012 has been revised to show the correct slope of 1%.*
MMD Comment 7	Appendix E, Table E1, Figures C-013 and Co14	Pit Reclamation	Table El describes an assumed 100-foot wide disturbance around the open pit that will be ripped and revegetated. This assumed disturbance and reclamation is not portrayed on Figures C-013 and C-014. Please provide the anticipated grading plan of this assumed 100-foot- wide area as well as a description of the anticipated sequencing of this reclamation as it relates to placement of the proposed perimeter berm proposed in Figure C-014.
	NMCC RESPONSE		*The 100-foot width assumed for reclamation around the perimeter of the pit is a generalized approximate average width of the disturbance that will occur during mining operations. The purpose of calling out a 100 ft. perimeter around the entire pit in the reclamation plan is as a means of acknowledging that there may be disturbance around the perimeter of the pit caused during operations and that to the extent that there is, NMCC will conduct reclamation of those areas as needed. The actual width of disturbance will vary by location. The locations and size of the disturbances will not be known until and if they are created in the field during operations. Some disturbances will be less than others. Where disturbance areas occur as a result of operations they will be ripped and graded to control drainage around the perimeter of the open pit and generally match the surrounding topography where possible or graded to 3:1 slopes at locations where the natural topography cannot be matched. NMCC has revised Drawing C-014 (See Note 3) and Section 2.4.2 of the Reclamation Plan (Appendix E) to acknowledge that disturbance that occurs around the perimeter of the pit during operations will be reclaimed as may be necessary. The grading plan calls for ripping and revegetating the areas as discussed in NMCC's response to MMD comment No. 8 following the construction of perimeter channels, barbed wire fencing, and the safety berm around the pit perimeter.*
MMD Comment 8	Appendix E, Table E1	Reclamation Cover Thickness	Several places in Table El propose up to 6" of cover thickness. MMD requires a minimum of 18" of cover thickness over non-deleterious artificial fill areas in order to provide an adequate root zone for revegetation. Please address.
	NMCC Response		*An 18" minimum cover thickness requirement over non-deleterious artificial fill does not exist in the Mining Act regulations. However, MMD and NMCC have agreed that where suitable native growth materials exist, the area will be ripped up to 18 inches deep and reseeded. In areas where native suitable growth media materials do not exist, the area will be ripped 12 inches deep and 6 inches of growth media will be placed over the ripped material and the area*

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	NMCC Response (Cont.)		*then seeded. Section 19.10.6.603 NMAC, Performance and Reclamation Standards and Requirements, provides that each reclamation plan must be developed to meet the site-specific characteristics of the mining operation and the site, and Subsection A requires that the reclamation plan be designed using the most appropriate technology and the best management practices. NMCC has designed its reclamation plan in conformance with this requirement. Foot-note No. 4 of Table E1 addresses MMD's comment with respect to cover thickness of non-deleterious artificial fill areas and the desire to provide an adequate root zone for revegetation. It indicates that the growth media stockpile areas, disturbed areas and other ancillary facilities will not require additional cover unless sufficient native growth media is not present in the area and that in those areas where insufficient residual growth media exists that an additional 6 inches of growth media material will be added to promote vegetative growth. It also indicates that all of these areas will be graded, re-contoured and ripped to a depth of between 12 and 18 inches. Treatment of these areas in this manner is considered the most appropriate technology and best management practice sufficient to provide adequate root zone for revegetation.*
MMD Comment 9	Appendix E, Section 2.1	OPSDA Boundaries	Section 2.1, page 8 references the open pit surface drainage area ("OPSDA"), however none of the drawings refer to the OPSDA. On drawings that show final buildout there is a "watershed boundary (by others)" label, and on drawings that show final reclamation topography there is a "reclamation watershed boundary" line. Please confirm that these boundaries represent the OPSDA and/or other watersheds surrounding the OPSDA.
	NMCC Response		*The watershed boundaries presented on the final buildout and regrade and drainage plan drawings represent the surface water drainage boundaries associated with each watershed area during operations and reclamation, respectively. The open pit surface drainage area (OPSDA) delineation has been added to the regrade and drainage drawings in the revised drawing package to identify its location at final reclamation. It should be noted that the aerial extent of the surface expression of the OPSDA during operations and the OPSDA at reclamation will differ as shown on Figures G-003 and G-004. During operations, surface water runoff from WRSP-1 will be diverted to Impacted Stormwater Impoundment B as shown on Figure G-003. After operations cease and WRSP-1 and Impacted Stormwater Impoundment B are reclaimed, the surface expression of the OPSDA will include those areas as shown on Figure G-004. Section 2.1 of the Reclamation Plan has been revised to provide clarification.*

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MMD Comment 10	Appendix E, Drawing C-002	Toe Channel (TC-2) Location	Drawing C-002 shows proposed toe channel TC-2, however this channel length is different than that shown on C-013. MMD prefers the routing shown on Figure C-002 in order to reduce water going to the proposed detention basins (as discussed above in comment #5). Please address.
	NMCC Response		*NMCC's Updated MORP, Reclamation Plan (Appendix E) and the attendant drawing package have been revised to address MMD's preferred routing of surface water runoff from the area. The detention basins have been eliminated. The revised grading plan for the area east and south of EWRSP-1 now calls for runoff to be routed to drain to the Grayback Arroyo diversion. See, also, NMCC's response to MMD Comment No. 5, above.*
MMD Comment 11	Reclamation Plan - General	Access & Haul Road Reclamation	Throughout the closure plan, little reclamation/reduction of the widths of access and haul roads is proposed. While access roads can be included in the post-mining land use, leaving 50' wide haul roads is excessive for what should become a single vehicle access road. As an example, the proposed access road shown on drawing C-002 is shown as "50-feet (minimum) width." Please address.
	NMCC Response		*The reclamation plan and associated drawings have been revised to provide that the width of the closure and post-closure access roads will be reduced to a width suitable for single vehicle access. Existing roads utilized for closure and post-closure access that are wider than that required for single vehicle access will be narrowed during reclamation by ripping, grading and covering with 6-inches of suitable cover material where unsuitable growth media exists. The areas will then be seeded and revegetated. Section 2.8.2 of the Reclamation Plan has been revised to provide clarification on the reclamation of the haul roads and access roads.*
MMD Comment 12	Appendix E, Section 2.3.2 & Drawings C-011, C-012	TSF Runoff collection Trench	Section 2.3.2, page 13 and page 14 describe an HDPE-lined runoff collection trench to be constructed at the toe of the TSF to route surface water runoff to the underdrain collection pond prior to cover placement on the TSF. This trench is not shown on Drawings C-011 and C-012. Please address.
	NMCC Response		*Drawings C-011 and C-012 of the Reclamation Plan (Appendix E) have been revised to show the HDPE-lined runoff containment berm. Typical details of the HDPE-lined runoff containment berm have also been added to Drawing C-021 to provide more clarity.*

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MMD Comment 13	Appendix E, Section 2.4 and Table E1	Open Pit Reclamation	The following comments related to Section 2.4 and Table El regarding the open pit shall be addressed: a. Description/justification as to how the pit walls will meet the wildlife habitat PMLU and reclamation to a self-sustaining ecosystem to meet the requirements of 19.10.6.603.C.(2) and 19.10.6.603.G; b. Description/justification as to how the pit walls meet the site stabilization and configuration requirements of §19.10.6.603.D NMAC including a description of how stabilization will be accomplished without backfilling or partial backfilling; c. Description/justification as to how adverse effects to pit water quality will be minimized in order to meet the requirements of §19.10.6.603.C(4) NMAC, which addresses hydrologic balance.
	NMCC Response		*NMCC believes that Appendix E is not the appropriate location to address MMD's request. Instead, NMCC has revised Sections 4.3.2, Wildlife Protection, 4.3.4, Hydrologic Balance, 4.4 Site Stabilization and Configuration, and 4.7, Revegetation, of the Updated MORP to address the issues raised by MMD.* *In response to comment a:, Section 19.10.6.603.C.(2) requires that measures be taken to* ***minimize adverse impacts*** *(emphasis added) on wildlife and important habitat, based on site-specific characteristics. NMCC considers that the pit walls represent a steep-canyon ecosystem environment similar to those that currently exist in the Copper Flat area. These steep-canyon ecosystems sustain native flora and fauna populations. The pit walls will provide for a similar ecosystem which is consistent with the primary goal of closeout and the proposed post-mine land use of wildlife habitat. Section 19.10.6.603.G is a revegetation performance and reclamation standard required to obtain release of financial assurance on revegetated lands. The Copper Flat reclamation plan does not propose revegetation of pit walls as NMCC anticipates that the pit wall will self-vegetate with native flora over time, providing a self-sustaining ecosystem appropriate for the life zone of the surrounding area, i.e., steep-canyon wildlife habitat. Additionally, Federal and State safety rules and regulations prohibit access to benches left in the pit walls due to restrictions regardeing working under rock highwalls and ingress/egress limitations.* *In response to comment b., Section 19.10.6.603.D requires that the permit area be* ***stabilized to the extent practicable, to minimize future impact*** *to the environment and protect air and*

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	NMCC Response (Cont.)		*water resources. With respect to the pit walls, the final slopes and drainage configuration will be such that they will be left in place and surface water runoff from the pit walls will be routed to the bottom of the pit via a channel (HC) that will be constructed along the haul road as shown in Drawing C-014. The pit walls will, in this manner, be compatible with the approved wildlife habitat post-mining land use, in conformance with 19.10.603.D.(1). It will not be necessary to backfill or partially backfill the open pit as NMCC's reclamation objectives will be otherwise accomplished through other mitigation measures as described in the Updated MORP and Reclamation Plan, in conformance with 19.10.6.603.D.(2). With respect to the requirements of 19.10.6.603.D.(3), as indicated above, the pit walls will be left in place, not reconstructed. As such, 19.10.6.603.D.(3) does not apply to the pit walls. Nonetheless, mine safety is of the utmost importance and pit highwalls represent a significant safety risk that must be minimized to the extent possible. Mass movement of the pit walls will be minimized by appropriate design, construction and operation of the pit. Appropriate pit design is of paramount importance in order to ensure the safety of mine personnel and minimize the economic impacts of pit wall failure. NMCC has conducted significant feasibility level geotechnical analysis for the design of the pit. The results of the geotechnical analysis was utilized in designing the open pit described in Section 2.1.2 of the Updated MORP and depicted in figures 2-3 through 2-11. Geotechnical safety factors appropriate to conditions projected for the Copper Flat Pit were incorporated into the geotechnical analysis resulting in pit slope angles designed to be generally 40-50 degrees. Pit wall designs will be reviewed again as part of detailed planning. During operations, blasting will be designed and controlled to maintain pit wall stability. A comprehensive pit slope monitoring program will be routinely used in order to maintain safe operating conditions, provide advance notice of potential instabilities so that mine plans can be modified to minimize hazards and provide additional real-time geotechnical information to assist in further analyzing slope stability and modifying slope designs as needed.* *Section 19.10.6.603.D.(4) requires that measures be taken to* ***reduce, to the extent practicable****, the formation of acid and other toxic drainage that may otherwise occur following closure to prevent releases that cause federal or state standards to be exceeded. The language of this section speaks to reduction of the potential for the pit wall to form and release acid or other toxic drainage and preventing their release so that they do not cause federal or state standards*

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	NMCC Response (Cont.)		*to be exceeded. The pit wall will not be a significant source of acid or other toxic drainage as demonstrated by the SRK geochemical studies (SRK 2013). As determined by SRK and described in their report, the majority of the materials tested typically exhibited either non-acid forming characteristics or a low potential for acid generation based on NAG and ABA test work results. Much of the material determined to be potentially acid generating (PAG) will be removed by mining. Pit lake chemistry modeling has predicted that waters will be moderately alkaline, approximately 8 pH, thus confirming that the ;\pit wall is not anticipated to be a source of acid and other toxic drainage that may be released and cause federal or state standards to be exceeded. In addition, the open pit has been confirmed to be a hydrologic sink (see Section 4.1.1 of the Updated MORP), thus further minimizing future impacts to the environment and protecting water resources. All surface drainage from the pit wall will be captured in the pit lake that will form at the bottom of the pit after operations cease, which will remain in the pit lake and not released to another surface drainage. Finally, as noted above, non-point source surface releases from the pit walls will be captured in the pit lake, in conformance with 19.10.6.603.D.(5). Therefore, no adverse effects to pit water quality or exceedance of federal or state standards are anticipated.* *In response to comment c., NMCC believes that there will be no adverse effects to pit water quality. The water quality data provided by NMCC in its Baseline Data Report (See Appendix 8-E, Intera 2012) for the existing pit lake, together with additional water quality data provided to MMD and NMED since development of the BDR, will be utilized to assist in defining and establishing baseline water quality conditions for the existing pit lake. Section 19.10.6.603.C.4 requires, in part, that reclamation result in a hydrologic balance* ***similar to pre-mining conditions*** *unless non-mining impacts have substantially changed the hydrologic balance. NMCC's Baseline Data Report and subsequent hydrologic reports submitted to the MMD and other agencies (see JSAI 2014c) have confirmed that the open pit is currently a hydrologic sink and will continue to be after operations and reclamation. The water that reports to the pit lake after the mine ceases to operate and the site is reclaimed will be the same source of water that has formed the existing pit lake, i.e., ground water inflow and precipitation runoff. Water quality of the pit lake formed after mining ceases is anticipated to be better for the foreseeable future because the ore body will have been removed by mining and the ore is the source of many of the constituents identified in the baseline data. Ground water will no longer be moving*

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	NMCC Response (Cont.)		*through higher mineral content rock. Instead, it will move through less mineralized rock into the pit. In the long term, future pit lake water quality may approach that of the existing pit lake as a result of evapo-concentration, but it will always be similar, and thus, in compliance with 19.10.6.603.C.4.*
MMD Comment 14	Appendix E, Section 2.5 & Drawing C-016	Plant Area Grading Plan	Section 2.5 describes reclamation of the plant area, however no overall grading plan for this large area is provided in Drawing C-016. Drawing C-016 appears to show many steep surfaces and other topographic irregularities across the former plant area (e.g. the slope east of the process water reservoir, the slope east of impacted stormwater impoundment A, the slope north and west of the crushed ore stockpile, slopes near the laydown yard, etc.). Please provide a comprehensive grading and reclamation plan for the plant area.
	NMCC Response		*A revised grading plan has been developed for the Plant Area and is presented on revised Drawing C-016. The Reclamation Plan has also been revised to reflect this addition. The existing hill south of the concentrator in the southern portion of the Plant Area will be left in place as a natural geomorphic feature. The top of the hill is currently covered with native vegetation and supports native wildlife in the area (birds, reptiles, and small mammals). The remaining slopes within the Plant Area will be graded to maximum 3:1 slope, and the top surfaces will be graded to a slope of 1% or greater to re-contour the slope east of the process water reservoir, the slope east of the impacted storm water impoundment, the slope north and west of the crushed ore stockpile and the slopes near the laydown yard..*
MMD Comment 15	Appendix E, Plant Site Reclamation – General	Grading & Reclamation of Grayback Arroyo	Proposed reclamation of the plant site does not include pull back and additional grading of the eastern, southern and southwestern slopes away from Grayback arroyo to achieve a 3:1 slope. These slopes are currently angle of repose and no reclamation is proposed along these edges of the plant site. Please address.
	NMCC Response		*The revised grading plan developed for the Plant Area and presented on revised Drawing C-016 includes regrading of all of the slopes along the perimeter of the Plant Area. The grading plan includes both pull back sections and pushdown sections along the perimeter of the Plant Area. The perimeter slopes will be graded to a slope of 3.0H:1V and covered with 36 inches of growth media. All of this grading is designed to avoid impact on Grayback Arroyo. The Reclamation Plan has been revised to reflect this addition.*

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MMD Comment 16	Appendix E, Figure C-015	Plant Reclamation	Figure C-015 shows an incision into the hillside south of the concentrator, however Figure C-016 does not show this incision at reclamation. Please correct.
	NMCC Response		*The incision in the hillside south of the concentrator is an artifact of an earlier design of the Plant Area. The incision was inadvertently included in the final buildout drawing for the Plant area (Drawing C-015), so no additional excavation will be needed. Drawing C-015 has been revised to show the hillslope without the incision south of the concentrator area.*
MMD Comment 17	Appendix E, General	Land Bridge Reclamation	No reclamation of the angle of repose, -50 foot high land bridge used as the entrance access road (Gold Dust Road; the upstream Grayback culvert) is proposed. Similarly, no reclamation is proposed for the -50 foot high land bridge (the downstream Grayback culvert) and -1,000 foot long cut that facilitates the tailings pipeline. MMD recognizes that there is a wetland in this v-shaped area between the land bridges, however §19.10.6.603.C(8) NMAC states "adverse effects to riparian and wetland areas shall be mitigated during reclamation unless the mitigation conflicts with the approved post-mining land use." Please provide a reclamation plan for these land bridges including removal of the culverts.
	NMCC Response		*The "wetland" referred to by MMD in this comment is not located where MMD describes it. It is actually located east of the easternmost land bridge (see Section 4.4.1.9 and Figure 4-12 of the BDR and Map 3 of 4, Detailed Riparian Vegetation Mapping Permit Area, of Appendix 4-D of the BDR). The revised grading plan developed for the Plant Area and presented on revised Drawing C-016 includes removal of the land bridge used as the entrance access road (Gold Dust Road) and the land bridge at the downstream Grayback culvert. The culverts at each location will also be removed as part of this process. The remaining angle of repose slopes following removal of the land bridges will be graded to a slope of 3.0H:1V and covered with 36 inches of growth media. A revised grading plan has also been developed for the approximate 1,000-foot long pipeline cut that facilitates the tailings pipeline. The revised grading plan is presented in revised Drawing C-012 and includes partial backfilling of the pipeline cut to allow for the construction of conveyance channel DCS-5 that will direct stormwater flows from the covered top surface and the northwest slopes of the TSF to Grayback Wash. The pipeline cut will be backfilled with clean fill in lifts, and each lift will be compacted. The remaining exposed slopes of the pipeline cut will be graded to a slope of 3.0H:1V and covered with 36 inches of growth media. The grading plan is designed so that there is no impact on Grayback Arroyo.*

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	NMCC Response (Cont.)		*Section 2.5 of the Reclamation Plan and Section 4.3.8 of the Updated MORP have been revised to reflect this information.*
MMD Comment 18	Appendix E, General	Plant Site Entrance Road Reclamation	The entrance road (Gold Dust Road) to the plant site contains several areas of waste rock fill that are not addressed in the reclamation plan (e.g. the stretch of access road due north of the proposed surge pond/cyclone plant.) The outslopes of these areas should be regraded to 3:1, covered with topdressing and revegetated. Additionally, the access road width should be reduced during reclamation. Please address.
	NMCC Response		*The reclamation plan has been revised to include reclamation of all haul roads and access roads containing waste rock fill. The outslopes of the waste rock fill areas will be graded to a slope of 3.0H:1V and covered with 36 inches of growth media. Subject to input from the Sierra County government with regard to public road access, all closure and post-closure access roads will be reduced to a width suitable for single vehicle traffic. The width of all existing roads utilized for closure and post-closure access will be reduced to accommodate single vehicle traffic and the excess width will be reclaimed by ripping and revegetating thems. The reclaimed areas will be covered with 6-inches of suitable cover material where unsuitable growth media exists.*
MMD Comment 19	Appendix E, Section 2.7	Haul Road layout and improvements	Section 2.7 does not describe or provide an approximate layout of any roads that may be constructed or improved in order to haul cover to the growth media stockpiles, in particular GMSP-2 located across Grayback arroyo. Please provide an approximate haul route and any road improvements that are anticipated in order to construct the growth media stockpiles as well as a reclamation plan for these roads.
	NMCC Response		*Haul roads and vehicle access to and from the growth media stockpiles will be limited to existing roads, contained within an existing disturbance footprint, or contained within a planned disturbance footprint. The locations of GMSP-1 and GMSP-3, as shown on Drawings C-009 and C-013, are coincident with the locations of the TSP and WRSP-2 and WRSP-3. The location of GMSP-2, as shown on Drawing C-011, and noted by MMD, is across Grayback Arroyo to the north of the TSF. In the case of GMSP-1 and 3, the haul routes will be within the location excavated within the TSF and WRSP-2 and WRSP-3 such that there will be little or no disturbance caused by a haul road. In the case of GMSP-2, Drawing C-012 shows the route to be taken from the TSF northwest along an existing road, across Grayback Arroyo, then east to*

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	NMCC Response (Cont.)		*GMSP-2. The roads not designated as needed for post reclamation monitoring will be reclaimed by ripping and revegetating the surface areas and covered with 6-inches of suitable cover material where unsuitable growth media exists as described in NMCC response to comment No. 8, above.*
MMD Comment 20	Appendix E, Section 2.8	Mill Sites Reclamation	Section 2.8 in the last paragraph states that "surface disturbance at the five acre mill sites will be reclaimed." The mining operation plan does not describe any disturbance to the five acre mill site claims. Please clarify.
	NMCC Response		*Section 2.2.12 of the Updated MORP, Other Facilities and Structures, at pages 2-53 and 2-54 describes the disturbance to seven of the nine 5-acre mill site claims as consisting of those associated with previous operations and maintenance of the water wells and attendant pipeline and access roads. NMCC will continue to utilize these facilities during operations and these facilities will remain at closure as discussed in Section 2.8.1, fifth bullet, of the Reclamation Plan. The fifth bullet also indicates that no additional disturbance of the areas where the production wells are located is anticipated to occur except for occasional minor disturbance that may occur during inspection and maintenance. Such disturbances will be repaired and reclaimed as needed during operation. It also indicates that surface structures and equipment will be removed and that the well areas will, otherwise be left as they currently exist. NMCC does not anticipate creating any disturbance on the remaining two mill-site locations. However ,NMCC has indicated that it may utilize the other two mill sites in the future for other well-related infrastructure uses such as staging and storage areas for booster tanks, pumps and electrical equipment, maintenance and monitoring. (See, also, NMCC's response to MMD Comment No. 1, above).*
MMD Comment 21	Appendix E, Section 2.8.2	Haul and Access Road Reclamation	Section 2.8.2 describes the reclamation process for haul roads and access roads as ripping the surface. However, as described in other comments in this letter, the road widths should be reduced, outslopes should be regraded, and a minimum of 18" of growth media applied prior to revegetation. Please revise the reclamation plan accordingly.
	NMCC Response		*NMCC has revised the Reclamation Plan to reflect reducing the width of access and haul roads that are left to a width appropriate for single vehicle access. With respect to MMD's comment to a minimum of 18" of growth media applied prior to revegetation, please refer to NMCC's response to MMD's comment No. 8.*

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MMD Comment 22	Appendix E, Table E6	Growth media Thickness	Section 3.1, Table E6 shows the surface impoundments requiring 25,168 cy of growth media. However, MMD calculates this volume to be 29,201 cy (based on the acreage and 6" of growth media as cover). As discussed previously in comment #8, MMD requires a minimum of 18" of growth media at reclamation. Please address.
	NMCC Response		*Table E4 has been updated to include the correct surface area of 22.3 acres for the TSF Evaporation Pond (See NMCC Response to Comment No. 24). Additionally, Table E6 has been updated with the correct surface area for the TSF Evaporation Pond, and an explanation that the TSF Underdrain Collection Pond gets incorporated into the TSF Evaporation Pond and is included in the 22.3 acre total TSF Evaporation Pond area.*
MMD Comment 23	Appendix E, Table E1	Impoundment Clean Fill	The reclamation plan for surface impoundments (Table El) states that the HDPE liners will be ripped, folded over and buried in-place, and impoundments backfilled with clean fill. Will the clean backfill be material excavated during impoundment construction? If so, where will this clean backfill be stockpiled until closure? If this clean fill is to be placed on the growth media stockpile, does Table E6 account for the volume of growth media that will be required for these facilities at closure? For example, backfilling of Impacted Stormwater Impoundment C would require -52,000 cy of growth media/backfill. Please clarify.
	NMCC Response		*Materials excavated during the construction of the surface impoundments will be used to build up the pond embankments and surrounding operational areas. Excess material will be used first for construction fill, including filling and re-grading the area immediately south and east of EWRSP-1, as described in NMCC's response to comments No. 5 and No. 10. Additional excess material will be stored in the GMSPs, if suitable, or taken to one of the WRSPs, if unsuitable. Sufficient space to add excess material from the impoundments exists at both the GMSPs and WRSPs. At reclamation, the majority of the fill needed to reclaim the impoundments will come from re-grading the embankments and the local fill. The balance of the fill requirements and the cover will be sourced from the GMSPs. Revised Table E6 includes material needed to fill and cover all impoundments. Section 2.6.2 of the Reclamation Plan has been revised to provide clarification on the reclamation of the surface impoundments.*
MMD Comment 24	Appendix E, Table E6	Evaporation Pond	Does "surface impoundments" in Table E6 include the evaporation pond?

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	NMCC Response		*The "surface impoundments" designation in Table E6 does include the TSF Evaporation Pond. Acreage figures in Tables E4 and E6 were reviewed and reconciled with reclamation designs. The surface area for the TSF evaporation pond shown on Table E4 was corrected to 22.3 acres. The 22.3 acres of the evaporation pond includes the TSF underdrain collection pond area tha becomes part of the TSF Evaporation Pond. As a result of our review and corrections the surface impoundment entry in Table E6 has been revised to 31.3 acres.*
MMD Comment 25	Appendix E, Section 3.2.2	Reclamation seed density	Section 3.2.2, seed mixtures, proposes 4.73 PLS drillseeded as "interim" for growth media stockpile stabilization versus 9.18 PLS drillseeded for "final" reclamation. Please provide a justification for the reduced seed density for interim stabilization.
	NMCC Response		*The objectives of the interim and final seed mixes are different. The interim seed mix will be used to quickly establish plant cover on the growth media stockpiles to minimize soil losses due to wind and water erosion. This will be accomplished using a seed mix comprised of selected grasses and forbs that are typically available from seed vendors. In contrast, the final seed mix is intended to establish a plant community that will meet the revegetation performance standards including shrub density and plant diversity. Thus, the final seed mix will have a higher PLS rate, particularly for shrub species, but also other grasses and forbs, to increase overall plant diversity. Seeding rates are a function of both the number of pure live seeds (PLS) per pound for a given species and the target density of the planting (seeds per square foot). While there are differences in seed density between the interim and final seed mixes, the increase seeding rate (PLS/acre) is partly related to the final mix having higher rates of certain species with larger (heavier) seed such as four-wing saltbush, winterfat and indian ricegrass.*
MMD Comment 26	Appendix E, Section 5.5.3	Growth Media Volume	Section 5.5.3 states that the growth media stockpiles need to contain 3.92 million cy, but are designed to contain 4.5 million cy (thereby there is an estimated 584,000 cy of excess growth media). However, Table E6 cites that 4.2 million cy of growth media is needed, Table E5 cites that 4.5 million cy will be stored, and page 40 states that 80,000 cy of topdressing will be stored in windrows around the plant area. This appears to be an excess of 380,000 cy of growth media, not 584,000 cy. Please clarify. Additionally, please provide a map showing the proposed location of the cover material windrows.

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	NMCC Response		*The required volume of reclamation cover material that was identified in Tables E6 (4.2 million cy),is more simply broken down as follows;* *Stored in GMSPs* — *3,920,000 cy* *Hauled as excavated in EWRSP 1, 2B & 4* — *204.000 cy* *Stored in windrows at plant area* — *80,000 cy* *Total* — *4,204,000 cy* *Table E5 provides the design storage volume of the GMSP's of 4.5 million cy of material. Therefore, the stockpiles have 580,000 cy of unused design capacity.* *With respect to the 80,000 cy of material identified to be stored in windrows at the process area on page 40 of the Reclamation Plan, upon further consideration, NMCC no longer proposes to store any material at the plant site. However, there will be a nominal volume of material stored in windrows (approximately 20,000 cy) along horizontal construction of ancillary facilities such as buried pipelines, roads, etc., as shown in revised Table E6 of the Reclamation Plan. The exact location of these windrows cannot be identified at this time as it will be determined in the field during construction as to whether or not excavated materials at Hz construction locations can be salvaged. The Reclamation Plan has been revised to reflect new information to further identify the estimated cover requirements. Table E6 and Sections 2.7, 3.0, 3.1 and 5.5 of the Reclamation Plan have been revised to provide updated information on the volume of growth media materials that will be needed.*

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MMD Comment 27	Appendix E, Section 5.5.2	Material Handling of Suitable Soils	The Supplemental Soils Investigation performed by Golder Associates (2013) states in Section 3.4 that "nearly 68% of the test pits meet the soil suitability criteria for outslope cover and 87% meet the specifications for top surface cover." Further, this report states that development of borrow [salvage] areas will "require oversight by a qualified soil scientist and some selective handing to ensure suitable borrow materials area stockpiled" and that "oversight and coordination would be required to optimize the handing of suitable cover materials." In contrast, Section 5.5.2 of Appendix E states that "NMCC will bulk salvage suitable soils and near-surface alluvial materials and that the deep coarse-textured alluvial materials will be mixed with the more fine-textured surficial soils." The plan to bulk salvage materials appears to contradict the necessity to selectively handle materials during salvage. The reclamation plan should commit to selective handing of topdressing with oversight by a qualified soil scientist during salvage and a Reclamation Materials Handling Plan should be developed for MMD review. Alternatively, NMCC should plan to bulk salvage and stockpile up to approximately 35% more growth media (approximately 6.1 million cy, not 4.5 million cy) since approximately 13-32% of this material will likely be deemed unsuitable for reclamation based on Golder (2013). This revised volume does not take into account the placement of 18" of growth media where 6" has been proposed. Please address.
	NMCC Response		*NMCC believes that Section 5.5.2 of Appendix E is consistent with the description contained in the Golder Supplemental Soils Investigation. The use of "bulk salvage" methods to excavate and recover suitable materials for reclamation is not contrary to the statements made in Golder (2013). NMCC will employ bulk excavation methods to recover material for reclamation. However, this does not preclude the use of selective methods to identify and separate suitable and unsuitable materials when excavating reclamation material. Methods used for recovering suitable reclamation material will be similar to the methods that will be used in the mine to identify and separate ore and waste in the pit. NMCC will engage a qualified soil scientist to guide identification, mapping, and handling of suitable soil horizons in the field (similar to ore control in the pit as discussed in Section 3.3.2 of the Updated MORP). NMCC commits to preparing a Reclamation Materials Handling Plan as a condition in the approved mine permit. Therefore, there is no need to excavate and store additional material to account for the inclusion of unsuitable material in the stockpile. The selection process will be completed at the point of excavation, before the material is taken to stockpile or taken for use in contemporaneous reclamation. Unsuitable material will be identified and sorted out as*

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	NMCC Response (Cont.)		*discussed above. Material that is not suitable for reclamation cover will be left behind at the TSF and incorporated into the TSF grading plan.* *With respect to accounting for 18 inches of cover material where 6 inches were proposed, discussions with MMD have concluded that ripping to 12-inches with 6-inches of growth media cover provides 18-inches of growth media. Also, please refer to NMCC Response to Comment No. 8.*
MMD Comment 28	Appendix E, General	Test Plot Work Plan	NMCC will be required to implement a test plot program of the growth media proposed for use at reclamation. A condition in the future MMD permit will be for NMCC to submit a Test Plot Study Work Plan in coordination and consultation with MMD. The key objectives of the study will be to evaluate erosion resistance and the ability to adequately establish vegetation. NMCC will be required to perform periodic monitoring of any test plots constructed. In the work plan, a reference area(s) should be proposed as a comparison to the test plots.
	NMCC Response		*NMCC is aware that a test-plot program will be required. We will work with MMD to develop a Test-Plot Study Work Plan. We anticipate utilizing the reclaimed existing waste rock stockpile areas in the program as they will be reclaimed in the early years of operations. We look forward to developing the plan in coordination with MMD.*
MMD Comment 29	Appendix E, Drawing C006	EWRSP-4	The north edge of EWRSP-4 in Drawing C-006 does not appear to tie into any of the existing contours. Please clarify.
	NMCC Response		*Drawing C-006 has been revised to show the tie-in between the regrade and existing contours at the north edge of EWRSP-4.*
MMD Comment 30	Appendix E, Figure C-010	Storm Water Pond C	In Figure C-010, Impacted Stormwater Pond C is not shown at reclamation. This pond should have a grading plan approximated in this figure. Please revise Figure C-010 accordingly.
	NMCC Response		*Drawing C-010 has been revised to show the footprint of reclaimed Impacted Stormwater Impoundment C and the grading plan for the area.*

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MMD Comment 31	Appendix E, Attachment 2	Evaporation Pond	The following comments relate to the proposed evaporation pond: a. Figure C-019, cross section L, appears to show quite a bit of excavation required for the construction of the evaporation pond. Please describe where the stockpile of excess material will be created; b. Figure C-012 shows that the east edge of the proposed evaporation pond is in a corner immediately adjacent to the proposed east and south mine permit boundary. Please describe how construction of the evaporation pond will be accomplished within the permit boundary; c. The closure plan does not provide a figure showing future grading and reclamation of the evaporation pond. Also, a description of what happens to proposed toe channel TC-8 and a description of where water coming down TC-8 will be routed at reclamation is required. Please address.
	NMCC Response		*In response to comment a.; Excess material remaining following construction of TSF Evaporation Pond will be utilized for reclamation of the TSF that are ready for cover at the time of the pond construction and/or direct hauled to other areas requiring fill and cover. Excess material from the evaporation pond construction that cannot be used at the time of excavation may be taken to one of the growth media stock piles, if the material is suitable, or to one of the waste rock stockpile areas, if unsuitable. Sufficient space to add excess material from the evaporation pond construction exists at both the GMSPs and WRSPs. Revised Table E6 in the Reclamation Plan includes material needed to fill and cover all impoundments. Section 2.6.2 of the Reclamation Plan has been revised to provide clarification on the reclamation of the evaporation pond.* *In response to comment b.; The mine permit area will be fenced and all construction equipment and construction disturbances associated with the TSF Evaporation Pond will be restricted to within the fenced mine permit area. Construction projects are routinely completed successfully with space constraints and NMCC will establish permit boundaries in the field and require contractors to respect the established boundaries.* *In response to comment c.; A new drawing (C-012A) has been developed showing the regrade and drainage plan for the TSF Evaporation Pond. As shown on Drawing C-012A, toe channel TC-8 will remain in place and will continue to route clean surface water runoff off of the TSF to the tributary drainage that ultimately drains to Grayback Arroyo. The Evaporation Pond liner will be cut and disposed of at the in the void created by the underdrain collection pond (which*

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	NMCC Response (Cont.)		*was incorporated into the Evaporation Pond) and covered with fill material graded from the Evaporation Pond area. The pond embankment will be collapsed, graded and re-contoured to allow the Evaporation Pond area to drain to a tributary drainage to Grayback Arroyo as shown on Drawing C-12A. The entire area will be ripped and seeded. Section 2.6.2 of the Reclamation Plan has been revised to provide clarification on the reclamation of the TSF Evaporation Pond.*
MMD Comment 32	Appendix E, General	Rip-Rap Source	Numerous figures depict the use of rip-rap for slope armoring, bench channels, downslope channels, etc. What is the proposed source of the rip-rap? Will rip-rap be sourced from the growth media stockpiles, and, if so, is there sufficient excess stockpiled volume to account for the volume of rip-rap needed and still have enough coarse material for outslope reclamation? Please address.
	NMCC Response		*Rip-Rap required for reclamation of Copper Flat may be sourced from three locations within the permit area boundary, as may be needed and determined by geochemical and engineering suitability. The sources of rip-rap may be that exhumed from within the TSF area during salvage operations of the growth media materials, rock that currently exists at EWRSP-2 and B, and rip-rap that may be sourced from a quarry developed in the andesite located at WRSP-3. if it is determined that sufficient materials cannot be salvaged from the TSF excavation and the EWRPs, a small quarry will be developed at the WRSP-3 location prior to constructing WRSP-3 to produce needed Rip-Rap. Developedrfip-rap material will be stockpiled at designated locations within the WRSP areas for temporary storage until needed. Any material not utilized as rip-rap will simply remain in the WRSR in which it is located and be reclaimed along with the rest of the deposited mine waste rock.*
MMD Comment 33	Appendix E, General	Downslope Channel protection	As discussed in the informal conversation between NMCC, NMED and MMD on February 15, 2017, NMCC may want to consider the use of articulating concrete block, or similar pre-fabricated materials, for downslope channels or other potentially high-flow channels.
	NMCC Response		*NMCC has included the utilization of articulating concrete block (ACB) in the design of the downslope channels as indicated in Drawing C-21, Detail 8 and accompanying Channel Schedule contained in the Reclamation and Closure Plan (Appendix E). As detailed in the Channel Schedule table, ACB is specified for all of the downslope channels included in the reclamation design as well as the haul road channel running to the base of the open pit.*

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MMD Forestry Division Comment 1	General	State Listed Endangered Plants	Thank you for giving me the opportunity to review and comment on the updated mining operation and reclamation plan for the Copper Flat Mine in Sierra County, NM (Permit Tracking No. SI027RN). I do not anticipate any impacts to state listed endangered plants from the updated MORP. I reviewed the updated closeout plan and have no further comments.
	NMCC Response		*NMCC appreciates the MMD Forestry Division's review and contribution to the process.*
NMED SWQB Comment 1	General	Pit Lake Water Quality Standards	In 2014, the US Army Corps of Engineers approved a jurisdictional determination for the 230-acre watershed surrounding the pit lake at Copper Flat, excluding it from regulatory action under Section 404 of the Clean Water Act. The status of the pit lake as a water-of-the-state, however, is still under review at this time, pending a survey to determine whether the lake at mine closure will remain entirely on private land. Until a formal decision is made, State Water Quality Standards for unclassified perennial waters are presumed to be relevant (NMAC 20.6.4.99). Other ephemeral drainages within and affected by the mine are also subject to water quality protections under both Federal and State regulations.
	NMCC Response		*NMCC has performed a cadastral survey of the property and provided the results to the Bureau of Land Management and has filed the survey plat in Sierra County. Upon BLM's concurrence with the survey results, NMCC will inform the Surface Water Quality Bureau and provide the evidence required that will allow the SWQB to determine that the pit lake will be located such that it will not be a water-of-the-state subject to the surface water quality standards of 20.6.4.99 NMAC. NMCC recognizes that there are other performance standards aside from SWQB surface water standard that apply in protecting ephemeral drainages within and affected by the mine are also subject to protections under federal and state regulations and will conduct its operations in conformance with them.*

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NMED SWQB Comment 2	General	SWPP	The SWQB is concerned that mine-impacted stormwater may discharge into Grayback Arroyo. The existence of a TDS/sulfate plume downgradient of the mine suggests that contaminated stormwater has, in the past, been discharged into Grayback Arroyo. A new Stormwater Pollution Prevention Plan (SWPP) and Multi-Sector General Permit will be required by NMCC which should address stormwater collection to prevent point-source discharge of contaminated stormwater. The SWQB will be reviewing the SWPPP and stormwater diversion structures for adequacy and soundness to prevent discharges, in addition to monitoring water quality data collected in Grayback Arroyo at the four sampling stations detailed in the MORP.
	NMCC Response		*The Copper Flat Mine is designed to be a zero discharge facility. As described in Section 2.1 of the Reclamation Plan (Appendix E), the existing waste rock stockpiles from previous operations at the site which are of concern to the NMED, will be reclaimed in conformance with NMCC's Reclamation and Closure plans. All impacted storm water runoff at the Copper Flat project will be captured in impoundments as described in the Updated MORP and the Discharge Plan application submitted to the NMED Groundwater Bureau. NMCC will prepare and submit a SWPP for the project after approval of the MORP and DP applications well in advance of commencing site preparation and construction. NMCC acknowledges that the SWQB will review the SWPP and monitor water quality data collected per the MORP. NMCC will also obtain an NPDES multi-sector general permit as the NMED Copper Rules require that certain impoundments be designed with an overflow feature capable of safely passing runoff from a 100-year, 24-hour precipitation event. As such, an NPDES permit will be required even though Copper Flat is designed as a zero discharge facility.*

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NMED GWQB Comment 1	General	MORP Submittal to NMED as part of DP Application	The MORP was submitted to NMED on October 14, 2016 as a component of the Ground Water Quality Bureau Discharge Permit Application (Application) for Discharge Permit 1840 (DP-1840). Technical review of the Application pursuant to the Water Quality Act (WQA) and the Water Quality Control Commission (WQCC) Regulations, including the Copper Mine Rule (20.6.7 NMAC), is currently in progress. Pursuant to Subsection G of 20.6.7.10 NMAC, the technical completeness response deadline is February 14, 2017. NMED may have additional comments based on technical review of the Application and associated operational, monitoring and closure plans. As such, any additional comments will be submitted under separate letterhead directly to NMCC Copper Flats Mine with copy to MMD as these reports are critical to development of the draft Ground Water Discharge Permit. NMED will coordinate response to these documents with MMD prior to issuance of a comment letter to NMCC Copper Flats Mine.
	NMCC Response		*NMED's comments to NMCC's Updated MORP (which was submitted to NMED in October 2016) were provided to MMD on January 6, 2017. Since that time, on February 12, 2017 NMED requested additional information as part of its technical review of NMCC Discharge Plan application which included comments to NMCC's Updated MORP. NMCC submitted its response to NMED's request on April 14, 2017 and that response is currently undergoing NMED's review. NMCC appreciates the coordination efforts between NMED and MMD on the matter.*
NMED GWQB Comment 2			NMED finds that environmental standards will be met if mining operations and reclamation are carried out as described in the pending New Mexico Mining Act permit, pending DP-1840, the Copper Mine Rule, and if the above comments are addressed.
	NMCC Response		*NMCC appreciates the cooperation and effort provided by NMED and MMD as we navigate our way through the permitting process.*
NMED AQB Comment 1	General	Air Quality	Assuming that the facility stays in compliance with their air quality permit, the AQB has no objection to the proposed Updated Mining Operation and Reclamation Plan
	NMCC Response		*NMCC appreciates the NMED's Air Quality Bureau's review and contribution to the process.*

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NMOSE Comment 1	General	Water Rights Availability	Testimony in the LRG-4652 water rights trial concluded in 2016, but court verdict has not yet been rendered. Availability of adequate water rights to conduct the proposed mining activities is necessary, and acquisition of rights will be required if sufficient rights are not deemed already in place. The NMOSE has not yet assessed hydrologic effects related to proposed project water use. The (potential) transfer-in of an undetermined amount of new water rights would result in an (as-yet undetermined) amount of depletions on Rio Grande flow and potential effects to the viability of proximal wells of other ownership. Depletions to flow in the Rio Grande would require offset in a manner acceptable to the NMOSE, and proximal well viability concerns may need addressing.
	NMCC Response		*NMCC acknowledges the OSE's role in resolving the issue of water rights and awaits the court's decision in the near future. Water availability is crucial to successful operation of the proposed mine and NMCC worked diligently to ensure that it has sufficient water and attendant water rights, including addressing the concerns of the OSE.*
NMOSE Comment 2	General	Water Rights Transfer	The rights transfer and assessment process would begin with application to the NMOSE through our Las Cruces office. Assessment of effects may benefit from, but not necessarily be conducted using project consultant JSAI groundwater flow model, referenced on page 4-2 of the submitted Updated Mining Operation and Reclamation Plan for its Copper Flat Mine (October 2016).
	NMCC Response		*NMCC does not foresee a need to initiate a water rights transfer request as the water to be utilized by NMCC in operation of the Copper Flat mine will be pumped (diverted) from the same wells for which water rights were granted, i.e., the production well field, and the location and purpose of use of the water will be the at the same location for which water rights were granted, i.e., the Copper Flat mine.*

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NMOSE Comment 3	Appendix A, B and D	TSF Design Reports	Appendix A - Feasibility Level Design, 30,000 TPD Tailings Storage Facility (November 30, 2015*) page 2 notes "The new TSF design will comply with the design and dam-safety guidelines and regulations of the New Mexico Office of the State Engineer (OSE) Dam Safety Bureau (NMDSB, 2010)." Also, Appendix 8 — Copper Flat Project Impoundment Design Report (signed 12/7/2015) page 3 notes "All impoundments for the Copper Flat Project will be considered "new" impoundments as defined by NMAC 20.6.7.17(D)." These documents, and as necessary, Appendix D — Copper Flat Project Site Diversion Analysis Report, relate to the design of project tailings storage facility and diversion (re-routing) plans for existing topographic drainages in the vicinity of project facilities. As new impoundments, the structures are subject to submittal of required NMOSE Dam Safety Bureau permit application and review. I understand project representatives have conferred with NMDSB personnel regarding the required submittal and that analysis and permitting will occur via that process.
	NMCC Response		*NMCC will prepare the Dam Safety Permit application documents that will need to be submitted to the NMOSE.*
NMOSE Comment 4	Appendix A	Revision Reference	Note that Updated Mining Operation and Reclamation Plan for its Copper Flat Mine (October 2016) references a June 2016 Appendix A revision on unnumbered title page for Appendix A following Section 5.0 —References.
	NMCC Response		*Appendix A, contained with the Updated MORP is the TSF Design Document as revised in June 2016. As explained in the insert sheet that follows the unnumbered title page for Appendix A is a separate document titled, "Feasibility Level Design, 30.000 TPD Tailings Storage Facility and Tailings Distribution and Water Reclaim System. This document was originally produced and submitted to the NMED in October 2015 and subsequently revised in June 2016 in response to agency comments.*

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NMOSE Comment 5	Appendix E	Well Plugging Requirements	Appendix E - Mine Reclamation and Closure Plan (October 7, 2016) addresses final disposition of various physical components of the project, and either that "installation, operation, and maintenance of groundwater monitoring wells that may be required for post-closure monitoring in accordance with 20.6.7.35.6 NMAC", or that "groundwater monitoring wells and surface water samplers that may be required for post-closure monitoring in accordance with 20.6.7.35.6 NMAC" will occur relative to the closure of several of the project components. It is reasonable to assume a suite of project monitor wells will be required for assessment of project effects post-cessation of mining. With consent of the appropriate regulatory agencies, these or other monitor or production wells may be considered for eventual decommissioning by plugging. Well plugging procedures may fall under joint jurisdiction of the NMOSE, MMD, and NMED, and the authorized plugging process may be specific to the original well design, hydrogeologic unit penetrated, and/or chemistry of groundwater tapped.
	NMCC Response		*NMCC acknowledges that wells that are decommissioned by NMCC will require the consent of the appropriate regulatory agencies.*
NM OSE Comment 6	Appendix E	Well Abandonment	All project wellheads shall be crafted at a minimum following 19.27.4 NMAC well design regulations and made safe from vandalism and the unwarranted infiltration or injection of contaminants and surface water. As project activities wind down and the presence of authorized personnel becomes less common, wellheads should be capably secured and locations documented, or decommissioned as required under project permit. Well decommissioning is generally accomplished by plugging by a New Mexico-licensed Well Driller. No well shall be buried, destroyed, or plugged without appropriate regulatory approval and permitting. The retention of an unused well is not a given, so should alternative uses be desired for any project well, the NMOSE shall be consulted to review the need for administrative filings related to amended ownership and/or use, provided the request is otherwise deemed permissible by actual property owner and collaborating regulatory agencies.
	NMCC Response		*NMCC acknowledges that there a variety of construction, maintenance and decommissioning requirements for wells owned by NMCC. Similarly, NMCC understands that alternative future uses of wells may be subject to NMOSE jurisdiction. NMCC has been consulting with the OSE on these types of matters and will continue to do so as the project develops.*

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NMDG&F Comment 1	Section 2.3	Wildlife Contingency Plan	Section 2.3, Wildlife Impacts Contingency Plan, states that fencing of "appropriate height" will be constructed around process water and solution ponds to keep out larger wildlife such as deer and antelope. The Department recommends that exclusionary fencing for livestock be designed to minimize potential injury to any wildlife attempting to cross under or over the fence. The fence can be designed to exclude the smaller terrestrial animals as well, by wrapping the bottom of eight foot chain link fence with a smaller mesh material. Please consult the Department's Livestock Wildlife Fence Guidelines for details, at: http://www.wildlife.state.nm.usidownload/conservation/habitat-handbook/project-quidelines/Livestock-Wildlife-Fence-Guidelines.odf. For those containment ponds and reservoirs that do not require exclusionary fencing, escape ramps should be constructed to intercept an animal swimming around the periphery of the tank, pit or pond, at any water level. Ramps should be constructed from a textured, non-slippery material. This section of the plan also states that for "avian species the use of exclusionary devices will be employed, as needed, to prevent exposure to toxic chemicals and conditions created by mining activities". Exclusionary devices such as netting or other materials should be designed and maintained to prevent entanglement or entrapment of both birds and bats. Monofilament nylon netting material should never be used because it is significantly more likely to ensnare wildlife, and cause injury or death. Extruded, knit, or woven netting is preferred, and should be kept taut and inspected regularly. Department staff is available for consultation to assist in developing appropriate wildlife-friendly fence designs and netting options for specific applications.
	NMCC Response		*NMCC will install exclusionary fencing for livestock around the perimeter of the site and around certain process water impoundments that is designed to minimize potential injury to any wildlife attempting to penetrate or jump the fence. NMCC will consult the Department's Livestock Wildlife Fence Guidelines in selecting fence designs. Escape ramps will be constructed in a textured, non-slippery material will be installed. Exclusionary avian devices such as netting or other materials, if utilized, will be designed and maintained to prevent entanglement or entrapment of birds and bats and will be kept taut and inspected regularly. Monofilament nylon netting will not be used.*

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NMDG&F Comment 2	Section 2.5	Pit Lake Post-mining Land Use	Section 2.5, Post Mining Land Use, states that the pit lake will "provide enhanced avian wildlife habitat and a water source for transient wildlife". The potential benefit to wildlife from the pit lake will be contingent upon meeting surface water quality standards over an extended time frame. Since the open pit is a hydraulic sink and groundwater recharge from local precipitation to the crystalline bedrock is limited because of its low hydraulic conductivity, any metals that leach into the pit lake from the surrounding high walls and mining area could concentrate over time, if the evaporation rate exceeds the recharge rate from local precipitation. This condition will be exacerbated if the local climate becomes hotter and drier in the future. New Mexico Copper Corporation should have a long-term mitigation plan in place to protect migratory birds and local wildlife if the water quality in the pit lake becomes toxic over time. Mitigation measures could include a combination of both exclusionary and hazing techniques.
	NMCC Response		*NMCC has prepared its reclamation plan for the pit to make it suitable for wildlife habitat after reclamation. NMCC is currently working with the MMD, NMED and BLM to establish the means by which the performance and reclamation standards will be met at the site. NMCC will develop a pit lake water quality management plan (see page 34 of the DEIS) that will detail reclamation, water quality management, and monitoring activities that will be conducted to facilitate compliance with applicable standards.*
NMDG&F Comment 3	Section 4.1	Best Management Practices	Section 4.1, Best Management Practices, states that NMCC will use only certified weed-free seed and mulch. It should also state that only native plant species will be used for reclamation and if possible, that they are sourced from within the same region and vegetative community types.
	NMCC Response		*The seed mixture used for reclamation will be native plant species to the extent possible based on availability, compatibility with the vegetation of the surrounding areas, soil and climatic conditions of the area, and by recommendations from the BLM and NMEMNRD. If possible, seeds and plants will be sourced from within the same region and vegetative community types. Section 4.1, Page 4-2 of the Updated MORP has been revised to reflect this.*

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NMDG&F Comment 4	Section 4.3.1	Bat Protection for Shafts, Adits, Tunnels	Section 4.3.1, Shafts, Adits or Tunnels, states that historic mine workings exist within the permit area and that NMCC will work with the Bureau of Land Management to safeguard those features from unauthorized entry. All historic mine workings should be evaluated for bat activity. Shafts and adits that are used by bats should be appropriately gated to protect bats as well as prevent unauthorized human entry. Information and guidance on determining the most appropriate closure type for specific mine openings can be found at the Abandoned Mine Closure Website (http://www.batgating.com/).
	NMCC Response		*Surveys of all historic mine features (shafts and adits) that were known within the mine area were conducted during the summer of 2012 and during the hibernation season of 2013 to survey for bats, as detailed in the July 2013 Baseline Data Report Addendum, see Section 5, pages 21-24 for more details. These surveys found only nominal use of these features by bats within the mine area. NMCC will conduct additional surveys prior to conducting safeguarding actions on shafts and adits to confirm that all historic mine features within the mine area being used by bats are identified. If found to be used by bats the adit or shaft will be gated appropriately to allow continued use by bats while preventing unauthorized human entry. Section 4.3.1, page 4-20, has been revised to reflect this.*
NMDG&F Comment 5	Section 4.3.2	High Hazard Protection	Section 4.3.2 states that exclusionary fencing will be used in high hazard areas that include electrical substations. The Department recommends that electrical substations and associated surface power lines be constructed in conformance with the Avian Power Line Interaction Committee's "Suggested Practices for Avian Protection on Power Lines" (2006) (www.aplic.org/mission.php).
	NMCC Response		*There are two proposed substations to provide power to the site, one located east of the mine on New Mexico State Land and the other located on-site. They will be constructed, owned, and operated by Tri-State Electric. NMCC anticipates that the electrical substations and associated surface power lines will be constructed in conformance with the Avian Power Line Interaction Committee's "Suggested Practices for Avian Protection on Power Lines", as these companies are well aware of the avian protection techniques available.*

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NM DCAHPD Comment 1	General	Historic Properties & Archaeological sites	In accordance with rule 19.10.6.605.0 NMAC, I reviewed our records to determine if cemeteries, burial grounds or cultural resources listed on the State Register of Cultural Properties or the National Register of Historic Places exist within or near the permit area. Our records show that there are no cultural resources listed on the National Register or State Register within or near the proposed permit area. There are however, resources tentatively identified as burial grounds. Although there are no cultural resources listed on the State or National Register, our records show several archaeological surveys within part of the permit area. These surveys identified archaeological sites and a historic district. The Bureau of Land Management and the New Mexico State Historic Preservation Officer have entered into a Programmatic Agreement to take into the account the mine operation's effects to historic properties and to resolve adverse effects to historic properties pursuant to Title 54 306108 (aka Section 106) of the National Historic Preservation Act and its implementing regulation, 36 CFR 800. The BLM may require avoidance of any eligible archaeological sites and an archaeological monitor to ensure that eligible sites are not affected.
	NMCC Response		*NMCC appreciates the NMDCAHPD's review and contribution to the process. The Cultural Resources Programmatic Agreement recently executed between the various interested parties is the document by which cultural properties at the will be protected.*