Final Environmental Impact Statement for the Phoenix Copper Leach Project

Cooperating Agency:
Nevada Department of Wildlife

Bureau of Land Management

April 2012

BLM

Battle Mountain District, Mount Lewis Field Office, Nevada

BLM Mission Statement

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Management is based upon the principles of multiple use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air and scenic, scientific, and cultural values.

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Bureau of Land Management
Battle Mountain
50 Bastian Road
Battle Mountain, Nevada 89820
Tel: 775-635-4000
Web Site Address: www.blm.gov/nv

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, Nevada 89820
Phone: 775-635-4000 Fax: 775-635-4034
http://www.blm.gov/nv/st/en/fo/battle_mountain_field.html

In Reply Refer To:
DOI-BLM-NVBO10-2011-0037-EIS
3809 (NVB-0100)
NVN-067930

Dear Reader:

Enclosed for your review and comment is the Newmont Mining Corporation, Phoenix Copper Leach Project abbreviated Final Environmental Impact Statement (FEIS), prepared by the Bureau of Land Management (BLM), Mount Lewis Field Office. The Draft Environmental Impact Statement (DEIS) was issued for public review and comment on October 28, 2011. The DEIS analyzed the direct, indirect, and cumulative impacts associated with the proposed construction and operation of the Phoenix Copper Leach Project.

The DEIS was commented on by region IX of the Environmental Protection Agency (the EPA), the Nevada Department of Wildlife (the NDOW), and various Nevada State Agencies through the Nevada State Clearinghouse. Various Lander County, Nevada economic organizations provided comment letters in support of approving the project as analyzed in the DEIS. Eight private citizens also provided letters supporting approval of the project as analyzed in the DEIS. The BLM did not receive any substantive comments from any other individuals or organizations on the DEIS.

The abbreviated FEIS is comprised of minor changes and corrections to the DEIS, the substantive comment letters, and the BLM's responses to those comments. The DEIS was not substantively changed because of the comments that were provided to the BLM. In order for a reviewer to fully understand the abbreviated FEIS, the reviewer must also have a copy of the DEIS, so the reviewer may compare the abbreviated FEIS to the DEIS.

Upon issuance of the Notice of Availability in the *Federal Register* for the Phoenix Copper Leach project FEIS by the EPA, a 30-day review period will begin. This review period is not considered a comment period under procedures of the National Environmental Policy Act (the NEPA). Should a reviewer or Federal Agency wish to provide comments during this 30-day review period, the BLM may consider addressing any substantive comments by incorporating any changes provided in the BLM's Record of Decision or the BLM may consider preparing a supplemental DEIS or FEIS. Should another Federal Agency reconsider its position on the Phoenix Copper Leach Project and advise the BLM of such a change during the 30-day review period, the BLM may consider that Federal Agency's position change and address that change in

the same manner, i.e., changes to the Record of Decision or preparing a supplemental DEIS or FEIS.

Should you choose to provide comments to the BLM on the abbreviated FEIS please remember that your entire comment, including your address, phone number, e-mail address, or other personal identifying information might be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. In addition, information will be posted online at the BLM website, http://www.blm.gov/nv/st/en/fo/battle_mountain_field.html. You may also download the FEIS from this web site.

You may obtain a copy of the FEIS by dropping by the Battle Mountain BLM District Office located at 50 Bastian Road, Battle Mountain, Nevada 89820; calling Dave Davis, the Phoenix Copper Leach Project Manager at 775-635-4000; faxing your comments to (775) 635-4034; or you may e-mail your comments to CU_Leach@blm.gov.

Your comments must be postmarked by the close of business at the close of the 30-day comment period.

Sincerely,

Christopher. J. Cook
Field Manager
Mount Lewis Field Office

FINAL ENVIRONMENTAL IMPACT STATEMENT
NEWMONT MINING CORPORATION
PHOENIX COPPER LEACH PROJECT

Lead Agency:	U. S. Department of the Interior Bureau of Land Management Battle Mountain District Mount Lewis Field Office
Cooperating Agencies:	Nevada Department of Wildlife
Project Location:	Lander County, Nevada
Correspondence Regarding This FEIS Should be Directed to:	Dave Davis, Phoenix Project Manager Bureau of Land Management 50 Bastian Road Battle Mountain, NV 89820 (775) 635-4150

ABSTRACT

Newmont Mining Corporation has submitted proposed amendments to its current gold mining Plan of Operations for the Phoenix Copper Leach Project to the Bureau of Land Management. The Proposed Project would be located in north-central Nevada approximately 12 miles southwest of the Battle Mountain, Nevada. The Proposed Project would be located on both public and private lands in Lander County, Nevada. The Proposed Project would involve the expansion and operation of the existing Phoenix Mine to include copper leaching/beneficiation of copper oxide rock material that previously has been permitted for disposal on currently permitted waste rock facilities. Active mining and processing for the Project would last approximately 24 years; active reclamation activities are anticipated to extend a minimum of 25 years beyond the operational phase. A minimum of 5 years of vegetation monitoring are required following revegetation activities. Additionally, long-term post-closure maintenance and monitoring would follow final reclamation. The Phoenix Copper Leach Project would mine approximately 158 million tons of copper ore for processing resulting in approximately 245 million pounds of recoverable copper during the ore processing timeframe. New surface disturbance associated with the Project would total 902 acres. The majority of the proposed facilities would occur in areas that have previously been approved for surface disturbance.

The Phoenix Copper Leach Project would consist of the following primary components: 1) expansion of the existing Plan of Operations boundary; 2) development and operation of two copper heap leach facilities; 3) construction of six new process ponds; 4) construction and operation of a copper solvent extraction-electrowinning facility; 5) designation of a new optional use area that could be developed as a borrow area; 6) establishment of an additional clay borrow area; 7) development of new water monitoring wells; 8) construction of a new haul road, pipeline, and utility corridor; 9) development of a new production well; and 10) conversion of five process ponds to evaporation ponds during reclamation.

This Final Environmental Impact Statement analyzes the environmental effects of the Proposed Project's site-specific impacts for all affected resources; one action alternative, the Reona Copper Heap Leach Facility Elimination Alternative; and the No Action Alternative.

Responsible Official for EIS:	Christopher J. Cook Field Manager Mount Lewis Field Office

Executive Summary

On May 30, 2007, Newmont Mining Corporation (Newmont) submitted a proposed amendment to the Plan of Operations (POO) (NVN 067930 [07-3A]) and Permit for Reclamation (#0223) for the Phoenix Copper Leach Project to the Bureau of Land Management (BLM) Mount Lewis Field Office of the Battle Mountain District, in compliance with 43 Code of Federal Regulations (CFR) 3809 and 3715. Revised plans were submitted on January 24, 2008; September 1, 2010; October 29, 2010; September 21, 2011; and February 29, 2012. Newmont proposes to expand and operate the existing Phoenix Mine to include copper leaching/beneficiation of copper oxide rock material that previously has been permitted for disposal on currently permitted waste rock facilities (WRFs). The proposal also includes the expansion of the existing Phoenix Mine POO boundary to encompass approximately 902 additional acres of land. The majority of the proposed facilities would occur in areas that previously have been approved for surface disturbance as analyzed in the Phoenix Project Final Environmental Impact Statement (EIS).

The proposed project area is located in Lander County, approximately 12 miles southwest of the Town of Battle Mountain, Nevada, in Townships 30 and 31 North, Range 43 East Mount Diablo Base Line Meridian. Approximately 194 acres of the proposed new disturbance area would be located on public lands administered by the BLM Mount Lewis Field Office, while approximately 708 acres would be on private lands owned by Newmont.

The proposed project would include the construction and operation of a new copper beneficiation facility, modification of existing mine components, and expansion of the proposed project boundary. Proposed project components would include:

- Expansion of the existing POO boundary;
- Development and operation of two copper heap leach facilities (HLFs);
- Construction of six new process ponds;
- Construction and operation of a copper solvent extraction-electrowinning facility;
- Designation of a new optional use area (OUA) (Section 5 OUA) that could be developed as a borrow area;
- Establishment of an additional clay borrow area;
- Development of new water monitoring wells;
- Construction of a new haul road, pipeline and utility corridor;
- Development of a new production well; and
- Conversion of five process ponds to evaporation (E-ponds) during reclamation.

Construction and operation of the proposed project is anticipated to begin in 2012, following receipt of all required permits and approvals. Active mining and processing for the project would last approximately 24 years. Active reclamation activities are anticipated to extend 25 years beyond the operational phase. A minimum of five years of vegetation monitoring are required following revegetation activities.

Geology and Minerals

Direct impacts of the Proposed Action on geologic and mineral resources would include: 1) the generation and permanent placement of up to a maximum of approximately 158 million tons of spent ore; and 2) the recovery of approximately 245 million pounds of copper.

The proposed project would result in approximately 902 acres of new surface disturbance. Disturbance associated with the reclaimed heap leach pads and use of borrow material (Section 5 OUA and Section 15/16 Borrow Area) (totaling approximately 852 acres) would permanently alter the natural topographic and geomorphic features within the study area.

Geologic Hazards and Geotechnical Considerations

There are no known active or potentially active faults or natural land sliding in the immediate vicinity of the proposed facilities. Therefore, the risk of facility damage from fault rupture or landslides is not anticipated.

The results of the slope stability analysis for the Phoenix Copper HLF indicate that the static factors of safety for the proposed HLF were calculated to be 1.9 for a 300-foot-high leach pad and should be stable under static loading conditions.

A pseudostatic and deformation analysis for the proposed Phoenix Copper HLF indicate that the facility is expected to be stable during an operational basis earthquake design seismic event (moment magnitude of 5.4 located approximately 9 miles from the study area) and that the calculated factor of safety would be 1.5 or greater. The analysis also indicates that the probability of a catastrophic slope failure during the post-closure period would be low.

The results of the slope stability analysis for the proposed Reona Copper HLF indicate that the static factors of safety for the HLF were calculated to be 1.6 for a 300-foot-high pad and should be stable under static loading conditions.

A pseudostatic and deformation analysis for the proposed Reona Copper HLF, using the same assumed operational basis earthquake and maximum design earthquake, indicate that the facility would be stable under an operational basis earthquake design and the calculated factor of safety would be 1.1 or greater. The analysis also indicates that the probability of a catastrophic slope failure during the post-closure period would be low.

Mineral Resources

Existing geologic and mineral resource information suggests the placement of the proposed facilities would not preclude future access to any known or inferred mineable ore.

Water Resources and Geochemistry

Groundwater Pumping

A new groundwater production well would be constructed in the northwest corner of Section 8 to supply water for the copper heap leach process included in the Proposed Action. The new production well would have a planned maximum flow rate of 1,000 gallons per minute (gpm) and a nominal flow of 600 gpm. The total estimated groundwater that would be used for the proposed project would be approximately 23,000 acre-feet. Groundwater pumping of the proposed production well is not expected to affect perennial flows in Willow Creek.

Process Facilities

Proposed facilities included in the Proposed Action would be designed, constructed, operated, and monitored in accordance with the Nevada Division of Environmental Protection (NDEP) and BLM permit requirements and associated plans and procedures. Temporary and permanent diversion channels designed to convey the 100-year, 24-hour storm event would be constructed around the proposed Reona and Phoenix copper HLFs to capture and divert sheet flow generated from upgradient source areas around the facilities. The proposed process facilities would be constructed and operated as zero-discharge facilities, as defined through the Water Pollution Control Permit (WPCP) review and approval process by the NDEP.

Copper Heap Leach Facilities. Geochemical testing results indicate that the leachate from the proposed HLFs (during the copper leaching process) would be strongly acidic and have high concentrations of metals. Under the Proposed Action, the facility would be designed in accordance with standard geotechnical design practices; would include a composite liner and leak detection system; and would be designed, constructed, and operated in accordance with NDEP requirements for a zero discharge facility. Therefore, significant impacts to surface water and groundwater quality from these facilities are not anticipated during construction and operation.

Closure and Post-closure Impacts. A Final Plan for Permanent Closure of the copper heap leach pads, detailing draindown, solutions management, and any necessary management requirements for any long-term effluent discharge and closure, would be developed 2 years prior to project closure in accordance with NDEP requirements (Nevada Administrative Code 445A.446 and 445A.447) and Nevada BLM's Reclamation/Closure Policy for Hardrock Mining Activities (Instruction Memorandum 2004-065).

Two closure options for the proposed copper HLFs are described in the Proposed Action. Under Closure Option 1, the heap leach pads would be covered with either a 5-foot engineered evapotranspiration (ET) alluvial cap; Closure Option 2 would consist of an engineered synthetic liner with an ET alluvial cap. At the early stages of closure, the draindown would be managed by active evaporation at the top of the copper heap leach pads using evaporators. Once draindown flow rate is reduced to relatively low flow rates, the draindown would be managed by passive evaporation in a series of specially designed E-ponds.

The proposed design of the E-ponds and procedures for E-pond closure and replacement would provide for management of leachate generated from the HLFs in the closure and post-closure period (under either Option 1 or Option 2) and prevent the solution from infiltrating to the groundwater system or impacting surface water resources. Mineral precipitate that forms through evaporation in the E-ponds would be contained within the lined and covered E-ponds. Therefore, construction, operation, and closure of the copper HLFs and E-ponds are not expected to impact water resources.

Natomas Waste Rock Facility

There is no proposed change in the design of the previously permitted Natomas WRF; however, development of the proposed project would reduce the volume of material, and reduce the ultimate height of the previously permitted Natomas WRF that was evaluated as part of the Phoenix Project 2002 EIS. The reduction in the final elevation of the Natomas WRF would result in a slight reduction in the estimated precipitation amount and net infiltration rate. An additional change would include the use of alluvium as cover material for reclamation rather than oxide waste rock material that was assumed in the original analysis. The BLM approved the use of alluvium as part of the approved Phoenix Mine Waste Rock Management Plan.

The overall modeling results for the Natomas WRF indicate that the reduced configuration would have little effect on the time required for meteoric water to infiltrate through the facility and underlying bedrock and reach groundwater. Therefore, the change in the configuration of the Natomas WRF resulting from the Proposed Action is not expected to change the timing of potential impacts to groundwater quality that was previously addressed in the Phoenix Project EIS.

Section 5 Optional Use Area

Surface water resources in the Section 5 OUA are limited to small ephemeral channels crossing the alluvial fan system. The proposed project area is underlain by alluvium sediments. Available information suggests that the thickness of the alluvial sediments and depth to groundwater is greater than 100 feet throughout the area.

Reclamation of the borrow area would be planned in accordance with a reclamation plan permit application, which would undergo a review and approval process by the NDEP and BLM in accordance with the agency Memorandum of Understanding for reclamation and water quality management. Site drainage and storm water pollution prevention would be part of the construction, operation, and reclamation objectives. Therefore, based on the current designs and regulatory requirements, no significant impacts to surface water quantity or quality are currently anticipated for this area.

Other Flooding, Erosion, Sedimentation, and Runoff Related Impacts

No impacts to delineated flood hazard Zone A areas would occur under the Proposed Action. Zone A delineations identify locations where flooding from a 100-year, 24-hour runoff event is expected. Due to the zero-discharge requirements for managing and monitoring process fluids, Newmont would avoid most potential impacts to surface water quality. No waters of the United States (U.S.) would be affected by the Proposed Action.

The planned storm water diversions around the proposed Reona and Phoenix Copper HLFs may have relatively sharp bends or steep channel gradients. Estimated peak flows and velocities resulting from a 100-year, 24-hour storm event have been used for designing the diversion channels and riprap lining for the channels. In the unlikely event of a channel failure, storm water at the proposed Phoenix Copper HLF would disperse onto the adjacent alluvial fan, whereas overflow from the Reona diversion channel would disperse to the existing tailings storage facility. Newmont would undertake diversion repairs immediately. Minimal impacts to surface water quantity or quality would occur in either case.

Measures to control runoff, run-on, and erosion and sedimentation from mining and processing facilities, including drainage management and reconstruction, is part of ongoing and planned reclamation and stabilization programs that would help decrease surface water impacts within the proposed POO boundary and downstream.

Willow Creek Flooding and Channel Migration

The active floodplain for Willow Creek is located west of the proposed Phoenix Copper HLF. Willow Creek in this area is characterized as a largely incised braided channel that experiences seasonal, ephemeral flow. Evaluations to assess: 1) the potential risk of flooding from the 100-year, 24-hour runoff event occurring in the Willow Creek watershed; and 2) the potential risk of channel migration along Willow Creek to affect the facility proposed Phoenix Copper HLF indicated that the site would not be subject to flooding during the 100-year, 24-hour event.

An evaluation of the geomorphic conditions indicated that the proposed Phoenix Copper HLF footprint is located east of the area that is subject to channel migration. The northwest corner of the proposed Phoenix Copper HLF is the portion of the pad that is situated closest to the channel migration area. In this area, the proposed HLF would be situated approximately 8 to 15 feet higher than, and east of a well defined slope that bounds the channel migration area. The results of the evaluation conclude that “channel avulsion or erosion is not anticipated to occur in magnitudes that would endanger or undercut the Phoenix Copper HLF during operational or closure timeframes.” Therefore, potential impacts due to flooding, erosion, or deposition along Willow Creek are not anticipated.

Spills and Release-related Impacts

With respect to the potential for impacts from spills and releases, the Emergency Response Plan describes procedures Newmont would use to respond to such occurrences, if needed. Reagents used for the copper recovery primarily would consist of sulfuric and hydrochloric acids. These would be managed by monitoring from central control rooms. Controls would consist of primary and secondary containment, pumps, and backups within the process flow circuit. Additional sumps and portable pumps and pipelines would provide contingency controls. Based on existing and proposed response programs, minimal impacts to surface water quality are anticipated from spills and releases at the mine site.

A maximum of 50,000 gallons per day of sulfuric acid is anticipated to be delivered to the proposed project by truck. Assuming that the acid is purchased from a chemical supplier in the Town of Battle Mountain, it would be transported up the Lower Reese River Valley on State Highway (SH) 305 to the project area. If a spill occurred in transport, the likelihood of significant surface water quality impacts would be low. Each truck would transport approximately 2,500 gallons per load. The overall route is generally 2.5 to 5 miles away from the Reese River, and primarily crosses porous alluvial fan sediments. Most channels that are intercepted by the road are ephemeral. Because of these factors, it is likely that a spill of sulfuric acid in transport would seep into the ground before reaching a waterbody. Subsequent clean-up efforts and attenuation within calcareous soils would further minimize the potential for significant impacts to surface water quality.

Additional reagents and chemicals that would be trucked to the mine site include an organic copper solvent extractant (e.g., Cognis LIX-984), a diluent such as SX-12 (a solvent extraction grade of kerosene), and liquid cobalt sulfate heptahydrate for use in the copper electrowinning circuits. Both the extractant and diluent have specific gravities less than 1.0 (likely to float on a water surface), and both are biodegradable. Cobalt sulfate heptahydrate is toxic to aquatic organisms and may cause long-term adverse effects in an aquatic environment. Given the semi-arid setting, transportation safety protocols, Newmont's Emergency Response program, and the general lack of surface waterbodies in the area, there is little risk of significant impacts to surface water quality from these materials.

Soils and Watershed

Soils and Reclamation

Implementation of the Proposed Action would result in the disturbance and loss of native soil profiles and related productivity on approximately 902 acres of proposed new surface disturbance, including 200 acres for the proposed Phoenix Copper HLF, 398 acres for the proposed Section 5 OUA, 254 acres for the proposed Section 15/16 Borrow Area, and 50 acres for the proposed haul road and utility corridor.

Native soil materials would be salvaged, to the extent possible, and used in site reclamation when their characteristics are suitable for adapted plant growth and where they could be safely salvaged. Replacement of growth media is proposed for major disturbances associated with the Proposed Action.

Implementation of concurrent reclamation to the extent possible, and installation of surface water and erosion controls, where needed, would minimize soil loss and erosion. As a result, significant impacts related to soil loss and erosion are not anticipated.

Impacts to the quality of native soils from project-related disturbance would be reduced based on Newmont's commitment to reclaim project components and successfully restore productive post-mining land uses. These objectives would be attained through the use of best management practices, as well as the use of site-adapted plant species for reseeding. Newmont has committed to seeding with a saline and sodium tolerant seed mixture for reclamation of project disturbances. The proposed seed mixture provides native species well adapted to the soils and are anticipated to successfully stabilize the disturbance area and provide a self-sustaining and diverse native plant community.

Based on state and federal reclamation requirements, it is likely that decreases in soil quality would not limit the attainment of overall post mining land use objectives. As a result, significant effects on the desired post-mining site productivity from soil quality impacts are not anticipated. Implementation of the project's Reclamation Plan would mitigate the loss of native soils and create productive post-mining land uses, primarily grazing and wildlife habitat.

Newmont would rely on alluvium obtained from the proposed Section 5 OUA and existing South OUA for reclamation growth media. As described in the Reclamation Plan, the OUAs are capable of providing up to 37.4 million tons (MT) of alluvium for reclamation capping purposes. The successful use of the alluvial

material in the reclamation program would be dependent on its ability to support the establishment and long-term productivity of desirable revegetated plant species.

Watershed

The proposed disturbance area would occur on a system of coalescing alluvial fans occurring within Buffalo Valley, an enclosed administrative basin (Hydrographic Area 131) within Hydrographic Basin 10 of Nevada's Central Region. Examination of the proposed project configuration indicates that little or no obstruction of existing alluvial fan drainages would occur from the placement of proposed facilities. Project related disturbance activities would affect approximately 0.3 percent of this watershed.

Storm water runoff from the proposed project site and components would be controlled in accordance with state and federal regulations pertaining to storm water management and pollution prevention. The project would be operated as a zero-discharge facility, as defined through the WPCP review and approval process by the NDEP.

Post-mining recontouring, reclamation, enhancement of drainage features, and long-term access restrictions would facilitate stabilization of the mine site. After proposed operations cease, reclamation and closure plans would be implemented, in accordance with permit requirements. After the cessation of operations, the successful implementation of the proposed reclamation plan would mitigate watershed impacts over the long term. No significant impacts to existing watershed conditions would be anticipated.

Vegetation

Plant Communities

Under the Proposed Action, the project would disturb or remove a total of approximately 902 acres of vegetation as a result of proposed disturbance activities in the proposed POO boundary expansion areas.

The proposed construction, operation, and maintenance activities would result in the direct removal of herbaceous and woody vegetation and fragmentation of native plant communities. Indirect impacts may result from the introduction or spread of noxious weeds and invasive species, potentially resulting in the reduction of native plant communities and available forage.

Project-related activities would result in the conversion of shrub-dominated vegetation cover types to herbaceous-dominated cover types in the short term. Over the long term, shrub species would become re-established and increase in abundance in the disturbance area as a result of reclamation and natural recolonization. Reclamation would be completed on approximately 902 acres (100 percent) of the proposed new disturbance area and would include measures to stabilize the growth media, reduce soil erosion, and minimize the potential for the establishment of noxious weeds and invasive species.

Revegetation activities would be modified based on the results observed during reclamation monitoring. The proposed seed mix and/or application rates may be modified as necessary based on any refinements of the reclamation program, and the information obtained from reclamation test plots. Modifications to the proposed seed mix would be made only after consultation and approval by the appropriate agencies. Based on implementation of the proposed reclamation plan, no significant impacts to plant communities are anticipated as a result of the proposed project.

No wetlands or perennial or intermittent streams, seeps, or springs were identified in the study area. As a result, no impacts to wetlands vegetation would occur under the Proposed Action.

Special Status Plant Species

No special status plant species were found in the study area during the biological surveys; therefore, significant impacts to these special status plant species are not anticipated as a result of project construction and operation.

Noxious Weeds and Invasive Species

Under the Proposed Action, surface disturbing activities would disturb or remove a total of approximately 902 acres of vegetation. Implementation of Newmont's reclamation plan and weed management plan would reduce the potential introduction and spread of noxious and invasive weed species in the proposed disturbance areas.

Wildlife and Fisheries Resources

The proposed project would result in the long-term reduction of approximately 902 acres of wildlife habitat, including approximately 648 acres of shadscale saltbush–budsage/grassland and 254 acres of black greasewood/shadscale saltbush habitat. The disturbance associated with the proposed project would be reclaimed incrementally, to the extent possible. Herbaceous habitats would recover within 3 to 5 years following reclamation, whereas shrub-dominated habitat would require up to 25 years to reach maturity.

Terrestrial Wildlife

Game Species. Potential direct impacts to mule deer would include the incremental long-term reduction of potential forage and the incremental increase of habitat fragmentation from vegetation removal associated with the Proposed Action. This anticipated loss of habitat would result in a small, incremental reduction in the amount of available habitat and is expected to have little impact on the existing low deer population densities that occur in the project vicinity. Although designated mule deer summer and winter range occur north of the project boundary on Battle Mountain, no BLM- or Nevada Department of Wildlife (NDOW)-designated mule deer movement corridors or seasonal habitats would be directly impacted from project activities. Therefore, impacts to deer populations are not expected to be significant.

Potential direct impacts to pronghorn would include the incremental long-term reduction of approximately 413 acres of pronghorn year-long range; however, no NDOW-designated pronghorn winter range would be directly impacted from project activities; therefore, impacts to pronghorn populations are not expected to be significant.

Impacts to mountain lions would not be expected to be significant, based on the low densities of individuals in the project vicinity.

Direct impacts to small game species (e.g., greater sage-grouse, chukar, mourning dove) would include the incremental long-term reduction of approximately 902 acres of potentially suitable habitat. Impacts also would include displacement from the disturbance areas and increased habitat fragmentation, until vegetation is re established. In most instances, suitable habitat adjacent to disturbance areas would be available for use by these species; however, displacement would increase competition and could result in some local reductions in wildlife populations if adjacent habitats are at carrying capacity. Potential impacts also could include nest abandonment or loss of eggs or young. The lack of known breeding sites (e.g., greater sage-grouse leks) and water sources that would support brooding birds limit the overall habitat quality for greater sage-grouse, mourning dove, Hungarian partridge, and chukar. Therefore, potential effects to small game species from mine development are not expected to be significant.

Nongame Species. Direct impacts to nongame species (e.g., small mammals, passerine, raptors, and reptiles) would include the incremental long-term reduction of approximately 902 acres of potentially suitable habitat. Impacts also would include displacement from the disturbance areas and increased habitat fragmentation, until vegetation was re-established. In most instances, suitable habitat adjacent to

disturbance areas would be available for use by these species; however, displacement could result in some local reductions in wildlife populations if adjacent habitats are at carrying capacity. Potential impacts also could include nest and burrow abandonment or loss of eggs or young. These short-term losses may reduce productivity for that breeding season but would cease following successful reclamation; therefore, impacts to nongame species are not expected to be significant.

Migratory Birds. Potential direct impacts to bird species would include the long-term loss of approximately 902 acres of potentially suitable breeding and foraging habitat; however, this loss is expected to have little effect on local bird populations, based on the amount of suitable breeding and foraging habitat in the surrounding area. Potential direct impacts to breeding birds (including raptors) would be minimized by avoiding habitat removal between March 1 and July 31, and the implantation of breeding bird surveys and appropriate mitigation, as needed, in coordination with the BLM, U.S. Fish and Wildlife Service, and NDOW.

Installation of new 0.2-mile 120-kilovolt (kV) and 2-mile 13.8-kV electrical powerline segments incrementally would increase electrocution and collision potential for migrating and foraging bird species (e.g., raptors and migrating birds). Based on Newmont's commitment to design and construct powerlines in accordance with applicable electrocution and collision protection guidelines, impacts to migratory birds (including raptors) from electrocution and collision would be low.

Human Presence and Noise. Potential noise and human presence impacts to wildlife species from the implementation of the Proposed Action is expected to be negligible since the Proposed Action is located at an existing mine site where human activity associated with mining operations currently occurs. Additionally, Newmont would require a mandatory employee education program for all personnel in order to minimize wildlife/vehicle-related collision impacts during project operations.

Water Management Activities. To minimize potential wildlife mortalities from exposure to processing solutions, 8-foot-high chain-link fencing would be installed around process ponds (including the raffinate pond), and netting would be installed over process or solution ponds that would contain leach solutions to minimize potential impacts to volant (flying) and terrestrial wildlife. The proposed copper HLFs would be designed and constructed as zero discharge facilities to minimize the potential for release of process solutions outside of the appropriately protected containment areas. Drip emitters would be buried where practical and the heaps would be scarified to minimize ponding and pooling of process solutions. Based on Newmont's applicant-committed environmental protection measures, potential impacts to wildlife resources from exposure to process solutions are not expected to be significant.

Aquatic Species. There are no anticipated impacts to aquatic resources from the proposed project due to a lack of perennial water sources within the study area.

Special Status Species. Impacts to special status wildlife species from surface disturbance would parallel those described above for terrestrial wildlife, including the long-term reduction of approximately 902 acres of wildlife habitat, approximately 648 acres of shadscale saltbush-budsage/grassland, and 254 acres of black greasewood/shadscale saltbush habitat.

Based on implementation of applicant-committed environmental protection measures, as described in Chapter 2.0, Section 2.5, no adverse effects to sensitive raptor species are anticipated, and the potential for impacts to sensitive bird species related to exposure to process solutions are not expected to be significant.

Bats. Direct impacts to bat species would include the long-term disturbance of 902 acres of foraging habitat, including approximately 648 acres of shadscale-budsage/grassland and 254 acres of black greasewood/shadscale habitat; however, due to limited roosting habitat within the study area, impacts to sensitive bat species are not expected to be significant.

Pygmy Rabbit. No direct impacts to the pygmy rabbits are anticipated due to the lack of suitable habitat within the disturbance area. Impacts to this species would be limited to increased human presence and noise effects, if present. Based on Newmont's environmental protection measure of conducting pygmy rabbit surveys prior to surface disturbance and the overall availability of suitable habitat in the project vicinity, these impacts would not be considered significant.

Bald Eagle. No bald eagle nest sites occur within the study area. Occurrence by this species would be limited to migrating and dispersing individuals. Impacts would include the long-term reduction of approximately 902 acres of potential foraging habitat, until reclamation was completed and vegetation re-established. Indirect impacts associated with mine-related noise and human presence currently occurs at the mine site and would continue under the proposed project. Based on implementation of Newmont's environmental protection measures, the lack of existing nest sites within the project boundary, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Swainson's Hawk. No Swainson's hawk nests have been identified in the study area. In addition, no suitable nesting habitat (i.e., trees, large shrubs, cliffs) occurs within the proposed disturbance areas. Direct impacts would include the long-term reduction of approximately 902 acres of potential foraging habitat, until reclamation was completed and vegetation re-established; however, this impact would be considered not significant based on the overall availability of suitable foraging habitat in the vicinity of the study area. Indirect impacts would continue to result from mine-related noise and human presence. Based on implementation of Newmont's environmental protection measures, the lack of existing nest sites within the project vicinity, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Ferruginous Hawk. No active ferruginous hawk nests have been identified within the study area; however, ferruginous hawks have been observed nesting north of the study area on Battle Mountain and immediately south of the existing tailings facility. Based on Newmont's environmental protection measures, including conducting raptor nest surveys and implementing mitigation measures, as applicable, impacts to breeding birds would not be significant. Direct impacts would include the long-term reduction of approximately 902 acres of potential foraging habitat, until reclamation was completed and vegetation re-established; however, this impact would be considered not significant based on the overall availability of suitable foraging habitat in the vicinity of the study area. Indirect impacts would continue to result from mine-related noise and human presence. Based on implementation of Newmont's environmental protection measures, the lack of active nest sites within the study area, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Golden Eagle. No golden eagle nests have been identified within the study area; however, golden eagles have been observed nesting north of the study area on Battle Mountain. Based on Newmont's environmental protection measures, including conducting raptor nest surveys and implementing mitigation measures, as applicable, impacts to breeding birds would not be significant. Direct impacts would include the long-term reduction of approximately 902 acres of potential foraging habitat, until reclamation was completed and vegetation re-established; however, this impact would be considered not significant based on the overall availability of suitable foraging habitat in the vicinity of the study area. Indirect impacts would continue to result from mine-related noise and human presence. Based on implementation of Newmont's environmental protection measures, the lack of existing nest sites in the project vicinity, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Prairie Falcon. No prairie falcon nest sites have been documented in the project vicinity; however, this species has been documented nesting north of the study area. Based on Newmont's environmental protection measures, including conducting raptor nest surveys and implementing mitigation measures, as applicable, impacts to breeding birds would not be significant. Direct impacts to migrating and

foraging falcons would include the long-term reduction of approximately 902 acres of potential foraging habitat, until reclamation was completed and vegetation re-established. Indirect impacts would continue to result from mine-related noise and human presence. Based on the implementation of Newmont's environmental protection measures, the lack of existing nest sites in the project boundary, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Greater Sage-grouse. No BLM- and NDOW-designated core breeding habitats, lek sites, or NDOW-designated seasonal habitats have been identified in the study area. As a result no direct impacts to breeding greater sage-grouse would be anticipated from the Proposed Action. Greater sage-grouse may utilize upland habitats in the project vicinity, especially within suitable habitat along Willow Creek. It is anticipated that nesting and brooding activity would be low, due to the limited availability of surface water and riparian vegetation in the study area. Therefore, based on the lack of suitable habitat in the study area, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Burrowing Owl. This species has been observed in the study area in past years, although no burrowing owl nest sites were documented. Vegetation that would be disturbed as a result of the proposed project would be suitable habitat for foraging birds in the study area; however, based on Newmont's environmental protection measures, including conducting raptor nest surveys and implementing mitigation measures, as applicable, impacts to breeding birds would not be significant. Direct impacts to this species would include the long-term reduction of approximately 648 acres of potential shadscale saltbush budsage/grassland and 254 acres of black greasewood/shadscale saltbush habitat, until reclamation was completed and vegetation re-established. Indirect impacts would continue to result from mine related noise and human presence. Based on implementation of Newmont's environmental protection measures and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Long-eared Owl. This species has been recorded nesting north of the study area at higher elevations on Battle Mountain but has not been documented nesting in the study area. No suitable breeding habitat (i.e., trees, large shrubs) is present in the study area. Therefore, impacts to breeding birds as a result of proposed mine-related activities would not be anticipated. Direct impacts to this species would result from the long-term reduction of approximately 902 acres of potential foraging habitat. These impacts would be considered not significant based on the overall availability of suitable habitat in the vicinity of the project. Indirect impacts would continue to result from mine-related noise and human presence. Based on the implementation of Newmont's environmental protection measures, the overall availability of suitable habitat in the vicinity of the project, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Short-eared Owl. Impacts to breeding birds as a result of proposed mine-related activities could occur based on potentially suitable breeding habitat (e.g., open shrublands) in the study area; however, based on Newmont's environmental protection measures, including conducting raptor nest surveys and implementing mitigation measures, as applicable, impacts to breeding birds would not be significant. Direct impacts to this species would result from the long-term reduction of approximately 902 acres of potential foraging habitat, until reclamation was completed and vegetation re-established. These impacts would be considered not significant based on the overall availability of suitable habitat in the vicinity of the project. Indirect impacts would continue to result from mine-related noise and human presence. Based on implementation of Newmont's environmental protection measures and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Pinyon Jay. This species has been documented north of the study area on Battle Mountain. Based on the presence of marginal habitat (shrublands) within the study area, direct impacts to breeding pairs (if present) as a result of proposed mine-related activities could include abandonment of a breeding

territory or nest site or the potential loss of eggs or young, which would reduce productivity for that breeding season. To minimize these impacts, Newmont has committed to avoiding habitat removal, to the extent possible, between March 1 and July 31 or, alternately, conducting breeding bird surveys and implementing appropriate mitigation in coordination with the BLM and NDOW. Direct impacts to foraging birds would result from the long-term reduction of approximately 902 acres of foraging habitat, until reclamation was completed and vegetation re-established. Indirect impacts would continue to result from mine-related noise and human presence. Based on the implementation of Newmont's environmental protection measures, the overall availability of suitable habitat in the vicinity of the project, and the existing level of activity at the mine site, potential impacts to this species as a result of the proposed project are not expected to be significant.

Juniper Titmouse. Based on the lack of potentially suitable breeding habitat, direct impacts to breeding pairs as a result of proposed mine-related activities would not occur. Direct impacts to foraging birds would include the long-term reduction of approximately 902 acres of foraging habitat, until reclamation was completed and vegetation re-established. Indirect impacts would continue to result from mine-related noise and human presence. Impacts would be considered not significant based on implementation of Newmont's environmental protection measures, the overall availability of suitable habitat in the vicinity of the project, and the existing level of activity at the mine site.

Loggerhead Shrike. Potentially suitable breeding habitat for this species is present in the study area. Direct impacts to breeding pairs (if present) as a result of proposed mine-related activities and the applicable environmental protection measures to minimize these impacts would parallel those described above for the pinyon jay. Direct impacts to this species would include the long-term reduction of approximately 902 acres of potential breeding and foraging habitat, until reclamation was completed and vegetation re-established. Indirect impacts would continue to result from mine related noise and human presence. Impacts would be considered not significant based on implementation of Newmont's environmental protection measures, the overall availability of suitable habitat in the vicinity of the project, and the existing level of activity at the mine site.

Vesper Sparrow. Potentially suitable breeding habitat for this species is present in the study area. Direct impacts to breeding pairs (if present) as a result of proposed mine-related activities and the applicable environmental protection measures to minimize these impacts would parallel those described above for the pinyon jay. Direct impacts to this species would include the long-term reduction of approximately 902 acres of potential breeding and foraging habitat, until reclamation was completed and vegetation has re established. Indirect impacts would continue to result from mine-related noise and human presence. Impacts would be considered not significant based on implementation of Newmont's environmental protection measures, the overall availability of suitable habitat in the vicinity of the project, and the existing level of activity at the mine site.

Black Rosy-finch. Based on the lack of suitable breeding habitat, direct impacts to breeding pairs as a result of proposed mine-related activities would not occur. Direct impacts to foraging birds would include the long-term reduction of approximately 902 acres of winter/transitional habitat, until reclamation was completed and vegetation re-established. Indirect impacts would continue to result from mine-related noise and human presence. Impacts would be considered not significant based on implementation of Newmont's environmental protection measures, the overall availability of suitable habitat in the vicinity of the project, and the existing level of activity at the mine site.

Range Resources

Direct impacts to range resources would result from the project-related long-term removal of grazing on approximately 194 acres of BLM-administered land. Livestock distribution may be affected as a result of the proposed mining-related activity in areas where livestock currently use the Copper Canyon Allotment. The effects to livestock distribution also would affect the utilization of available forage in the long term. Indirect impacts may include the introduction or spread of noxious weeds and invasive species potentially resulting in the reduction of available forage quality and quantity.

No modification of seasonal stocking rates would be anticipated as a result of project implementation within the Copper Canyon Allotment. The long-term loss of 15 animal unit months (AUMs) would represent less than 1 percent of the total permitted use.

Reclamation would be completed on approximately 194 acres (or 100 percent) of the total proposed disturbance area on BLM-administered lands. All areas would be fenced and excluded from grazing for the duration of proposed leaching and reclamation activities. Satisfactory revegetation (i.e., soil stabilization through the presence of adequate plant cover) of disturbed areas on BLM-administered lands would increase plant cover and provide an adequate amount of forage to recover the 15 AUMs affected by project-related activities. Livestock grazing would resume after revegetation was complete and upon the removal of the perimeter fence around the Proposed Action disturbance areas. As a result, no significant impacts to available forage or AUMs would occur as a result of the Proposed Action.

No water-related range improvements were identified within the study area; therefore, no significant impacts to water-related range improvements would occur as a result of the Proposed Action. No significant impact to the Copper Canyon Allotment would occur as a result of the Proposed Action.

Paleontological Resources

Potential direct impacts to paleontological resources from implementation of the Proposed Action would be limited to areas of disturbance; potential indirect impacts could result from potential increased accessibility to fossil beds from improved access to remote areas and subsequent illegal collecting.

The Quaternary-age alluvial deposits within the proposed disturbance areas are considered as Condition 3 for paleontological sensitivity and are unlikely to produce vertebrate or invertebrate fossils. In addition, an assessment of paleontological resources found no known vertebrate or invertebrate localities within the study area. Therefore, because there are no known or suspected unique or site-specific paleontological resources in the study area, there would be no significant impacts to paleontological resources anticipated under the Proposed Action.

If paleontologically unique or site-specific fossiliferous deposits (particularly vertebrate fossils) are encountered during construction, operation, or reclamation of the proposed project, measures would need to be taken to evaluate the paleontological resource.

Cultural Resources

Cultural resources inventories were conducted within the area of potential effects for the Proposed Action. Based on the results of these inventories, no archaeological sites or isolated finds are recommended as eligible for the Natural Register of Historic Places (NRHP); 1 of the 3 loci is recommended as a contributing component of the previously recorded NRHP-eligible site. Final determination of eligibility will be decided by the BLM. In accordance with the Programmatic Agreement (PA), unavoidable adverse effects to historic properties would be mitigated through implementation of a treatment plan.

Indirect effects, such as illegal collecting of artifacts and inadvertent damage to archaeological sites, could occur in the study area due to an increase in the number of workers during construction. In accordance with the 1994 PA, Newmont would ensure that all of its personnel, and the personnel of its contractor, are directed not to engage in the illegal collection of historic and prehistoric materials. This protection measure would reduce, but not completely eliminate, the potential for illegal collecting of artifacts and inadvertent damage to archaeological sites.

If previously unknown cultural resources are discovered during construction, all construction activities would cease within 300 feet of the discovery and the BLM authorizing officer (AO) would be notified of the find. Steps would be taken to protect the resource from vandalism or further damage until the BLM AO can evaluate the nature of the discovery. If the previously unidentified cultural resource is determined

eligible to the NRHP or unevaluated, adverse effects would be mitigated as outlined in the PA. Construction would not resume in the area of the discovery until the BLM AO has issued a notice to proceed.

If construction or other project personnel discover what may be human remains, funerary objects, or items of cultural patrimony on BLM-administered land, construction would cease within the vicinity of the discovery, and the BLM AO would be notified of the find. The location of the find would not be publically disclosed, and the remains would be secured and preserved in place. Any discovered Native American human remains, funerary objects, or items of cultural patrimony found on federal land would be handled in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). Non-Native American human remains would be handled in accordance with Nevada state law. Construction would not resume in the area of the discovery until the BLM AO has issued a notice to proceed.

If human remains and associated funerary objects are discovered on private land during construction activities, construction would cease within the vicinity of the discovery and the county coroner or sheriff would be notified of the find. Treatment of any discovered non-Native American human remains found on private land would be handled in accordance with Nevada Revised Statute (NRS) 440.025; Native American human remains found on private land would be handled in accordance with NRS 383.150.

Native American Traditional Values

To date, no traditional cultural properties or places of cultural and religious importance to the tribes have been identified in the study area through tribal consultation/coordination or cultural resource inventory of the project APE; however, tribal representatives who participated in the August 2008 field tour expressed concern with mining (in general) and its impact on natural resources.

Tribal consultation/coordination currently is ongoing and would continue through project completion. If a traditional cultural property or place of cultural and religious importance is identified by tribal representatives, and avoidance is not feasible, specific operating procedures, stipulations, or mitigation measures would be developed in consultation/coordination with the affected tribal groups with the goal of reducing or eliminating impacts to the identified site. Per the 1994 PA, if mitigation is required at a traditional cultural property or place of cultural and religious importance, a treatment plan would be reviewed and approved by the BLM, State Historic Preservation Office, Advisory Council on Historic Preservation, and Newmont. Tribal representatives would be asked to participate in the development of any such treatment plan.

If construction or other project personnel discover what may be Native American human remains, funerary objects, or items of cultural patrimony on BLM-administered land, construction would cease within the vicinity of the discovery, and the BLM AO would be notified of the find. The location of the find would not be publically disclosed, and the remains would be secured and preserved in place. Treatment of Native American human remains, funerary objects, or items of cultural patrimony found on federal land would be handled in accordance with the NAGPRA.

If Native American human remains and associated funerary objects are discovered on private land during construction activities, construction would cease within the vicinity of the discovery and the county coroner or sheriff would be notified of the find. The location of the find would not be publically disclosed, and the remains would be secured and preserved in place. Treatment of any Native American human remains found of private land would be handled in accordance with NRS 383.150.

Air Quality

Estimates of the emission rates for five criteria air pollutants (particulate matter less than 10 microns in diameter [PM_{10}]; particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]; carbon monoxide [CO]; sulfur dioxide [SO_2]; and oxides of nitrogen [NO_X]), the two criteria air pollutant precursors (NO_X and volatile organic compounds), and the greenhouse gas (GHG) carbon dioxide were made from each

emission unit for all five applicable criteria air pollutant regulatory time periods (1-hour, 3-hour, 8-hour, 24-hour, and annual).

The emission rates for PM_{10}, CO, NO_X, and SO_2 specified in the current NDEP-Bureau of Air Pollution Control (BAPC) Class II Air Quality Operating Permit for the proposed project were used for the permitted emission units which would be operational during Year 2016. $PM_{2.5}$ emission rates for these permitted sources were calculated from the NDEP-BAPC permitted PM_{10} emission rates using $PM_{2.5}/PM_{10}$ ratios developed from the emission factors found in the current versions of U.S. Environmental Protection Agency AP-42. The maximum modeled pollutant concentrations would be in compliance with state and national Ambient Air Quality Standards. Fugitive dust and vehicle exhaust from mining activities and equipment would be managed under the Class II operating permit.

No individual hazardous air pollutants (HAP) would be emitted in a quantity greater than the major source limit of 10 tons per year (tpy). Also, the combined HAP emissions are less than the major source limit of 25 tpy. Therefore, the Proposed Action would not constitute a major HAP source.

GHG emissions associated with the Proposed Action would contribute approximately 14,757 tpy from fuel combustion and 21,473 tpy from electrical power for a total of 36,230 tpy of GHG.

Land Use and Access

Land Use

The Proposed Action would increase surface disturbance in the study area by approximately 902 acres; 194 acres (21 percent) are BLM-managed public land and 708 acres (79 percent) are Newmont-owned private land. Approximately 398 acres of the proposed new disturbance area would be associated with the Section 5 OUA and haul road and utility corridor, which is surrounded on three sides by currently approved mine facilities or activities. An additional 254 acres of new disturbance would occur in Sections 15 and 16, which lie between the approved tailings and clay borrow areas at the south end of the currently approved mine.

The Proposed Action would be consistent with BLM plans and policies that designate land use within the study area as open for mineral exploration and development, as stated in the Shoshone-Eureka Resource Area Resource Management Plan. Although Lander County does not have jurisdiction to regulate land use on federal lands, the proposed project would be consistent with the county's preference for "multiple use" management and retention of existing mining areas as expressed in the 2005 Policy Plan for Federally Administered Lands. The Proposed Action would comply with adopted plans and policies of potentially affected governmental entities.

New project-related surface disturbance would reduce the amount of land available for livestock grazing, dispersed recreation, and wildlife habitat, although the loss would be minimal in the context of the overall area, particularly considering the current limited use levels. The proposed surface disturbance would constitute approximately 0.8 percent of the 106,430-acre Copper Canyon Allotment. The public/private breakdown would be 194 acres of public land disturbance, or 0.3 percent of the total 61,730 acres of public land, and 708 acres of private land disturbance, or 1.6 percent of the total 44,700 acres of private land.

No conflicts with existing rights-of-way (ROWs) have been identified for the Proposed Action. Most of the ROWs and use authorizations within the proposed and existing disturbance area exist to serve the mining activities. An existing county road (N-48143) has been replaced by the rerouted Willow Creek Road (N-84251).

Post-reclamation land uses of the proposed disturbance areas would be returned to open space, grazing, dispersed recreation, and wildlife habitat. These uses would be consistent with local and BLM land use plans and guidelines.

Access

Transportation safety concerns related to highway traffic generated by the Proposed Action would be minimal. Lines of sight at intersections are unobstructed and sight distances are ample. Development of the proposed project would have no effect on the physical characteristics of the major intersections or SH 305. The increase in traffic would be minimal, remaining well within the capacity of the roadways as noted above. The mix of heavy vehicles in the traffic stream would not change substantively. As such, any increase in the risk of traffic accidents would be minor and proportional to the overall increase in traffic.

Based on this analysis, development of the proposed project would not significantly affect highway traffic in the mine vicinity. Any degradation in roadway safety conditions would be minimal.

Access to public and private lands in the project vicinity would be minimally affected by the proposed project.

Based on the analysis and assumptions noted above, the effects of the proposed project on land use and access in the study area would be considered minor.

Recreation and Wilderness

Recreation

Under the Proposed Action, surface disturbance at the Phoenix Mine would increase by approximately 902 acres, 194 acres (21 percent) of which would be on BLM-administered public land and 708 acres (79 percent) would be on Newmont-owned private land. Approximately 398 acres of the proposed new disturbance area would be associated with the Section 5 OUA and haul road and utility corridor, which would be surrounded on three sides by currently approved mine facilities or activities. The remaining 254 acres would be in Sections 15 and 16, which lie between the currently approved tailings and the clay borrow areas at the south end of the currently approved mine.

The potentially affected lands do not offer unique recreational opportunities and would not affect developed or high concentration undeveloped recreation facilities or resources. The acreage of public lands affected would be minor in the context of the currently approved mine disturbance. It also would be a small fraction of the acreage available for recreational activities in the project vicinity and region, which has abundant public open space lands available for dispersed recreational opportunities. Although no specific recreational use data are available for the public lands directly affected by the Proposed Action, the number of dispersed recreationists affected is expected to be minimal, and what little displacement may occur would not create overuse of other areas or degradation of the resource. Therefore, significant impacts would not occur from the displacement of dispersed recreationists under the Proposed Action.

Adverse impacts to big and small game populations are not anticipated as a result of implementation of the Proposed Action. Consequently, adverse impacts to hunting opportunities are not expected. Additionally, no adverse impacts to fisheries located at Willow Creek are expected as a result of operations under the Proposed Action.

Developed recreational facilities in the region and in the Town of Battle Mountain are not expected to be adversely affected through implementation of the Proposed Action. The Proposed Action would result in a temporary (12 months) increase in population of approximately 73 persons during construction (a 5.3 percent increase from the estimated 2007 county population) and a permanent increase in population of approximately 60 persons during operations (a 0.7 percent increase from the 2009 Lander County population). Facilities at the Mill Creek Recreation Area, located approximately 24 miles south of the Town of Battle Mountain, could experience increased use during project construction and operation. Other regional recreational facilities such as Willow Creek also would likely experience minor increased demand during project construction and operation. Developed recreational facilities in the region would

be expected to accommodate increased demand for recreation from this level of growth and are not expected to be adversely impacted by the influx of people.

Recreational facilities located within the Town of Battle Mountain would be able to absorb any extra demand placed on them as a result of the anticipated new residents to the area. Consequently, significant impacts to developed recreation facilities would not occur under the Proposed Action.

Wilderness

Implementation of the Proposed Action would have no impact on wilderness or wilderness study areas (WSAs). The closest WSA is approximately 15 miles to the west (China Mountain WSA), and it is not anticipated that project-related disturbance would be visually or audibly discernible from the WSA.

Social and Economic Values

Under the Proposed Action, construction is expected to begin late in the first quarter of 2012, with construction completed and operations beginning approximately 1 year later, during the first quarter of 2013. Construction would be completed by a contractor with an estimated average work force of 150, and a brief peak work force of 250 occurring in the third quarter of 2012. Approximately 40 to 50 additional operations workers would be hired for the proposed project beginning during construction so they would be familiar with the project and trained to begin commissioning and production as soon as construction is completed. For calculation purposes, this analysis assumes that 48 additional operations workers would be hired. The existing work force of approximately 460 people would continue working at the existing Phoenix Project operations, resulting in a total of approximately 508 operations employees at the mine site. The 48 new workers for the proposed project would be employed for approximately 22 years. It is expected that the 460 workers currently on-site would continue through mining operations, and the work force then would be cut to approximately 150 for closure and reclamation activities.

Population

In-migrating construction workers and their families would number approximately 73 persons. This number of people would represent a 0.3 percent increase over the 2010 population of 22,303 for the two-county study area. If the new population is distributed similar to the existing work force, approximately 39 persons would locate in the Town of Battle Mountain vicinity, representing an increase of 1.3 percent, and 30 would locate in and near Winnemucca where they would represent an increase of 0.4 percent of the community's population.

In-migrating operation workers and their families would number approximately 60 persons. This increase would represent a 0.3 percent increment over the 2010 study area population. Again, if distributed similar to the existing work force, 32 new people in the Town of Battle Mountain area would represent an increase of 0.9 percent of that community's population. The new population would be 25 in Winnemucca, representing 0.3 percent of the 2010 population in the Winnemucca area.

The project-related population increase would be well below the 5 percent impact significance threshold for the study area, even if the entire increase occurred in the Town of Battle Mountain.

Income and Employment

The direct work force increase for construction of the proposed project would peak at approximately 250 workers for a few weeks and would average 150. Indirect employment generated by the project is projected at 30 to 50 additional jobs. Approximately 70 percent of construction-related jobs (direct and indirect) are expected to be filled from the local work force, leaving a demand for 54 to 90 workers from outside the local area.

The peak direct construction employment increment would represent a 2.9 percent increase over total employment in the study area. Total peak direct and indirect employment would be 3.3 percent of

existing total employment. The current availability of unemployed workers in Lander and Humboldt counties suggest that there would be adequate numbers of workers to fill most of the construction jobs. It is expected, however, that at least some of the needed jobs would have to be filled from outside the area if specific job skills are required for certain jobs.

The direct operations work force increase for the proposed project would be approximately 48 workers. Indirect employment generated by the activity is projected at 36 additional jobs, raising the total to 84 jobs. Local labor is projected to meet 60 percent of the direct project-related jobs, and 70 percent of the indirect jobs, leaving a demand for 22 workers from outside the local area, although continuing high unemployment rates locally could reduce that number.

The direct employment increment would represent a 0.5 percent increase over existing total employment in the study area. Total direct and indirect employment would be 0.8 percent of existing total employment. There are more than enough unemployed workers in Lander County to fill the needs of the proposed project, if the unemployed individuals have the appropriate skills to fill the jobs. It is expected, however, that at least some of the needed jobs would have to be filled from outside the area, as indicated in the assumptions noted above.

The estimated annual operations payroll for the proposed project, including benefits, would be approximately $5.5 million. Each $1.00 in direct earnings would indirectly generate an additional $0.37 in earnings to other workers in the local economy. Consequently, the annual indirect impact on earnings would be approximately $2.0 million, yielding a combined annual indirect impact of approximately $7.5 million. The portion spent locally would constitute an economic benefit accruing from the project to the local economy.

Housing

Project-related demand for housing during operations is estimated at up to 27 units. Both Lander County and Humboldt County had relatively high estimated vacancy rates in 2007. The Battle Mountain community alone had an estimated 339 vacant units. With this many units vacant, it is anticipated there would be no issues accommodating the housing needs of project related workers and their families.

Community Facilities and Services

Generally, existing utilities and emergency response services should have few, if any, difficulties accommodating the estimated 73 to 124 new people during construction, and 60 new operations-related people the proposed project would bring to the study area. It is expected that the proposed project would have only minor and insignificant effects on public services and facilities in the study area.

Public Education

No effects to school enrollment are anticipated during construction, as it is anticipated that construction workers would be unlikely to move their families to the area for the relatively short period of time they would be at the mine site. During operations, the proposed project would increase the school-age population in the study area by an estimated 11 students. This would increase enrollment in study area schools by less than 1 percent. The number of new students would be greatest in the Town of Battle Mountain.

Public Finance

Newmont estimates the proposed project would generate approximately $0.8 million in net proceeds of mines taxes during the first year of production, which would be distributed among Lander County, the school district, the hospital district and the state. That amount would rise to a peak of slightly over $2.0 million in the Year 4, would decline gradually to approximately $1.1 million in the Year 8, and would then vary from $0.4 million to $1.3 million through Year 21 before tailing off to zero by the last year of the project. These estimates would be over and above the net proceeds taxes paid for the on-going Phoenix

Project operations, which would average approximately $3.3 million per year during the life of the proposed project. Existing operations at the Phoenix Project began in March 2006, but did not pay net proceeds taxes until 2009 because of a combination of development costs exceeding revenues and the lag from the time of assessment to the time of tax payment. Net proceeds can vary substantially from year-to-year, depending on production volumes, mineral prices, and annual production costs.

Newmont would continue to pay ad valorem property taxes on the assessed value of the mining property. These taxes would lag behind net proceeds taxes due to standard assessment procedures, but would be more consistent over the life of the project. Newmont (2011b) estimates general property tax payments for the proposed project would be approximately $0.4 million in Year 2 and $1.1 million in the Year 3. They would then remain between $1.1 million and $0.9 million for the life of the project, averaging slightly over $0.9 million per year. As with net proceeds taxes, property taxes would be in addition to the average of $2.9 million per year expected to be paid for previously permitted, on-going Phoenix Project operations.

Sales and use taxes for the proposed project would average slightly over $600,000 per year, with periodic peaks near or above $900,000 approximately every 5 years. The incremental increase attributable to the proposed project would be a modest 7 percent above the annual average of $8.3 million projected for on-going operations.

The proposed project would be expected to pay approximately $36,000 per year in business tax, a minor increase over the approximately $415,000 annual business tax projected for the existing Phoenix Project.

It is projected that the proposed project would pay a total of over $2.4 million annually in local and state taxes in these four major tax categories. This would be an increase of 16.4 percent over the $14.9 million annual average projected for the existing Phoenix Project.

Social Conditions

It is estimated that project construction could add up to 73 people to the study area; however, the increase would be short-term and unlikely to affect the social or governmental character of the study area.

With an expected project-related population increase during operations of 60 people in a community that has grown slowly since the 2000 census, it is not anticipated that the growth would cause any disruption in social or governmental structures.

Visual Resources

Viewpoints affected by the proposed project would include portions of Interstate 80, SH 305, Buffalo Valley Road, and Willow Creek Road. Of these, SH 305 (northbound), Buffalo Valley Road, and Willow Creek Road were identified as key observation points (KOPs), due to their close proximity, use volume, and sensitivity of viewers.

SH 305 Northbound (KOP-1)

A moderate increase in the extent of visible mine features would occur following development of the Proposed Action. The change would be most noticeable in the area of the proposed Phoenix Copper HLF on the west side of the existing Phoenix Mine. In this visual resource management (VRM) Class IV area, the significance of the visual impacts as seen from KOP-1 under the Proposed Action would be moderate and would conform to the management guidelines for the area.

Buffalo Valley Road (KOP-2)

It is estimated that the degree of the visual impact as observed from KOP-2 under the Proposed Action would be moderate due to the extent of the currently permitted disturbance and the allowable change within the VRM Class IV designation.

Willow Creek Road (KOP-3)

Under the Proposed Action, the extent and scale of development substantially would increase as observed from this KOP. Dominating this view would be Phases 2 and 3 of the Phoenix Copper HLF. This expansion would be apparent to the casual viewer in comparison to the natural peaks and mine features south and east of these facilities. From this KOP, the existing high voltage transmission line in the foreground contributes relatively strong line contrasts. The scale and extent of the Proposed Action would dominate the scene and result in a moderate degree of visual contrast as seen from KOP-3.

It is estimated that the degree of the visual impact as observed from KOP-3 under the Proposed Action would be moderate due to the extent of existing disturbance and the allowable change within the VRM Class IV designation.

Environmental Justice

The analysis indicates that the potential effects of the Proposed Action would not be expected to disproportionately affect any particular population. Although the Town of Battle Mountain does have a higher percentage of American Indians than the state reference population, there is no indication that they would suffer disproportionate effects of the Proposed Action. Potential environmental effects that may occur at a greater distance would affect the Town of Battle Mountain's population equally, without regard to minority status or income level.

Hazardous Materials and Solid Waste

Transportation

Hazardous substances would be transported by commercial carriers or vendors in accordance with the requirements of Title 49 of the CFR. Carriers would be licensed and inspected as required by the Nevada Department of Transportation and the U.S. Department of Transportation.

In order to evaluate the potential impact of the transportation of hazardous materials to the mine site, the risk of a transportation accident resulting in a release of hazardous materials was evaluated. Accident rates derived from national statistics for truck accidents that involve hazardous materials indicate that accident rate for corrosive materials was 0.13 per million miles traveled. Based on this information, there would be a low probability of an accident involving the release of hazardous materials during the operational period of the proposed project. A similar evaluation performed for the diluent indicated that probability of an accident and a release of the material over the lifetime of the project is very low.

Storage and Use

Newmont has developed an Emergency Response Plan to respond to spills of hazardous materials at the mine site. Operations conducted in accordance with this plan would ensure that impacts from spills would be minimized and the spilled materials contained and removed. Newmont would have the necessary spill containment and cleanup equipment available on site, and personnel would be able to respond quickly.

Hazardous substances would be handled in accordance with applicable Mine Safety and Health Administration or Occupational Safety and Health Administration regulations (Titles 29 and 30 of the CFR). The hazardous materials used for the proposed project would be handled as recommended on the manufacturer's Material Safety Data Sheets. Based on the facility's design features and the

implementation of the Emergency Response Plan, the probability of a major release occurring at the mine site during the life of the proposed project is considered to be low.

Potential Effects of a Spill

The environmental effects of a release would depend on the material released, the quantity released, and the location of the release. Potential spills could range in magnitude from a few gallons of material spilled during transfer operations at the mine site to the loss of several thousand gallons into a riparian drainage as a result of a transportation accidental release.

A large-scale release of hazardous material would have implications for public health and safety depending on the location of the release. Under the Proposed Action, the probability of a release along a transportation route is very small, and the probability of a release within a populated area is smaller, and the probability of a release involving an injury or fatality is smaller still. As a result, it is not anticipated that a release involving severe effects to human health or safety would occur during the life of the project.

The release of a hazardous material or waste into a sensitive area (e.g., stream, wetland, or populated area) is assumed to be very unlikely.

Response to a Spill

In the event of a hazardous materials release en-route to the mine site, the transportation company would be responsible for response and cleanup. Hazardous materials transporters are required to maintain an Emergency Response Plan, which details the appropriate response, treatment, and cleanup for a material spilled onto land or into water. Specific procedures would be developed for fuels, acids, and other hazardous materials.

Solid Waste

The proposed project would generate non-hazardous solid waste in the form of crud solids and montmorillonite clay. This waste material would be placed on the heap leach pads. In addition, empty material containers would be cleaned and disposed of in the on-site landfill or other permitted disposal site.

The lead sludge would be shipped back to the anode supplier for recycling. It is estimated that 15,000 pounds, or 60 drums, per year would be generated from the proposed project.

Technologically Enhanced Naturally Occurring Radioactive Materials

There is a low potential for the concentration of technologically enhanced naturally occurring radioactive materials (TENORM) as a result of the proposed copper leaching and extraction; however, if TENORM were to be concentrated, it has the potential to occur in leached materials, processing wastes, and process piping and equipment. Newmont has committed to quarterly testing and monitoring for uranium, radium, and gamma ray activity at various process areas. In addition, Newmont has committed to gamma ray monitoring of E-ponds during closure operations. Monitoring will occur quarterly when workers are performing regular maintenance or monitoring of E-ponds. A one-time gamma meter measurement survey would occur at each E-pond upon closure. The monitoring would provide an indication if TENORM is being concentrated over time. No thresholds of radioactivity are currently proposed and if radioactivity is shown to increase over time, the BLM would consult with appropriate state and federal regulatory agencies to determine a course of action that would be protective of public health and environment as part of ongoing operations or actions to be implemented during reclamation.

Contents

List of Tables

1.0 Introduction

The Final Environmental Impact Statement (EIS) for the Phoenix Copper Leach Project contains the revisions to the Draft EIS (Chapter 2.0); a record of the written comments received on the Draft EIS with responses to the substantive comments (Chapter 3.0); and additional new references (Chapter 4.0).

The Phoenix Copper Leach Project Draft EIS was distributed for public comment on October 28, 2011. None of the comments received during the public comment period required major changes or revisions in the Draft EIS. The Draft EIS has not been reprinted; therefore, this abbreviated Final EIS must be read in conjunction with the Draft EIS (October 2011). For specific details on impacts to resources, refer to the Draft EIS (October 2011).

2.0 EIS Modifications and Corrections

This chapter contains specific modifications and corrections to the Phoenix Copper Leach Project Draft EIS published in October 2011. These revisions were made in response to comments received during the 45-day comment period from October 28, 2011 through December 12, 2011. **Table 2-1** identifies the text revisions. Where text has been modified or added, the new text appears in bold italic print. Deleted text appears with a strikeout line through the text. Revised tables are presented in their entirety following **Table 2-1**. No figure revisions were required; therefore, the final figures remain illustrated within the Draft EIS (October 2011).

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
ES-1	Executive Summary	1	5	Revised plans were submitted on January 24, 2008; September 1, 2010; ~~and~~ October 29, 2010***; September 21, 2011; and February 29, 2012***.*
ES-1	Executive Summary	3	8-9	• Designation of a new optional use area (OUA) (Section 5 OUA) that could be developed as a ~~copper HLF and~~ borrow area;
ES-1	Executive Summary	3	12	• Construction of a new haul road, pipeline and utility corridor; ~~and~~
ES-1	Executive Summary	3	13	• Development of a new production well~~.~~***; and***
ES-1	Executive Summary	3	14	• ***Conversion of five process ponds to evaporation ponds (E-ponds) during reclamation.***
ES-1	Executive Summary	4	3-4	~~Overall closure and~~ ***Active*** reclamation activities are anticipated to extend ~~approximately 13~~ ***25*** years beyond the operational phase. ***A minimum of five years of vegetation monitoring are required following revegetation activities.***
ES-2	Executive Summary	4	1-4	A pseudostatic and deformation analysis for the proposed Phoenix Copper HLF indicate that the facility is expected to be stable during an operational basis earthquake design ~~EISmic~~ ***seismic*** event (moment magnitude of 5.4 located approximately 9 miles from the study area) and that the calculated factor of safety would be 1.5 or greater.
ES-3	Executive Summary	4	5-7	Once draindown flow rate is reduced to relatively low flow rates, the draindown would be managed by passive evaporation in a series of specially designed ~~evaporation ponds (~~E-ponds~~)~~.
ES-6	Executive Summary	2	2-3	As described in the Reclamation Plan, the OUAs are capable of providing up to ~~9,476,692 cubic yards~~ ***37.4 million tons (MT)*** of alluvium for reclamation capping purposes.
ES-8	Executive Summary	6	1-5	To minimize potential wildlife mortalities from exposure to processing solutions, 8-foot-high chain-link fencing would be installed around process ponds (including the raffinate pond), and ***bird*** netting~~, pond covers, or floating "bird balls," as appropriate,~~ would be installed over ~~ditches and~~ ***process or solution*** ponds that would contain leach solutions to minimize potential impacts to volant (flying) and terrestrial wildlife.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
ES-17	Executive Summary	1	2-3	This number of people would represent a 0.3 percent increase over the ~~2009~~ ***2010*** population ~~estimated at approximately 23,693~~ ***22,303*** for the two-county study area.
ES-17	Executive Summary	2	1-5	This increase would represent a 0.3 percent increment over the ~~2009~~ ***2010*** study area population. Again, if distributed similar to the existing work force, 32 new people in the Town of Battle Mountain area would represent an increase of ~~1.1~~ ***0.9*** percent of that community's population. The new population would be 25 in Winnemucca, representing 0.3 percent of the ~~2009~~ ***2010*** population in the Winnemucca area.
1-1	1.1	1	5-6	Revised plans were submitted on January 24, 2008, September 1, 2010, ~~and~~ October 29, 2010; ***September 21, 2011, and February 29, 2012*** (Newmont ***2012, 2011a,*** 2010a, 2008a).
1-1	1.1	2	8-9	Designation of a new optional use area (OUA) (Section 5 OUA) that could be developed as a ~~copper HLF and~~ borrow area;
1-1	1.1	2	12	Construction of a new haul road, pipeline and utility corridor; ~~and~~
1-1	1.1	2	13	Development of a new production well~~.~~***; and***
1-1	1.1	2	14	***Conversion of five process ponds to evaporation ponds (E-ponds) during reclamation.***
1-1	1.1	3	3-4	~~Overall closure and~~ ***Active*** reclamation activities are anticipated to extend ~~approximately 13~~ ***25*** years beyond the operational phase. ***A minimum of 5 years of vegetation monitoring are required following revegetation activities.***
1-5	1.3.3	6	1-5	The BLM has the responsibility and authority to manage the surface and subsurface resources on public lands located within the jurisdiction of the Mount Lewis Field Office, and has designated lands within the project area as open for mineral exploration and development. In its Record of Decision (ROD) for the Shoshone-Eureka Resource Management Plan (RMP) (BLM 1986~~a~~), the BLM states in objectives 1.0 and 2.0 under Minerals that it would: ….
1-6	1	1	1	The management decisions applicable to these objectives are as follows (BLM 198~~6b~~***4***):
2-1	2.1	1	1-2	This chapter describes the proposed project (Proposed Action) as described by Newmont in their most recent POO Amendment #NVN-067930 (07-3A) and Permit for Reclamation (#0223) (Newmont 201***2***).

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
2-1	2.2	5	1-3	The No Action Alternative would result in a total of approximately ~~7,210~~ ***7,223*** acres of currently permitted surface disturbance, including approximately ~~4,163~~ ***4,215*** acres on private land and ~~3,047~~ ***3,008*** acres on public land administered by the BLM Mount Lewis Field Office.
2-2	2.2.1	Table 2.2-1		See revised Table 2.2-1.
2-3	2.2.1	Table 2.2-1		See revised Table 2.2-1.
2-3	2.2.3	2	3	***The North OUA is permitted for use as a WRF, haul road corridor, or ancillary facility but is accounted for as a WRF in the permitted Phoenix Mine disturbance table for bonding purposes.*** Surface disturbance from WRFs total ~~2,013~~ ***2,090*** acres.
2-3	2.2.4	4	1-4	Based on the Phoenix Project Final EIS (BLM 2002a) analysis and subsequent POO approvals, Newmont currently has authorization and has commenced the construction of a new heap leach pad ***(totaling 336 acres)*** in Section 8 of the South OUA; however, the BLM has only authorized the development of one 20-foot lift of ore~~.~~***. P***~~p~~rocessing of this ore has not been permitted.
2-7	2.2.12	3	3	***The North*** ~~This~~ OUA covers 78 acres ***and is accounted for in Table 2.2-1 as a WRF***.
2-7	2.2.13	4	1-2	Approximately ~~97~~ ***111*** acres of the mine disturbance is associated with an existing haul road and utility corridor in the central and southwestern portion of mine.
2-8	2.2.20	4	1-2	In accordance with the Phoenix Mine Water Resource Monitoring Plan and Water Pollution Control Permit (WPCP) NEV 0087061, monitoring of groundwater levels ***during operations would*** occur on a monthly ~~or quarterly~~ basis.
2-9	2.3	1	1-2	Designation of a new optional use area (OUA) (Section 5 OUA) that could be developed as a ~~copper HLF and~~ borrow area;
2-9	2.3	1	5	Construction of a new haul road, pipeline and utility corridor; ~~and~~
2-9	2.3	1	6	Development of a new production well~~.~~***; and***
2-9	2.3	1	7	***Conversion of five process ponds to evaporation ponds (E-ponds) during reclamation.***
2-9	2.3	Table 2.3-1		See revised Table 2.3-1.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
2-10	2.3	Table 2.3-1		See revised Table 2.3-1.
2-10	2.3.1	1	2-3	The proposed POO boundary would be expanded by 902 acres, for a total of ~~8,080~~ ***8,093*** acres. Surface ownership within the proposed POO boundary would include ~~4,845~~ ***4,897*** acres of private land and ~~3,235~~ ***3,196*** acres of public land.
2-11	2.3.2	1	8-10	~~Overall closure and~~ ***Active*** reclamation activities associated with the project facilities are expected to extend ~~approximately 13~~ ***25*** years beyond the operational phase. ***A minimum of 5 years of vegetation monitoring are required following revegetation activities.***
2-11	2.3.2	Table 2.3-2	Source	Source: Newmont 2011~~a~~***b***.
2-14	2.3.3.1	2	1-9	The proposed Phoenix HLF would be constructed in three phases (Phases 1, 2, and 3) and would occupy approximately 405 acres (**Figure 2.3-3**). ***The Phoenix HLF in Section 8 is currently permitted for 336 acres of disturbance, as authorized in the Phoenix Final EIS (BLM 2002a).*** Phase 1 of the Phoenix HLF would ~~be constructed within the previously permitted South OUA and would occupy~~ ***cover*** approximately ~~205~~ ***195*** acres ***of the permitted Phoenix HLF area and would be expanded into Section 5 as Phase 2 (106 acres) and Phase 3 (94 acres), bringing the total leach pad disturbance to 395 acres. Ten acres would be utilized as process and event ponds; approximately 75 additional acres would be utilized as E-ponds during facility closure. The remaining 56 acres would be used for storage of equipment and materials. In summary, the total permitted acreage of the Phoenix HLF would be 536 acres (Newmont 2012).*** ~~As discussed in Section 2.2.4, Newmont currently has authorization and has commenced the construction of the Phase 1 heap leach pad, which includes the development of one 20-foot lift of ore. Processing of copper ore has not been permitted under this authorization. Phases 2 and 3 would be developed in Section 5, T30N, R43E, and would occupy approximately 106 and 94 acres, respectively. Up to approximately 75 acres would be utilized as E-ponds during facility closure in the permitted South OUA, as authorized in the Phoenix Final EIS (BLM 2002a).~~
2-14	2.3.3	4	1-4	• An 8-foot-high chain-link fence would be installed around the process ***or solution*** ponds (including the raffinate pond), and bird netting ~~pond covers, or floating "bird balls," as appropriate,~~ would be installed over ~~ditches and~~ ***process or solution*** ponds containing leach solutions, to minimize potential impacts to avian and terrestrial wildlife.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
2-26	2.3.4	3	1-2	All process ***or solution*** ponds ***containing leach solutions*** would be fenced with a minimum of 8-foot-high chain-link fence to exclude wildlife access to the ponds, and ponds would be covered with bird netting ~~or floating "bird balls," as appropriate~~.
2-34	2.4.1	6	2-3	The estimated time for PFS at the HLFs is ~~5~~ ***approximately 19*** years.
2-35	2.4.1	Table 2.4-1		See revised Table 2.4-1.
2-37	2.4.2.2	Table 2.4-2		See revised Table 2.4-2.
2-38	2.4.2.5	5	5-7	A noxious weed monitoring and control program currently is, and would continue to be, implemented at the Phoenix Mine site for existing and proposed facilities (EMA 1999a; Newmont 2011~~b~~***c***).
2-39, 2-42	2.4.3.1	12 (page 2-39) thru 1 (page 2-42)	1-4 (page 2-39) thru 1-6 (page 2-42)	The Option 2 cover system would consist of covering the regraded spent heap surface with a 6-inch layer of bedding material (finer grained sand/gravel to prevent puncturing of ~~geomembrane~~ ***liner***), placing a 60 mil ~~double textured~~ HDPE ***Super GripNet*** ~~geomembrane~~ ~~***liner***~~ over the bedding layer, and covering the ~~geomembrane~~ ***liner*** with ***an eight ounce, non-woven fabric geotextile and*** 3.5 feet of an ET alluvial cap. ~~The conceptual plan for subsurface drainage is to construct a network of drainage pathways consisting of gravel approximately 1-foot-thick underlying 2.5 feet of alluvial cap. The drain pathways would be constructed across the slope and tie into drop down channels (drainages formed within the valleys or swales) constructed every 500 to 1,000 feet (on centers) such that infiltration through the alluvial cap could be collected and routed off the heap. The drainage layer would consist of gravel that would have permeability typically two times in magnitude greater than the alluvial cap material.~~
2-42	2.4.3.1	2	1-6	The dual textured HDPE ~~geomembrane~~ ***Super GripNet liner*** cover system would incorporate a non-plastic bedding layer and granular growth media below and above the ~~geomembrane~~ ***liner***, respectively. This type of textured ~~geomembrane~~ ***liner*** is geotechnically stable at slopes of 3H:1V or shallower when placed in accordance with technical specifications (to be developed during final design of the cover). Typical factors of safety for slope stability exceed 1.3 under both unsaturated and saturated conditions and experience only minor permanent deformation (<12 inches) under the influence of ~~EISmic~~ ***seismic*** events.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
2-42	2.4.3.1	2	7-10	The textured ~~geomembrane~~ ***liner*** will be secured in anchor trenches placed on 15-foot-wide benches every 50 vertical feet, which allows for easier constructability and serviceability along with reducing the propensity of long-term creep, or soil movement.
2-42	2.4.3.1	3	3-5	Under Option 2, the seed mix would include plants with root depths that do not exceed ***3.5 feet (i.e., the thickness of the ET alluvial cap) to further minimize the unlikely event of precipitate and/or metal uptake that remains in the heap material.***
2-44	2.4.3.3	5	4-6	The period of solution recirculation and active evaporation is expected to take ~~2 plus years~~ ***seven months*** for the Phoenix heap leach pad (~~0.5 year~~ ***four months*** for the Reona heap leach pad) based on the projected draindown curve modeled using HLDE.
2-50	2.4.3.3	1	8-12	Data from other Newmont sites (Copper Basin Reclamation Project), past studies (AMEC Earth and Environmental, Inc. [AMEC] ***2010a,b;*** 2009), and proposed cover studies would be used to determine which cover option would be selected for the heaps. This phase is expected to take ~~2~~ ***17.5*** years for the Phoenix heap leach pad (~~1~~ ***14.5*** year***s*** for the Reona heap leach pad).
2-51	2.4.3.3	3	5-6	The HLDE model is designed to estimate draindown curves for HLFs and is used as a tool by the BLM and NDEP for bond calculations ~~(BLM 2011)~~.
2-51	2.4.3.3	4	1-4	Under Option 1, the flow rates are predicted to reduce to approximately ~~10.3~~ ***10.2*** gpm for the Phoenix Copper HLF and 1.2 gpm for the Reona Copper HLF after 30 years. Under Option 2, the flow rates are predicted to reduce to approximately ~~8.7~~ ***8.6*** gpm for the Phoenix Copper HLF and 0.9 gpm for the Reona Copper HLF after 30 years.
2-51	2.4.3.3	4	6-8	These long term flow estimates are conservative since the flow rates are predicted to continue to decline after 30 years prior to reaching a final steady state flow rate (AMEC 2011~~b~~***a***).
2-51 thru 2-52	2.4.3.3	7 (page 2-51) thru 1 (page 2-52)	6 (page 2-51) thru 1 (page 2-52)	~~The mineral phase assumed for the rate of from the proposed new copper HLFs (JBR 2011a).~~

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
2-52	2.4.3.3	2	5-7	The 7-foot cover and growth media thickness, along with selective planting of vegetation with root depths less than 5 feet ***and 3.5 feet (for Options 1 and 2, respectively)*** would preclude the uptake of the precipitates by the vegetation on the reclaimed ponds.
2-52	2.4.3.3	3	1-4	In order to minimize impacts to wildlife species from the exposure to precipitate in the E-ponds, Newmont has committed to: 1) installing and maintaining fencing around and bird netting across E-ponds to prevent wildlife access to the ponds until reclamation is complete; ***2) monitoring of the fencing and bird netting on a twice-weekly basis during operations and reclamation; and on a monthly basis during closure;*** ~~and 2)~~ ***3) repairing damages to these facilities within 48 hours; and (4)*** submitting quarterly reports to the BLM and NDOW on wildlife mortalities.
2-55	2.4.5	1	6-7	~~Periodic~~ ***Twice-weekly*** monitoring ***during operations and reclamation; monthly monitoring during closure;*** and ***periodic*** maintenance and/or replacement of fencing around and bird netting over each E-pond;
2-55	2.4.5	1	11	• ***As part of their water pollution control permit (WPCP) issued by the NDEP's Bureau of Reclamation and Regulation, Newmont would have groundwater monitoring wells placed down gradient of all operational ponds tied to the Phoenix Copper Leach Project. As these ponds are converted to E-ponds the WPCP would require monthly groundwater monitoring and quarterly reporting throughout the closure process. This groundwater monitoring and reporting would apply to all of the additional E-ponds constructed for the closure process.***
2-56	2.5.3	6	1-4	To minimize the introduction and spread of noxious weeds and invasive species in project-related disturbance areas, Newmont would implement their Weed Management Plan, which outlines the following control measures: prevention techniques, noxious weed surveys, selective site sterilization, and annual spraying (Newmont 2011~~b~~***c***).

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
2-57	2.5.4	1	1-10	• ~~In order to minimize impacts to wildlife species from the exposure to precipitate in the E-ponds, Newmont has committed to: 1) installing and maintaining fencing around, and bird netting across, E-ponds to minimize wildlife access to the ponds until reclamation is complete; and 2) submitting quarterly reports to the BLM and NDOW on wildlife mortalities. If wildlife mortalities are identified within or near the E-ponds, Newmont would immediately contact the NDOW, as required under the IAPPs, and the BLM to determine appropriate mitigation.~~
				• ~~Eight-foot-high chain-link fencing would be installed around the process ponds (including the raffinate pond) in accordance with the NDOW IAPP. Netting, pond covers, or floating "bird balls," as appropriate, would be installed over ditches and ponds containing leach solutions to minimize potential impacts to volant and other terrestrial wildlife.~~ • ***During all operational periods for the life of the Project, Newmont would provide eight-foot-high chain link fencing around the perimeter of process or solution ponds that may pose a hazard to all terrestrial wildlife.*** • ***During the operational periods for the life of the Project, Newmont would provide protection to all volant wildlife by placing bird netting over the process or solution ponds that may pose a hazard to volant wildlife.*** • ***During the operational periods for the life of the Project, Newmont would monitor these wildlife exclusion facilities (i.e., chain link fencing and bird netting) on a twice-weekly basis. The integrity of the wildlife exclusion facilities would be monitored for effectiveness, and any damage to these facilities would be properly repaired within 48 hours. Newmont would maintain a record of any wildlife mortalities that occur in association with the permitted facility. Those reports would be provided quarterly to the NDOW and BLM on a form provided by the NDOW. In addition, Newmont would report any mortalities to wildlife species protected under the Migratory Bird Treaty Act (MBTA); all game animals; game birds; and sensitive, threatened or endangered species, which are associated with chemical-containing tanks or impoundments. This report would be made by telephone to the regional office of the NDOW, by the beginning of the next working day following the occurrence or observation of those mortalities.***

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
				• ***Newmont would provide once monthly monitoring of wildlife exclusion facilities during the long-term closure process of E-ponds that could pose a threat to both terrestrial and volant wildlife. The monitoring frequency may be changed to a more frequent timeframe should the operational monitoring of wildlife exclusion facilities require an increased monitoring frequency. The implementation of an increased monitoring frequency would result from operational monitoring indicating that the effectiveness of these facilities require more frequent repairs to protect all wildlife.***
2-58	2.5.7	6	N/A	***Newmont would paint or construct buildings associated with the proposed Project using earth tones in order to minimize color contrasts with the surrounding landscape.***
2-65	2.8.1	Table 2.8-1	Marigold Mine	Operating Dates: ~~1988~~ ***1989***-present
2-67	2.8.1	Table 2.8-1	Sources	[6]BLM 2011~~a~~***b***. [10]Newmont 2011~~a~~***b***.
2-71	2.9	Table 2.9-1	Geology and Minerals	Newmont would extract approximately 245 million pounds of copper and generate approximately ~~150~~ ***158*** MT of spent copper heap leach ore.
2-71	2.9	Table 2.9-1	Geology and Minerals	Geotechnical and ~~ElSmic~~ ***seismic*** stability
3.0-1	3.0	3	4-6	The period of potential cumulative impact is defined as the approximate ~~34~~ ***49***-year life of the project including construction, operation, and reclamation phases.
3.0-1	3.0	4	3-6	Unless otherwise noted on a resource-specific basis, short-term is defined as the 24-year construction and operational life of the project and a ~~10~~ ***25***-year reclamation period; long-term impacts are defined as impacts that would continue post-reclamation (i.e., beyond ~~34~~ ***49*** years).
3.2-11	3.2.1.4	4	4-5	Monitoring data for the Fortitude Pit Lake for 2010 is provided in Newmont's WPCP 2010 fourth quarter report (Newmont 2011~~c~~***d***).

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.2-11	3.2.1.4	4	8-10	The 2010 water quality samples indicate that the water met all Nevada primary drinking water standards but exceeds secondary standards for iron, manganese, sulfate and TDS (Newmont 2011~~c,~~d***, e***).
3.2-20	3.2.2.1	2	4-6	For the alluvial cap (Closure Option 1) the results of the analysis estimate average flow rates after 30 years of draindown of ~~10.3~~ ***10.2*** gpm for the proposed Phoenix HLF, and 1.2 gpm from the proposed Reona HLF.
3.2-20	3.2.2.1	3	1-3	For the synthetic liner and alluvial cap (Closure Option 2), the HLDE model results estimate the average flow rates after 30 years of draindown of ~~8.7~~ ***8.6*** gpm for the proposed Phoenix HLF, and 0.9 gpm from the proposed Reona HLF (JBR 2011).
3.2-20	3.2.2.1	5	1-3	AMEC (2011~~b~~***a***) used a computer model to estimate the long-term steady state drainage from the Phoenix and Reona HLFs resulting from either an alluvial cap (Closure Option 1) or synthetic liner and alluvial cap (Closure Option 2).
3.2-20	3.2.2.1	5	5-6	Details regarding the input parameters including the material properties and boundary conditions are summarized in the AMEC (2011~~b~~***a***) report.
3.2-20	3.2.2.1	6	2-5	Using the 2 percent infiltration rate as the best estimate for the alluvial cap (Closure Option 1), the model simulated draindown curve for this scenario indicates that the flow rates reach a steady state flow of 2.9 gpm at approximately 130 years after closure (AMEC 2011~~b~~***a***, Figure 4).
3.2-20	3.2.2.1	7	5-6	Between 180 years and 450 years the flow rate under this scenario gradually declines to 0.4 gpm at 450 years (AMEC 2011~~b~~***a***, Figure 4).
3.2-21	3.2.2.1	1	2-5	Using the 2 percent infiltration rate as the best estimate for the alluvial cap (Closure Option 1), the model simulated draindown curve for this scenario indicates that the flow rates reach a steady state flow of 0.4 gpm at approximately 80 years after closure (AMEC 2011~~b~~***a***, Figure 5).
3.2-21	3.2.2.1	Table 3.2-6	Source	Source: AMEC 2011~~b~~***a***.
3.3-6	3.3.2.1	4	3-5	Test pits investigated by AMEC for Newmont (AMEC 2010***b***) suggest that a cemented layer occurs at approximately 30 inches in depth at 2 sites in the southern portion of the Section 5, T30N, R43E, and may not be present consistently across the site.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.3-7	3.3.2.1	6	2-3	As described in the Reclamation Plan, the OUAs are capable of providing up to ~~9,476,692 cubic yards~~ ***37.4 MT*** of alluvium for reclamation capping purposes.
3.4-10 thru 3.4-11	3.4.2	2 (page 3.4-10) thru 1 (page 3.4-11)	4 (page 3.4-10) thru 1-3 (page 3.4-11)	Short-term impacts are those that would occur during the approximate ~~34~~ ***49***-year life of the project (including reclamation); long-term impacts are those that would extend beyond the approximate ~~34~~ ***49***-year life of the project (including reclamation).
3.5-15	3.5.2.1	2	6-9	An 8-foot-high chain-link fence would be installed around the ***perimeter of the*** process ***or solution*** ponds, and ***bird*** netting~~, pond covers, or floating "bird balls," as appropriate,~~ would be installed over ~~ditches and~~ ***the process or solution ponds*** that would contain leach solutions to minimize potential impacts to volant (flying) and terrestrial wildlife.
3.10-9	3.10.1.3	1	7-8	According to the NDEP, PM_{10} monitoring conducted in Elko since 2006 has shown a decline in ambient concentrations (NDEP 2011***b***).
3.10-10	3.10.1.3	Table 3.10-4	Source	Source: JBR 2007b; NDEP 2011***b***; USEPA 2011c.
3.10-14	3.10.2.1	1	4-6	The estimate also should reflect the reality that not all of the proposed project emission sources would be operating at the same time (i.e., the proposed project would be operating for approximately ~~25~~ ***22*** years, as such, many of the proposed project operations would be completed before others have commenced).
3.10-14	3.10.2.1	2	7-11	Based on estimates provided by Newmont of yearly proposed project material production rates over the proposed ~~25~~ ***24*** year mine life, Year 2016 has both the largest total material throughput (total quantity of material mined or moved), at 41.745 MT, and the largest number of haul truck miles driven, at 1.451 million miles, than any other projected year.
3.11-1	3.11.1.1	3	1-3	The public lands in the study area are under the jurisdiction of the BLM and administered under the Shoshone-Eureka RMP (BLM 1986~~b~~***4***). Included in the RMP are the specified objectives for minerals, in general, and management decisions for "locatable minerals" and "current mineral production areas."

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.11-2	3.11.1.1	5	2-3	Information on these authorizations was derived from BLM Master Title Plats and from the BLM LR2000 system (BLM 2011~~b,~~c***,d***).
3.11-3	3.11.1.1	Table 3.11-1	Source	Source: BLM 2011~~b,~~c***,d***.
3.11-4	3.11.1.1	Figure 3.11-1	Source	Source: BLM 2011~~b,~~c***,d***.
3.11-5	3.11.2.1	6	1-3	The Proposed Action would be consistent with BLM plans and policies that designate land use within the study area as open for mineral exploration and development, as stated in the Shoshone-Eureka Resource Area RMP (BLM 198~~6b~~***4***).
3.11-6	3.11.2.1	2	3-4	An existing county road (N-48143) has been replaced by the rerouted Willow Creek Road (N-84251) (BLM ~~2008h~~ ***2011c***).
3.13-1	3.13.1.1	2	3-4	The population then declined in 2003 to 5,277 before rebounding to ***the*** present population of ~~over 6,000~~ ***5,775*** people, likely in response to the ebb and flow of mining in the Battle Mountain area (**Table 3.13-1**).
3.13-1	3.13.1.1	Table 3.13-1		See revised Table 3.13-1.
3.13-1	3.13.1.1	3	1-7	The entire CESA contains an estimated ~~23,693~~ ***22,303*** people, which account for approximately ~~0.9~~ ***0.8*** percent of Nevada's total estimated population (~~Nevada State Demographer 2009~~ ***U.S. Census Bureau 2010***). Nevada has been one of the country's fastest growing states for much of the past three decades, but it was one of the hardest hit by the recent recession. The Nevada ~~demographer estimates that~~ state's population declined between ~~2008 and~~ 2009 ***and 2010***. During the years of increased population, most of the growth occurred in urbanized areas, particularly southern Nevada and especially Las Vegas, and more recently Reno. Nevada***'s population of 2,700,551*** ~~had an estimated 2,711,205~~ people in ~~2009,~~ ***2010 was*** down from 2,718,337 in 2007 ***(Nevada State Demographer 2009; U.S. Census Bureau 2010)***.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.13-3	3.13.1.1	1	1-7	Ethnically and racially, Lander and Humboldt counties are notably less diverse than the state as a whole with substantially lower percentages of African-American and Asian residents; however, both counties have higher percentages of Native Americans, with approximately ~~4.3~~ ***3.8*** percent of the population in Humboldt County and ~~4.6~~ ***3.4*** percent in Lander County, compared to ~~1.3~~ ***0.9*** percent for the entire state (**Table 3.13-2**). People of Hispanic origin of any race (as categorized in U.S. Census Bureau statistics) represent ~~21.7~~ ***21.1*** percent of the Lander County population and ~~20.6~~ ***24.4*** percent of the Humboldt County population, compared with ~~24.6~~ ***26.5*** percent of the state (~~Nevada State Demographer 2009, 2006~~ ***U.S. Census Bureau 2010***).
3.13-3	3.13.1.1	Table 3.13-2		See revised Table 3.13-2.
3.13-3	3.13.1.1	4	2-4	The median household income for the state for ~~2008~~ ***2010*** was estimated at ~~$56,432~~ ***$53,310***, compared with ~~$58,005~~ ***$57,304*** for Humboldt County (~~102.8~~ ***107.5*** percent of the state level) and ~~$61,938~~ ***$62,329*** for Lander County (~~109.8~~ ***117*** percent of the state level) (U.S. Census Bureau ~~2009a~~ ***2010***).
3.13-3 thru 3.13-4	3.13.1.1	5 (page 3.13-3) thru 1 (page 3.13-4)	1-4 (page 3.13-3) thru 1-2 (page 3.13-4)	An estimated ~~11.2~~ ***12.4*** percent of Nevada's population was considered to be living in poverty in ~~2008~~ ***2009*** according to Census estimates (U.S. Census Bureau ~~2009a~~ ***2010***). Both Lander County (~~9.9~~ ***10*** percent) and Humboldt County (~~10.2~~ ***11.5*** percent) had smaller percentages of their populations living in poverty. The rates for children and youth under 18 living in poverty followed a similar pattern with both Lander County's ~~12.5~~ ***12.4*** percent rate and Humboldt County's ~~13.6~~ ***14.5*** percent rate lower than the Nevada's ~~15.0~~ ***21.3*** percent rate (U.S. Census Bureau ~~2009a~~ ***2010***).

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.13-5	3.13.1.3	2		~~The Census Bureau collected data for the 2000 census, and, although that data is now 10 years old, it is the most consistent dataset available (U.S. Census Bureau 2000).~~ The ~~2000~~ ***2010*** census found ~~9,734~~ ***9,698*** housing units in the study area; ~~6,954~~ ***7,123*** units (~~71~~ ***73*** percent) were in Humboldt County and ~~2,780~~ ***2,575*** units were in Lander County (**Table 3.13-5**). At the time, ~~7,826~~ ***8,502*** of the housing units were occupied, leaving ~~1,908~~ ***1,196*** (~~19.6~~ ***12.3*** percent) vacant. The overall vacancy rate can be misleading; however, as some portion of the vacant units were for seasonal, recreational or occasional use and not readily available for people seeking housing. Vacancy rates were at a modest ~~3.9~~ ***1.0*** and ~~4.0~~ ***2.6*** percent in homeowner units, but a much higher ~~19.7~~ ***7.4*** and ~~32.4~~ ***13.8*** percent for rental units in Humboldt County and Lander County, respectively (U.S. Census Bureau ~~2000~~ ***2010***).
3.13-5	3.13.1.4	Table 3.13-5		See revised Table 3.13-5.
3.13-6	3.13.1.4	1	1-7	~~The Census Bureau estimated that the total number of housing units in the 2-county area had increased to 10,085 as of 2008, an increase of 3.6 percent (U.S. Census Bureau 2009b). The estimates included 7,341 units in Humboldt County (a 5.6 percent increase) and 2,744 units in Lander County (a 1.3 percent decrease) (U.S. Census Bureau 2009b). The Census Bureau does not prepare estimates of vacancy rates between decennial census years, although the increased unemployment rates in recent years would suggest that vacancy rates may be higher than they were in 2000. Vacancy rates in the high teens suggest the housing market in the study area remains "soft" particularly in the rental market.~~
3.13-11	3.13.1.6	1	1-3	Newmont paid approximately $6.0 million in property taxes, including net proceeds of mining, to Lander County in 2009 for the Phoenix Mine property, which was more than double the $2.4 million paid in 2008 (Newmont 2011~~a~~***b***).
3.13-11	3.13.1.6	Table 3.13-8	Source	Source: Newmont 2011~~a~~***b***.
3.13-15	3.13.2.1	1	2-6	This number of people would represent a 0.3 percent increase over the ~~2009~~ ***2010*** population ~~estimated at approximately 23,693~~ ***of 22,303*** for the two-county study area. If the new population is distributed similar to the existing work force, approximately 39 persons would locate in the Town of Battle Mountain vicinity, representing an increase of ~~1.3~~ ***1.1*** percent, and 30 would locate in and near Winnemucca where they would represent an increase of 0.4 percent of the community's population.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.13-16	3.13.2.1	2	2-6	This increase would represent a 0.3 percent increment over the ~~2009~~ ***2010*** study area population. Again, if distributed similar to the existing work force, 32 new people in the Town of Battle Mountain area would represent an increase of ~~1.1~~ ***0.9*** percent of that community's population. The new population would be 25 in Winnemucca, representing 0.3 percent of the ~~2009~~ ***2010*** population in the Winnemucca area.
3.13-16	3.13.2.1	8	2-3	Each $1.00 in direct earnings would indirectly generate an additional $0.37 in earnings to other workers in the local economy (BEA 199~~2~~***7***; Dobra 1988).
3.13-17	3.13.2.1	5	3-5	Newmont (2011~~a~~***b***) estimates general property tax payments for the proposed project would be approximately $0.4 million in year 2 and $1.1 million in the 3rd year.
3.13-17	3.13.2.1	6	1-2	Sales and use taxes for the proposed project would average slightly over $600,000 per year, with periodic peaks near or above $900,000 approximately every 5 years (Newmont 2011~~a~~***b***).
3.13-18	3.13.2.1	1	1-3	Finally, the proposed project would be expected to pay approximately $36,000 per year in business tax, a minor increase over the approximately $415,000 annual business tax projected for the existing Phoenix Project (Newmont 2011~~a~~***b***).
3.13-18	3.13.2.1	2	1-3	It is projected that the proposed project would pay a total of over $2.4 million annually in local and state taxes in these four major tax categories (Newmont 2011~~a~~***b***). This would be an increase of 16.4 percent over the $14.9 million annual average projected for the existing Phoenix Project (Newmont 2011~~a~~***b***).
3.13-19	3.13.2.3	1	8-10	Based on the current distribution of project-related worker residence locations, such an event would have the greatest effect on the Battle Mountain area where over ~~44~~ ***36*** percent of the estimated current population of ~~2,967~~ ***3,635*** could leave the area in search of new employment opportunities.
3.13-20	3.13.2.3	1	1-2	Under the No Action Alternative, it is anticipated that the operation would continue to contribute taxes at an average of approximately $14.9 million annually (Newmont 2011~~a~~***b***).

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.15-1	3.15.1	5	1-6	The data presented below are based on information obtained from the U.S. Census Bureau ~~2000~~ ***2010*** census ~~and the Nevada State Demographer's Office~~ (U.S. Census Bureau ~~2000~~ ***2010***~~; Nevada State Demographer 2006~~). Data obtained from the U.S. Census Bureau website was compiled and released in ~~2000~~ ***2010***. This data was used as the basis for the analysis because it is the most reliable and consistent data available. ~~The state demographer's estimates are included to provide a more recent point of reference, although this dataset is not as complete as the census data.~~
3.15-1	3.15.1.1	6	5-8	For Nevada, the American Indian, Eskimo, or Aleut population ~~constituted slightly over~~ ***was near*** 1 percent of the total population in both 2000 and ~~2009~~ ***2010***. The Lander County and the community of Battle Mountain percentages were 4.0 percent and 2.5 percent, respectively, in 2000, with Lander County ~~increasing to an estimated 4.6~~ ***decreasing to 3.4*** percent by ~~2009~~ ***2010***.
3.15-1	3.15.1.1	6	10	Humboldt County ~~increased to an estimated 4.3~~ ***decreased to 3.8*** percent by ~~2009~~ ***2010***.
3.15-2	3.15.1.1	Table 3.15-1		See revised Table 3.15-1.
3.15-3	3.15.1.2	4-5	1-12	~~PCPI in Lander County lag behind the state level. U.S. BEA data from 2000 indicated a state average of $30,986 (BEA 2007). The Lander County average was $26,250, 84.7 percent of the state level, and a Humboldt County average was $25,244, 81.5 percent of the state level (BEA 2007). **Table 3.15-2** shows census data for 1999/2000, which is presented for consistency in the analysis. Although the numbers vary, the relationships remain similar. By 2008, estimated per capita personal income had risen substantially and Lander County's level had exceeded the state's level; Humboldt County still trailed at 81.2 percent of the state level. Estimates for 2008 were $40,936 for the state level, $41,812 for Lander County, and $33,249 for Humboldt County.~~ ~~In contrast to PCPI,~~ ***The*** estimated median household incomes in CESA counties are slightly above statewide household incomes. The median household income for the state for ~~2008~~ ***2009*** was estimated at ~~$56,432~~***$53,310***, compared with ~~$61,938~~ ***$62,329*** for Lander County (~~109.8~~ ***116.9*** percent of the state level), and ~~$58,005~~ ***$57,309*** for Humboldt County (~~102.8~~ ***107.5*** percent of the state level) (U.S. Census Bureau ~~2009a~~ ***2010***). ***Table 3.15-2 shows census data for ~~1999/2000~~ 2009, which is presented for consistency in the analysis.***
3.15-3	3.15.1.2	Table 3.15-2		See revised Table 3.15-2.

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
3.15-3 thru 3.15-4	3.15.1.2	6 (page 3.15-3) thru 1 (page 3.15-4)	2-4 (page 3.15-3) thru 1-3 (page 3.15-4)	An estimated ~~11.2~~ ***12.4*** percent of Nevada's population was considered to be living in poverty in ~~2008~~ ***2009*** according to U.S. Census Bureau (~~2009a~~ ***2010***) estimates. Both Lander County (~~9.9~~ ***10.0*** percent) and Humboldt County (~~10.2~~ ***11.5*** percent) had smaller percentages of their populations living in poverty. The rates for children and youth under 18 living in poverty followed a similar pattern with both Lander County (~~12.5~~ ***12.4*** percent) and Humboldt County (~~13.6~~ ***14.5*** percent) being lower than Nevada's estimated ~~15.0~~ ***21.3*** percent rate (U.S. Census Bureau ~~2009a~~ ***2010***).
3.17-1	3.17	1	1-3	As described in Chapter 3.0, Introduction, short-term is defined as the 24-year operational life of the project and the ~~10~~ ***25***-year reclamation~~/closure~~ period; long-term is defined as the future following reclamation (i.e., beyond ~~34~~ ***49*** years).
3.19-1	3.19	Table 3.19-1	Source	Source: USEPA 2011e; Newmont 2011~~a~~***b***.
4-3	4.3	3	New	***On November 30th, 2010, eight individuals from the Battle Mountain and Elko Bands of the Western Shoshone Te-Moak Tribe, the Duckwater and the Yomba Shoshone Tribes participated in a site visit at the proposed Phoenix Copper Leach Project area. Input received from tribal members generally indicated concerns about all mining and its impacts to the land and its resources. The tribal members did not provide any specific concerns to the BLM that related to the proposed Phoenix Copper Leach Project.***
6-1	6.0	References		AMEC Earth and Environmental, Inc. (AMEC). 2011b. Phoenix CLP – Willow Creek Floodplain Evaluation (letter report). Closure Water Balance Summary prepared for Newmont Mining Corporation. May 25, 201~~0~~***1***.
6-1	6.0	References		AMEC Earth and Environmental, Inc. (AMEC). 2010***b***. Newmont Mining Corporation Phoenix Project Borrow Area Quantity and Delineation Assessment for Closure Cap Material. October 18, 2010. [Note: All figures and text with the 'AMEC 2010' reference should be referenced as 'AMEC 2010b'.]

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
6-1	6.0	References		Bureau of Economic Analysis (BEA). 2007. *Regional Economic Information System: Table CA1-3: Nevada Per Capita Personal Income.* U.S. Department of Commerce. Washington, D.C. April 2007. Internet website: www.bea.gov/regional/reis/print.cfm. Accessed ~~January 2011~~ ***July 22, 2010***.
6-1	6.0	References		Bureau of Economic Analysis (BEA). 199~~2~~***7***. Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II), ~~Second~~ ***Third*** Edition. U.S. Department of Commerce. Washington, D.C.
6-1	6.0	References		Bureau of Land Management (BLM). 2011~~a~~***b***. Response to data request: email from L. Turner, BLM to C. Johnson, AECOM. April 21, 2011. [Note: All figures and text with the 'BLM 2011a' reference should be referenced as 'BLM 2011b'.]
6-1	6.0	References		Bureau of Land Management (BLM). 2011~~b~~***c***. Nevada Land Records. U.S. Department of the Interior, Bureau of Land Management, Nevada State Office. Reno, Nevada. Internet website: www.nv.blm.gov/LandRecords/. Accessed February 2011. [Note: All figures and text with the 'BLM 2011b' reference should be referenced as 'BLM 2011c'.]
6-1	6.0	References		Bureau of Land Management (BLM). 2011~~c~~***d***. *Land and Minerals Rehost 2000 System – LR2000*. U.S. Department of the Interior, Bureau of Land Management, Nevada State Office. Reno, Nevada. Internet website: http://www.blm.gov/lr2000/index.htm. Accessed February 2011. [Note: All figures and text with the 'BLM 2011c' reference should be referenced as 'BLM 2011d'.]
6-1	6.0	References		~~Bureau of Land Management (BLM). 2008h. Nevada Land Records. U.S. Department of the Interior, Bureau of Land Management, Nevada State Office. Reno, Nevada. Internet website: www.nv.blm.gov/LandRecords/. Accessed February 2011.~~

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
6-1	6.0	References		Bureau of Land Management (BLM). 1986~~a~~. Shoshone-Eureka Resource Area Record of Decision. Battle Mountain District, Battle Mountain. Nevada. March 1986. 31 p. plus appendices. [Note: All figures and text with the 'BLM 1986a' reference should be referenced as 'BLM 1986'.]
6-1	6.0	References		Bureau of Land Management (BLM). 198~~6b~~***4***. *Shoshone-Eureka Resource Management Plan; Final Environmental Impact Statement*. U.S. Department of the Interior, Bureau of Land Management, Battle Mountain District. Battle Mountain, Nevada. February 198~~6~~***4***.
6-1	6.0	References		Ecological Resource Consultants, Inc. 2007. Technical Memorandum to L. Shea, Smith Williams Consultants, Inc, from T. Thompson regarding Water Balance Analysis, Reona Copper Leach Project. November 16, 200~~8~~***7***.
6-1	6.0	References		Environmental Management Associates, Inc. (EMA). 2011. Air Quality Assessment Report. Newmont Mining Corporation, Phoenix Mine Copper Leach Project, Lander County, Nevada. EMA Report 2122-0~~1~~***2***. ~~February~~ ***April*** 2011.
6-1	6.0	References		Exponent. 2000. Hydrochemical Characterization of the Proposed Phoenix Project, Lander County, Nevada. Volumes 1 and 2. ~~Updated September 29~~ ***August*** 2000.
6-1	6.0	References		Merriman, C. 2008. Personal communication from C. Merriman (Range Specialist), BLM Battle Mountain Field Office, Battle Mountain, Nevada, to A. Grow (Biologist), ENSR, regarding range and vegetation resources for the Phoenix Copper Leach Project. ~~February 20, 2008~~ ***Multiple dates***.
6-1	6.0	References		Nevada Division of Environmental Protection (NDEP). 2011***b***. Nevada Air Quality Trend Report, 1998-2009. Nevada Department of Environmental Protection Bureau of Air Quality Planning. February 8, 2011. [Note: All figures and text with the 'NDEP 2011' reference should be referenced as 'NDEP 2011b'.]

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
6-1	6.0	References		Nevada State Demographer. 2009*. Nevada County Population Estimates July 1, 1986 to July 1, ~~2009~~* **2007***; Includes Cities and Towns.* Small Business Development Center, University of Nevada Reno. Reno, Nevada. Internet website: www.nsbdc.org/what/data_statistics/demographer/pubs/docs/Nevada_2009_Estimates_030910.pdf. Accessed January 2011.
6-1	6.0	References		***Newmont Mining Corporation (Newmont). 2012. Plan of Operations #NVN-067930 (07-3A) and Permit for Reclamation #0223, Phoenix Copper Leach Project Proposed Amendment. May 30, 2007 (Revised February 29, 2012).*** [Note: All figures and text with the 'Newmont 2010a' reference should be referenced as 'Newmont 2012'.]
6-1	6.0	References		Newmont Mining Corporation (Newmont). 2011~~a~~***b***. Responses to data requests from M. Burt, Newmont, to C. Johnson, AECOM. January 18, February 8, February 15, 2011. [Note: All figures and text with the 'Newmont 2011a' reference should be referenced as 'Newmont 2011b'.]
6-1	6.0	References		Newmont Mining Corporation (Newmont). 2011~~b~~***c***.Weed Management Plan for the Phoenix Mine. Document Number PHX-PLAN-0003. [Note: All figures and text with the 'Newmont 2011b' reference should be referenced as 'Newmont 2011c'.]
6-1	6.0	References		Newmont Mining Corporation (Newmont).2011~~c~~***d***. Fourth Quarter Monitoring Report, 2010. Water Pollution Control Permit NEV87061. January 26, 2011. [Note: All figures and text with the 'Newmont 2011c' reference should be referenced as 'Newmont 2011d'.]
6-1	6.0	References		Newmont Mining Corporation (Newmont). 2011~~d~~***e***. Water Pollution Control Permit NEV87061 2010 Annual Report, February 2011. [Note: All figures and text with the 'Newmont 2011d' reference should be referenced as 'Newmont 2011e'.]

Table 2-1 Modifications and Corrections to the Draft EIS

Page	Draft EIS Section Number	Paragraph[1]	Line	Revised Text
6-1	6.0	References		Newmont Mining Corporation (Newmont). 2010c. Memorandum from R. Parratt to J. Sherve and P. Plumley Regarding Phoenix Copper Leach Project, Natomas Waste-Rock Infiltration Re-Characterization. ~~September 1~~ ***June 19***, 2010.
6-1	6.0	References		Simunek, J., M. Sejna, H. Saito, M. Sakai, and M. Th. Van Genuchten. 2009. The HYDRUS-1D Software Package for Simulating ***the*** One-Dimensional Movement of Water, Heat, and Multiple Solutes in Variably-Saturated Media. Dept. of Environmental Sciences, University of California, Riverside.
6-1	6.0	References		SRK Consulting (SRK). 2011. Screening-Level Ecological Risk Assessment of the Phoenix Copper Leach Project Evaporation Cells. Prepared for Newmont Mining Corporation. ~~November 2008~~ ***May 2010*** (Revised August 2011).
6-1	6.0	References		U.S. Geological Survey (USGS). 1997. National Earthquake Information Center Database. ***Internet website: http://earthquake.usgs.gov/regional.neic.***

[1] Paragraph number includes first partial paragraph at top of page, if applicable.

Revised Tables

Table 2.2-1 Authorized Surface Disturbance by Land Ownership

Project Component	Private Land Surface Disturbance (acres)	Public Land Surface Disturbance (acres)	Total Surface Disturbance (acres)
Open Pits[1]			
Phoenix	452	100	552
Reona	13	128	141
Midas	429	179	608
Minnie	45	8	53
Iron Canyon	67	25	92
Subtotal	**1,006**	**440**	**1,446**
Waste Rock Facilities			
Iron Canyon North	50	39	89
Iron Canyon South	98	30	128
Iron Canyon East	12	75	87
Box Canyon	43	170	213
Butte Canyon	2	25	27
Philadelphia Canyon	376	14	390
Natomas	292	705	997
North Fortitude	58	23	81
North Optional Use Area	71	7	78
Subtotal	**1,002**	**1,088**	**2,090**
Reona HLF (Gold)	303	168	471
Reona Event Pond	0	0	0
Tailings Facility (TF)	1,030	366	1,396
Mill and Processing Facility	31	0	31
Ore Stockpiles	29	33	62
Growth Media Stockpiles	0	67	67
Clay Borrow Area	463	6	469
Borrow Area	176	52	228
South Optional Use Area	0	306	306
Phoenix HLF[2]	0	336	336
Haul Road and Utility Corridor[3]	57	54	111
Utility Corridor	43	12	55
Office Area	3	49	52

Table 2.2-1 Authorized Surface Disturbance by Land Ownership

Project Component	Private Land Surface Disturbance (acres)	Public Land Surface Disturbance (acres)	Total Surface Disturbance (acres)
Ancillary Facilities	21	0	21
Exploration[4]	25	25	50
Subtotal	**2,181**	**1,474**	**3,655**
Total Disturbance Within the Phoenix Mine Boundary	**4,189**	**3,002**	**7,191**
Willow Creek County Road Reroute	23	4	27
Buffalo Valley Power Line	2	1	3
Philadelphia Canyon Power Line	1	1	2
Total Disturbance Outside the Phoenix Mine Boundary	**26**	**6**	**32**
Total Project Disturbance	**4,215**	**3,008**	**7,223**

[1] Open pit disturbance includes post-reclamation highwalls and pit backfill facilities.

[2] Phoenix HLF is located in the South OUA and has been approved for the development of a new HLF with one 20-foot lift.

[3] The acreage associated with the haul road and utility corridor includes the approvals for expansion (BLM 2011a; NDEP 2011a).

[4] Exploration disturbance included for purposes of the Reclamation Cost Estimate.

Source: Newmont 2010a.

Table 2.3-1 Proposed Action – Surface Disturbance

Project Component	Currently Permitted (acres)	Proposed Action (acres)			Total (acres)
		Private	Public	Total	
Open Pits[1]	1,446	0	0	0	1,446
Waste Rock Facilities[2]	2,090	0	0	0	2,090
Reona HLF[3]	471	0	0	0	471
Reona Event Pond	0	0	0	0	0
TF	1,396	0	0	0	1,396
Mill and Processing Area	31	0	0	0	31
Ore Stockpiles	62	0	0	0	62
Growth Media Stockpiles	67	0	0	0	67
Clay Borrow Area	469	0	0	0	469
Borrow Area	228	0	0	0	228
South Optional Use Area[4]	306	0	0	0	306
Phoenix HLF[4]	336	200	0	200	536
Haul Roads and Utility Corridors	111	25	25	50	161
Utility Corridor	55	0	0	0	55
Office Area	52	0	0	0	52
Ancillary Facilities	21	0	0	0	21
Exploration	50	0	0	0	50
Section 5 Optional Use Area[5]	0	360	38	398	398
Section15 Borrow Area	0	123	3	126	126
Section 16 Borrow Area	0	0	128	128	128
Subtotal[6]	**7,191**	**708**	**194**	**902**	**8,093**

Table 2.3-1 Proposed Action – Surface Disturbance

Project Component	Currently Permitted (acres)	Proposed Action (acres)			Total (acres)
		Private	Public	Total	
Willow Creek Road Reroute	27	0	0	0	27
Buffalo Valley Power Line	3	0	0	0	3
Philadelphia Canyon Power Line	2	0	0	0	2
Subtotal[7]	**32**	**0**	**0**	**0**	**32**
Total Proposed Action Disturbance	**7,223**	**708**	**194**	**902**	**8,125**

[1] Pit disturbance includes post-reclamation highwalls and pit backfill facilities.

[2] The SX-EW Beneficiation Facility and a portion of the proposed haul road and utility corridor would be located within the area permitted for the Natomas WRF.

[3] The proposed Reona HLF (approximately 58 acres) would be developed in the permitted Reona HLF (Gold). Up to approximately 12 additional acres would be utilized for the development of E-ponds during closure of the Reona Copper HLF.

[4] Phase 1 of the Phoenix HLF would be developed in the permitted Phoenix HLF (Section 8). Up to approximately 75 additional acres would be utilized for the development of E-ponds during closure of the Phoenix Copper HLF.

[5] New surface disturbance would occur from the development of Proposed Action facilities.

[6] Acres of disturbance within the proposed Phoenix Mine POO boundary.

[7] Acres of disturbance associated with ROWs outside the proposed Phoenix Mine POO boundary.

Source: Newmont 2010a.

Table 2.4-1 Reclamation Schedule[1]

Name	Year	1				2				3				4				5				6				7				8				9				10				11				12				13				14				15				16				17				18				19				20				21				22				23				24				25			
	Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Phoenix Copper Heap Leach Pad																																																																																																								
PFS Phase I (Active Evaporation and Recirculation)[2]																																																																																																										
PFS Phase II (Active Evaporation)[2]																																																																																																											
PFS Phase II (E-Pond Conversion)[3,4]																																																																																																											
PFS Phase III (Passive Evaporation)[5]																																																																																																											
Regrading																																																																																																											
Cover Placement																																																																																																											
Revegetation																																																																																																												
Vegetation Monitoring																																																																																																											
Reona Copper Heap Leach Pad																																																																																																											
PFS Phase I (Active Evaporation and Recirculation)[2]																																																																																																											
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Revegetation																																																																																																												
Vegetation Monitoring																																																																																																												

[1]Activity duration is based on Closure Option 2.
[2]The duration of PFS includes both HLFs, since the same labor and equipment crew would be used for both facilities.
[3]The process ponds will be converted to E-ponds during PFS Phase II; however, the E-ponds will fill with precipitates as the draindown solution evaporates.
[4]Active E-pond monitoring would be conducted during operations; regrading, cover placement, revegetation, and vegetation monitoring would be conducted upon E-pond closure.
[5]Passive evaporation and new E-pond construction would be conducted during Phase III; however, given the duration of E-pond construction, only passive evaporation is illustrated through year 25 of vegetation monitoring completion. New E-ponds would be constructed approximately every 86 years for the Phoenix HLF and every 53 years for the Reona HLF.
[6]Raffinate Pond only; all other process ponds would be converted to open E-ponds.
[7]Includes SX/EW facility and Acid Storage Area.

Table 2.4-2 Reclamation Seed Mix

Scientific Name	Common Name	Application Rate[1] (pounds pure-live-seed per acre)
Grasses		
Bouteloua gracilis	Blue grama	2
Elymus elymoides	Bottlebrush squirreltail	1
Elymus trachycaulus	Slender wheatgrass	1
Leymus cinereus	Great Basin wildrye	2
Oryzopsis hymenoides	Indian ricegrass	2
Sporobolus airoides	Alkali sacaton	1
Forbs		
Sphaeralcea coccinea	Scarlet globemallow	0.25
Linum perenne	Blue flax	2
Melilotus officinalis	Yellow sweet clover	1
Achillea spp.	Yarrow	0.25
Shrubs		
Atriplex canescens	Fourwing saltbush	2
Atriplex confertifolia	Shadscale saltbush	2
Ceratoides lanata	Winterfat	1
Total		**17.5**

[1] Broadcast seed application rates would be 1.5 times the drill seed application rates.

[2] Early contemporaneous revegetation would be monitored, and the final seed mix would be evaluated and modified depending on monitoring results.

Source: Newmont 2010a.

Table 3.13-1 Population Characteristics

Area	1980	1990	2000	2010	Average Annual Percent Change 1980-1990	Average Annual Percent Change 1990-2000	Average Annual Percent Change 2000-2010
Battle Mountain Census Designated Place	2,749	3,542	2,871	3,635	2.6	(2.1)	2.4
Lander County	**4,076**	**6,266**	**5,794**	**5,775**	**4.4**	**(0.8)**	**0.0**
Winnemucca	4,140	6,134	7,175	7,396	4.0	1.6	0.3
Humboldt County	**9,434**	**12,844**	**16,197**	**16,528**	**3.1**	**2.3**	**0.2**
Nevada	**800,493**	**1,201,833**	**1,998,257**	**2,700,551**	**4.1**	**5.2**	**3.1**

Sources: U.S. Census Bureau 2010, 2000, 1981.

Table 3.13-2 Race and Ethnicity by County

Race and Ethnicity	Humboldt County (%)	Lander County (%)	State of Nevada (%)
White Not of Hispanic Origin	68.9	73.7	54.1
Black Not of Hispanic Origin	0.5	0.3	7.7
American Indian, Eskimo or Aluet	3.8	3.4	0.9
Asian or Pacific Islander Non-Hispanic	0.8	0.3	7.7
Other and Two or More Races	1.6	1.1	3.1
Hispanic Origin of Any Race	24.4	21.1	26.5

Source: U.S. Census Bureau 2010.

Table 3.13-5 2010 Housing Vacancy Rates

Geographic Area	Housing Units			Vacancy Rates (%)		
	Total	Occupied	Vacant	Total	Homeowner	Rental
Humboldt County	**7,123**	**6,289**	**834**	**11.7**	**1.0**	**7.4**
Winnemucca (city)	3,214	2,926	288	9.0	1.4	8.7
Remainder of Winnemucca CDP[1]	1,242	1,097	145	11.7	6.1	8.2
Lander County	**2,575**	**2,213**	**362**	**14.1**	**2.6**	**13.8**
Battle Mountain CDP	1,518	1,364	154	10.1	2.6	15.0
CESA Total	**9,698**	**8,502**	**1,196**	**12.3**	**NA[2]**	**NA**

[1] CDP = Census Designation Place.

[2] NA = not available.

Source: U.S. Census Bureau 2010.

Table 3.15-1 Ethnic Composition of Populations, 2000 and 2009

Location	Total Population	White		Black		American Indian, Eskimo, or Aleut		Asian or Pacific Islander		Other Race		Two or More Races		Hispanic or Latino of Any Race	
		Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
2000 Counts[1]															
Lander County	5,794	4,891	84.4	12	0.2	231	4.0	20	0.3	502	8.7	136	2.3	1,073	18.5
Battle Mountain	2,871	2,334	81.3	4	0.1	73	2.5	15	0.5	339	11.8	106	3.7	677	23.6
Humboldt County	16,106	13,401	83.2	82	0.5	647	4.0	103	0.7	1,375	8.5	498	3.1	3,040	18.9
Winnemucca	7,174	5,984	83.4	23	0.3	160	2.2	66	0.9	689	9.6	252	3.5	1,488	20.7
State of Nevada	1,998,257	1,501,886	75.2	135,477	6.8	26,420	1.3	98,692	4.9	159,354	8.0	76,428	3.8	393,970	19.7
2010 Counts[2]															
Lander County	5,775	4,254	73.7	17	0.3	197	3.4	21	0.3	0	0	62	1.1	1,214	21.1
Battle Mountain	3,635	2,550	70.2	14	0.4	125	3.4	14	0.4	0	0	40	1.1	892	24.5
Humboldt County	16,528	11,395	68.9	78	0.5	628	3.8	126	0.8	12	0.1	251	1.5	4,038	24.4
Winnemucca	7,396	5,020	67.9	36	0.5	137	1.9	69	0.9	6	0.1	104	1.4	2,024	27.4
State of Nevada	2,700,551	1,462,081	54.1	208,058	7.7	23,536	0.9	206,503	7.6	4,740	0.2	79,132	2.9	716,501	26.5

[1] U.S. Census Bureau 2000.

[2] U.S. Census Bureau 2010.

Table 3.15-2 2009 Income Level of the Study Area Compared to the State of Nevada based on a Sample

Location	Average Poverty Threshold[1]	Median Household Income[2]
Lander County	$17,374	$62,324
Humboldt County	$17,374	$57,309
State of Nevada	$17,374	$53,310

[1] The dollar amount shown is the average threshold for a three-person family, which is the average household size for each county and community.

[2] A "household" includes all the persons who occupy a housing unit.

Source: U.S. Census Bureau 2010.

3.0 Public Review of the Draft EIS

The 45-day public comment period on the Phoenix Copper Leach Project EIS began on October 28, 2011, and ended on December 12, 2011. The BLM received 15 comment letters during the public comment period. **Table 3-1** lists each of the comment letters by respondent, the assigned letter number, and the number of comments per letter.

Comments received during the public comment period are presented on the following pages, together with the BLM's responses to these comments. Each comment and each response is identified by the letter number and comment number. Each letter has been reviewed in its entirety and considered by the BLM in preparation of the Final EIS for the Phoenix Copper Leach Project.

Table 3-1 Public Comment Letters in Response to the Draft EIS

Letter Number	Commenter	Number of Comments
Federal Agencies		
F1	USEPA	16
Nevada State Agencies		
S1	Nevada Department of Wildlife	1
S2	Nevada Division of State Lands	5
S3	Nevada Division of Water Resources	1
S4	Nevada State Historic Preservation Office	1
Local Agencies		
L1	Lander County, NV	1
L2	Lander County, NV	1
L3	Lander County Public Land Use Advisory Planning Commission, NV	1
L4	The Greater Austin Chamber of Commerce, NV	1
Private Individuals		
P1	Usacitizen1	1
P2	Amanda Glasgow	1
P3	Kevin Sur	1
P4	Walter Robinson	1
P5	G. Robert Denham	1
P6	Luz Sandoval	1

F1- Letter

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

JAN 19 2012

OFFICE OF THE
REGIONAL ADMINISTRATOR

Amy Lueders
Bureau of Land Management
1340 Financial Boulevard
Reno, Nevada 89520

Subject: Draft Environmental Impact Statement (EIS) for the Phoenix Copper Leach Project, Lander County, Nevada [CEQ #20110357]

Dear Ms. Lueders:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500 - 1508, and our review authority under Section 309 of the Clean Air Act, as well as the May 21, 2008 Memorandum of Understanding between the Bureau of Land Management (BLM) and EPA. I appreciate the time and effort that you and your staff are devoting to discussing with EPA this proposed project and the need to ensure the availability of adequate funding for the centuries of monitoring and management that will be required at mining sites such as this one after their closure in order to protect both the environment and the taxpayer.

The proposed Phoenix Copper Leach Project would expand the existing Phoenix Mine, adding 902 acres of new disturbance to the 7,210 acres that are currently permitted. The project includes copper leaching/beneficiation of copper oxide rock material that BLM previously permitted for disposal in waste rock facilities at the Phoenix Mine in a November 2003 Record of Decision. According to the Draft EIS, the mine is expected to operate for 24 years, followed by 13 years of reclamation, after which drain down fluids from the proposed copper leach pads would be managed in evaporation ponds for at least 500 years. As solids accumulate in the evaporation ponds throughout that lengthy post-closure period, ponds would be reclaimed and new ponds would be constructed and monitored.

The Draft EIS clearly states that, following closure, long-term care will be necessary to protect water quality and wildlife at the Phoenix Mine, and indicates that BLM would require a long-term funding mechanism to cover the cost of post-closure monitoring and management of the heap leach facilities and evaporation ponds. The Draft EIS lacks, however, critical information regarding the nature and adequacy of that funding mechanism, and, based on our analysis of BLM's recent practice and current guidance regarding financial assurance for mining operations, we believe it is likely that the long-term post-closure monitoring and management of the proposed project will be underfunded and, therefore, ineffective. Leachate from the spent copper ore will be acidic and is expected to contain concentrations of aluminum, arsenic,

Responses to Letter F1

F1 - Letter (cont'd)

beryllium, cadmium, copper, iron, manganese, nickel, sulfate, total dissolved solids, and zinc that exceed water quality standards. If heap leach facilities and evaporation ponds are not properly managed over the long-term, the project could result in significant and long-term degradation of surface water and/or groundwater quality, as well as wildlife exposure to acute or chronic toxicity from several of these parameters.

F1-1

EPA has rated the Phoenix Copper Leach Project Draft EIS as "**3 – Inadequate Information**" (see Enclosure 1: "Summary of Rating Definitions and Follow-Up Action") because it does not disclose any detail on how funds will be available as long as they are needed to implement the closure and post-closure obligations. The information that EPA believes is needed includes: (1) the amount needed to cover the costs of the post-closure obligations for the proposed project, (2) a detailed description of the proposed long-term funding mechanism that would be established for the proposed project; and (3) the updated reclamation/closure bond amount needed for the project. We recommend that BLM determine the appropriate level of funding for the reclamation/closure bond and the proposed long-term funding mechanism for the proposed Copper Leach Project; analyze the adequacy of the funding amount and mechanism, including associated uncertainties; and circulate this information in a Supplemental Draft EIS for public comment, in accordance with NEPA and CEQ's NEPA Implementation Regulations. The Supplemental Draft EIS should evaluate the anticipated effectiveness, and risks, of the Phoenix Mine closure and post-closure commitments, and consider whether the proposed trust fund ensures that sufficient funds will be available to implement the post-reclamation obligations for as long as they are needed. EPA respectfully requests the opportunity to review this information and provide BLM our feedback before you publish the Supplemental Draft EIS. EPA's detailed comments on the Draft EIS are enclosed (Enclosure 2).

F1-2

The availability of adequate resources to ensure effective reclamation, closure, and post-closure management is a critical factor in determining the significance of the project's potential impacts and its environmental acceptability. An adequate reclamation/closure bond and post-closure funding mechanism are needed to ensure that the costs of stabilizing, reclaiming, and managing the site after closure are covered by the mine operator for as long as they may be needed. In other words, if mitigation funds will not be adequate to effectively protect environmental resources from significant and long-term degradation, the project would be environmentally unacceptable. Such assurances could make the difference between the project being sufficiently managed over the long-term by the site operator, versus an unfunded or under-funded contaminated site that becomes a liability for the federal government and taxpayers, e.g., under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

F1-3

BLM and EPA agree that adequate financial assurance at mines is important to safeguard the environment and taxpayers. Metal mining and protection of taxpayers from long-term liability is an EPA priority, and EPA continues to believe that the adequacy of financial assurance is a critical element to be addressed in the NEPA process and should be disclosed. Without this information, EPA believes that federal officials will not have important information concerning the likelihood that sufficient resources will be available for closure and post-closure mitigation, and the public may not understand the potential environmental and fiscal consequences of this proposed project.

Responses to Letter F1 (cont'd)

F1-1 BLM policy, as supported by the Surface Management regulations (43 CFR 3809), do not support the placement of the following information into an environmental impact analysis: 1) RCE calculations; 2) financial guarantee amount; 3) LTFM calculations; and 4) LTFM agreements.

The BLM does not include reclamation costs in the NEPA process because NEPA requires the agency to analyze potential environmental impacts from a proposed major federal action. The reclamation/financial guarantee estimates and LTFMs are a financial assurance should the operator fail to comply with the reclamation requirements and long term maintenance when identified by the BLM authorized officer. These estimates are not part of this environmental impact analysis.

F1-2 The EPA refers to reclamation bonds and long term funding mechanisms as "mitigation funds." These funding mechanisms are provided under the BLM's enforcement and compliance regulations as identified in the 43 CFR 3809 Surface Management regulations.

The BLM requires and/or applies "mitigation" as defined by the Council on Environmental Quality in 40 CFR 1508.20, Mitigation, which states:

"Sec. 1508.20 Mitigation."

"Mitigation includes:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments."

There is nowhere in the citation where CEQ identifies reclamation bonds or long term funding mechanisms as "mitigation." Nor do these definitions identify any form of monetary funds as mitigation. The BLM does not agree with EPA's assertion that the reclamation bond and LTFM are considered mitigation. Therefore, as is BLM policy, the BLM will not be placing this information in the FEIS.

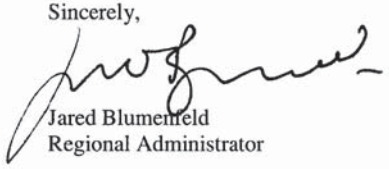
F1 - Letter (cont'd)

F1-4 As you know, BLM Nevada did include financial assurance information in the 2002 EIS for the Phoenix Mine.[1] Furthermore, such disclosure is consistent with CEQ guidance, which states that all relevant, reasonable mitigation measures that could improve the project are to be identified in an EIS and, to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented should also be discussed.[2] CEQ guidance views a discussion of funding for implementation of mitigation commitments as critical to ensuring informed decision making, and has stated that agencies should not commit to mitigation measures if it is not reasonable to foresee the availability of sufficient resources to ensure the performance of the mitigation.[3]

F1-5 We also note that BLM's Instruction Memorandum (IM) 2009-153: Financial Guarantees for Notices and Plans of Operations requires that, if the state director allows the use of other financial instruments not listed under 43 CFR 3809.555, he/she must document and make available to the public the decision and criteria used for accepting financial instruments not listed under 43 CFR 3809.555. We believe the NEPA process is an appropriate mechanism for this disclosure as well.

F1-6 We appreciate the opportunity to review this Draft EIS and look forward to working with BLM to resolve the issues outlined in this letter. We will call to arrange a meeting with you to discuss plans for completing the NEPA process. In the meantime, if you have any questions, please call me at (415) 947-4238 or have your staff contact Jeanne Geselbracht, our lead NEPA reviewer for this project, at (415) 972-3853. Please send a copy of the Supplemental Draft EIS to this office (mailcode CED-2) at the same time it is filed with our Washington, D.C. office.

Sincerely,



Jared Blumenfeld
Regional Administrator

Enclosures:
(1) Summary of Rating Definitions and Follow-Up Action
(2) EPA's detailed comments on the Phoenix Copper Leach Project Draft EIS

cc: Doug Furtado, BLM-Battle Mountain District Office
Colleen Cripps, Nevada Division of Environmental Protection

F1-7 [1] In light of the large disparity between EPA's and BLM's estimates of initial funding needed for the original Phoenix Mine trust fund ($33.5 million vs. $408,000), EPA's November 25, 2002, comment letter on the Phoenix Project Final EIS recommended that BLM engage an independent third party to analyze BLM's cost estimate and financial predictions and adjust the trust fund accordingly during the first triennial review.

[2] CEQ, Memorandum for Federal NEPA Liaisons, Federal, State and Local Officials and Other Persons Involved in the NEPA Process, Question 19b, March 16, 1981.

F1-8 [3] CEQ, *Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact*. 76 Fed. Reg. 3843, 3848-3849 (Jan. 21, 2011).

Responses to Letter F1 (cont'd)

F1-3 The reclamation cost estimate process and the LTFM (also known as a long term trust fund, LTTF) process as noted in comment response F1-2 are not part of the NEPA process, but rather part of the enforcement and compliance requirements of the BLM's Surface Management regulations. The Plan of Operations approval and the Record of Decision will clearly state what these two values have been calculated to be by the BLM.

F1-4 These regulations do not support the placement of financial guarantee information or LTFM/ LTTF figures in a NEPA document. Rather, in this case, the EPA requested this information be placed in the 2002 Phoenix FEIS and the BLM agreed to place those figures in that FEIS.

The policies and processes currently in place did not apply at the time the Phoenix Project FEIS (January 2002) was issued. All financial guarantee information is a component of the enforcement and compliance section of the Surface Management regulations. Also see response to comments F1-2 and F1-3.

F1-5 See comment response F1-4. The BLM does not agree with EPA's assertion that the IM 2009-153 identified requires the BLM to place this information in a NEPA document. The instruction memorandum simply states that the state director must make available to the public the decision and criteria used if other financial instruments are used for any LTFMs.

F1-6 The BLM has issued an abbreviated Final EIS for the Phoenix Copper Leach Project.

F1-7 The correct initial funding amount in that trust fund was $918,500, not $408,000, as noted by the USEPA.

F1-8 The CEQ Guidance referenced by the EPA is taken out of context and does not accurately capture that section that guidance provides.

Specifically the guidance states the following on page 1 of that document:

"2. CEQ is issuing this guidance as an exercise of its duties and functions under section 204 of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4344, and Executive Order No. 11,514,35 Fed. Reg. 4,247 (Mar. 5, 1970), as amended by Executive Order No. 11,991,42 Fed. Reg. 26,927 (May 24, 1977). This guidance is not a rule or regulation, and the recommendations it contains may not apply to a particular situation based upon the individual facts and circumstances. This guidance does not change or substitute for any law, regulation, or other legally binding requirement and is

F1 - Letter (cont'd)

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

Responses to Letter F1 (cont'd)

F1-8 cont'd

not legally enforceable. The use of language such as "recommend," "may," "should," and "can" is intended to describe CEQ policies and recommendations. The use of mandatory terminology such as "must" and "required" is intended to describe controlling requirements under the terms of NEPA and the CEQ Regulations, but this document does not independently establish legally binding requirements."

The BLM, as identified in comment response F1-2, is clearly following its 43 CFR 3809 Surface Management regulations as they direct preparation and use of reclamation bonds and LTFMs. Since this CEQ guidance *"does not change or substitute for any law, regulation, or other legally binding requirement and is not legally enforceable."* the BLM does not concur with EPA's position (i.e., that the LTFM and reclamation bond information must be placed in the NEPA document).

F1 - Letter (cont'd)

Phoenix Copper Leach Project Draft EIS
EPA Detailed Comments
January, 2012

F1-9 The Phoenix Copper Leach Project Draft EIS describes the closure and post-closure phases for management of the proposed Phoenix copper leach facilities. EPA has also reviewed *Closure Options Evaluation Phoenix Copper Leach Project* ("Closure Options Evaluation"),[4] which includes cost estimates for several closure/reclamation and long-term monitoring and maintenance options for the proposed copper leach project. Option 4 in the Closure Options Evaluation is similar to the closure options assessed in the Draft EIS, and this cost information was available well in advance of publication of the Draft EIS. For the most part, the Option 4 closure/ reclamation and post-closure costs appear to be appropriate. We believe significant issues should be remedied, however, to ensure that the costs assigned to the closure/reclamation plan and the costs assigned to the long-term monitoring and maintenance plan allow the closure/reclamation bond and the long-term funding mechanism (LTFM) for the proposed project to effectively respond to funding needs as they arise. The Draft EIS does not identify the cost estimates for the closure/reclamation bond or the LTFM or analyze the adequacy and uncertainties associated with these funding amounts. Nor does the Draft EIS describe or analyze the actual funding mechanism (or funding options) in any detail to demonstrate how it will ensure that the costs of post-closure monitoring and mitigation will be covered for as long as needed.

F1-10 We understand that the 2012 LTFM would be separate from the existing Phoenix Project long-term trust fund (2004 LTTF), which was established in 2004 to cover the cost of implementing the Phoenix Mine *Contingent Long-Term Groundwater Management Plan* (CLTGMP) to which BLM committed in the 2003 Phoenix Project Record of Decision; however, we believe there are lessons to be learned from the 2004 LTTF that are applicable to the 2012 LTFM, given the inadequacies, in our opinion, of the 2004 LTTF. As we stated in our November 25, 2002 comment letter on the original Phoenix Project Final EIS, we believe that the assumptions proposed to establish the original trust fund were flawed because the method used to calculate the funding amount significantly underestimated the likely need and was based on overly optimistic rates of return, and that the allowable investment instruments were unduly risky. We concluded, therefore, that the original Phoenix Project appeared to be environmentally unacceptable and the Final EIS inadequate because the trust fund assumptions used were flawed, making effective implementation of the CLTGMP infeasible.

F1-11 EPA has analyzed, with EPA contractor assistance, the Phoenix Project Long-Term Contingent Fund Agreement and the Phoenix Project Irrevocable Trust, which together established the 2004 LTTF, as well as documents BLM provided us after the Record of Decision. In addition, in the absence of specific information in the Phoenix Copper Leach Project Draft EIS regarding financial assurance, we have reviewed BLM's Instruction Memorandum (IM) 2009-153 to examine how BLM may establish the long-term financial assurance for this project. Based on this review, we have concerns that, when established, the 2012 LTFM for the proposed Copper Leach Project could be significantly underfunded and unavailable over the long term to cover the costs of the post-closure obligations associated with the copper leach facilities.

[4] Closure Options Evaluation Phoenix Copper Leach Project, JBR Environmental Consultants, Inc., August 19, 2011

Responses to Letter F1 (cont'd)

F1-9 Comment noted. Thank-you for your comment.

F1-10 The EPA has correctly identified that the current Phoenix Gold Mine LTFM or Long Term Trust Fund (LTTF) is, and will remain, a separate funding mechanism with respect to the Phoenix Copper Leach Project's proposed LTFM.

This is due to the fact that the trigger points for implementing the Phoenix Gold Mine LTFM are tied to potential solute transport of meteoric waters and any constituents those waters may mobilize through the waste dumps to possible surface and groundwater sources. The Phoenix Copper Leach Project's LTFM trigger points are tied to the closure of the two heap leach facilities, managing the drain down fluids, and disposal of the various salt precipitates that will develop during the closure's passive evaporation process.

Please also refer to the collective previous comment responses.

F1-11 Comment noted. Also, please refer to comment response F1-7.

F1 - Letter (cont'd)

As described in more detail below, we recommend that BLM determine the appropriate level of funding for the closure/reclamation bond for the mine and disclose the specific long-term funding mechanism that will be established for the proposed Copper Leach Project; analyze the adequacy of the funding amount and mechanism; and circulate this information in a Supplemental Draft EIS for public comment. The following information should be addressed in the Supplemental Draft EIS.

F1-11 cont'd

Adequacy of the 2012 LTFM

There is no single right way to establish a trust; however, the overall goal is clear: ensuring that the trust has sufficient assets to cover the costs for which it was established, for as long as needed. BLM's current guidance, as embodied in IM 2009-153, differs from the approach BLM took in establishing the Phoenix Project's LTTF in 2004. If the LTTF were to have been developed following the procedures in the IM 2009-153, the project proponent would have had to increase its investment. Even with that improvement, we believe IM 2009-153 may allow a degree of flexibility in investment instruments that unnecessarily increases the risk that adequate funds will not be available when needed.

Recommendation: We recommend BLM consider the following approaches to help ensure that the new Phoenix Copper Leach trust covers the costs of monitoring, managing the heap leach facilities and drain down fluids, and other post-closure obligations in perpetuity.

- **Shift to current value trusts or use more realistic discount rates.** BLM uses net present value (NPV) trusts. EPA allows for current value trusts (i.e., cost estimates calculated in current dollars) in many situations, and under this approach, the trust is fully funded immediately. Where NPV trusts (i.e., cost estimates calculated using a discount rate) are used, the single most important factor in calculating the beginning amount of the trust corpus (and therefore, the value of the trust in the future) is to use an appropriate discount rate. Overly aggressive discount rates "backload" contributions to the trust over time, and also limit true-up contributions. EPA suggests that BLM consider the use of current value trusts or NPV trusts with a standard benchmark discount rate as opposed to an individually negotiated rate. For example, EPA has authorized the 30-year Treasury Constant Maturity return for some trusts that allow for NPV.

F1-12

- **Shift to annual true-up cycle.** BLM requires adjustments, or "true-ups", to trust funds every three years if they are not meeting their growth performance goals. EPA strongly supports the idea of a true-up requirement, but recommends that BLM consider using an annual true-up cycle rather than a 3-year cycle, to address both problematic investment performance and the risk of grantor bankruptcy or other corporate failure more often. Catching either of these problems quickly (i.e., with a shorter true-up cycle) would ensure that the trust is better positioned to secure the appropriate funds to make the trust whole.

- **Consider a more conservative investment portfolio requirement.** BLM imposes few limitations on the types of investments allowed for its trust funds. EPA generally imposes significant limitations on potential investments, especially when the trust is an NPV trust. We acknowledge that there is a downside to conservative investment strategies (namely, that the grantor contribution would likely increase), but believe, given

Responses to Letter F1 (cont'd)

F1-12 Comment noted. Thank-you for your comment.

F1 - Letter (cont'd)

the adverse consequences of trust failure for future taxpayers and/or the environment, that a conservative approach may be appropriate in this instance.

Contingencies for closure earlier than planned

During the past 25 years, there have been four price cycles for copper, with each cycle lasting an average of 5.5 years. The average price change between peak and trough for each cycle was 49.5 percent, demonstrating the volatility of the copper market. At the Phoenix Mine, metal prices at any given time will influence whether mine rock is assigned to a gold processing circuit, a copper processing circuit, or a waste rock facility. The Draft EIS does not estimate the economic threshold for recovery of Phoenix copper oxide ore or discuss whether or how revenue-based ore control decisions regarding gold processing versus copper processing could affect the life of the copper leach operations. Accordingly, BLM should plan for the contingency that the copper leach facilities may close significantly earlier than planned in the Plan of Operations, and take that into account in establishing the LTFM. For example, based on a discount rate of 2.6 percent, the present value of the long-term monitoring and maintenance obligations identified in the Closure Options Evaluation after 24 years of operation is $7.9 million. At this discount rate, the present value after 12 years, however, is $10.7 million. Therefore, if the copper leach facilities were to operate for only half as many years as planned, the amount needed in the LTFM at the start of the project would be almost $3 million greater than the amount needed if closure occurred, as planned, after year 24. This difference, however, does not account for the smaller reclamation area and maintenance costs that a 12-year build-out would require relative to a 24-year build-out. In addition, EPA is not recommending these present values per se. They are provided here only to illustrate the relevant information needed for a fully informed decision on the adequacy of financial assurance and effectiveness of the proposed mitigation.

F1-12 cont'd

Recommendation: The Supplemental Draft EIS should estimate the economic threshold for recovery of Phoenix copper oxide ore and discuss whether and how revenue-based ore control decisions regarding gold processing versus copper processing could affect the life of the copper leach operations.

The Supplemental Draft EIS should include an evaluation of how earlier closure dates and smaller leach pad sizes could affect the timing and funding needs of the various elements of the post-closure plan (drain down rates, closure and construction of evaporation ponds, bird netting, etc.).

We also recommend that any costs currently assigned to the 2012 LTFM but which would occur during the 13-year closure/reclamation period be instead assigned to the closure/reclamation bond. In the event that one or both copper leach pads closed earlier than projected in the Plan of Operations and Newmont were unavailable to satisfy these obligations, they would be covered by the closure/reclamation bond and would not affect the corpus of the trust if it is not fully funded by that date.

Additional long-term monitoring and maintenance activities and costs

F1-13

After the proposed copper leach operations are completed, the closed Phoenix Copper Leach Pad, located on an alluvial fan and proximal to Willow Creek, will be a permanent fixture on the landscape. The Willow Creek Floodplain Evaluation conducted by AMEC (May, 2011) analyzed

Responses to Letter F1 (cont'd)

F1-13 The following is taken from the Washington Office, BLM, IM 2009-153, Financial Guarantees for Notices and Plans of Operations, Attachment 2, Guidelines for Establishing a Long Term Funding Mechanisms:

Unanticipated Events – The district/field managers should not use 43 CFR 3809.552(c) to require an operator to establish a fund to address unanticipated events, such as accidents, failures or spills, or for worst-case scenarios. If an event occurs that creates a new reclamation obligation, the BLM will require the operator to adjust the financial guarantee upward accordingly to cover the new obligation. Moreover, these events have a low probability of occurrence and are best addressed by a thorough review of the Plan of Operations and the development of contingency measures, and an active inspection program.

The Council on Environmental Quality has also made a determination that "worst case scenarios" need not be analyzed in National Environmental Policy Act documents.

The State of Nevada has the legal responsibility to establish minimum engineering standards for mining facilities. In implementing this responsibility, Nevada has promulgated "NAC 445A.433: Minimum design criteria: Universal requirements; areas where groundwater is near surface; proximity of new process components to dwellings; liability for degradation of water."

NAC 445A,433 states in part:

(c) All process components must be designed to withstand the runoff from a 24-hour storm event with a 100-year recurrence interval.

In this comment, EPA wishes the BLM to pursue running a "probable maximum flood event" as opposed to requiring Newmont meeting current Nevada Administrative Code 445A,433.

Probable maximum flood events or "probable maximum precipitation" events are used by engineers and agencies like the Federal Emergency Management Agency to determine worst-case scenarios, in potential events like a major dam failure. For instance, a probable maximum flood event model could be used to ascertain what would happen to the City of Laughlin, Nevada should the Hoover Dam fail. The Department of Energy uses these kinds of models when building nuclear storage facilities so they may engineer such facilities to withstand extreme events. Since:

1) Newmont has designed all of its proposed Phoenix Copper Leach Facilities to NAC 445A,433 requirements for meeting a 100 year flood event;

F1 - Letter (cont'd)

the 100-year, 24-hour flood event to determine the propensity of Willow Creek to intercept the Phoenix Copper Leach Pad. Based on the 100-year, 24-hour event, the western perimeter berm of the Phoenix Copper Leach Pad was relocated toward the southeast. While this appears to be an appropriate analysis and relocation for the operational and closure timeframe, lower probability events, such as the probable maximum flood, have not been analyzed. Low probability events over the long-term post-closure period (e.g., a 500-yr event, rain-on-snow storm event, or a wet period preceding a large storm) could lead to slope failure and/or failed covers resulting in increased surface runoff and sedimentation and increased leachate reporting to the evaporation cells. In light of the potential problems posed by severe storm events and/or an inadequately maintained closed leach pad, it will be important to ensure that the closed Phoenix leach pad is conservatively maintained and meets performance standards in perpetuity.

F1-13 cont'd

In the discussion of post-closure obligations, however, the Draft EIS (section 2.4.5) does not identify regular inspection, maintenance, or replacement of the leach pad cap and cover system. Moreover, the long-term monitoring and maintenance cost estimate in Appendix C of the Closure Options Evaluation includes only a one-time installation of the impermeable cap and no replacement costs. Regular inspections will be important, especially after storms and spring snowmelt, and repairs will be needed to maintain the leach pad cap, cover and conveyance systems.

Recommendation: The Supplemental Draft EIS should include regular inspection, maintenance and replacement of the cap, cover and conveyance system in the post-closure obligations. The long-term monitoring and maintenance cost estimate should include the costs of maintenance of the original cover and conveyance systems to meet performance standards relative to stormwater controls and cover infiltration, including regular inspections, repairs, and replacement of the impermeable cap every 50 to 100 years.

F1-14

The Draft EIS (section 2.4.5) identifies long-term monitoring and maintenance obligations that would be covered by the LTFM. We were unable to find some of these activities and their associated costs in Appendix C of the Closure Options Evaluation, however, such as road and culvert maintenance; erosion repair and revegetation; maintenance of stormwater channels, retention ponds, and best management practices; groundwater monitoring and sampling; site security; and associated equipment, materials and labor costs. In light of the monitoring, operation and maintenance needs to maintain the assumed performance during the post-closure period, we assume that a crew consisting of two full time employees and equipment and materials, as necessary, may be needed. This requirement in particular may be necessitated by the large amount of bird-netting being deployed at the project and the accompanying need to attend such features on a regular basis. Furthermore, the markups for indirect costs appear lower than we would expect for the long-term operation and maintenance. Based on several other western mines where government agencies oversee the post-closure operation and maintenance, we recommend a multiplier of 0.5 (50%).

Recommendation: The costs identified above should all be covered by the LTFM. If any of these costs would, instead, be covered under, or overlap with, the original Phoenix Mine 2004 LTTF, this should be clarified in the LTFM. The Supplemental Draft EIS

Responses to Letter F1 (cont'd)

F1-13 cont'd

2) Newmont's Willow Creek dam permit includes running a model of a possible dam failure (and that permit is current with respect to Nevada regulations); that dam failure model predicts an approximately six-foot high wall of water inundating the Willow Creek drainage for a very short duration. This flood event would hit the south-west corner of the ridge the Phoenix Heap Leach sits upon. There is an approximately 40 foot difference in elevation between the Willow Creek channel and the top of the ridge the Phoenix Copper Leach facility will reside on. In other words, should the Willow Creek Dam fail, there would be approximately 34 feet of free board between the crest of the flood-waters and the top of the ridge the heap leach is built on.

3) Newmont went to considerable expense and delay in having a stream morphology study of the Willow Creek drainage study completed at EPA's request. That study indicates there is little likelihood that Willow Creek would ever migrate to the east and undermine the Phoenix Copper Leach Pad; the BLM has decided not to analyze this issue further, and stands by its current analysis in the DEIS.

The EPA also requests that the BLM consider not only regular inspections of the closed heap leach facilities' caps and covers, but ask that the LTFM be capable of replacing these covers/caps at regular 50-100 year intervals. EPA does not provide any science or rationale as to why the proposed permanently closed and fully reclaimed heap leach facilities should be re-disturbed on a regular basis. The synthetic cap will be covered with alluvium and not exposed to sunlight; studies indicate that the effective life under those conditions for HDPE would be hundreds of years (Geosynthetic Institute 2011). It should be noted that unlike the double-lined, leak detected liners beneath heap leach pads, the synthetic cap is not buried under several hundred feet of ore and does not have to eliminate all infiltration, just a large percentage of it, to be effective. Some limited leakage of the cap due to root penetration or desiccation over long periods of time would not affect its purpose.

The BLM refers the EPA to the beginning of this response and BLM's citation of WO-IM-2009-153 and the definition cited under "Unanticipated Events." In part, that definition/policy states:

"If an event occurs that creates a new reclamation obligation, the BLM will require the operator to adjust the financial guarantee upward accordingly to cover the new obligation."

While the EPA clearly wants what it considers adequate up-front funding

F1 - Letter (cont'd)

F1-14 cont'd should also clarify which post-closure obligations and costs, if any, would overlap with and/or be covered under the existing Phoenix Project 2004 LTTF.

It appears from the cost estimate that bird netting would be replaced only every 15 years. We were unable to find the basis for the netting costs and cannot discern how frequently netting would be inspected and repaired. We believe bird netting should be inspected at least monthly and will likely need frequent repair.

F1-15 **Recommendation:** EPA recommends that the costs of frequent inspection and repair of bird netting and/or other bird exclusion methods be covered under the LTFM and committed to in the Supplemental Draft EIS. Given the toxicity and large size of the evaporation ponds, as well as the potential for nets to frequently tear and trap avifauna, we also recommend that Newmont investigate alternative methods to exclude birds from the evaporation ponds in a safer, more effective, and efficient manner.

Updated reclamation bond amount for the entire Phoenix Mine

F1-16 The Draft EIS does not provide the estimated cost of the reclamation/closure obligations for the proposed Copper Leach Project that will be added to the overall Phoenix Mine reclamation/ closure bond. EPA believes transparency in the EIS regarding this information is important because it addresses whether financial resources will be adequate to meet closure/reclamation obligations and ensure protection of water quality and biological resources.

Recommendation: The Supplemental Draft EIS should include the estimated cost of the closure/reclamation obligations for both the proposed Copper Leach Project and the Phoenix Mine as a whole.

Responses to Letter F1 (cont'd)

F1-13 cont'd for such an event, the BLM's Surface Management Regulations and policy guidance provided in IM-2009-153 clearly provides the mechanism the BLM would use should such a replacement of the heap leach caps and covers be required in the future.

F1-14 The BLM Surface Management Regulations and the Washington Office's IM-2009-153 provide direction for all facets of developing the closure process and funding that process, including the calculation of indirect costs. The funding is based on a third party contractor providing all of the services required to close such a facility as the Phoenix Copper Leach Project. The Washington IM also provides for monitoring and maintenance of the LTFM to ensure the entire closure process is monitored, maintained, and funded according to the Plan of Operations.

F1-15 See the response to the Nevada Department of Wildlife (NDOW) comments. Newmont has committed to a monthly inspection of the fencing that will be placed around each E-pond as well as the bird netting. Newmont has also committed to immediate repair or replacement of either wildlife exclusion facility should a repair be needed or a wildlife mortality detected. These commitments would comply with current NDOW requirements for IAPPs.

NDOW's current regulations permit the use of fencing and bird netting where active evaporation is essential to the closure process.

F1-16 Please see previous responses. The Record of Decision and pending Plan of Operations approval will contain these amounts and be issued after the FEIS' 30 day review period has been completed.

Letter S1

BRIAN SANDOVAL
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE
1100 Valley Road
Reno, Nevada 89512
(775) 688-1500 • Fax (775) 688-1595

KENNETH E. MAYER
Director
RICHARD L. HASKINS, II
Deputy Director
PATRICK O. CATES
Deputy Director

January 25, 2012

Dave Davis
Phoenix Project Manager
Bureau of Land Management
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

RE: Phoenix Copper Heap Leach DEIS comment letter

Dear Mr. Davis,

Thank you for the opportunity to provide comments on Newmont Mining Corporation's proposed Phoenix Copper Heap Leach project in Lander County. The Nevada Department of Wildlife (NDOW) is concerned with direct, indirect, and cumulative impacts to wildlife resources and their habitats. As a cooperating agency on this project, we appreciate the level of involvement provided to us.

S1-1

NDOW's primary concern with the proposed project is based around the 28 to 38 evaporation ponds that will be constructed for the Phoenix Copper heap leach field (HLF) and Reona HLF. Due to the attractive nature and potential for impact to resident as well as migratory wildlife we have concerns with construction, maintenance and monitoring of these ponds. Given the extended duration of the project and associated closure plan we believe that the DEIS should provide a more detailed monitoring and maintenance plan for these facilities. Specifically, there should be a schedule that provides for the inspection and repair of the associated bird netting as it is very difficult to maintain in Nevada's climate. The long term durability of pond liners is uncertain. As such, the plan should incorporate measures or strategies that will prevent and detect any contaminants released through a pond liner failure.

Thank you for the opportunity to comment on this project and should you have questions regarding any of our comments please contact Katie Miller the Eastern Region Mining Biologist at 775-777-2368.

Sincerely,

Alan Jenne
Eastern Region Supervising Habitat Biologist

cc: Doug Furtado, Battle Mountain District Manager
Steve Siegel, NDOW Habitat Staff Biologist

Responses to Letter S1

S1-1 The issuance of the Industrial Artificial Pond Permit (IAPP) is clearly within the Nevada Department of Wildlife's (NDOW) purview. Working with the NDOW as a full cooperating agency during the development of the Phoenix Copper Leach Project Draft Environmental Impact Statement (DEIS), NDOW indicated that Newmont would be required to have one or more IAPPs for both the ponds used for project operations and closure.

Recent correspondence with the Elko NDOW office indicates that there are no prescribed monitoring frequencies applied to IAPPs. In addition to the existing Applicant Committed Environmental Protection Measures (ACEPMs) contained in the DEIS, Newmont has committed to the following Applicant Committed Environmental Protection Measures: 1) During all operational periods for the life of the Phoenix Copper Leach Project, Newmont would provide eight-foot-high chain link fencing around the perimeter of process or solution ponds that may pose a hazard to all terrestrial wildlife; 2) During the operational periods for the life of the Phoenix Copper Leach project, Newmont would provide protection to all volant wildlife by placing bird netting over the process or solution ponds that may pose a hazard to volant wildlife; 3) During the operational periods for the life of the Phoenix Copper Leach Project, Newmont would monitor these wildlife exclusion facilities (chain link fencing and bird netting) on a twice-weekly basis. The integrity of the wildlife exclusion facilities would be monitored for effectiveness, and any damage to these facilities would be properly repaired within 48 hours. Newmont would maintain a record of any wildlife mortalities that occur in association with the permitted facility. Those reports would be provided quarterly to the NDOW and BLM on a form provided by NDOW. In addition, Newmont would report any mortalities to wildlife species protected under the Migratory Bird Treaty Act; all game animals; game birds; and sensitive, threatened or endangered species, which are associated with chemical-containing tanks or impoundments. This report would be made by telephone to the regional office of NDOW, by the beginning of the next working day following the occurrence or observation of those mortalities; and 4) Newmont would provide once monthly monitoring of wildlife exclusion facilities during the long-term closure process of E-ponds that could pose a threat to both terrestrial and volant wildlife. The monitoring frequency may be changed to a more frequent time-frame should the operational monitoring of wildlife exclusion facilities require an increased monitoring frequency. The implementation of an increased monitoring frequency would result from operational monitoring

S1 Letter (cont'd)

Responses to Letter S1 (cont'd)

S1-1 cont'd indicating that the effectiveness of these facilities require more frequent repairs to protect all wildlife.

The FEIS is changed to reflect the Applicant-Committed Environmental Protection Measures in Chapter 2.5.4.

With respect to the NDOW's comment on the life of the pond liners, please see comment response F1-13.

S2 - Letter

The Nevada Division of State Lands and the State Land Use Planning Agency offer the following comments:

S2-1 Multiple use activities on Nevada's public lands are supported and encouraged. There are continuing concerns about the cumulative visual impacts to public lands users' experiences from certain activities (temporary and permanent). Some notable activities include proliferation of new roads, poorly-sited and designed structures, lack of co-location of infrastructure and improper lighting, to name a few.

S2-2 There is a concern about the cumulative visual impacts to public lands users' experiences. For example, dark sky attributes are a finite resource and subject to increasing deterioration as inappropriately-lighted development covers the landscape. This is even more evident in remote stretches of Nevada where dark skies prevail yet are seriously impacted by even one new lighting source.

S2-3 A comprehensive look at visual impacts should be considered when federal agencies review any development plan on public lands in Nevada, and nationally. The Nevada Division of State Lands encourages federal agencies to develop a consistent policy and "condition of approval" that can be required of applicants and included in NEPA decisions. It is hoped that all Federal agencies would include dark sky lighting and other visual resource protection and mitigation as a condition of approval for permanent and temporary applications.

S2-4 The following language is suggested that should be provided up front to applicants who propose development on public lands that includes lighting:

Utilize appropriate lighting:

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.
- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.

1

Responses to Letter S2

S2-1 The Phoenix Copper Leach Project Draft EIS followed all of the appropriate protocols for cumulative impact analysis as has been established by the CEQ, the Department of Interior, and the BLM. Each section in Chapter Three of the DEIS, the "Affected Environment and Environmental Consequences", clearly delineates where this project may cause a cumulative impact to a particular resource. Further, and in accordance with CEQ guidance, all likely reasonably foreseeable future actions have been clearly stated so a reader may ascertain how any particular resource might be impacted by those actions as well.

S2-2 Chapter 3-14, entitled "Visual Resources" clearly and succinctly outlines the impacts to visual resources that will likely result from implementation of the project. Further, Section 3.14.3 of this same chapter clearly outlines the likely cumulative impacts to visual resources. Also see response S2-1.

If the reviewer would refer to Chapter 2.5.7 in the DEIS, you may read where Newmont has committed to following International Dark Sky Association (IDKA) guidelines for night lighting; however, it may not be possible to completely adhere to the IDKA's guidelines as the Phoenix Mine is an over 8,000 acre industrial facility run around the clock, year around and as such falls under the regulations of the Mine Safety and Health Administration (MSHA)which has specific lighting requirements to ensure worker safety.

S2-3 See response to comment S2-1.

S2-4 See response to comment S2-1.

S2 - Letter (cont'd)

- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.

In addition, the following mitigation measures should be employed.

Utilize building materials, colors and site placement that are compatible with the natural environment:

S2-5

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.

- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.

- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Skip Canfield
State Land Use Planning Agency

Responses to Letter S2

S2-5 The location of the largest two facilities, the Phoenix Copper and Reona Heap Leach Facilities were determined by economic, engineering, and environmental requirements. As committed to in Section 2.5.7, these facilities will be reclaimed to address visual impacts.

Most of the new buildings, including the SX-EW plant are located on private property owned by Newmont. Discussions with Newmont management have indicated their willingness to incorporate applicant committed environmental protection measures for the visual resource impacts that may result from the construction and placement of all new buildings associated with the Phoenix Project.

Thus, Chapter 2.5.7, Visual Resources, has been changed to state that Newmont commits to using earth-tone colored paint on its buildings where this color does not conflict with any MSHA regulations.

S3 - Letter

Nevada SAI # E2012-078
Project: DEIS Phoenix Copper Leach Project - Battle Mt. BLM
12/2/2011

AGENCY COMMENTS:

S3-1

Any person proposing to construct a dam (process ponds) in this state shall, before beginning construction, obtain from the State Engineer a permit to appropriate, store and use the water to be impounded by or diverted by the dam. If the proposed dam is or will be 20 feet or more in height, measured from the downstream toe to the crest of the dam, or is less than 20 feet in height and will impound more than 20 acre-feet of water, the plans and specifications must be approved by the State Engineer, in accordance with NRS 535.010 and NAC 535.200 prior to beginning construction.

All waters of the State belong to the public and may be appropriated for beneficial use pursuant to the provisions of Chapters 533 and 534 of the Nevada Revised Statutes (NRS), and not otherwise. No use of surface water or groundwater is to occur unless a permit is issued. A waiver from the Nevada Division of Water Resources must be obtained for any monitor wells not required by the Nevada Division of Environmental Protection or the Federal Environmental Protection Agency.

Signature:

Joseph E. DiTucci
Water Resource Specialist II
Nevada Division of Water Resources

12/2/2011

Responses to Letter S3

S3-1 All BLM approvals require that all other Federal, State, and local permits must be obtained prior to implementation of the project.

S4 - Letter

Skip Canfield

From: Rebecca Palmer
Sent: Tuesday, December 06, 2011 9:57 AM
To: Skip Canfield
Subject: RE: E2012-078 DEIS Phoenix Copper Leach Project - Battle Mt. BLM - Bureau of Land Management

S4-1 The SHPO has reviewed the subject document and supports it as written.

Rebecca Lynn Palmer
Deputy Historic Preservation Officer
901 South Stewart Street, Suite 5004
Carson City NV 89701
Phone (775) 684-3443
Fax (775) 684-3442

Please note, my email is rlpalmer@shpo.nv.gov

From: Skip Canfield
Sent: Friday, November 18, 2011 9:29 AM
To: Rebecca Palmer
Subject: E2012-078 DEIS Phoenix Copper Leach Project - Battle Mt. BLM - Bureau of Land Management

NEVADA STATE CLEARINGHOUSE
Department of Conservation and Natural Resources, Division of State Lands
901 S. Stewart St., Ste. 5003, Carson City, Nevada 89701-5246
(775) 684-2723 Fax (775) 684-2721

TRANSMISSION DATE: 11/18/2011

State Historic Preservation Office

Nevada SAI # E2012-078

Project: DEIS Phoenix Copper Leach Project - Battle Mt. BLM

Follow the link below to find information concerning the above-mentioned project for your review and comment.
E2012-078

- **Please evaluate this project's effects on your agency's plans and programs and any other issues that you are aware of that might be pertinent to applicable laws and regulations.**

Responses to Letter S4

S4-1 Thank-you for your comment.

L1 - Letter

December 9, 2012

Mr. Dave Davis
Bureau of Land Management
Battle Mountain District Office
50 Bastian Road
Battle Mountain, NV 89820

Mr. Davis:

Lander Economic Development Authority

315 South Humboldt St.
Battle Mountain, NV 89820

The Lander Economic Development Authority (LEDA) appreciates the opportunity to comment on the Phoenix Copper Leach Project Draft Environmental Impact Statement (DEIS). LEDA is dedicated to equal representation of the diverse economic factors within Lander County, to improve and sustain the economic growth of Lander County.

The Phoenix Copper Leach Project proposed by Newmont Mining Corporation is located within Lander County, Nevada. LEDA supports the Proposed Action to expand and operate the facilities at the Phoenix Gold Mine.

As discussed in the DEIS, the construction phase of the project would result in an increase in sales and use tax revenues in Lander County. Economic benefits include net proceeds on mine production and property taxes on the resulting increased assessed value of the mining property. The community of Battle Mountain will gain by maintaining or increasing employment opportunities as a majority of the additional workforce required for construction and operation is expected to be hired locally. A portion of the workers payroll would also stimulate the local economy in non-basic industries such as retail trade, insurance, and other services.

L1-1

LEDA recognizes and appreciates Newmont's commitment to social responsibility by continuing to incorporate sustainable development activities into its mining project. These activities include working proactively with federal, state, and county agencies and stakeholders, incorporating sound environmental practices into operations, addressing legacy issues associated with older mining operations in the project area, working with other stakeholders on post-closure planning to minimize impacts to the local community, planning for post-mining land uses that provide long-term stability to the local area, maintaining donations and scholarship programs, and encouraging employees to be active in their local communities.

In economic terms, the Proposed Action has the capacity to provide short and long term benefits to Lander County and the State of Nevada. For these reasons, LEDA is in strong support of the proposal.

Sincerely,

Sarah Hinton
Board Member

George Fennemore
Board Member

Sandy Ayers
Board Member

RECEIVED
DEC 12 2011
COUNTY COMMISSION

Responses to Letter L1

L1-1 Thank-you for your comment.

L2 - Letter

December 9, 2012

Mr. Dave Davis
Bureau of Land Management
Battle Mountain District Office
50 Bastian Road
Battle Mountain, NV 89820

Lander Economic Development Authority

315 South Humboldt St.
Battle Mountain, NV 89820

Mr. Davis:

The Lander Economic Development Authority (LEDA) appreciates the opportunity to comment on the Phoenix Copper Leach Project Draft Environmental Impact Statement (DEIS). LEDA is dedicated to equal representation of the diverse economic factors within Lander County, to improve and sustain the economic growth of Lander County.

The Phoenix Copper Leach Project proposed by Newmont Mining Corporation is located within Lander County, Nevada. LEDA supports the Proposed Action to expand and operate the facilities at the Phoenix Gold Mine.

As discussed in the DEIS, the construction phase of the project would result in an increase in sales and use tax revenues in Lander County. Economic benefits include net proceeds on mine production and property taxes on the resulting increased assessed value of the mining property. The community of Battle Mountain will gain by maintaining or increasing employment opportunities as a majority of the additional workforce required for construction and operation is expected to be hired locally. A portion of the workers payroll would also stimulate the local economy in non-basic industries such as retail trade, insurance, and other services.

L2-1

LEDA recognizes and appreciates Newmont's commitment to social responsibility by continuing to incorporate sustainable development activities into its mining project. These activities include working proactively with federal, state, and county agencies and stakeholders, incorporating sound environmental practices into operations, addressing legacy issues associated with older mining operations in the project area, working with other stakeholders on post-closure planning to minimize impacts to the local community, planning for post-mining land uses that provide long-term stability to the local area, maintaining donations and scholarship programs, and encouraging employees to be active in their local communities.

In economic terms, the Proposed Action has the capacity to provide short and long term benefits to Lander County and the State of Nevada. For these reasons, LEDA is in strong support of the proposal.

Sincerely,

Sarah Hinton	Dee Helming	George Fennemore	Sandy Ayers
Board Member	Board Member	Board Member	Board Member

Responses to Letter L2

L2-1 Thank-you for your comment.

L3 - Letter

LANDER COUNTY PUBLIC LAND USE ADVISORY
PLANNING COMMISSION
NOVEMBER 16, 2011

Dave Davis, Phoenix Project Manager
Bureau of Land Management
50 Bastian Road
Battle Mountain, Nv.89820

Attention: Dave Davis: Re: DEIS for the Phoenix Copper Leach Project.

The Lander County Public Land Use Advisory Planning Commission would like to add our support for the Phoenix Copper Leach Project Draft Environmental Impact Statement (DEIS) prepared by the Bureau of Land Management, (BLM) Mount Lewis Field Office, which would analyze impacts associated with the proposed construction and operation of the Phoenix Copper Leach Project which is located in North-Central Nevada approximately 12 miles southwest ,of Battle Mountain, Nevada.

L3-1 The proposed Project is located on both Public and Private land in Lander County, Nevada. The majority of work proposed would occur in areas approved for surface disturbances which would be a plus for environmental purposes. The board supports the Newmont Mining Corporation who has submitted a proposed amendment to the current Gold mining plan of operation.

This Draft Environmental Impact Statement analyses the environmental Effects of the Proposed Project's site-specific impacts for all affected Resources , which is supported by the LCPLUAP Commission.

Thank you for the opportunity to support you in this project.

Best Regards,

Philip Williams, Chairman ,LCPLUAPCommission
cc.Lander County Board of Commissioners

Responses to Letter L3

L3-1 Thank-you for your comment.

L4 - Letter

The Greater Austin Chamber of Commerce
PO Box 212
Austin NV 89310
775-964-2200
www.austinnevada.com
austinnvchamber@yahoo.com

November 14, 2011

Bureau of Land Management
Mount Lewis Field Office
Attn: Dave Davis, Phoenix Project Manager,
50 Bastian Rd
Battle Mountain, NV 89820

Re: DOI-BLM-NVB010-2011-0037-EIS
3809 (NVB0000)
NVN-067930

Dear Mr. Davis,

Thank you for the opportunity to comment on the Newmont Mining Corporation, Phoenix Copper Leach Project EIS. The Board of Directors of the Greater Austin Chamber of Commerce at their regular meeting of November 7, 2011, reviewed the information included in your Draft EIS, and cast a unanimous vote to support the development of the Phoenix Copper Leach project.

L4-1 The Austin Chamber of Commerce supports any and all development of industries and mining in Lander County. Mining has long been the main industry for the County, and has provided jobs and tax support to our area. It is important to keep the jobs from mining in Lander County, thus supplying a workforce to live in the county and families to live in our communities. .

Our Chamber meets the first Monday of the month in the Chamber office in the Austin Court House at 10:00 am. The Board welcomes you or any of your staff to discuss this or any other issues at hand.

Sincerely

Philip Williams
President Austin Chamber of Commerce

Cc: Lander County Commissioners
File

Responses to Letter L4

L4-1 Thank-you for your comment.

P1 - Letter

BLM_NV_BMDO_CU_LeachProject

From: usacitizen1 usacitizen1 <usacitizen1@live.com>
Sent: Friday, October 28, 2011 10:46 AM
To: BLM_NV_BMDO_CU_LeachProject; americanvoices@mail.house.gov; comments@whitehouse.gov
Cc: speakerboehner@mail.house.gov; sf.nancy@mail.house.gov; info@taxpayer.net; media@cagw.org; letters@newsweek.com; today@nbc.com; foe@foe.org; info@earthjustice.org; info@peta.org
Subject: public comment on federal register FW: deny permit

P1-1 i have read of newmont corp being sued for pollution in other countries in this world. why would america give a corporation with a record like that a record to do anything in america? i am in favor of no expansion for this polluter. i am nin favor of corporations who pollute being put out of business immediately. we need more comment on actions from the citizens and less from skanky corrupt washington agencies, which take bribes. our govt agencies all seem to be "regulatorily captured" these days by the corporations they were created to regulate, so that the intersts of the people of the usa are completely ignored. money buys.
usacitizen1@live.com

Responses to Letter P1

P1-1 Thank-you for your comment.

P2 - Letter

November 1, 2011

Dave Davis
Phoenix Project Manager, Bureau of Land Management
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

Mr. Davis

As a Newmont Employee and private citizen I appreciate the opportunity to comment on the Phoenix Copper Leach Project; Draft Environmental Impact Statement (DEIS). The project plan provides opportunity to process material previously classified as waste rock to be mined as copper ore, therefore adding value through diversity and sustainability to the Phoenix Mine life, Lander County and Northern Nevada.

I feel by designing a closure plan with input from the regulatory agencies, industry best practices and the community in mind, Newmont is committed to uphold their commitment to responsible care for the environmental during mine life and also when mining is complete.

P2-1

As discussed in the DEIS, implementation of the Copper Leach Project will add much needed stimulation to the local economy through increase to the tax base of Lander County. Additional positive impacts to the local region will occur through job stimulation at a time that much of the nation is suffering from loss of jobs. The construction phase of the project which will generate employment for up to 150 construction workers for 18 to 24 months and the long term effects will be realized by the 50 additional full time jobs.

Thank you for the consideration of my comments and I strongly support a favorable response to Newmont's plans.

Sincerely,

Amanda Glasgow

Responses to Letter P2

P2-1 Thank-you for your comment.

P3 - Letter

Kevin Sur
1880 Janie Lane
Elko, Nevada 89801
H-(775) 738-4104

Dave Davis
Phoenix Project Manager, Bureau of Land Management
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

11/01/11

Dear Mr. Davis

I would like to express my comments on the Phoenix Copper Leach Project.

1. Phoenix Copper Leach Project will make a valuable economic contribution to the local area economy.
2. The Phoenix Copper Leach Project is adjacent to an active mining district and will use existing infrastructure thus minimizing the overall effect on the environment. Mitigation measures have been proposed where impacts to the environment are anticipated.
3. Newmont Mining Corporation has the right to enter the public lands and explore for and exploit mineral deposits under the General Mining Law of 1872.
4. Newmont Mining Corporation is a responsible operator with a long history of operating in an environmentally and socially responsible manner.

P3-1

I urge the BLM to approve the Phoenix Copper Leach Project and issue permits at the earliest possible date.

Sincerely,

Kevin Sur

Responses to Letter P3

P3-1 Thank-you for your comment.

P4 - Letter

From: Walter Robinson [Walter.ROBINSON@Newmont.com]
Sent: Tuesday, November 01, 2011 4:27 PM
To: BLM_NV_BMDO_CU_LeachProject
Subject: phoenix copper leach project

November 1, 2011
Dave Davis
Phoenix Project Manager, Bureau of Land Management
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

Mr. Davis

As a Humboldt County citizen and a 17 year Newmont Employee I appreciate the opportunity to comment on the Phoenix Copper Leach Project; Draft Environmental Impact Statement (DEIS). The project plan provides opportunity to process material previously classified as waste rock to be mined as copper ore, therefore adding value through diversity and sustainability to the Phoenix Mine life, Lander County, and the nearby Northern Nevada counties.

I feel by designing a closure plan with input from the regulatory agencies, industry best practices and the community in mind, Newmont is committed to uphold their commitment to responsible care for the environmental during mine life and also when mining is complete.

P4-1

As discussed in the DEIS, implementation of the Copper Leach Project will add much needed stimulation to the local economy through increase to the tax base of Lander County. Additional positive impacts to the local region will occur through job stimulation at a time that much of the nation is suffering from loss of jobs. The construction phase of the project which will generate employment for up to 150 construction workers for 18 to 24 months and the long term effects will be realized by the 50 additional full time jobs. In these economic times that we are in putting people to work is a good thing.

Thank you for the consideration of my comments and I strongly support a favorable response to Newmont's plans.

Sincerely,

Walter Robinson,
Utility Maintenance
Phoenix Mine

Responses to Letter P4

P4-1 Thank-you for your comment.

P5 - Letter

G Robert Denham
332-Lakeport Dr
Spring Creek, Nevada 89815
775-778-3522

Dave Davis
Phoenix Project Manager, Bureau of Land Management
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

11/02/11

Dear Mr. Davis

I would like to express my comments on the Phoenix Copper Leach Project.

1. Phoenix Copper Leach Project will make a valuable economic contribution to the local area and national economy. Copper is a valuable and necessary commodity required to develop and grow our economy it makes the most sense that it should be produce in this country with American Labor.

2. The Phoenix Copper Leach Project is adjacent to an active mining district and will use existing infrastructure thus minimizing the overall effect on the environment. Mitigation measures have been proposed where impacts to the environment are anticipated. In many ways it appears that they have gone above what is reasonable and necessary.

P5-1

3. Newmont Mining Corporation has the right to enter the public lands and explore for and develop (exploit) mineral deposits under the General Mining Law of 1872. This law has been the key to maintaining the economy of much of the west. It provides jobs an income to thousands in what would otherwise be deprived areas.

4. Newmont Mining Corporation is a responsible operator with a long history of operating in an environmentally and socially responsible manner.

I urge the BLM to approve the Phoenix Copper Leach Project and issue permits at the earliest possible date.

Sincerely,

G Robert Denham

Responses to Letter P5

P5-1 Thank-you for your comment.

P6 Letter

October 31, 2011

Dave Davis
Phoenix Project Manager, Bureau of Land Management
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

Mr. Davis

As a Elko County citizen and a Newmont Employee I appreciate the opportunity to comment on the Phoenix Copper Leach Project; Draft Environmental Impact Statement (DEIS). The project plan provides opportunity to process material previously classified as waste rock to be mined as copper ore, therefore adding value through diversity and sustainability to the Phoenix Mine life, Lander County and Northern Nevada.

I feel by designing a closure plan with input from the regulatory agencies, industry best practices and the community in mind, Newmont is committed to uphold their commitment to responsible care for the environmental during mine life and also when mining is complete.

P6-1

This project will add much needed stimulation to the local economy through increase to the tax base of Lander County. Additional positive impacts to the local region will occur through job stimulation at a time that much of the nation is suffering from loss of jobs. The construction phase of the project which will generate employment for up to 150 construction workers for 18 to 24 months and the long term effects will be realized by the 50 additional full time jobs.

Thank you for the consideration of my comments and I strongly support a favorable response to Newmont's plans.

Sincerely,

Luz Sandoval

Responses to Letter P6

P6-1 Thank-you for your comment.

4.0 Additional References

AMEC Earth and Environmental, Inc. (AMEC). 2010a. Newmont Mining Corporation Phoenix Copper Leach Project Phoenix Copper and Reona Copper Leach Pads Conceptual Closure Cap Analysis. January 4, 2010.

Bureau of Land Management (BLM). 2011a. Amended Plan of Operations Approved. Determination of Required Financial Guarantee. June 8, 2011.

Geosynthetic Institute (GSI). 2011. GRI White Paper #6 on Geomembrame Lifetime Prediction: Unexposed and Exposed Conditions. June 7, 2005 (Updated February 8, 2011).

Nevada Division of Environmental Protection (NDEP). 2011a. BMRR Approval of the Phoenix Project Section 5 Haul Road Plan of Operations Modification Dated April 14, 2011 with Revised Pages Dated June 16, 2011, and Issuance of Revised Reclamation Permit #0223, BLM Case Number #NVN-067960. June 29, 2011.

Newmont Mining Corporation (Newmont). 2012. Plan of Operations #NVN-067930 (07-3A) and Permit for Reclamation #0223, Phoenix Copper Leach Project Proposed Amendment. May 30, 2007 (Revised February 29, 2012).

_____. 2011a. Plan of Operations #NVN-067930 (07-3A) and Permit for Reclamation #0223, Phoenix Copper Leach Project Proposed Amendment. May 30, 2007 (Revised September 21, 2011).

U.S. Census Bureau. 2010. Profile of General Population and Housing Characteristics: 2010. Geo: Battle Mountain CDP, Humboldt County, Lander County, State of Nevada, and Winnemucca City, Nevada.