April 4, 2016

Via email: BLM_NM_LCDO_Comments@blm.gov

Doug Haywood
Las Cruces District Office
Bureau of Land Management
1800 Marquess St.
Las Cruces, NM 88005

RE: Public Comments on Copper Flat Copper Mine Draft Environmental Impact Statement

Dear Mr. Haywood:

The undersigned organizations submit to you for your consideration the following comments on the Copper Flat Draft Environmental Impact Statement (DEIS).

The Bureau of Land Management (BLM) has requested public comment on the "adequacy and accuracy of the proposed action and alternatives, the analysis of their respective management decisions and any new information that would help the BLM as it develops the mine plan of operation for the Copper Flat Mine."[1]

We believe that the Draft EIS does not provide adequate and accurate information for the public to fully evaluate the proposed action and alternatives as required by the National Environmental Policy Act 40 CFR 1500.1(b).[2] We therefore recommend that the BLM amend the DEIS to ensure that the Agency can make a decision that is based on a complete understanding of the environmental consequences of the proposed action and alternatives and facilitate taking actions that protect, restore, and enhance the environment.[3]

Additionally, the proposed action and alternatives do not "prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws" as required

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1 BLM Transmittal Letter for Copper Flat Mine DEIS (BLM November 2015, 1793 (L0310).

2 "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail." https://www.gpo.gov/fdsys/pkg/CFR-1999-title40-vol24/pdf/CFR-1999-title40-vol24-part1500.pdf

3 "Ultimately, of course, it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. These regulations provide the direction to achieve this purpose." 40 CFR 1500.1(c) https://www.gpo.gov/fdsys/pkg/CFR-1999-title40-vol24/pdf/CFR-1999-title40-vol24-part1500.pdf

under 43 CFR Subpart 3809: Surface Management.[4] Because this proposed action does not comply with state law, the Bureau of Land Management cannot approve this action as it will cause unnecessary or undue degradation of public lands.[5]

Finally, this DEIS does not comply with the requirements of 43 CFR Subpart 3809.401 and therefore the BLM cannot approve this action. The DEIS does not include a number of plans and information required under this subpart, including water management plans, quality assurance plans, monitoring plans, post-closure management plan, interim management plan, and reclamation cost estimate. BLM must disapprove the plan of operation as it does not meet the applicable content requirements of §3809.401[6]

The Draft EIS does not provide adequate and accurate information for the public to fully evaluate the proposed action and alternatives as required by the National Environmental Policy Act.

- Proposed action and alternatives inadequately identified and assessed. The proposed action and alternatives evaluated in the DEIS are based solely on copper production levels and do not consider the range of management scenarios and reclamation alternatives that should be fully assessed. Management options include monitoring plans, water quality management plans, and financial assurance. Reclamation alternatives include different options for backfilling the open pit, use of liners to protect groundwater from acid mine drainage released from waste rock piles and low-grade ore stockpiles, and alternative cover systems to minimize infiltration of precipitation into waste rock and stock piles to protect surface and groundwater quality. This is a huge omission of information critical to evaluating the environmental consequences of the proposed action and alternatives and the range of technical options available for mitigating adverse impacts to the environment.

- Current limitation on water rights and alternative contingencies have not been analyzed. Currently, the State Engineer has approved NM Copper Corporation's application for only 888.783 acre-feet per year of the 7,376 acre-feet per year of water rights that the company claims. The DEIS states that the average annual water use is 13,370 acre-feet per year. About 9,000 acre-feet per year will be recycled. The DEIS discusses three options if NNMCC's application is not approved, including leasing of groundwater and purchase and transfer of water rights. The DEIS does not disclose where that water would come from, how much water would need to be leased or

[4] 43 CFR Subpart 3809: "The purposes of this subpart are to: (a) Prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. Anyone intending to develop mineral resources on the public lands must prevent unnecessary or undue degradation of the land and reclaim disturbed areas."
[5] 43 CFR 3809.5 "*Unnecessary or undue degradation* means conditions, activities, or practices that:(1) Fail to comply with one or more of the following: the performance standards in §3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources."
[6] 43 CFR 3809.411(3) "BLM disapproves, or is withholding approval of your plan of operations because the plan:(i) Does not meet the applicable content requirements of §3809.401"

purchased, or the impacts to surface and groundwater supplies, springs/streams, wildlife and threatened and endangered species from these alternative water sources.

- Impacts to surface and groundwater quantity have not been adequately evaluated. As outlined in the Interstate Stream Commission's public comments, the DEIS does not evaluate the impacts of water use for the proposed action and alternatives on the Rio Grande Compact and does not discuss where water supply would come from in the Mine's initial years of operation before sufficient process water is produced to achieve a 75% recycling rate.

- There are no mitigation measures identified for the adverse impacts to surface and groundwater resources. According to NEPA, agencies must, to the fullest extent practicable, avoid or minimize adverse impacts of their actions on the quality of the human environment.[7] The DEIS does not identify any measures for mitigating surface and groundwater depletion and water quality impacts. This is a major deficiency of the DEIS under NEPA requirements.

- Evaporation from the pit lake has not been estimated. It is unclear if evaporation from the pit lake after closure is estimated and included in the DEIS analysis. Water rights need to be in place to cover this consumptive use. The total evaporative losses should be estimated in perpetuity, including cumulative impacts to groundwater and reduced discharge to the Rio Grande and Caballo Lake.

- Water quality impacts of the proposed action and alternatives have not been adequately assessed. Water quality impacts were identified as a key issue during Scoping and yet the DEIS fails to provide adequate quantitative information on the magnitude, extent and timing of potential surface and groundwater quality impacts and how these impacts will be mitigated. The DEIS acknowledges the potential for water quality impacts from waste rock piles, low-grade stockpiles, and the pit lake. A materials characterization and handling plan is not provided to understand in more detail the potential for acid generation and how groundwater will be protected. Lining of waste rock piles and low-grade ore stockpiles is not considered as an alternative to mitigate potential impacts to groundwater quality. Pit lake water quality is predicted to exceed some standards post-closure, yet no consideration of alternatives for mitigating these impacts is discussed, such as partial or full backfilling of the pit. The DEIS does not provide a water quality management plan that outlines more specifically how water quality will be managed in the pit lake.

- Air quality impacts and applicable federal and state laws have been improperly assessed. A misreading of the Clean Air Act New Source Review Prevention of Significant Deterioration (PSD) requirements results in the DEIS finding of "not

[7] "Federal agencies shall to the fullest extent possible use all practicable means consistent with the requirements of the Act and other essential considerations of nation policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions on the quality of the human environment." 40 CFR 1500.2(f).

significant" for Alternative 2 (Preferred Alternative). However, the Copper Flat mine would be considered a major source rather than a minor source under Alternative 2 given that its emissions of PM10 and carbon monoxide are predicted to be above thresholds. PSD policy is if a source is "a major source for one, it is major for all." Also it is unclear if Alternative 2 was actually modeled or if emissions estimates were just "pro-rated" based on the proposed action and Alternative 1. Given that Alternative 2 is the preferred alternative, air quality impacts for this alternative should be modeled. Additionally, there is no discussion of why air quality impacts are considered "not significant." For the preferred alternative, the Copper Flat Mine would be a new major source in a "clean" air shed with localized air quality and visibility impairment from fugitive dust that could impact transportation and recreation and tourism on the Byways and Ladder Ranch. Mitigation measures have not been identified.

- Climate change impacts were not quantitatively analyzed. No quantitative information is provided in the DEIS for greenhouse gas emissions for the proposed action and alternatives. The DEIS analysis appears to be using criteria air pollutant emissions as a surrogate for greenhouse gas emissions without explicitly stating this.

- Impacts to Threatened and Endangered Species are not fully assessed and mitigation measures are not identified. The DEIS states that threatened and endangered species (T&E) may be affected by the proposed action. However, it does not disclose the results of consultation with the US Fish and Wildlife Service in compliance with Section 7 of the Endangered Species Act or any mitigation measures to prevent impacts to T&E species. Because it is not disclosed where all of the water will come from to operate the mine (see second bullet above), the impacts to riparian areas from groundwater pumping and any associated impacts to T&E species have not been fully evaluated.

- Measures to mitigate significant impacts to cultural resources are not provided. The DEIS states that the proposed action would cause significant impact to historic properties. It is unclear if any consultations with federal and state agencies under the National Historic Preservation Act have taken place. No specific mitigation measures have been outlined, despite the significance of adverse impacts.

- Recreation impacts are not fully assessed. The Lake Valley Backcountry Byway and the Geronimo National Scenic Byway are within the Area of Potential Effect of the proposed action. The DEIS states that the Byways promote tourism in the area, yet there is no analysis provided that demonstrates the potential impacts to Byways-related tourism from the proposed action or alternatives. Additionally, the negative impacts to recreation and tourism on the Ladder Ranch have not been assessed. Associated mitigation measures for these impacts are also not discussed.

- Transportation impacts are not fully evaluated and mitigation measures not identified. The DEIS states that the reduction in life expectancy of road pavement due to increased truck traffic on NM-152 is 53% – 70% for the proposed action and

alternatives. Additionally, the Sierra County Road Superintendent states that the level of heavy traffic on Gold Mine Road for the proposed action and alternatives "would destroy the roadway." There is no assessment of the increased maintenance requirements for these roadways, the associated costs, and who is responsible for these costs. The DEIS appears to be supportive of pushing these costs onto the public sector, since no mitigation measures for this adverse impact have been identified. These costs could be significant for low-income communities. Maintenance of roads has been an ongoing issue in Mining District communities adjacent to the Chino mine in Grant County. Heavy use of roadways by mining trucks cause rapid deterioration of pavement. It has been a continual point of conflict between communities, Freeport-McMoRan and state and local road and highway authorities to repair these roads in a timely manner. Because the public sector pays the costs of road repair, already stressed local and state budgets often can't handle the cost of increased maintenance from mine truck traffic.

- Negative economic impacts have not been included in socio-economic analysis. Several categories of negative economic impacts resulting from the proposed action and alternatives have not been assessed and call into question the rosy results of the economic impact analysis. Negative economic impacts of reduction in water supplies under the Rio Grande Compact have not been evaluated. The increased costs in road and highway maintenance from heavy truck traffic that state and local governments will have to bear are not assessed or included in the economic analysis. Similarly, the negative impacts to recreation and tourism have not been quantified and factored into the economic impact analysis.

- Proposed action could cause huge financial liability for public. The BLM financial assurance requirements, cited in the DEIS and found at 43 CFR 3809.552(c) as well as New Mexico Mining Act financial assurance requirements found at 19.10.12.120 NMAC are inadequate to protect the public from the massive financial liability posed by the proposed action. These financial assurance mechanisms assume that the site will not become a Superfund site, yet history shows that a vast majority of hard rock mines in the U.S. eventually do become Superfund sites. In New Mexico, the Chevron Molybdenum mine is a perfect example of how current state and federal financial assurance requirements are inadequate. The Chevron mine currently has financial assurance for closure and mine reclamation totaling $167 million with the state of New Mexico. Yet the Record of Decision (ROD) under the CERCLA estimates cleanup costs between $500 million and $800 million.[8] Thus the liability to the public currently stands at $330 - $630 million dollars. The reclamation costs and associated financial assurance required by BLM and the state of New Mexico are not discussed in the DEIS. Therefore it is impossible to evaluate the environmental and financial risks to the public for environmental liabilities created by the proposed action.

[8] US EPA Region 6. (2010). Record of Decision, Molycorp Inc. Questa, New Mexico (CERCLIS ID NO: NMD002899094).

- Socio-economic impact mitigation measures identified in the DEIS will increase negative impacts to the public sector. The DEIS proposes as mitigation less liquid forms of financial assurance that increase the risk to the public sector and reduce it for the mining company. This has the potential to create a large financial liability on the public sector. The rationale for these mitigation measures is lacking.

- Cumulative impacts of mine water use on discharge to the Rio Grande need to be evaluated in more detail. The DEIS acknowledges that the impact of a reduction in groundwater discharge to Caballo Reservoir and the Rio Grande from the proposed action and alternatives is "expected to have a long-term, large-extent, and probable cumulative effect on these water resources" and identifies the need for a "comprehensive mid-basin study of Caballo Reservoir and the Rio Grande." This study should be conducted along with the evaluation of these cumulative impacts on the Rio Grande Compact. This is a significant adverse impact with the potential for major negative economic impacts that has been overlooked.

The Bureau of Land Management cannot approve this action as it will cause "unnecessary or undue degradation of public lands."

The reclamation plan associated with the proposed action and alternatives, as described in the DEIS, does not meet all performance and reclamation standards and requirements of the NM Mining Act and constitutes an "unnecessary or undue degradation of public lands" under 43 CFR §3809.5.

Under the NM Mining Act, mine operations "shall be planned and conducted to minimize negative impact to the hydrologic balance in both the permit and potentially affected areas."[9] There is no material handling plan for waste rock piles and low-grade ore stockpiles that describes how non-point source surface releases of acid or other toxic substances will be contained within the permit area, and that all other surface flows from the disturbed area are treated to meet all applicable state and federal regulations. There is no water quality management plan that describes how pit lake water quality will be managed.

Furthermore, a new mine cannot be permitted under the Mining Act if it will require "perpetual care" to meet applicable state and federal environmental requirements following closure.[10] The DEIS acknowledges that standards will likely be exceeded in the pit lake after closure, but yet the DEIS does not discuss what measures will be implemented to meet water quality standards and what water quality management measures will be required and for how long.

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[9] 19.10.5.508B.(4) NMAC

[10] New Mexico Mining Act of 1993, 69-36-12 B "The director shall issue the permit for a new mining operation if the director finds that: (4) the mining operation is designed to meet *without perpetual care* all applicable environmental requirements imposed by the New Mexico Mining Act and regulations adopted pursuant to that act and other laws following closure."

In order to meet water quality standards in the pit lake, protect groundwater in the vicinity of the open pit and prevent the pit lake from creating a threat to wildlife, it is highly probable that water quality management in perpetuity will be required to meet surface and groundwater standards. The DEIS does not discuss any options for backfilling at closure that could reduce or eliminate the need for perpetual care. Given the high likelihood of the need for perpetual care, the state Mining and Minerals Division will be unable to approve the Copper Flat Mining Act permit given the requirements of 69-36-12 B(4). The DEIS lacks discussion of this very important permitting requirement.

Additionally, wildlife protection is not assured post-closure as required in the Mining Act.[11] The post-closure pit lake water quality is estimated to exceed water quality standards for wildlife, yet the post-mining land use under the Mining Act is "a water reservoir for wildlife habitat." The pit lake post-mining land use of wildlife habitat cannot be approved under the Mining Act, since the mine operator hasn't demonstrated how water quality standards for wildlife will be met in the pit lake.

DEIS does not comply with the requirements of 43 CFR Subpart 3809.401 and therefore the BLM cannot approve this action.

The DEIS does not include a number of plans and information required under BLM's regulations for surface management. BLM must disapprove the plan of operation as it does not meet the applicable content requirements of 43 CFR §3809.401 and 43 CFR §3809.420(b)(11)(i).

The following plans and information are not provided in the DEIS as required under 43 CFR §3809.401:

- Water Management Plan. Because a water management plan is not provided, the decision maker and the public have no way to determine how surface and groundwater quality will be managed during mine operation for the proposed action and alternatives.

- Quality Assurance Plan. BLM and the public have no way to evaluate how the mine operator will guarantee information quality associated with mine operations without the Quality Assurance Plan.

- Rock Characterization and Handling Plan. BLM and the public are not able to understand the potential for acid generation from waste rock piles and low-grade ore stockpiles and how surface and groundwater quality will be protected without the Rock Characterization and Handling Plan.

- Mine reclamation, including information on the feasibility of pit backfilling that details economic, environmental, and safety factors. As discussed above, the DEIS does not provide any information on backfilling options. These feasibility

[11] 19.10.5.508B.(2) NMAC. "Measures shall be taken to minimize adverse impacts on wildlife and important habitat."

assessments are required not only under BLM's surface management requirements, but also under the state Mining Act. The DEIS discussion of the mine reclamation plan does not adequately address how surface and groundwater quality will be protected.

- Post-closure management. Monitoring is a key component of post-closure management. The DEIS states that BLM and state agencies would define post-closure monitoring requirements at closure. This information should be provided in the closure/closeout plan and should be included in the DEIS, as well as a description of what measures would be taken should monitoring indicate that there are problems with surface or groundwater quality, erosion, revegetation, wildlife protection, among other factors.

- Monitoring Plan. Monitoring plans are lacking for a range of environmental indicators for mine operation and post-closure, including surface and groundwater quality, wildlife, revegetation, erosion, and air quality. For example, there is no information provided on the frequency of surface and groundwater quality monitoring post-closure and for the time period beyond closure that monitoring will be required. This is important information, especially given that water management in perpetuity of the pit lake may be needed.

- Interim Management Plan. There are no details provided in the DEIS for the Interim Management Plan. The discussion appears to be a placeholder only and provides no detail on how the project area would be managed during periods of temporary closure to prevent unnecessary or undue degradation.[12]

- Reclamation cost estimates. Reclamation cost estimates for the proposed action and alternatives are not provided. This required information is critical to determining the amount and types of financial assurance that will be required by BLM. Given that the Copper Flat mine will cause significant negative impacts to surface and groundwater quality and the environment along with negative economic impacts, it is necessary that the public understand the magnitude of clean-up costs and the financial instruments that will be used to guarantee that the mine site can be reclaimed should NM Copper Corporation go bankrupt. Additionally, this information is critical for evaluating the long-term risks to the public for the environmental liabilities created by the proposed action. Given that a vast majority of hard rock mines eventually become Superfund sites given the inadequacy of state and federal laws, reclamation cost estimates and financial assurance requirements are important for the public's and decision maker's assessment of the proposed action and alternatives.

[12] 43 CFR 3809.401(5) *Interim management plan.* A plan to manage the project area during periods of temporary closure (including periods of seasonal closure) to prevent unnecessary or undue degradation. The interim management plan must include, where applicable, the following: (i) Measures to stabilize excavations and workings; (ii) Measures to isolate or control toxic or deleterious materials (See also the requirements in §3809.420(c)(12)(vii).); (iii) Provisions for the storage or removal of equipment, supplies and structures; (iv) Measures to maintain the project area in a safe and clean condition; (v) Plans for monitoring site conditions during periods of non-operation; and (vi) A schedule of anticipated periods of temporary closure during which you would implement the interim management plan, including provisions for notifying BLM of unplanned or extended temporary closures.

BLM must also disapprove the plan of operation as it does not meet the applicable requirements of 43 CFR §3809.420(b)(11)(i).[13] Liners under waste rock piles and low-grade ore stockpiles are not planned to be used to minimize uncontrolled migration of leachate even though the DEIS states that there is moderate to high potential for generation of acid rock drainage or other deleterious leachate with sufficient percolation.[14] Additionally, there is an inadequate demonstration of how pit lake water quality will be managed in order to prevent exceedances of water quality standards post-closure.

We thank you for consideration of our comments.

Sincerely,

Allyson Siwik, Executive Director
Gila Resources Information Project

M.H. "Dutch" Salmon, Chair
Gila Conservation Coalition

Donna Stevens, Executive Director
Upper Gila Watershed Alliance

Rachel Conn, Projects Manager
Amigos Bravos

David Coss, Chair
Rio Grande Chapter of the Sierra Club

Christine Newtson, Chair
Southern New Mexico Group
Rio Grande Chapter of the Sierra Club

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[13] *Acid-forming, toxic, or other deleterious materials.* You must incorporate identification, handling, and placement of potentially acid-forming, toxic or other deleterious materials into your operations, facility design, reclamation, and environmental monitoring programs to minimize the formation and impacts of acidic, alkaline, metal-bearing, or other deleterious leachate, including the following: (i) You must handle, place, or treat potentially acid-forming, toxic, or other deleterious materials in a manner that minimizes the likelihood of acid formation and toxic and other deleterious leachate generation (source control); (ii) If you cannot prevent the formation of acid, toxic, or other deleterious drainage, you must minimize uncontrolled migration of leachate; and(iii) You must capture and treat acid drainage, or other undesirable effluent, to the applicable standard if source controls and migration controls do not prove effective. You are responsible for any costs associated with water treatment or facility maintenance after project closure. Long-term, or post-mining, effluent capture and treatment are not acceptable substitutes for source and migration control, and you may rely on them only after all reasonable source and migration control methods have been employed.

[14] Copper Flat DEIS p. 3-38.

Mark Allison, Executive Director
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