

Response

The water quantity impacts have been revised to in response to numerous comments on the mitigation section of the EIS.

Comments

Letter 813 Comment 5, Letter 813 Comment 6, Letter 813 Comment 7, Letter 813 Comment 9, Letter 813 Comment 10, Letter 813 Comment 12

CC-009-Water Rights

Commenters express concerns about affects to water rights, including those in Diamond Valley. In addition, concern was also expressed about the Pete Hansen Decree, PWR 107s, and other individual water rights. Commenters also expressed concern about the current impacts to ground water and ground water availability in Diamond Valley.

Response

Pumping from the Project is not predicted by ground water modeling to cause any detectible lowering of the water table in the Diamond Valley agricultural area. The Project is neutral to Diamond Valley water supplies, as any consumptive use of Diamond Valley water would necessarily be permitted by acquisition and transfer of previously granted water rights. EML has no responsibility to mitigate historic overdraft of groundwater by agriculture pumping in the basin. It is acknowledged in the EIS that the State Engineer would restrict groundwater use as necessary to comply with Nevada water law and would be responsible for administering water rights for the basin.

Given the uncertainties regarding the hydrologic characteristics of the area and the degree to which the springs and streams will or will not be affected by the ground water removal, it is reasonable for the agency (BLM) to require monitoring and implementation of mitigation measures only after impacts to surface waters are realized. In addition, any degradation does not constitute "unnecessary or undue" degradation. BLM is to prevent, not only unnecessary degradation, but also degradation that while necessary to mining, is undue or excessive.

EML has acquired and gained approval from the State Engineer for permanent transfer of ground water rights in Diamond Valley to the pit portion of the Project, in the amount of 385 acre-feet per year. The duty of the transferred rights was adjusted down for crop consumptive use (State Engineer Ruling 6127 dated July 15, 2011). Thus, the Project would not result in additional water consumption beyond what was previously appropriated. There is no detrimental impact to the available ground water in Diamond Valley because the State Engineer reduced the duty of the rights being transferred to the pit to be equal only to the crop consumptive use portion of the irrigation rights.

The State Engineer may require a quantity of water rights to remain at the pit post-mining (in perpetuity) to cover future pit lake evaporative losses. The State of Nevada has deemed post-mining pit lake filling and evaporative losses as part of the overall beneficial use derived from the mining project and not a waste of water. This determination is consistent with numerous open pit mining projects throughout Nevada.

Public Water Reserves (PWR 107) are acknowledged in the State of Nevada by issuance of a Reserved water right permit by the State Engineer. The BLM has filed applications for Reserved water rights for stockwater and wildlife use in Kobeh Valley and the adjacent basins, with subsequent Reserved permits being granted by the State Engineer. These are acknowledged and disclosed in the EIS within the modeled area of Project drawdown, including the rates and annual duties granted. Domestic water uses of underground water in Nevada are permissible without obtaining a water right permit, up to the statutory maximum of 1,800 gallons per day (equal to two acre-feet per year). Domestic uses of greater amounts require a water right permit. All domestic wells (without permits) and all permits granted for domestic water use within the area of projected Project drawdown of the water table have been identified and disclosed in the EIS.

Decreed water rights of Henderson Creek, and other streams and spring sources in the Pete Hanson Decree, were subject to review by the State Engineer and are addressed in Ruling 6127, which was recently upheld by judicial review. For the analysis of impacts, the EIS conservatively assumes that the regional groundwater aquifer is connected with surface water flows. However, Nevada water law allows for a reasonable of groundwater, and no impact to decreed surface water rights of Henderson Creek are expected. However, for assurance, monitoring requirements are in place in the State Engineer's Monitoring, Management, and Mitigation Plan (3M Plan) for the Project.

Other spring and stream sources, regardless of whether an active water right has been filed, that could potentially be claimed for use as a vested right are also considered and disclosed in the DEIS. All mapped springs and perennial streams within the predicted area of water table drawdown are identified, whether or not the source has a permit.

Once the ore body has been mined and water rights use cease, Nevada State water laws remain applicable, including possible transfer of water right to other locations and uses within the basin, or forfeiture of water rights if non-use occurs for more than five years.

Transfer or changes in use of EML's water rights after mining would require filing of applications and review by the State Engineer's office in accordance with regulatory requirements on processing, including public review.

The State Engineer ruling has considered all water rights types, including those for impoundments of surface waters, within the potential area of influence of the mining Project. No impact is predicted to impoundments or impoundment water sources. However, monitoring would be required as described in the 3M Plan, including monitoring for potential impacts to stream and spring resources.

The Nevada State Engineer would retain responsibility for administration of water rights, including review of data to determine whether the Project would result in impacts and whether mitigation would be required.

Comments

Letter 179 Comment 3, Letter 384 Comment 7, Letter 803 Comment 147, Letter 805 Comment 13, Letter 805 Comment 15, Letter 813 Comment 2, Letter 836 Comment 1, Letter 855 Comment 18, Letter 855 Comment 22, Letter 855 Comment 23, Letter 855 Comment 24, Letter 855 Comment 25, Letter 855 Comment 31, Letter 855 Comment 51, Letter 858 Comment 37, Letter 858 Comment 38, Letter 858 Comment 54, Letter 858 Comment 55, Letter 859 Comment 26, Letter 859 Comment 57, Letter 859 Comment 58, Letter 859 Comment 73, Letter 859 Comment 97, Letter 859 Comment 99, Letter 859 Comment 103, Letter 859 Comment 131, Letter 859 Comment 132, Letter 908 Comment 3

CC-010-EML Water Rights

Commenters express concern about the exclusion of EML owned water rights from effects analysis. This discredits the analysis in the EIS.

Response

The EIS makes it clear the applications to transfer underground water rights purchased by EML and applications to change the manner of use must be approved prior to the start of the Project, as required by Nevada water law, which the Nevada State Engineer has done and the District Court has confirmed. All of these ground water applications are represented and included in the EIS analysis as part of the Proposed Action pumping for the Project, include water required for mitigation, which is a combined total of 11,300 acre-feet per year. It is obvious that, as the Project applicant, EML recognizes that other existing water rights which it owns may be affected. Regardless of those potential effects, EML has decided to propose the Project. The intent of the EIS is to analyze and disclose effects to environmental resources, not to provide an analysis that might better inform the applicant's decision. Disclosure of potential impacts to the applicant's existing rights and holdings is not necessary to inform the BLM's decision.

Comments

Letter 802 Comment 2, Letter 859 Comment 64, Letter 859 Comment 65

CC-011-Monitoring and Mitigation

Commenters express concern regarding the effectiveness of the proposed monitoring and mitigation for potential impacts to water resources. These concerns include the determination of appropriate triggers to implement mitigation, the scope of the proposed mitigation for the springs and streams, and how individuals will be compensated. In addition, the source of water for mitigation is also questioned.

Response

The BLM believes the water resource monitoring proposed for the Project is adequate to provide the necessary information to allow the BLM to fully evaluate the potential effects of the Project on water resources and to determine if mitigation is necessary. Monitoring sites are based on the modeled predictions of drawdown but also extend beyond the projected extent of the ten-foot drawdown contour. Monitoring includes both ground water levels and surface water flows. The frequency of the proposed monitoring is adequate to detect Project-induced effects, especially when considering the extensive baseline data that have been collected.

Evaluation of the monitoring data would allow the BLM to determine when mitigation is necessary; however, some ground water levels and surface water flows would be affected by other anthropogenic stresses and natural factors so that it is not possible to define appropriate "bright line" triggers for mitigation. Mitigation identified in the EIS includes specific mitigation for individual surface water sources. The BLM would ensure that the mitigation restored the pre-Project function and value of water-related resources that could be impacted. Nevada water law recognizes that water rights include a duty and diversion rate, and mitigation required by the State Engineer for any Project-related impacts would be based on providing those amounts of water.

As stated in the EIS, EML would be responsible for implementing mitigation as directed by the BLM. Additionally, the EIS recognizes that the State Engineer would have jurisdiction and authority to require mitigation for impacts to water rights. The State Engineer has accepted a Monitoring, Management, and Mitigation (3M) Plan that includes funding for water right mitigation. The BLM has the authority to require funding for mitigation of impacts to water resources not covered by water rights should monitoring data indicate the necessity for providing this financial assurance.

Table 3.2-9 and Table 3.2-18 have been revised in the FEIS to indicate that a reduction of flow caused by the Project would be the threshold for the BLM to consider implementation of mitigation.

The EIS uses appropriate criteria for impact significance determination. Impairment of designated uses would constitute a significant impact, whereas mere changes in chemistry that do not impair designated beneficial uses would not be significant.

Comments

Letter 803 Comment 119, Letter 803 Comment 121, Letter 803 Comment 123, Letter 805 Comment 20, Letter 823 Comment 6, Letter 855 Comment 7, Letter 855 Comment 15, Letter 855 Comment 16, Letter 855 Comment 38, Letter 855 Comment 39, Letter 855 Comment 43, Letter 855 Comment 44, Letter 855 Comment 48, Letter 855 Comment 50, Letter 855 Comment 59, Letter 855 Comment 94, Letter 855 Comment 95, Letter 855 Comment 125, Letter 855 Comment 126, Letter 855 Comment 163, Letter 859 Comment 9, Letter 859 Comment 10, Letter 859 Comment 18, Letter 859 Comment 19, Letter 859 Comment 31, Letter 859 Comment 33, Letter 859 Comment 39, Letter 859 Comment 51, Letter 859 Comment 53, Letter 859 Comment 54, Letter 859 Comment 62, Letter 859 Comment 77, Letter 859 Comment 80, Letter 859 Comment 81, Letter 859 Comment 85, Letter 859 Comment 125, Letter 859 Comment 126, Letter 906 Comment 2, Letter 941 Comment 28

CC-012-Recovery of Ground Water Levels

Commenters express concern about post-Project recovery of ground water levels, when would water levels begin to recover, and also will the water levels recover.

Response

The following text has been added to Section 3.2.3.3.2. of the EIS to provide additional description of groundwater level recovery in the Kobeh Valley wellfield area: "Water level recovery in the Kobeh Valley wellfield area would begin immediately upon cessation of Project pumping. Recovery would be quickest in the vertical dimension in the area nearest the production wells. The cone of depression created by ground water pumping would expand laterally for a number of years after cessation of pumping, ranging between two to 30 years depending on geographic location. Once the cone of depression reached the maximum lateral extent, it would begin to contract laterally and would continue to fill vertically. Recovery of water levels in the wellfield area would reach within ten feet of pre-Project conditions by 100 years post mining (Table 3.2-10).

Comments

Letter 855 Comment 36, Letter 855 Comment 37, Letter 859 Comment 74

CC-013- Impacts to Wildlife from Draindown Solution

Commenter expressed concern about impacts to wildlife from draindown of the ET basins. Specific concern regarding direct impacts to wildlife are raised, as well as indirect impacts to wildlife from water quality and vegetation.

Response

When considering realistic exposures, ecological threats from draindown solutions are minimal. Fencing would effectively exclude all larger terrestrial wildlife species. ET cell backfill would eliminate the potential for open solution. A long-term funding mechanism would be placed to remove ET cell media with high concentrations of salts, (and to maintain fencing). Given the design consideration, a risk assessment is not warranted. No changes to the text of the EIS have been made in response to this comment.

Comments

Letter 941 Comment 49, Letter 941 Comment 51

CC-014-Modeled Ground Water Users

Commenter expressed concern regarding the number of ground water pumping sources used in the ground water flow model. Also the ground water flow model assumption of a substantial decrease in Diamond Valley ground water pumping in Year 2105 is not accurate.

Response

The BLM believes that the modeling is sufficiently accurate and that pumping sources have been adequately accounted for. Even if there are "hundreds" of domestic wells in the area, they are limited to two acre-feet per year, which would not make a meaningful difference in the model results. Likewise, for the future pumping assumption, while some smaller sources of pumping are not explicitly represented in the model, the assumption of sustained agricultural pumping at current magnitudes through year 2105 cumulatively represents a near "worst case" total pumping magnitude from the Diamond Valley basin from all sources. This assumption was adopted, given the lack of a specific water management plan for the basin to map out an overdraft curtailment plan. Also, all simulated pumping in Diamond Valley is subtracted out when analyzing effects of the Proposed Action. Lastly, in regards to the Wise Family Development "water rights," these are pending applications before the State Engineer and have not yet been granted. The model assumption for future pumping includes granting of water rights to Kobeh Ranch LLC (senior most pending applications to

appropriated groundwater in Kobeh Valley) up to the perennial yield of the basin, as defined at 16,000 AF/yr. It would not be appropriate to assume that the State Engineer would grant additional water rights in the basin in excess of the perennial yield, therefore, the junior pending applications are not included in the cumulative action model scenario.

At the time of model preparation, the input assumptions were based on the best available data including projections of Ruby Hill pumping. The extension of pumping from that source beyond what was assumed in the model is minor in relation to total pumping stresses and will not substantially affect the model results. Furthermore, the pumping from Diamond Valley is "subtracted" from the Cumulative Action model runs to determine impacts from the Proposed Action.

The comment correctly states that it is impossible to predict the rates at which pumping rates will decrease. There are too many variables and possible outcomes to make an accurate prediction. The assumption used in the model is sufficiently accurate to allow the model to provide reliable information to predict impacts and answer the questions posed by the impact analysis. The assumption regarding agricultural pumping is conservative, in that it represents continued pumping at current rates for an additional 50 years, well beyond what appears to be likely, given the current rate of drawdown. This is a valid and reasonable assumption, given the lack of a definitive water management plan to address the overdraft situation. In addition, Diamond Valley pumping is "subtracted" from the Cumulative Model run to determine impacts from the Proposed Action.

The incremental increase in municipal or mining pumping, whether temporary or permanent, is generally obscured by the magnitude of agricultural pumping projected into the future. Furthermore, given the current state of overdraft in the basin, it is likely that any additional mine pumping, or pumping for other uses, would have to be derived from the existing pool of agricultural water rights that have been granted.

Comments

Letter 803 Comment 103, Letter 803 Comment 104, Letter 803 Comment 106, Letter 803 Comment 107

CC-015-WRDF Cover Design

Commenters expressed concern about the WRDF cover design. The cover may not work as designed. One commenter expressed a request for a different cover design.

Response

A store-and-release cover would be constructed over the PAG WRDF to limit infiltration in to the dump after closure. A cover design and infiltration model was completed by MWH Americas, Inc. (MWH) to assess closure requirements for infiltration control and protection of water resources. Water balance simulations and predictive infiltration modeling were used to evaluate the long term flux of water through the cover at various thicknesses. The model-predicted water flux through the 24-inch alluvial cover indicates the available storage capacity of the cover is sufficient to significantly reduce infiltration reporting to the WRDF. Based on these results and experience with other waste rock dumps throughout Nevada with similar site conditions, seepage from the toe of the PAG WRDF is not anticipated for average or dry climatic conditions. Furthermore, the PAG WRDF is designed with a low-permeable base layer and drainage system in order to minimize the potential for downward migration of any infiltration into the subsurface. Therefore, the proposed WRDF design provides adequate source control and a geomembrane cover is not warranted. During operations, the effectiveness of a 24-inch cover for the actual site conditions would be confirmed and the proposed closure design would be modified if required.

The proposed waste rock management, PAG facility design and closure approach sufficiently address the potential for long-term water quality issues associated with the PAG waste rock.

No changes to the text of the EIS have been made to address this comment.

Comments

Letter 805 Comment 8, Letter 941 Comment 22, Letter 941 Comment 41

CC-016-Emergency Personnel

Commenter expressed concern about the availability of emergency personnel to respond to an increase in emergency situations associated with the Project. In addition, there was concern expressed about the cost to Eureka County to add additional personnel, as well as the timeframes associated with hiring qualified personnel.

Response

The following text has been added to Section 2.1.10 of the EIS. "EML or its contractor would have emergency medical personnel on site during construction. EML would have emergency medical personnel on-site during operations and would maintain a licensed ambulance with licensed driver for transportation in the event of an incident that required this level of attended emergency

transportation. However, should a medical emergency occur, it is recognized that, depending on the specifics, Eureka County emergency medical services may be contacted for assistance with medical response or transportation."

Comments

Letter 803 Comment 329, Letter 803 Comment 330

CC-017-Model Uncertainty

Commenter expressed concern about the uncertainty in the pit lake water quality model. The model outputs were not consistent with other models for pit lakes in Nevada and therefore should be redone. The commenter identified a number of model results and stated that these results were of concern. In addition, there was a lack of comparison to existing pit lakes associated with gold mines in Nevada.

Response

All models contain a level of uncertainty. Uncertainty in the Mount Hope pit lake modeling has been constrained through extensive and conservative sensitivity analyses of various components related to pit wall rock and groundwater chemistry, including (but not limited to):

- ♣ Geochemical data from humidity cell tests (HCTs) used to represent pit wall rock runoff/submergence chemistry. Early-time, late-time, and average data from the HCTs were applied to the model to evaluate sensitivity to these data.
- ♣ Scaling of the geochemical data from laboratory to field concentrations. The Mount Hope modeling measured the grain sizes of material in the HCTs and compared them to field conditions to develop a relatively conservative scaling factor (compared to typical pit lake models at other sites). To evaluate uncertainty in scaling, the "unscaled" laboratory data were also applied in the model for a conservative assessment.
- ♣ Number of "pore volumes" that rinse from the pit wall rock during submergence. The Mt Hope modeling evaluated rinsing of up to 20 pore volumes of solute from the pit walls. This is a very conservative estimate of rinsing that is not typical to pit lake models at other sites.
- ♣ Groundwater quality data to represent post-closure inflowing groundwater. Groundwater quality data from four wells were applied to the model in proportion to inflow rate; the most conservative sensitivity analysis used the lowest quality (highest total dissolved solids) groundwater for all inflowing water.

No changes to the text of the EIS have been made to address this comment.

Comments

Letter 858 Comment 17, Letter 858 Comment 18, Letter 858 Comment 22

CC-018-Pit Lake Model Assumption

Commenter express concern about the pit lake model assumptions. A number of revised scenarios were presented. Also the BLM needs to require the evaluation of the following questions. What happens when water is removed from an aquifer regarding the volume that it used to fill? Assuming it is air, how much sulfate will be produced if a realistic assumption is made that over 44 years, all of the oxygen in that air is consumed by pyrite oxidation? What will happen to those soluble products as the cone of depression and water enters the pit lake?

Response

A main issue the commenter raises is with regard to the water quality of the groundwater entering the pit following closure. The commenter contends that during dewatering, atmospheric air would be drawn into the aquifer via advective transport (as opposed to diffusion), and this influx of highly oxygenated air would be available to oxidize sulfides and produce secondary sulfate minerals in the aquifer. In concept, these secondary minerals would be flushed back into the pit as the water table rebounds, introducing sulfate, acidity and metals into the pit lake. There are no literature citations to support this conceptual model. As described in the conceptual model developed for Mt Hope, the vadose zone materials in the cone of depression around the Mt. Hope pit would not be expected to generate significant amounts of sulfate, metals, or acid for the following reasons:

- ♣ Geochemical data indicate a relatively inert ore body with low sulfur and carbonate content; only 16 percent of the ultimate pit wall is predicted to be potentially acid generating, with the remaining 84 percent classified as non-acid generating rock. The surrounding aquifer material would contain similar, or lower, levels of reactive sulfides.
- ♣ The fracture-controlled nature of flow (air or water) in the aquifer results in very low porosity and very limited surface area for potential reaction with air.
- ♣ Air entering the vadose zone as the pit is slowly being dewatered would be stripped of oxygen as it encounters reactive material; predominantly in the pit wall materials.
- ♣ If any oxygen succeeded in entering the deeper fractures, oxygen would still need to reach the pyrite grains to react. Any pyrite grains exposed in fracture pathways, which are not already oxidized, would have residual soil water around them. Residual moisture content of the vadose zone would limit oxidation due to very low rates of oxygen diffusion through water.

♣ In the highly unlikely event that even a small amount of oxygen reached the deeper fractures, , HCT data (which are conservative estimates of reactivity due to higher porosity, greater reactive surface area, aggressive wet/dry weathering cycles, etc.) indicate relatively low sulfate and negligible acid generation.

♣ Pyrite oxidation rates are orders of magnitude lower at circumneutral pH (compared to pH less than 4) because of inhibited bacterial activity at higher pH. Geochemical test data and site water quality data indicate near-neutral pH conditions in the aquifer and therefore very slow rates of associated pyrite oxidation.

♣ Ritchie (Ritchie, A.I.M., 1994. Sulfide Oxidation Mechanisms: Controls and Rates of Oxygen Transport, in, Short course Handbook on Environmental Geochemistry of Sulfide Mine-Wastes, a Mineralogical Association of Canada publication edited by J.L. Jambor and D.W. Blowes, 1994) has a clear demonstration of the potential effects of pyrite oxidation caused by a single pore volume of air in sulfide rich waste rock (high pyrite content, reactive, high porosity, fully penetrated by air). The amount of oxygen present in the first pore volume was about 1000 times too low to oxidize all the pyrite, indicating an additional source of oxygen would be required (i.e., very slow, diffusion controlled migration of O₂). Considering the test case by Ritchie is highly conservative on all counts compared to in-situ host rock at Mt Hope, and still was insignificant pyrite oxidation, it follows that in the case of Mount Hope host rock (i.e., lower porosity, lower sulfide, less reactive, higher moisture content, less oxygen availability, no indication of reactivity in HCTs) there would be no significant mass loading of sulfate, metals, or acidity to the pit lake. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 858 Comment 15, Letter 858 Comment 19

CC-019-Roads and Traffic

Commenters expressed concern regarding the roads used in the traffic assessment. Would the roads in Kobeh Valley be used to access the Project? Also would the taxes paid by EML be sufficient to construct passing lanes and school bus turnouts on SR 278?

Response

EML has revised the Plan of Operations to clarify that the only Project access would be from S.R. 278 and that there would be no direct Project access from the west via Roberts Creek Road. The text in 2.1.9 has been revised to read "A primary access road about 32 feet wide (24 feet running surface width plus four foot wide shoulders) would be constructed to connect the proposed Project Area with S.R. 278. Following project construction, EML may pave this primary access road.

To enhance safety, turn and acceleration lanes would be constructed on S.R. 278 at the Project entrance. A deceleration/right turn lane would be constructed for southbound traffic beginning north of the Project turnoff and would be extended south of the turnoff to provide an acceleration lane for the southbound traffic. A deceleration/left turn lane would be constructed for northbound traffic beginning south of the Project turnoff, and an acceleration lane would be constructed beginning at the project turnoff and extending north.

To remove mud and dirt from highway vehicles, an oversized cattle guard system would be installed on the main access road. EML would install a vehicle wash to reduce the amount of mud and dirt that would be tracked onto S.R. 278 if, in cooperation with Eureka County, area residents and NDOT, it is determined to be necessary.

A secondary Project access road would be constructed to the north of the primary access road, principally for the delivery of equipment and materials. Access into the project would be limited to the single entry point at the main gate where the access road from S.R. 278 would reach the Project perimeter fence. No public access to the Project from the Kobeh Valley side would be provided. However, inside the Project boundaries, EML personnel and authorized contractors would be allowed to enter Kobeh Valley from the west side of the project through secured gate(s) to conduct Project-related activities in the well field and other areas as needed, and to re-enter the Project through the secured gate(s)."

No Project related traffic has been identified as potentially using County Road 101.

Comments

Letter 803 Comment 387, Letter 803 Comment 416, Letter 805 Comment 42

CC-020-Impacts to Phreatophytes

Commenters expressed concern about the type and duration of impacts to phreatophytes as a result of predicted ground water drawdown. Potential impacts to soils and air quality from changes or loss of phreatophytes are also identified. Commenters also identified potential impacts to riparian areas, special status species, as well as livestock forage as a result of predicted ground water drawdown. Commenters also request mitigation for these impacts to phreatophytes.

Response

The impact analysis for phreatophytes (located after the Significance of the Impact for Impact 3.9.3.3-1) has been revised in Section 3.9.3.3.1 of the FEIS to read as follows, "Phreatophytes that may be impacted as a result of the Proposed Action aquifer drawdown occur in Kobeh Valley. In the central Kobeh Valley, as discussed in Section 3.2 the shallow ground water (between zero and ten feet below ground surface) at the valley floor supports substantial areas of phreatophyte vegetation (Figure 3.9.2). Current conditions include the presence of the following species in the phreatophyte vegetation community: greasewood; rabbitbrush; and saltgrass. ET of ground water by phreatophytes is the primary ground water discharge in the basin. As illustrated on Figure 3.2.9, approximately 4,122 acres of phreatophyte vegetation were mapped as occurring within the area predicted to be impacted by aquifer drawdown. More recent data from satellite imagery indicate that as many 28,500 acres of phreatophytes are located in Kobeh Valley; however, these data are not yet finalized (USGS 2011). In order to verify the extent of phreatophytes potentially impacted by the Project, the soil associations in Kobeh Valley were reviewed to determine which soils are associated with phreatophytes. This review identified Bubus loam (1010), Bubus-Dianev (1012), Ocala silt loam (161), Dianev silt loam (250), Brinnum silt loam (400), and Beanflat silt loam (410). The extent of these soils in Kobeh Valley is similar to the extent of phreatophytes identified in the preliminary results from the USGS Open-File Report 2011-1089 (USGS 2011), and are distributed southwest of the Project Area and overlap modeled ground water drawdown contours up to 70 feet in depth. However, the majority of phreatophytes that would be impacted are located in the area predicted to experience a ten- to 20-foot drawdown. The resultant depth to ground water would be between ten feet (if the baseline ground water level was at the surface) and up to 30 feet (if the baseline ground water level was ten feet below the surface). On average, the majority of the phreatophytes are predicted to experience an increase in depth to ground water of 20 feet as a result of the Proposed Action. However, based on the more recent phreatophyte location data some of the phreatophytes would be located where the depth to ground water is predicted to increase as many as 70 feet as a result of the Proposed Action.

Where the phreatophytes would be impacted as a result of ground water drawdown, the increase in the depth to ground water is expected to result in impacts to the phreatophyte vegetation through a change in vegetation composition and cover. Lowering of the water table resulting from ground water drawdown is a change in resource availability for the vegetation with an associated increase in ecological stress. Species adapted to conditions of higher available water will be replaced over time by species adapted to conditions of lower available water. Change in the depth to ground water is not the only factor that affects the composition of phreatophyte communities. Other factors that affect changes in phreatophyte communities include the following: amount of annual precipitation; climate change; livestock grazing; and fire regime (KS2 Ecological Field Services 2011).

In the areas where the phreatophytes would experience an increased depth to water of 20 feet (which is what the majority of phreatophytes would be experience), the xeric phreatophytes (rabbitbrush and greasewood) are expected to respond by increasing their root depth as the depth to ground water increases and utilize more surface water when it is available (Naumberg et al. 2005). While the percent cover of greasewood and saltgrass may decrease, the percent cover of rabbitbrush would increase (KS2 Ecological Field Services 2011, Stringham 2011). In areas where the phreatophytes would experience an increase depth to water of 50 feet, the vegetation community would likely shift from greasewood and rabbitbrush to mainly rabbitbrush, and then as the depth to ground water increases more would likely shift to a community dominated by Wyoming big sagebrush (populations of Wyoming big sagebrush are located adjacent to the xeric phreatophytes in Kobeh Valley). A water table decline could result in perennially drier soils. The deeper water table would preclude salt accumulation at the soil surface, allowing precipitation to leach salts to deeper soil depths, resulting in drier, less saline soils, and creating conditions where xeric phreatophytes can survive (Cooper et al. 2005). Additionally, recovery of the water table following Project-related ground water pumping could result in a transition back to a pre-Project vegetation community state (Stringham 2011).

Impacts to other vegetation communities as a result of drawdown are not expected. The predicted ten-foot water drawdown contour for the Proposed Action does not intercept any known phreatophyte vegetation within Diamond Valley, Antelope Valley, or Pine Valley.

■ Impact 3.9.3.3-2: Phreatophyte vegetation would potentially experience a change in species composition and percent cover due to the predicted water table drawdown associated with ground water pumping and subsequent recovery of the water table. Lowering of the water table in the area of phreatophytes is not expected to result in a loss of vegetation in these communities.

Significance of the Impact: The impact is not considered potentially significant. Based on the results of the analysis, no mitigation for this impact is proposed."

As a result of the revised analysis for the impacts in Section 3.9.3, there are no quantifiable impacts to air quality expected as a result of wind-blown fugitive dust from the loss of phreatophytes from the Project.

The text describing phreatophytes in Section 3.2.2.6.5 has been revised in the FEIS to add the following text, "Some phreatophytes, such as greasewood (*Sarcobatus* spp.), commonly send their roots as deep as 50 feet to the water table, although depths of up to 80 feet were reported by Eakin et al. (1951). Rabbitbrush (*Chrysothamnus* and *Ericameria* spp.) is also considered a phreatophyte, although it has a dimorphic root structure with fine roots in the upper soil profile and woody tap roots that extend to near the water

table at greater than 13-foot depths, however, depths of up to 48 feet have been reported (KS2 Ecological Field Services 2011). The existing phreatophyte areas in the HSA are mainly found along the axial drainages of Antelope, Kobeh, and Pine valleys and surrounding the playa area in the northern part of Diamond Valley."

The text in Sections 3.2.3.5.2, 3.2.3.7.2 has been revised in the FEIS to read as follows, "The predicted water table drawdown in Kobeh Valley extends to the mapped phreatophyte areas northwest of Bean Flat and east of Lone Mountain (Figure 3.2.26). The predominant phreatophyte vegetation in these areas is greasewood. The simulated extinction depth for greasewood is 40 feet below the ground surface, and the ground water model results indicate that the magnitude of drawdown along the perimeter of these phreatophyte vegetation areas would exceed the extinction depth for some period of time (Montgomery et al. 2010). This could potentially lead to a change in composition and percent cover of phreatophyte plants and an associated decrease in evapotranspiration of ground water, as reflected in the estimated water budget changes listed in Tables 3.2-15 and 3.2-16."

The text for Impacts 3.2.3.5-4, 3.2.3.6-4, and 3.2.3.7-4 has been revised in the FEIS to read as follows, "Ground water flow modeling indicates that there could be up to an approximately 25 percent decrease in evapotranspiration of ground water in Kobeh Valley due to a change in phreatophyte composition and percent cover resulting from temporary mine-induced drawdown."

The text in Sections 3.9.3.3.3, 3.9.3.5.3, and 3.9.3.7.3 has been revised in the FEIS to read as follows, "Residual adverse impacts to vegetation would include the permanent loss of vegetative productivity from approximately 734 acres of land associated with the open pit that would not be reclaimed and a long-term change in vegetation composition (i.e., tree and shrub dominated communities to grass and forb dominated communities, potential change in phreatophyte vegetation percent cover and composition) as a result of Project development and operation."

The text for Impacts 3.9.3.5-2, 3.9.3.6-2, and 3.9.3.7-2 has been revised similar to Impact 3.9.3.3-2 in the FEIS.

The impact analysis for phreatophytes (located after the Significance of the Impact for Impact 3.11.3.3-1) has been revised in Section 3.11.3.3.1 in the FEIS to read as follows, "The mine dewatering system and pumping of the production well field is expected to drawdown the ground water table in an area surrounding the open pit. As discussed in Section 3.2, modeling results show that significant water table drawdowns in the aquifer would occur in an area measuring approximately 232 square miles around the Project Area including the northeast quadrant of Kobeh Valley and the southernmost fringe of the Roberts Mountains.

Phreatophytes that may be impacted as a result of the Proposed Action aquifer drawdown occur in Kobeh Valley. In the central Kobeh Valley, as discussed in Section 3.2 the shallow ground water (between zero and ten feet below ground surface) at the valley floor supports substantial areas of phreatophyte vegetation (Figure 3.9.2). As illustrated on Figure 3.2.9, approximately 4,122 acres of phreatophyte vegetation were mapped as occurring within the area predicted to be impacted by aquifer drawdown. More recent data from satellite imagery indicate that as many 28,500 acres of phreatophytes are located in Kobeh Valley (these data will be finalized upon publication) (USGS 2011). In order to verify the extent of phreatophytes potentially impacted by the Project, the soil associations in Kobeh Valley were reviewed to determine which soils are associated with phreatophytes. This review identified Bubus loam (1010), Bubus-Dianeve (1012), Ocala silt loam (161), Dianeve silt loam (250), Brinnum silt loam (400), and Beanflat silt loam (410). The extent of these soils in Kobeh Valley is similar to the extent of phreatophytes identified in the preliminary results from the USGS Open-File Report 2011-1089 (USGS 2011), and are distributed southwest of the Project Area and overlap modeled ground water drawdown contours up to 70 feet in depth. However, the majority of phreatophytes that would be impacted are located in the area predicted to experience a ten- to 20-foot drawdown. Where the phreatophytes would be impacted as a result of ground water drawdown, the increase in the depth to ground water is expected to result in impacts to the phreatophyte vegetation through a change in vegetation composition and cover.

Impacts to other vegetation communities as a result of drawdown are not expected. The predicted ten-foot water drawdown contour for the Proposed Action does not intercept any known phreatophyte vegetation within Diamond Valley, Antelope Valley, or Pine Valley.

■ Impact 3.11.3.3-2: Phreatophyte vegetation would potentially experience a change in species composition and percent cover due to the predicted water table drawdown associated with ground water pumping and subsequent recovery of the water table. Lowering of the water table in the area of phreatophytes is not expected to result in a loss of vegetation in these communities.

Significance of the Impact: The impact is not considered potentially significant. Based on the results of the analysis, no mitigation for this impact is proposed."

The text for Impacts 3.11.3.5-2, 3.11.3.6-2, and 3.11.3.7-2 has been revised similar to Impact 3.11.3.3-2 in the FEIS.

The impact analysis for phreatophytes has been revised in Section 3.12.3.3 such that Impact 3.12.3.3-1 now follows, "Table 3.12-2 includes the active preference before and during the Project for the affected allotments. The loss of 781 AUMs represents 2.7 percent of the active grazing preference for the allotments in the Project Area."

The impact discussion for phreatophytes has been revised in Section 3.12.3.3 of the FEIS following Impact 3.12.3.3-1 to include a new impact and now reads, "The 14,204-acre enclosure would not impact AUMs within the 3 Bars, Santa Fe/Ferguson, or Lucky C Allotments. However, portions of these allotments could have potential impacts to AUMs due to the possible impacts to forage and habitat in the phreatophyte vegetation community related to ground water drawdown.

■ Impact 3.12.3.3-2: Phreatophyte vegetation would potentially experience a change in species composition and percent cover due to the predicted water table drawdown associated with ground water pumping and subsequent recovery of the water table. Although the lowering of the water table in the area of phreatophytes is not expected to result in a loss of vegetation in these communities, it is possible that the changes in the phreatophyte community would result in a loss of forage productivity. Impacts to other vegetation communities as a result of drawdown are not expected.

Significance of the Impact: The impact is considered potentially significant. Mitigation for this impact is discussed below.

■ Mitigation Measure 3.12.3.3-2: The BLM would monitor for changes to forage productivity as a result of ground water drawdown associated with Project-related ground water pumping. If the BLM detects a loss of forage productivity attributable to the Project, the BLM would develop and provide EML with appropriate seed mixes for those areas within and outside the Project Area impacted by water table drawdown that should be seeded. The nature of the seed mix may vary depending on the conditions encountered as a result of the drawdown. If the BLM determines reseeding to be necessary, the BLM would coordinate the conditions for reseeding (including a possible two-year grazing closure) with local permittees in order to reduce impacts to AUMs.

■ Effectiveness of Mitigation and Residual Effects: Mitigation Measure 3.12.3.3-2 would reduce potential impacts to local permittees from changes in vegetation species composition and percent cover as a result of water table drawdown during Project activities. Monitoring vegetation and possible reseeding with an appropriate seed mix, as well as BLM coordination with local permittees following reseeding, would reduce the long-term impacts to AUMs."

The remaining impacts in Section 3.12.3.3 have been renumbered in the FEIS in sequential order. Similarly edits have been made in Sections 3.12.3.5, 3.12.3.6, and 3.12.3.7 in the FEIS.

The text in the third paragraph of Section 3.13.3.3.1 in the FEIS has been revised to read as follows, "Phreatophyte vegetation would potentially experience a change in species composition and percent cover due to the predicted water table drawdown associated with ground water pumping and subsequent recovery of the water table. Lowering of the water table in the area of phreatophytes is not expected to result in a loss of vegetation in these communities. Additionally, reseeding mitigation proposed in Section 3.12.3 would improve the availability of forage for wild horses in areas identified by the BLM. Impacts to other vegetation communities as a result of drawdown are not expected. Therefore, impacts to overall wild horse forage as a result of the drawdown are not expected."

Comments

Letter 254 Comment 1, Letter 254 Comment 2, Letter 803 Comment 4, Letter 803 Comment 11, Letter 803 Comment 60, Letter 803 Comment 65, Letter 803 Comment 178, Letter 803 Comment 179, Letter 803 Comment 202, Letter 803 Comment 203, Letter 803 Comment 205, Letter 803 Comment 208, Letter 803 Comment 212, Letter 803 Comment 213, Letter 803 Comment 219, Letter 803 Comment 226, Letter 803 Comment 228, Letter 803 Comment 230, Letter 803 Comment 233, Letter 803 Comment 259, Letter 855 Comment 5, Letter 855 Comment 14, Letter 855 Comment 62, Letter 855 Comment 63, Letter 855 Comment 64, Letter 855 Comment 73, Letter 855 Comment 74, Letter 855 Comment 75, Letter 855 Comment 76, Letter 855 Comment 77, Letter 855 Comment 78, Letter 855 Comment 79, Letter 855 Comment 80, Letter 855 Comment 81, Letter 855 Comment 84, Letter 855 Comment 85, Letter 855 Comment 86, Letter 855 Comment 87, Letter 855 Comment 88, Letter 855 Comment 89, Letter 855 Comment 90, Letter 855 Comment 91, Letter 855 Comment 92, Letter 855 Comment 93, Letter 855 Comment 102, Letter 855 Comment 103, Letter 855 Comment 111, Letter 855 Comment 112, Letter 855 Comment 113, Letter 855 Comment 114, Letter 855 Comment 116, Letter 855 Comment 119, Letter 855 Comment 120, Letter 855 Comment 121, Letter 855 Comment 128, Letter 855 Comment 129, Letter 855 Comment 164, Letter 855 Comment 167, Letter 859 Comment 113, Letter 859 Comment 116, Letter 859 Comment 118, Letter 885 Comment 2, Letter 941 Comment 4, Letter 941 Comment 70, Letter 941 Comment 71

CC-021-Water Development Plan

Commenters expressed concern about EML's water development plan. The EIS does not adequately discuss Nevada Water Law. Also, does the proposed 100,300 acre-feet per year of water include all the proposed uses for the Project? Is the pit dewatering included in the proposed 11,300 acre-feet per year water use?

Response

It should be noted that the Seventh Judicial District Court for the State of Nevada ruled on June 13, 2012 to uphold the Nevada State Engineer's decision regarding the issuance of the water rights for the Project with a total combined duty of 11,300 acre-feet per year.

The FEIS has been revised to add the word "fresh" to the first sentence in Section 2.1.2. The sentence in the FEIS reads as follows, "The Project would require approximately 11,300 acre-feet per year (afy) (approximately 7,000 gallons per minute [gpm]) of fresh water supply . . ."

Also, the following text has been inserted in the FEIS after the third sentence in the first paragraph in Section 2.1.2.1, "Most of the fresh water would be ground water from the Kobeh Valley Wellfield. The fresh water requirement is 7,000 gpm. Most of the water (fresh and non-fresh) used in the project would be for processing molybdenum ore. Additional smaller amounts would be used for environmental controls (primarily for dust control and to operate the roaster's sulfur dioxide scrubber), potable, and sanitation. Fresh water would be required for some reagent solutions (associated with ore processing), environmental, potable, and sanitation. The rest of the fresh water would be used to "make-up" water requirements for ore processing. The remainder of the total processing requirement, comprising roughly two-thirds to three-quarters of the total processing requirement, would not be fresh. Non-fresh water includes recycled process water and runoff."

As outlined in Section 2.1.2, the project is permitted for 11,300 acre-feet per year from the NDWR. Section 2.1.2.1 discloses that construction water pumping would occur at a low rate for 12 months before the wellfield supply system is completed. The use of water during the reclamation phase of the Project would be a small amount of water and less than that amount analyzed in the DEIS.

Comments

Letter 363 Comment 3, Letter 803 Comment 39, Letter 859 Comment 14, Letter 859 Comment 20, Letter 859 Comment 25, Letter 859 Comment 27, Letter 859 Comment 28, Letter 859 Comment 29, Letter 859 Comment 40, Letter 859 Comment 41, Letter 859 Comment 48

CC-022-General Opposition to the Project

Commenters expressed general opposition to the project.

Response

General opposition to the Project noted.

Comments

Letter 360 Comment 1, Letter 361 Comment 1, Letter 369 Comment 4, Letter 385 Comment 1, Letter 385 Comment 9, Letter 386 Comment 9, Letter 390 Comment 1, Letter 391 Comment 9, Letter 392 Comment 1, Letter 393 Comment 1, Letter 394 Comment 1, Letter 395 Comment 1, Letter 396 Comment 1, Letter 397 Comment 9, Letter 398 Comment 1, Letter 401 Comment 9, Letter 403 Comment 9, Letter 404 Comment 1, Letter 404 Comment 10, Letter 405 Comment 9, Letter 407 Comment 1, Letter 793 Comment 1, Letter 794 Comment 1, Letter 797 Comment 9, Letter 798 Comment 1, Letter 798 Comment 3, Letter 799 Comment 1, Letter 801 Comment 9, Letter 802 Comment 7, Letter 809 Comment 1, Letter 816 Comment 1, Letter 816 Comment 4, Letter 819 Comment 1, Letter 820 Comment 7, Letter 823 Comment 15, Letter 834 Comment 1, Letter 834 Comment 8, Letter 835 Comment 1, Letter 839 Comment 8, Letter 840 Comment 1, Letter 841 Comment 9, Letter 844 Comment 8, Letter 844 Comment 9, Letter 845 Comment 4, Letter 847 Comment 10, Letter 848 Comment 9, Letter 849 Comment 9, Letter 850 Comment 6, Letter 851 Comment 9, Letter 852 Comment 3, Letter 853 Comment 9, Letter 854 Comment 8, Letter 857 Comment 1, Letter 860 Comment 10, Letter 861 Comment 9, Letter 862 Comment 1, Letter 863 Comment 10, Letter 864 Comment 1, Letter 864 Comment 5, Letter 865 Comment 1, Letter 865 Comment 11, Letter 913 Comment 1

CC-023-Ten-Foot Drawdown Contour

Commenters expressed concern about use of the ten-foot drawdown contour. The analysis in the EIS should present and use the one-foot or five-foot drawdown contour as the measurement of potential impacts.

Response

Use of the numeric flow model to project potential drawdown at magnitudes of less than approximately ten percent of the local magnitude of drawdown becomes progressively uncertain as the threshold for drawdown prediction decreases. While the numeric model produces values of drawdown to small fractions of a foot, extrapolated over vast distances (the entire model domain), the numbers at this level of precision become an artifact of numeric processes rather than a representation of a physical reality. This is due to physical and mathematical simplifications necessary to model the regional flow system. While there is no standardized way of determining a reporting threshold, the value of ten feet is believed to be commensurate with the predictive qualities and uncertainties associated with this particular model. It is acknowledged that lesser degrees of drawdown can have impacts, however, modeling in this complex geologic setting has its limitations, and to report modeling results to very small thresholds would project a false level of model utility.

Comments

Letter 360 Comment 2, Letter 361 Comment 2, Letter 385 Comment 7, Letter 386 Comment 2, Letter 390 Comment 2, Letter 390 Comment 3, Letter 390 Comment 7, Letter 391 Comment 2, Letter 392 Comment 2, Letter 392 Comment 3, Letter 392 Comment 7,

Letter 393 Comment 2, Letter 394 Comment 2, Letter 394 Comment 3, Letter 395 Comment 3, Letter 397 Comment 2, Letter 401 Comment 2, Letter 402 Comment 2, Letter 403 Comment 2, Letter 404 Comment 3, Letter 405 Comment 2, Letter 407 Comment 5, Letter 797 Comment 2, Letter 799 Comment 2, Letter 799 Comment 3, Letter 801 Comment 2, Letter 802 Comment 3, Letter 809 Comment 5, Letter 820 Comment 2, Letter 823 Comment 1, Letter 834 Comment 6, Letter 835 Comment 5, Letter 839 Comment 1, Letter 841 Comment 2, Letter 844 Comment 2, Letter 847 Comment 3, Letter 848 Comment 2, Letter 849 Comment 2, Letter 851 Comment 2, Letter 853 Comment 2, Letter 854 Comment 3, Letter 855 Comment 32, Letter 855 Comment 58, Letter 855 Comment 118, Letter 855 Comment 122, Letter 859 Comment 52, Letter 859 Comment 70, Letter 859 Comment 71, Letter 860 Comment 3, Letter 861 Comment 2, Letter 862 Comment 3, Letter 863 Comment 3, Letter 864 Comment 4, Letter 865 Comment 4, Letter 908 Comment 1

CC-024-General Comments with No Specified Actions

Commenters have provided general comments.

Response

The commenter has provided a general comment that does not supply specific information that would result in a change to the EIS. Comment noted.

Comments

Letter 179 Comment 1, Letter 183 Comment 1, Letter 223 Comment 1, Letter 229 Comment 1, Letter 865 Comment 2, Letter 874 Comment 1, Letter 879 Comment 2, Letter 899 Comment 1, Letter 906 Comment 5, Letter 906 Comment 8

CC-025-Eureka County Plan Consistency

Commenter expressed concern regarding EIS consistency with the plans and policies in the Eureka County Master Plan. Additionally, the commenter requests the EIS to state that the Project would be in compliance with Eureka County codes.

Response

The BLM is not required to conform to Eureka County plans or policies, or to reject proposals that are not in conformance with those plans or policies. The Final EIS includes the following language suggested by Eureka County, "Some elements of the Proposed Action would be in conformance with Eureka County plans and policies while other elements of the proposed mine could prove inconsistent with these plans and policies." An appendix has been added to the EIS to identify inconsistencies with county plans and policies. The BLM has analyzed all of the impacts and attempted to reconcile conflicts and concerns where practicable. The appendix discloses the rationale behind any items that could not be reconciled. A sentence has been added to the end of the first paragraph in Section 1.5.4 that identifies this appendix.

Section 1.5.4 of the FEIS has been revised to include the following sentence, "The BLM acknowledges that EML would have to comply with any applicable Eureka County codes."

Comments

Letter 803 Comment 274, Letter 931 Comment 2

CC-026-Water Mitigation for Pine Valley

Commenter expressed concern regarding water mitigation for water resource impacts in Pine Valley. The analysis does not consider the time it would take for the Nevada State Engineer to authorize any necessary water permits for the implementation of the mitigation. There would not be sufficient water to implement the mitigation.

Response

If a supply of substitute water to Pine Valley was required for mitigation purposes, then the operator would be required to:

1. Purchase existing Pine Valley water rights;
 - a. Likely require a change application as well to be able to use the water where mitigation is required and for the specific use to be mitigated.
 - b. Temporary applications may be granted by the State Engineer in emergency situations and may be granted within a shorter time period than with permanent applications.
2. Obtain new temporary Pine Valley water rights;
3. Transfer existing water rights from Kobeh Valley;
4. Transfer existing water rights from Diamond Valley;
5. Transfer existing water rights from another hydrographic basin.

Because Diamond Valley is over-appropriated, the State Engineer may be reluctant to allow the transfer of water from that basin to Pine Valley. The interbasin transfer criteria that the State Engineer must consider are: (1) need to import the water, (2) whether a water conservation plan in the importing basin is advisable, (3) whether the proposed action is environmentally sound, and (4) whether the

proposed use is an appropriate long-term use that will not unduly limit the future growth and development in the exporting basin (NRS 533.370(3)).

If mitigation cannot be made by supplying a substitute source of water, then the State Engineer could order all pumping that is affecting the source to be stopped or reduced.

The model does not predict a complete cessation of flow. It is not expected under any scenario that mitigation will require pumping to replace the entire flow of the creek. It is expected that sufficient water will be available to augment creek flows if necessary. Technical documents support that conclusion.

Comments

Letter 803 Comment 126, Letter 803 Comment 127

CC-027-Spring Drain

Commenters express concern about the piping for the buried spring. The spring flow may contact waste rock and the piping may collapse.

Response

Appendix 3 of the Plan of Operations includes the design of the foundation drain that would be constructed to route water from the spring that would be located beneath the non-PAG WRDF. The design includes a system of collection pipes, geo-textile and synthetic liner to preclude contact with the non-PAG waste rock.

The conduit designed to convey spring flow to the outside of the non-PAG WRDF provides a method to retain the values provided by this water resource.

The EIS is not required to analyze worst-case scenarios.

Comments

Letter 803 Comment 45, Letter 858 Comment 11

CC-028-Post-Mining Pit Lake Model

Commenters expressed concern about the representation of the post-mining pit lake in the model. The pit lake may have a “flow-through” condition that would degrade the quality of adjacent ground water.

Response

Although there is a pre-mining groundwater level gradient across the pit area, by the end of mining this gradient is overwhelmed by the steep gradients into the pit, in all directions. As shown on the end-of-mining, 10-year and 50-year post mining groundwater level contours (Figures 4.5-6, 4.5-8, and 4.5-9, respectively; presented in the July 2010 Mt. Hope model report), the radically steep gradients towards the pit preclude any type of flow-through condition where pit lake water escapes the hydraulic pit sink.

As shown on the end-of-mining, 10-year and 50-year post mining ground water level contours (Figures 4.5-6, 4.5-8, and 4.5-9, respectively of the Montgomery & Associates and Interflow, 2010 report), ground water levels surrounding the pit are substantially higher than the pit lake surface elevation. In addition, the radically steep gradients towards the pit preclude any type of flow-through condition where pit lake water escapes the hydraulic pit sink. The steep gradients toward the pit would occur in unknown or unsimulated preferential flow paths; these preferential flow paths would not compromise the hydraulic sink shown on Figures 4.5-6, 4.5-8, and 4.5-9. No changes to the text of the EIS have been made in response to this comment.

Comments

Letter 858 Comment 23, Letter 858 Comment 24, Letter 858 Comment 25, Letter 858 Comment 26, Letter 858 Comment 27

CC-029-Roberts Creek Recreation Data

Commenters expressed concern about the data used for the analysis of Roberts Creek recreation. The EIS had little information on the recreational values of Roberts Creek. In addition, the EIS did not evaluate alternatives that would not impact Roberts Creek.

Response

The DEIS used all reasonable available data in the discussions of the affected environment and environmental consequences. The BLM met its obligations under NEPA to evaluate all reasonable alternatives to the Proposed Action. The alternatives evaluated in the EIS are presented in Section 2.2 of the document. No changes to the text of the FEIS have been made in response to this comment.

Comments

Letter 363 Comment 5, Letter 384 Comment 3

CC-030-Range Improvements

Commenters expressed concern about impacts to range improvements from the Project, as well as financial assurance of the responsible party and maintenance of range improvements impacted by the Project. Commenters request impacts to range improvements within the predicted ten-foot drawdown be analyzed.

Response

As disclosed in Section 3.12.3, no impacts to range improvements other than developed spring sites are expected. Range improvement projects that are located outside the Project Area including fences, water haul sites, and cattle guards would not be affected by the ten-foot drawdown. Impacts to springs and wells with water rights registered with the State Engineer within the ten-foot drawdown are mitigated in Section 3.2.3.3. EML would be responsible for the implementation of the mitigation, which would be specified in the ROD. No revisions have been made in the EIS in response to this comment.

Comments

Letter 803 Comment 238, Letter 855 Comment 49, Letter 855 Comment 138, Letter 855 Comment 139, Letter 855 Comment 140, Letter 855 Comment 142, Letter 855 Comment 144

CC-031-Impacts to Surface Water Quantity

Commenters express concern regarding impacts to water for livestock and wildlife. A loss or reduction of water would impact the use of the grazing allotment. The EIS must analyze the effect to cows and calves for a change in water availability.

Response

The EIS analysis accounts for potential impacts on all water rights and, as the comment notes, the EIS acknowledges that some rights may not be of public record. It is also clear that mitigation requirements apply to all water rights. Vested water rights are those that were established prior to enactment of Nevada's water law (1905). Subsisting rights are just vested water rights for stockwatering on public lands.

No change has been made to Table 3.2-6. NRS 533.367, referenced in the comment, requires a person seeking to appropriate water from a spring or seep to ensure that any wildlife that have been using the source will continue to have the ability to access it. NRS 533.367 does not apply because EML is not seeking to appropriate water from any spring source.

Comments

Letter 803 Comment 98, Letter 803 Comment 254, Letter 855 Comment 9, Letter 855 Comment 11

CC-032-Pit Lake Affects to Animals

Commenters expressed concern about the effects of the pit lake on livestock, wildlife, and wild horses. Commenters request that the EIS disclose animal drowning hazards and impacts from drinking pit lake water to animals.

Response

The analysis for the SLERA conservatively assumed that livestock would be able to access the pit lake. Reclamation of the open pit will include construction of berms intended to deter livestock. Following reclamation, the BLM would evaluate if the pit would be made accessible to livestock and wild horses.

Comments

Letter 855 Comment 157, Letter 855 Comment 159, Letter 855 Comment 161, Letter 855 Comment 162

CC-033-Data Adequacy

Commenters expressed concern regarding the water data sources used in the DEIS. Particularly, not enough weather station data were included in the data set for the ground water flow model, not enough stream flow measurements were considered, and not all the known springs were included in the ground water flow model.

Response

Data utilized for identification of hydrologic processes and potential impacts are comprehensive and sufficient for the purposes of the EIS.

Known springs and wells in the area of impact are identified using the referenced data sets. Specifically, springs are identified using USGS topographic mapping and Nevada Division of Water Resources water rights filings. The referenced "Gravel Pit Spring" is not

included in data sets, and is a unique surface water feature in the study area created by excavation of a gravel pit below the water table. As a modern and artificially created "resource", this is analogous to a pit lake, and is not subject to PWR 107. More importantly, this surface water feature is outside the ten-foot projected drawdown contour and should not be identified as a potentially impacted water resource.

Mean annual precipitation data is based on a number of regional stations including the Diamond Valley USDA and Eureka COOP stations (Table 3.2-1). The Diamond Range SNOTEL station, located approximately 25 miles from Mount Hope at an elevation of 8,000 feet amsl, has a period of record average precipitation quantity of 21.71 inches (28 years of record from WY1984 through WY2011). The Diamond Range SNOTEL station has been added to Table 3.2-1. The USBLM RAWs station data are not included in this compilation due to the type of equipment and operation of these weather stations, which deems them unreliable data sources for determination of annual precipitation quantities (not accurate for winter-time precipitation measurements). The Diamond Valley "agrimet" station is believed to be the same station, or very nearly located to, the Diamond Valley USDA site listed in Table 3.2-1.

Table 3.2-2 is a summary of USGS stream gaging locations. At the time of compilation of the this table for the DEIS, published data were not available for the recently established USGS Roberts Creek stream gage. Two months of data are now published for this gage for the time frame being reported in Table 3.2-2 (5-4-11 to 7-6-11), and Table 3.2-2 has been updated to incorporate these data. During this timeframe, there were four field measurements of flow, and the average flow from published daily flow values over this two month timeframe is 4,367 gpm.

The conditions of Roberts Creek, Coils Creek, Pete Hanson Creek, and many other streams in the study area are documented and disclosed, including identification of perennial and ephemeral stream reaches, and flow measurements available from EML, the USGS, and other referenced data sources.

All active water rights on stream sources are identified as determined from the Nevada Division of Water Resources (as referenced) which is the best data available for this purpose.

Comments

Letter 803 Comment 85, Letter 803 Comment 86, Letter 803 Comment 87, Letter 803 Comment 88

CC-034-AUM Reductions

Commenters expressed concern regarding the amount of AUM reductions on private land due to a loss of forage associated with the predicted ten-foot ground water drawdown. Additional mitigation for this impact is requested as well as economic and financial impact analysis in the EIS.

Response

The text under the Effects on Other Sectors of the Local Economy subheading in section 3.17.3.3.1 in the third paragraph, fourth sentence, has been revised in the FEIS to read as follows, "Mitigation would also be available for Project-related effects on agricultural production and livestock grazing and production resulting from the ground water drawdown (Sections 3.2.3 and 3.9.3)."

Comments

Letter 803 Comment 310, Letter 855 Comment 154

CC-035-Monitoring Concerns

Commenters expressed concern regarding the inclusion of monitoring in the mitigation measures. Commenters request that monitoring not be considered mitigation.

Response

Monitoring included as part of the proposed project does not meet the strict definition of mitigation. Monitoring is included in mitigation discussions to explain that implementation of mitigation would be determined for some resources by monitoring that would be required as a condition of project approval. The FEIS has been edited where necessary to make this distinction between monitoring and mitigation.

Comments

Letter 802 Comment 5, Letter 803 Comment 108

CC-036-Fences and Berms

Commenters express concern regarding the location of fences in the Project Area and potential impacts to livestock and wild horses if access to the pit lake occurs.

Response

Figures 2.1.1, 2.1.3, 2.1.5, and 2.1.8, in the EIS illustrate the location of the fence and the facilities located outside of the fenced area. Section 2.1.16 of the EIS describes the fencing that would be constructed and reclaimed by EML. Reclamation of the open pit will include construction of berms intended to deter livestock. Following reclamation, the BLM would evaluate if the pit would be made accessible to livestock and wild horses. No change has been made to the EIS in response to this comment.

Comments

Letter 855 Comment 99, Letter 855 Comment 158, Letter 855 Comment 160, Letter 855 Comment 171, Letter 855 Comment 172

CC-037-Surface Water Impact Duration

Commenters expressed concern regarding the duration of surface water impacts. The EIS needs to discuss how “at least 400 years” of impacts to surface water sources, relates to the sustainability of the resources, and the multiple use objectives of public lands.

Response

As outlined in Section 3.2.3.3 of the EIS ground water impacts are anticipated to last up to 400 years. However, impacts to surface water are not expected to last for the same duration. Impacts to the surface waters are adequately mitigated, as described in Section 3.2.3.3 of the EIS. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 859 Comment 76, Letter 859 Comment 78

CC-038-Roberts Creek Analysis and Mitigation

Commenters request additional analyses and mitigation be provided for Roberts Creek fisheries. Mitigation should be implemented if there is a reduction in flows. Any impacts to streams in the Roberts Mountain area would likely have some negative impact on the quality of life and recreational opportunities available to local residents and cannot be replaced by other sources.

Response

The water mitigation trigger has been revised to address impacts regarding a reduction in flow rather than full cessation. Implementation of water mitigation would benefit not just LCT in those creeks impacted by the Project, but other fish species as well. Mitigation has been provided for the loss of water flow in Roberts Creek (see Table 3.2-9), and states that water from the Project would be pumped to Roberts Creek to mitigate for the drawdown.

Direct and indirect impacts to the drawdown of Roberts Creek are discussed throughout the EIS in the following sections: Section 3.2 Water Resources - Water Quantity; Section 3.11 Wetlands and Riparian Zones; Section 3.12 Livestock Grazing and Production; Section 3.13 Wild Horses; Section 3.15 Recreation and Wilderness Study Areas; and Section 3.23 Wildlife and Fisheries Resources.

Comments

Letter 384 Comment 4, Letter 384 Comment 6, Letter 803 Comment 309, Letter 803 Comment 366, Letter 803 Comment 367, Letter 803 Comment 368, Letter 803 Comment 370

CC-039-Assumptions of Scope of Impacts to Springs

Commenters express concern with the assumptions use for the scope of impacts to springs. The paragraph states that surface and spring water flows affected by the ten-foot drawdown are assumed to be interconnected with the regional ground water system, but the next paragraph asserts that springs within the Roberts Creek drawdown area “...are not hydraulically interconnected with the regional ground water system.” This statement contradicts the assertion made in the previous paragraph and has no data to support the conclusion.

Response

A report prepared by JBR and submitted to the BLM in May 2012 summarizes the results of a third field investigation to assess the degree of connection between the surface water flows in the Roberts Mountains and the regional groundwater aquifer. Based on this information, the text of the FEIS has been revised. The intent of the revision is to clarify that although data indicate a separation between the regional groundwater aquifer and superficial flows, such that ground water drawdown would not be likely to affect these surface flows, for identification of potential impacts and development of mitigation, it is conservatively assumed that these flows would be affected.

The text on page 3-85 of the DEIS reads, "Of the 22 potentially impacted springs, six appear to be associated with water rights (Table 3.2-6) and at least eight are considered perennial (Table 3.2-8). The identified potentially impacted perennial springs are all located at high elevations in the Roberts Mountains and on the flanks of Mount Hope, and within approximately four miles of the proposed open pit. The source of these springs is believed to be the fractured bedrock aquifer, which receives recharge from the higher elevations as infiltration of snowmelt and rainfall. It is possible that geologic block faulting has compartmentalized the ground water flow at some of these spring sites so that they would be isolated from mine-induced drawdown, but there is no available evidence to define such conditions if they exist. For the purposes of this analysis, it was conservatively assumed that all of the springs located in this area are interconnected with the regional ground water system and potentially could be impacted due to water-table lowering attributable to the Proposed Action. Surface water flow in Roberts Creek, located approximately 6.5 miles west of the proposed open pit, is fed by springs that flow into Roberts Creek or its tributaries. The upper spring-fed segments of Roberts Creek generally flow throughout the year, but the springs within the drawdown area that feed those segments are believed to originate in areas of localized, perched ground water that are not hydraulically interconnected with the regional ground water system."

This text will be revised in the FEIS to read, "Of the 22 potentially impacted springs, six appear to be associated with water rights (Table 3.2-6) and at least eight are considered perennial (Table 3.2-8). The identified potentially impacted perennial springs are all located at high elevations in the Roberts Mountains and on the flanks of Mount Hope, and within approximately four miles of the proposed open pit. The source of these springs is believed to be the fractured bedrock aquifer, which receives recharge from the higher elevations as infiltration of snowmelt and rainfall. Surface water flow in Roberts Creek, located approximately 6.5 miles west of the proposed open pit, is fed by springs that flow into Roberts Creek or its tributaries. The upper spring-fed segments of Roberts Creek generally flow throughout the year, and as with other springs in the upper elevations of Roberts Mountains, the springs within the drawdown area that feed those segments are believed to originate in areas of localized, perched groundwater that are not hydraulically interconnected with the regional groundwater system. It is also possible that geologic block faulting has compartmentalized the groundwater flow at some of these spring sites so that they would be isolated from mine-induced drawdown, but there is no available evidence to define such conditions if they exist. For the purposes of this analysis, it was conservatively assumed that all of the springs located in the area projected to experience ten feet or more of drawdown are interconnected with the regional groundwater system and potentially could be impacted due to water-table lowering attributable to the Proposed Action."

Comments

Letter 803 Comment 114, Letter 813 Comment 4

CC-040- Ranch Locations Relative to Project Area

The commenter is concerned regarding ranch locations near the Project Area.

Response

The intent of this text is to indicate the location of residences in different directions from the Project. The text has been revised to state "The nearest residences to the Project are the Roberts Creek Ranch to the west, Alpha Ranch to the north, and residences in Diamond Valley to the east and southeast, which are 6.5, 14.5, and 9.3 miles from the Project, respectively."

Comments

Letter 803 Comment 268, Letter 803 Comment 269

CC-041-Golden Eagle Mitigation

Commenters express concern regarding impacts to and mitigation for golden eagles. Specifically, the commenters request that the mitigation measure for golden eagles be revised to include mitigation.

Response

Mitigation Measure 3.23.3.3-8 has been revised to read as follows, "Mitigation Measure 3.23.3.3-8: All suitable golden eagle nesting habitat located within a five-mile radius of the Project Area boundary would be surveyed twice a year by a qualified biologist for the life of the Project to check the use status of golden eagle nests and habitat. If a nest is determined to be active, the nests would be monitored by video (with still images recorded every five minutes) and the recording would be reviewed by a qualified biologist once a week until the young have fledged. During the 18-month construction phase, the timing of weekly monitoring of active nests would occur from sunrise to sunset by video (with still images recorded every five minutes). During the 44 year mine life, the weekly monitoring for active nests would coincide with blasting activities. The video camera would record the nest beginning two hours before the blast and end two hours after the blast (with continuous video images recording). Annual reports would be submitted to the BLM biologist summarizing the results of the surveys. Following one year of monitoring, the qualified biologist would develop interpretable metrics to evaluate whether disturbance affects golden eagles. If there are impacts to golden eagles identified, the qualified biologist would coordinate with the BLM and USFWS to develop an adaptive management strategy to mitigate impacts for subsequent years. If a negative impact to nesting golden eagles is detected during monitoring, the BLM biologist would be contacted by electronic mail or phone by the next business day."

Comments

Letter 409 Comment 11, Letter 813 Comment 15

CC-042-Climate Change

The commenter requests that a reference be included for the climate change discussion in section 3.9.2.2.4.

Response

The first sentence in Section 3.9.2.2.4 has been revised in the FEIS to read as follows, "Vegetation composition is integral to many functioning ecosystems." The second sentence has been revised in the FEIS to read as follows, "Potential changes in vegetation associated with projected effects of climate change may alter plant communities (U.S. Global Change Research Program 2009)." The text in Section 3.23.2.2.4 has been revised as follows, "The projected changes in climate ... change impacts on migratory aquatic species (U.S. Global Change Research Program 2009)." The following reference has been added to Section 6 of the FEIS, "U.S. Global Change Research Program. 2009. Global Climate Change Impacts in the United States. Thomas R. Karl, Jerry M. Melillo, and Thomas C. Peterson (eds.). Cambridge University Press."

Comments

Letter 803 Comment 209, Letter 803 Comment 365

CC-043- Indirect Cultural Resource Impacts

The commenter is concerned regarding potential cultural resource impacts to the town of Eureka and requests mitigation for these impacts.

Response

The Historic Town of Eureka is not within the area of potential effects (APE) for cultural resources. No change has been made in the FEIS in response to this comment.

Comments

Letter 803 Comment 354, Letter 803 Comment 355

CC-044- Impacts to Roberts Creek

The commenter is concerned regarding impacts to Roberts Creek. The EIS lacks analysis of potential impacts to other recreational game species that may be affected by changes to water resources.

Response

Mitigation in response to potential impacts to surface flow on Roberts Creek is included in section 3.2.3.3.1. No change has been made to the FEIS in response to this comment.

Comments

Letter 803 Comment 287, Letter 803 Comment 288

CC-045- Land Use Impacts

The commenter is concerned regarding impacts to land use, particularly to private lands.

Response

A new subsection has been added to Section 3.14.3.3 that discusses impacts to private land uses. The only direct effect will be to private land controlled by EML. All other effects to private land uses are indirect (i.e., associated with the ground water drawdown). This section will reference those sections of the EIS where those indirect effects are discussed (i.e., groundwater, range, wetlands).

Comments

Letter 803 Comment 270, Letter 803 Comment 272

CC-046- Slower, Longer Alternative Analysis

The commenter is concerned regarding the description of the Slower, Longer, Alternative in Chapter 2 of the EIS, as well as the impact discussion of this alternative in Chapter 3. The commenter requests that the day-to-day impacts from this alternative be given proper weight in the EIS.

Response

The section to which the commenter is referring is intended only to provide a description, not to influence the environmental analysis of the alternative. The DEIS analyzed and disclosed anticipated impacts from the Slower, Longer Project Alternative as required under

NEPA and CEQ regulations. The last sentence in the second paragraph under Section 2.2.4 has been revised as follows in the FEIS, "However, some aspects of environmental disturbance (i.e., wildlife) would be greater due to the extended duration." The DEIS disclosed the impacts from this alternative and has provided an explanation of how this alternative would be implemented.

Comments

Letter 803 Comment 74, Letter 803 Comment 276

CC-047-Water Availability

The commenters expressed concern regarding the amount of water available including a water budget. There is a failure to provide a water budget for existing water uses, the mining project, and the Project's proposed mitigation measures.

Response

Tables 3.2-13 and 3.2-14 of the EIS present in detail a water budget that includes the existing water uses. Tables 3.2-11 and 3.2-12 of the EIS present a water budget with changes to existing uses as a result of the Proposed Action. The Proposed Action water use includes water that may be necessary for implementation of mitigation measures.

Comments

Letter 803 Comment 6, Letter 803 Comment 7

CC-048-Water Mitigation for Wildlife and Horses

Commenters expressed concern regarding water use for mitigation of impacts to wildlife and horses. Commenters expressed concern regarding how water (and water rights) to implement mitigation for wildlife or wild horses would be obtained.

Response

Impacts to subsisting water rights may be mitigated under the authority of the State Engineer. Subsisting water rights do not apply to wildlife or horses. The BLM's mitigation plan provides that impacts to surface waters that provide water to wildlife and horses would be mitigated.

Comments

Letter 803 Comment 140, Letter 803 Comment 258, Letter 803 Comment 261, Letter 855 Comment 181

CC-049- Traffic impacts on SR 278

The commenter is concerned regarding increased traffic impacts on SR 278. The analysis omits any discussion of the impacts of increases in truck, bus, and passenger vehicle traffic. In addition, there is no analysis or description of what is considered "substantial" or "significant".

Response

The existing traffic data used in Section 3.19 of the FEIS has been updated to use the 2010 traffic data from the Nevada Department of Transportation website, as well as the 2012 truck trips by the Ruby Hill Mine on S.R. 278. The analysis in Section 3.24.3.3 in the FEIS has been revised to separate changes in bus use and to include truck traffic from toll roasting. A specific assessment of changes in car traffic can not be made since the number of employee personal vehicles that would be used is not reasonably known.

Comments

Letter 803 Comment 377, Letter 803 Comment 381, Letter 803 Comment 386, Letter 803 Comment 388

CC-050-Pinion-Juniper Woodland Encroachment

The commenter requests that the EIS address past, present, and future pinion-juniper woodland encroachment and expansion in the cumulative effects assessment analysis.

Response

These comments are beyond the scope of the EIS.

Comments

Letter 803 Comment 427, Letter 803 Comment 428, Letter 803 Comment 431, Letter 803 Comment 434

CC-051- Locally Defined Adverse Impacts

The commenter is concerned regarding locally defined adverse impacts and respective mitigation. The commenter wants mitigation to state that EML would purchase and retire at least an equal amount of currently pumped water in Diamond Valley in coordination with the NDWR.

Response

The drawdown impacts associated with Project do not appreciably propagate into Diamond Valley. See Section 3.2.3.3 in the FEIS for a discussion of impacts and mitigation. The breadth of the commenter's discussion of impacts is outside the scope of this EIS.

Comments

Letter 803 Comment 146, Letter 803 Comment 148

CC-052- Ground Water Pumping

The commenter is concerned regarding language in the DEIS relating ground water pumping. It is not clear what the phrase "EML would assess the distance of the screened interval and the pumping below the ground water table" means. Please add "with concurrence from NDWR".

Response

The text in Section 3.2.3.3 of the EIS has been modified to clarify that the BLM would not implement mitigation for impacts to water rights, and that mitigation for impacts to water rights falls under the jurisdiction and responsibility of NDWR. In addition, text has been added to Section 3.26 of the EIS that outlines the types of mitigation that the BLM does not have the authority to require but could be required by other regulatory bodies, such as the NDWR.

Comments

Letter 803 Comment 137, Letter 803 Comment 139

CC-053-Air Quality Modeling

The commenter is concerned regarding the implementation of the air quality model used in the DEIS. When properly performed, the air quality modeling will demonstrate that 1-hour NO₂ concentrations will be exceeded by the proposed mining operation. The statement regarding the irreversible and irretrievable impacts to air resources is suspect, especially given the exceedance of the new 1-hour NO₂ standard.

Response

The model was revised to incorporate concerns identified by Eureka County and was performed in accordance with BLM-approved protocol. The results of the model are disclosed in the FEIS. The revised model demonstrates compliance with all NAAQS. The documentation for the revised model is available for review at the Battle Mountain BLM Office as part of the project's administrative record.

Comments

Letter 803 Comment 192, Letter 803 Comment 194, Letter 803 Comment 439

CC-054- Impacts to Water Wells

The commenter is concerned regarding impacts to water wells, and these impacts on livestock, wildlife, and wild horses. As previously requested, please add Roberts Creek Ranch domestic well into Table 3.2-10. Also add wells 204 and 310 since, as previously explained, they currently do not have rights associated with them as the table title suggests, and they are wells that may be affected

Response

It is not correct to state that the owners of wells 204 and 310 have at least a subsisting right to water livestock from ground water produced by the well. A subsisting water right is a vested right to use water from a water source located on public lands to water livestock that subsist mainly from grazing the surrounding public lands. See *Itcaina v. Marble*, 56 Nev. 420 (1956) (stating that defendant could not acquire any right to the water source at issue because he did not attempt to appropriate any water until 1909, and therefore, would have been required to file an application from the State Engineer's Office). Nevada law was changed in 1993 to allow a subsisting right to be proved by showing grazing use only as far back as 1950, but the right is still based on a pre-1905 use. If the subsisting right was not initiated prior to 1905 (for surface water) or 1939 (for ground water), then the person who intends to use the water must seek permission from the State Engineer to appropriate the water.

A subsisting right to ground water would require the well to have been constructed prior to 1939. Otherwise, the owners of wells identified as 204 and 310 would be required to obtain a ground water appropriation from the Nevada State Engineer.

Comments

Letter 803 Comment 132, Letter 803 Comment 135

CC-055-Mitigation for Visual Impacts to Historic Trails

Commenters expressed concern regarding the lack of mitigation to the visual impacts on historic trails, and request that mitigation for this impact be developed in the EIS.

Response

Mitigation for visual impacts to the Pony Express Trail will be identified in the Historic Treatment plan. The FEIS has been revised to include mitigation for Impact 3.20.3.3-1. This mitigation would include photodocumentation to capture the setting and feel of the Pony Express Trail adjacent to the project that would be visually impacted.

The Treatment Plan would also include off-site mitigation in the form of GPS mapping and surveying of off-site portions of the Pony Express Trail located on public land. Segments would be selected at a 1:1 ratio of linear mileage based on the length of segments of the trail that would be impacted by the Project and are considered eligible as discussed in Section 3.21.3. Additionally, Mitigation Measure 3.7.3.3-1 would reduce visual impacts to users of the Pony Express Trail.

Comments

Letter 233 Comment 4, Letter 803 Comment 353

CC-056- Land Uses on Private Land

The commenter is concerned regarding land uses on private lands within the drawdown area.

Response

Text has been added to Section 3.14.2.2 of the FEIS that discusses the land uses on private lands adjacent to the Project Area in the area on the 10-foot drawdown. In addition, a reference to Figure 1.1.2 has been added to this section. This figure shows the land status in the Project Area, as well as most of eastern Kohav Valley.

Comments

Letter 803 Comment 265, Letter 803 Comment 266

CC-057-Funding for Reclamation/Closure Bond

The commenters are expressed concern about whether the Project will have the appropriate level of funding for the reclamation closure bond and long-term funding for such tasks. The BLM should require the applicant to provide adequate financial assurance that long term controls and post-closure management will be implemented when necessary during and after mine closure or cessation of mining at some earlier period not foreseeable, but possible, due to market conditions or technical issues. The Draft EIS is inadequate because it does not disclose any detail on how BLM will ensure that funds will be available as long as they are needed to implement the closure and post-closure obligations.

Response

Should EML be required to implement mitigation, and should that mitigation consist of providing ground water to replace diminished surface water flows, EML would be responsible for obtaining the necessary water rights. It is anticipated that the water would come from EML's existing water rights. However, the water rights could come from transfer of existing EML water rights, purchase of water rights from other parties and transfer of those purchased rights as needed, or acquisition of new water rights in accordance with Nevada water law. Attempting to identify the exact mechanism for obtaining water rights, in such an eventuality, would be speculative.

As described in Section 2.1.16.1 of the FEIS, financial assurance for the project would include reclamation bonding and establishment of a Long-Term Funding Mechanism (LTFM) for potential post-reclamation activities. As shown in Table 2.1-10 of the FEIS, the anticipated reclamation schedule includes 30 years of post-project monitoring. It is not the BLM's policy to include the estimated cost of reclamation in NEPA documents. The reclamation and closure techniques are presented in the EIS to allow for review and comment on their adequacy. Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer has the authority to review and require cost updates at any time to ensure bond adequacy.

In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. BLM previously identified the need for a LTFM, and the Final EIS includes a description of the components of that trust. As with reclamation bonding, BLM policy is to not disclose the cost estimate or calculations for LTFM in NEPA documents. However, the amount of reclamation costs and the LTFM would be disclosed in a ROD. The LTFM would be reviewed periodically to assess financial performance and adjusted as necessary to ensure that the available funds are adequate to implement the components of the LTFM.

As long as a Plan of Operations remains active, the operator of record is liable for post-mining environmental issues, and would be required to maintain the financial assurances as determined adequate by the BLM.

The BLM 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 the EPA's position (i.e., that the LTFM and reclamation bond information must be placed in the NEPA document). In addition, the following text has been added as a replacement of the text following the second sentence in the third paragraph under Section 2.1.16 in the EIS, "There is a potential for additional monitoring and maintenance tasks that would be required beyond the 30-year post-closure timeline that is currently included in the reclamation cost estimate. Financial assurance for these tasks would be provided outside of the reclamation bond by means of a Long Term Funding Mechanism (LTFM). The specifics of the LTFM and the amount of the assurance needed would be determined in cooperation with the BLM. The tasks to be covered by the LTFM include, but not be limited to, maintenance of pit perimeter fencing, monitoring of pit lake water quality, draindown from the PAG WRDF and the TSF, and maintenance of ET cells that would be constructed to manage long-term draindown from the TSF (the costs to convert the process ponds into ET cells is included in the Project reclamation costs and associated bond). Treatment of the pit lake water, the PAG WRDF draindown or the TSF draindown are not included because studies have indicated that there is no potential for any of these solutions to degrade water quality or otherwise present an environmental risk. Monitoring during operations and the 30-year closure period would be covered by the reclamation bond, and if information collected during this period indicates the need, the LTFM would be adjusted to include treatment. Maintenance of ET cells that would be constructed to manage long-term draindown from the TSF would include replacing the backfill. The ET cells would be designed simply to provide containment of draindown solution as it evaporates and backfill that would function as growth media for vegetation. Over long time periods, salts in the draindown solution that precipitate within the backfill could completely occupy the media pore space, affecting the viability of vegetation. The ET cell would continue to provide containment by means of its synthetic liner, and solution draindowns would decrease over time, reducing the amount of solution volume that would need to be contained. However, as a conservative measure, costs for ET cell maintenance would be included in the LTFM established as part of this Project. As stated previously, the maintenance specifics and costs would be determined in cooperation with the BLM."

In Addition, Section 2.1.16.1 of the EIS has been revised to provide details on the establishment of a Long-Term Financial Mechanism to ensure that adequate funding is available for the implementation of mitigation in the post reclamation and closure period.

Comments

Letter 803 Comment 19, Letter 803 Comment 131, Letter 823 Comment 5, Letter 824 Comment 5, Letter 824 Comment 6, Letter 855 Comment 52, Letter 859 Comment 79, Letter 859 Comment 96, Letter 859 Comment 130, Letter 941 Comment 2, Letter 941 Comment 3, Letter 941 Comment 5, Letter 941 Comment 11, Letter 941 Comment 13, Letter 941 Comment 14, Letter 941 Comment 15, Letter 941 Comment 16, Letter 941 Comment 17, Letter 941 Comment 19, Letter 941 Comment 23, Letter 941 Comment 24, Letter 941 Comment 25, Letter 941 Comment 26, Letter 941 Comment 50, Letter 941 Comment 63

CC-058-Visual Simulations

The commenter is concerned about the quality and accuracy of colors described and simulations of visual photos (KOPs) in the visual resource section.

Response

The visual simulations are only a representative image, and are not meant to replace actual conditions. It is not possible to simulate every color and/or light condition that may be present throughout the day or year.

Comments

Letter 803 Comment 196, Letter 803 Comment 197

CC-059-Impacts of Mitigation Implementation

The commenters suggest that the EIS should analyze all impacts associated with implementation of mitigation. Please provide the appropriate level of analysis to demonstrate that a particular mitigation strategy is technically feasible and practicable, not just an opinion that it will be effective.

Response

Replacement of diminished surface flows with ground water may require additional environmental analysis or permitting. Table 3.2-9 of the EIS outlines the anticipated mitigation for surface waters. However, this is only one of the mitigation options. Additionally, the extensive monitoring program would allow warning of potential impacts before they actually occurred so this additional analysis and permitting could be initiated before impacts occur. The text in the EIS has been revised to identify impacts from potential mitigation measures.

Comments

Letter 803 Comment 124, Letter 855 Comment 135, Letter 855 Comment 136, Letter 941 Comment 31

CC-060-PAG WRDF Design

The commenter recommends that the PAG WRDF should be capped with a geomembrane or equivalent, and include an additional cap and liner controls in the WRDFs to provide more robust source control to protect water quality. Also, the commenter recommends the more conservative draindown response curves be used.

Response

The analysis presented in the EIS and the Plan of Operations demonstrates that the proposed design of the PAG and Non-PAG WRDFs are appropriate. No change has been made to the EIS in response to this comment.

Comments

Letter 941 Comment 6, Letter 941 Comment 56

CC-061-Mitigation Advisory Committee

The commenter requests that additional language be spelled out regarding the mitigation advisory committee in the EIS and requests that text be revised to state "The advisory committee will review and approve the water-related monitoring protocols, data, and reports, meet no less frequently than quarterly, and make recommendations to the BLM on operational changes or compliance issues."

Response

The FLPMA does not require establishment of an advisory committee for approval of the Plan of Operations as the commenter suggests. Rather, 43 U.S.C. 1712(c)(9) describes coordination between the Secretary and other agencies for the development and revision of land use plans. Similarly, 43 CFR 1610.3-1(4) provides direction for the BLM on providing "meaningful public involvement of other Federal agencies, State and local government officials, both elected and appointed, and federally recognized Indian tribes, in the development of resource management plans, including early public notice of final decisions that may have a significant impact on non-Federal lands."

The text in Section 2.1.15 of the FEIS has been revised to read as follows, "In addition to the monitoring requirements consistent with 43 CFR 3809.401(b)(4), and applicant committed practices outlined for water resources, an advisory committee would be established as described in the water resources monitoring plan (Appendix C). Eureka County would be invited to participate on this advisory committee. The establishment of the advisory committee would allow participants to review the monitoring reports, meet on a periodic basis and comment on monitoring results." The DEIS already states that "The establishment of the advisory committee would be based on an agreement subsequent to the issuance of a ROD and Plan approval." Since this text is included in the Plan of Operations, then it would be authorized by the Plan of Operations approval which is part of the ROD. The BLM cannot grant the advisory committee the authority to "approve" water monitoring reports; therefore, this text has not been added in the FEIS.

Finally, Table 3.2-9 and Table 3.2-18 have been revised in the FEIS to indicate that a reduction of flow caused by the Project, rather than cessation, would be the threshold for the BLM to consider implementation of mitigation.

Comments

Letter 803 Comment 20, Letter 803 Comment 63

CC-062-Mitigation of Diminished Water Flows

The commenters express concern regarding the mitigation measures to replace diminished flows as a result of the Project. EML may need to obtain additional water use permits to comply with mitigation measures. In Table 3.2-9 and 3.2-18, mitigation measures call for substantial diversion rates that are over and above the 11,300 acre feet per year of appropriated water.

Response

The mitigation option that would replace diminished surface flows with ground water would require a volume of replacement established on the basis of base flows, since these base flows (as opposed to precipitation- and snowmelt-derived flows), are the only flow reductions that could reasonably be attributed to the proposed project. These base flows vary for each of the sources identified. Tables 3.2-9 and 3.2-18 in the EIS have been revised to report base flows for the potentially impacted surface waters. These base flow rates are substantially less than the values reported in the version of these tables included in the DEIS.

Should EML be required to implement mitigation, and should that mitigation consist of providing ground water to replace diminished surface water flows, EML would be responsible for obtaining the necessary water rights. It is anticipated that the water would come from EML's existing water rights. However, the water rights could come from transfer of existing EML water rights, purchase of water rights from other parties and transfer of those purchased rights as needed, or acquisition of new water rights in accordance with

Nevada water law. Attempting to identify the exact mechanism for obtaining water rights, in such an eventuality, would be speculative.

Comments

Letter 796 Comment 1, Letter 803 Comment 122, Letter 805 Comment 18, Letter 859 Comment 83, Letter 941 Comment 62

CC-063-RFFAs in Tables 4.2-3 and 4.2-4

The commenter is concerned regarding the completeness and accuracy of data listed in Tables 4.2-3 and 4.2-4. Specifically, the commenter questions the acreages of wildland fires, noxious weed control activities, and mineral projects.

Response

Table 4.2-3 in the FEIS has been revised to read "436,600 acres" in the "Wildland Fires" row in the "RFFA" column. This value is based on an average yearly burn size of 5,900 acres, using BLM Battle Mountain District-wide data, over the RFFA 74-year timeframe. The value in the "Total" column in the "Noxious Weed Control Activities" row has been revised to "306" and the table's total and subtotal have been updated. The value in the "RFFA" column for "Noxious Weed Control Activities" row has been revised to "nq" as this value cannot be reasonably quantified. The use of "nq" does not indicate that the activities are not occurring or expected to occur, rather that the values cannot be reasonably quantified for this EIS. The values under the "Mineral Development and Exploration" section of Table 4.2-3 have been updated and include the Ruby Hill expansion.

Comments

Letter 803 Comment 411, Letter 803 Comment 420

CC-064-Scope/Scale of Impacts in EIS

The commenters express concern regarding the disclosure of impacts to several resources from the Project.

Response

The EIS discloses the potential effects of the Proposed Action on air quality (Section 3.6), water resources (Sections 3.2 and 3.3), traffic (Section 3.24), and noise (Section 3.16). No changes to the text of the EIS have been made to address this comment.

Comments

Letter 805 Comment 4, Letter 834 Comment 5, Letter 907 Comment 2

CC-065-Socioeconomic Impacts from the Project

The commenters are concerned regarding the impacts on agricultural jobs as a result of the Project. If air quality in Diamond Valley is negatively impacted and there is no available water for irrigation, that leaves more than four hundred employers and employees unemployed, sick from breathing dust and the people of the area may eventually be on food stamps. Our livelihood would be taken. Please also remember that Diamond Valley agriculture stimulated the economy and supports the food availability in the U.S.

Response

Section 3.2.3 and 3.6.3 of the EIS disclose the potential Project impacts to air resources and water resources. None of the potential impacts identified in these two sections results in indirect effects to Socioeconomics. No changes to the text in the EIS have been made to address this comment.

Comments

Letter 369 Comment 3, Letter 370 Comment 4

CC-066-Impacts to Schools in Eureka

The commenters are concerned regarding the amount of children that will possibly be introduced to the area, and the impacts to the school system in Eureka. The school system in southern Eureka is high achieving and the education of our children will be compromised. New students entering the system typically are behind as soon as they enter because of Eureka's current high achievement.

Response

Section 3.17.3 of the EIS discloses the potential impacts to the school system resulting from implementation of the Project. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 805 Comment 52, Letter 903 Comment 1

CC-067-Socioeconomic Impacts

The commenters are concerned that the socioeconomic analysis in the EIS does not cover all impacts. The farming industry, the existing environmental values, the existing natural resources, and existing prior rights should not be ignored despite the benefits of the Project.

Response

Section 3.17.3 of the EIS discloses the potential impacts to socioeconomics. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 384 Comment 8, Letter 907 Comment 3, Letter 907 Comment 6

CC-068-Traffic Impacts

Commenters express concern regarding the additional vehicles on highways near the Project, as well as the description of the current conditions on the road. The effects of adding additional vehicles should be reconsidered with new numbers from the Department of Transportation and new accident statistics from the Highway Patrol. The Existing Conditions section of the EIS describes the roads and their use, but fails to address the condition of the roads. SR 278 has no shoulders, is prone to flooding, has slow moving agriculture vehicles, and the school buses stop directly on the road. Snow removal from Alpha to Carlin is less certain than from Alpha to Highway 50. The presence of active agriculture transportation in Pine Valley is not adequately addressed in the DEIS. Slow moving hay delivery systems and tractors are part of daily life on SR 278 in Pine Valley. There are no shoulders in this area either, making it difficult for slow moving vehicles to pull over and providing little maneuverability for fast moving trucks and buses.

Response

The existing traffic data used in Section 3.19 of the FEIS has been updated to use the 2010 traffic data from the Nevada Department of Transportation website, as well as the 2012 truck trips by the Ruby Hill Mine on S.R. 278. Additionally, S.R. 278 is a public transportation route under the jurisdiction of the Nevada Department of Transportation. The condition of S.R. 278 is outside the scope of analysis for this EIS, however, suggested mitigation that is outside BLM's jurisdiction is provided in Section 3.26 of the EIS that may be required by other regulatory bodies that may have jurisdiction.

Comments

Letter 265 Comment 1, Letter 265 Comment 2, Letter 265 Comment 3, Letter 265 Comment 5, Letter 265 Comment 6, Letter 803 Comment 346, Letter 803 Comment 347, Letter 803 Comment 376, Letter 803 Comment 378, Letter 803 Comment 379, Letter 803 Comment 383, Letter 803 Comment 384, Letter 803 Comment 422

CC-069-Mitigation for Impacts to Highways

Commenters express concern regarding the impacts to highways near the Project and request mitigation. An increase in 19 truck trips per day to deliver chemicals is an 85 percent increase over current truck trips, not the 15 percent stated in 3.24.3-1. Eureka County request the following mitigation, "EML would ensure that every effort be taken to bus the majority of employees to and from the Project site. EML will also provide policy to mine employees that cannot ride buses to car pool whenever possible. EML will also limit unnecessary visits to the Project area by vendors, contractors, and mine support services. EML will coordinate with Eureka County and NDOT to address any issues that arise on the transportation system by invitation from any, or all, parties. EML will develop an MOU with Eureka County before mine start-up to establish maintenance responsibilities by EML on County roads heavily used or impacted by Project activities." Who is going to be responsible for picking up the new trash on Highway 278?

Response

The BLM has neither the authority to require, nor the mechanisms to enforce, the requested mitigation. However, EML has added a "Committed Practice" to the Plan of Operations that appears to provide all of the requested mitigation measures. The following text has been added to Section 2.1.14 of the EIS, "EML proposes to meet with Eureka County on a regular basis to provide project updates. These updates would be intended to provide information related to employment numbers, housing plans, transportation plans and other aspects of the Mt Hope project that would allow Eureka County to more effectively prepare for changes to the community and the potential for increased demands on county-provided services. In addition, EML would provide updates on taxes paid to state and local governments to allow a clear assessment of the impact on county services, in comparison to the revenues made available to deliver those services. EML would work with county staff to quantify potential gaps in revenue versus cost for services, should they occur. Further, EML would work with Eureka County to find ways to remedy any imbalance, such as providing necessary services at less cost, including contribution of EML resources.

In addition, EML proposes to work with Eureka County to identify ways to improve medical services and emergency response services for the community. EML would encourage employees to become active members of the volunteer fire and medical emergency response services."

In an effort to reduce traffic on existing roads, EML would provide bus or other multi-passenger transportation to employees. EML would also encourage car pooling among employees that do not elect to use company-provided transportation. EML would discourage unnecessary visits to the Project area by vendors, contractors, and mine support services. EML would coordinate with Eureka County and NDOT to address any transportation issues.

In addition, should there be sufficient interest, EML would establish and participate in a Mine Oversight and Liaison Yardstick Committee. This committee would be responsible for continually measuring effectiveness of these practices and identifying issues of concern to the local community."

Additionally, suggested mitigation that that is outside BLM's jurisdiction is provided in Section 3.26 of the EIS that may be required by other regulatory bodies that may have jurisdiction.

Comments

Letter 265 Comment 7, Letter 265 Comment 8, Letter 796 Comment 4, Letter 803 Comment 350, Letter 803 Comment 391, Letter 805 Comment 43

CC-070- Special Status Species Mitigation

The commenter is concerned regarding the potential impacts to species that could occur within the Project Area, but were not observed during surveys. The commenter requests that mitigation be developed for these species.

Response

The best available science indicates the three special status plant species do not occur in the Project Area. Investigations included field surveys, habitat analyses, and consultation with the appropriate agencies. No mitigation is necessary if these species are not located in the Project Area. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 803 Comment 215, Letter 803 Comment 216, Letter 803 Comment 217

CC-071-Alternatives to Water Use

The commenters suggest that the Proposed Action include additional alternatives for the use of water, including a holding reservoir. If the mine had chosen to purchase 22,600 acre-feet per year from private holders in Diamond Valley in return for pumping 11,300 af/yr from the Diamond Valley Hydrographic Basin, it would have eliminated the vast majority of environmental impacts related to this Project. The additional 11,300 af/yr would help alleviate the current over-drafting of the entirety of the Diamond Valley Flow System.

Response

The EIS incorporates a reasonable range of alternatives based on the scope of the Proposed Action and the purpose and need statement. No reasonable alternatives were identified that would eliminate all the impacts to potential water sources. No change has been made to the EIS in response to this comment.

Comments

Letter 179 Comment 2, Letter 363 Comment 7, Letter 859 Comment 93

CC-072-Project Impacts to Water Resources

The commenters expressed concern regarding the management of water resources as a result of the Project. The impacts of this Project could negatively affect the viability of the agricultural base in Eureka County. The long term total consumptive use of the Water Resource by the project is not environmentally responsible given existing water use challenges.

Response

The NDWR has issued EML their water rights for the Project. As outlined in Section 3.2 of the EIS the potential impacts to water resources has been analyzed. No change has been made to the EIS in response to this comment.

Comments

Letter 796 Comment 2, Letter 802 Comment 4

CC-073-Mitigation Impacts to Water Users

The commenters expressed concern regarding the impacts to water users other than the proponent as a result of the Project. The EIS fails to consider how compensation will be paid to affected water right holders and public water users if the Project causes adverse effects and mitigation efforts do not fully protect those persons.

Response

The BLM believes, based on the analysis in the EIS, that the mitigation of impacts resulting from the lowering of the water table can reasonable be expected to be effective. Impacts to water rights are under the jurisdiction of the NDWR. If an owner of a water right believes that their right has been affected, then the owner of that right would need to seek relief from the NDWR. The BLM does not have any authority to regulate water rights. No change has been made to the EIS in response to this comment.

Additionally, suggested mitigation that that is outside BLM's jurisdiction is provided in Section 3.26 of the EIS that may be required by other regulatory bodies that may have jurisdiction.

Comments

Letter 802 Comment 6, Letter 855 Comment 53, Letter 855 Comment 54, Letter 855 Comment 55, Letter 855 Comment 60, Letter 859 Comment 98

CC-074-Visual Inspections of Waste Rock

The commenters expressed concern regarding the PAG material management, as well as the identification and visual inspection methodology for segregation PAG from Non-PAG waste rock.

Response

The text in Section 2.1.3.2.2 of the EIS has been revised to read as follows, "As mining continues and the ore/waste model is refined, the model prediction of the sulfide content could be used along with selective laboratory analysis to route waste rock. The method of routing waste rock by using selective laboratory analysis and model predictions would be augmented with visual inspection of waste rock to further verify sulfide content, and comparison of model results with previously mined benches to confirm the accuracy of the predictive model. Authorization from the BLM and BMRR would be obtained prior to implementing this alternative waste segregation method."

Comments

Letter 803 Comment 46, Letter 859 Comment 42, Letter 859 Comment 44

CC-075-Water Use in the Proposed Action

The commenter is concerned that the EIS does not fully analyze the impacts to water use as a result of the Proposed Action. The EIS does not consider how much water will be necessary and from which sources the water will be appropriated. The EIS does not discuss an annual account of water use by EML under the Proposed Action.

Response

As outlined in Section 2.1.2, the Project is permitted for 11,300 afa from the NDWR. Section 2.1.2.1 discloses that construction water pumping would occur at a low rate for 12 months before the wellfield supply system is completed. The use of water during the reclamation phase of the Project would be a small amount of water and less than that amount analyzed in the EIS. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 859 Comment 15, Letter 859 Comment 17

CC-076-Partial Backfill Alternative Impacts

The commenter expresses concern regarding rationale for why the partial backfill alternative was not selected for anticipated water waste.

Response

A ROD would explain the reasoning for the selection of the approved alternative. The EIS discloses the potential impacts associated with the implementation of the alternatives. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 859 Comment 101, Letter 859 Comment 104

CC-077-Water Quality Associated with Storage Pond

The commenters are concerned regarding the potential water quality issues associated with a breach or leak in the settling pond. This is surely going to happen. A pond this size will certainly have leaks. The monitoring and mitigation outlined in the DEIS does not adequately address this issue.

Response

The TSF has been designed with a liner, drainage blanket, and solution recovery system to minimize hydrostatic head. The facility has been designed according to accepted engineering practices and leaks are not anticipated. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 823 Comment 10, Letter 906 Comment 3

CC-078-Impacts to Wild Horses

The commenters are concerned regarding potential impacts to wild horses as a result of the Project and the ground water drawdown. Commenters request additional data for the existing conditions for the HMAs as well as additional mitigation for loss of surface water.

Response

The BLM utilized the best available information in Section 3.13.2 of the EIS, which provides a description of the existing condition for HMAs. This description includes the number of horses that overlap with the Project Area and identifies the HMAs located within the area predicted to be impacted by the ground water drawdown. Section 3.2.3 includes mitigation for impacts to surface water impacted by the Project. Section 3.13.3 of the EIS discloses impacts to and mitigation for wild horses including development of additional water sources. Appendix D of the EIS includes details regarding the mitigation identified for wild horses. No change has been made in the EIS in response to this comment.

Comments

Letter 360 Comment 3, Letter 361 Comment 3, Letter 385 Comment 10, Letter 386 Comment 1, Letter 386 Comment 3, Letter 386 Comment 4, Letter 386 Comment 5, Letter 386 Comment 7, Letter 386 Comment 8, Letter 390 Comment 8, Letter 390 Comment 10, Letter 390 Comment 11, Letter 391 Comment 1, Letter 391 Comment 3, Letter 391 Comment 4, Letter 391 Comment 5, Letter 391 Comment 7, Letter 391 Comment 8, Letter 392 Comment 8, Letter 392 Comment 10, Letter 392 Comment 11, Letter 393 Comment 3, Letter 393 Comment 4, Letter 393 Comment 6, Letter 393 Comment 7, Letter 395 Comment 2, Letter 395 Comment 4, Letter 395 Comment 5, Letter 395 Comment 6, Letter 395 Comment 8, Letter 395 Comment 9, Letter 397 Comment 1, Letter 397 Comment 3, Letter 397 Comment 4, Letter 397 Comment 5, Letter 397 Comment 7, Letter 397 Comment 8, Letter 398 Comment 2, Letter 398 Comment 3, Letter 401 Comment 1, Letter 401 Comment 3, Letter 401 Comment 4, Letter 401 Comment 5, Letter 401 Comment 7, Letter 401 Comment 8, Letter 402 Comment 1, Letter 402 Comment 3, Letter 402 Comment 4, Letter 402 Comment 5, Letter 402 Comment 7, Letter 402 Comment 8, Letter 403 Comment 1, Letter 403 Comment 3, Letter 403 Comment 4, Letter 403 Comment 5, Letter 403 Comment 7, Letter 403 Comment 8, Letter 404 Comment 2, Letter 404 Comment 4, Letter 404 Comment 5, Letter 404 Comment 6, Letter 404 Comment 8, Letter 404 Comment 9, Letter 405 Comment 1, Letter 405 Comment 3, Letter 405 Comment 4, Letter 405 Comment 5, Letter 405 Comment 7, Letter 405 Comment 8, Letter 407 Comment 2, Letter 407 Comment 6, Letter 407 Comment 8, Letter 797 Comment 1, Letter 797 Comment 3, Letter 797 Comment 4, Letter 797 Comment 5, Letter 797 Comment 7, Letter 798 Comment 2, Letter 801 Comment 1, Letter 801 Comment 3, Letter 801 Comment 4, Letter 801 Comment 5, Letter 801 Comment 7, Letter 801 Comment 8, Letter 809 Comment 2, Letter 809 Comment 6, Letter 809 Comment 8, Letter 809 Comment 9, Letter 819 Comment 2, Letter 819 Comment 4, Letter 820 Comment 1, Letter 820 Comment 3, Letter 820 Comment 4, Letter 820 Comment 5, Letter 820 Comment 6, Letter 834 Comment 2, Letter 834 Comment 3, Letter 835 Comment 2, Letter 835 Comment 6, Letter 835 Comment 8, Letter 835 Comment 9, Letter 839 Comment 2, Letter 839 Comment 3, Letter 839 Comment 4, Letter 839 Comment 6, Letter 839 Comment 7, Letter 840 Comment 2, Letter 840 Comment 3, Letter 840 Comment 6, Letter 840 Comment 7, Letter 841 Comment 1, Letter 841 Comment 3, Letter 841 Comment 4, Letter 841 Comment 5, Letter 841 Comment 7, Letter 841 Comment 8, Letter 844 Comment 1, Letter 844 Comment 3, Letter 844 Comment 4, Letter 844 Comment 5, Letter 844 Comment 7, Letter 845 Comment 2, Letter 847 Comment 2, Letter 847 Comment 4, Letter 847 Comment 5, Letter 847 Comment 6, Letter 847 Comment 8, Letter 847 Comment 9, Letter 848 Comment 1, Letter 848 Comment 3, Letter 848 Comment 4, Letter 848 Comment 5, Letter 848 Comment 7, Letter 848 Comment 8, Letter 849 Comment 1, Letter 849 Comment 3, Letter 849 Comment 4, Letter 849 Comment 5, Letter 849 Comment 7, Letter 849 Comment 8, Letter 850 Comment 1, Letter 850 Comment 2, Letter 850 Comment 3, Letter 850 Comment 4, Letter 851 Comment 1, Letter 851 Comment 3, Letter 851 Comment 4, Letter 851 Comment 5, Letter 851 Comment 7, Letter 851 Comment 8, Letter 852 Comment 1, Letter 853 Comment 1, Letter 853 Comment 3, Letter 853 Comment 4, Letter 853 Comment 5, Letter 853 Comment 7, Letter 853 Comment 8, Letter 854 Comment 1, Letter 854 Comment 2, Letter 854 Comment 4, Letter 854 Comment 6, Letter 854 Comment 7, Letter 855 Comment 12, Letter 855 Comment 173, Letter 855 Comment 175, Letter 855 Comment 176, Letter 855 Comment 180, Letter 860 Comment 2, Letter 860 Comment 4, Letter 860 Comment 5, Letter 860 Comment 6, Letter 860 Comment 8, Letter 860 Comment 9, Letter 861 Comment 1, Letter 861 Comment 3, Letter 861 Comment 5, Letter 861 Comment 6, Letter 861 Comment 7, Letter 861 Comment 8, Letter 862 Comment 2, Letter 862 Comment 4, Letter 862 Comment 5, Letter 862 Comment 6, Letter 862 Comment 8, Letter 863 Comment 2, Letter 863 Comment 4, Letter 863 Comment 5, Letter 863 Comment 7, Letter 863 Comment 8, Letter 863 Comment 9, Letter 864 Comment 11, Letter 864 Comment 12, Letter 865 Comment 3, Letter 865 Comment 5, Letter 865 Comment 6, Letter 865 Comment 7, Letter 865 Comment 9, Letter 865 Comment 10

CC-079-Wild Horse Predators

The commenters object to the statement in the EIS that wild horses "lack true natural predators" since the mountain lion and coyote are significant natural predators.

Response

The BLM utilized the best available data to describe the affected environment for wild horses in Section 3.13.2 of the EIS. Wild horses are not native to the ecosystem, and thus, have virtually no natural predators. The text in the EIS has been revised to read, "virtually no natural predators" in accordance with the DOI's Factsheet on Challenges Facing the BLM in its Management of Wild Horses and Burros (http://www.blm.gov/wo/st/en/prog/wild_horse_and_burro/wh_b_information_center/blm_statements/new_factsheet.html).

Comments

Letter 360 Comment 4, Letter 361 Comment 4, Letter 390 Comment 4, Letter 390 Comment 5, Letter 392 Comment 4, Letter 392 Comment 5, Letter 394 Comment 4, Letter 407 Comment 3, Letter 799 Comment 4, Letter 809 Comment 3, Letter 835 Comment 3

CC-080-Fugitive Dust Emissions Mitigation

The commenter is concerned that the analysis does not employ mitigation measures to prevent impacts to vegetation and prevent fugitive dust emissions as employed in other projects. The EIS here should employ technologies to model the impacts of phreatophyte dislocation or death, and if such analysis reveals the impacts to be significant, the BLM must craft mitigation measures that will prevent fugitive dust emissions while also avoiding an invasion of non-native plants in affected areas.

Response

The following text in Section 3.8.3.3 has been revised in the FEIS to read as follows, "... An indirect effect to soils could occur as a result of the decline in the water table in Kobeh Valley due to the pumping of ground water for mine operations. This decline in the water table could result in a shift from a more hydric soil to a more xeric soil. This change in soil conditions could result in a shift in species composition and percent cover of phreatophytic vegetation in Kobeh Valley (Cooper et al. 2006). This change in vegetation species composition and percent cover should not result in a loss of vegetation sufficient to increase soil erosion. An additional indirect"

Section 3.8.3.5 has been revised in the FEIS to read as follows, "... Similar to the Proposed Action, an indirect effect to soils could occur as a result of the decline in the water table in Kobeh Valley due to the pumping of ground water for mine operations. This decline in the water table could result in a shift from a more hydric soil to a more xeric soil. This change in soil conditions could result in a shift in species composition and percent cover should not result in a loss of vegetation sufficient to increase soil erosion. An additional indirect ..."

Section 3.8.3.6 has been revised in the FEIS to read as follows, "... Similar to the Proposed Action, an indirect effect to soils could occur as a result of the decline in the water table in Kobeh Valley due to the pumping of ground water for mine operations. This decline in the water table could result in a shift from a more hydric soil to a more xeric soil. This change in soil conditions could result in a shift in species composition and percent cover should not result in a loss of vegetation sufficient to increase soil erosion. An additional indirect ..."

Section 3.8.3.7 has been revised in the FEIS to read as follows, "... Similar to the Proposed Action, an indirect effect to soils could occur as a result of the decline in the water table in Kobeh Valley due to the pumping of ground water for mine operations. This decline in the water table could result in a shift from a more hydric soil to a more xeric soil. This change in soil conditions could result in a shift in species composition and percent cover should not result in a loss of vegetation sufficient to increase soil erosion. An additional indirect ..."

Comments

Letter 803 Comment 12, Letter 803 Comment 201

CC-081-Analysis of Threats to Greater Sage-grouse

The commenter is concerned that the EIS does not fully address all threats to greater sage-grouse as a result of the Project in relation to other activities in the PMU and Battle Mountain District.

Response

Cumulative effects to greater sage-grouse are disclosed in Chapter 4 of the EIS. No change has been made to the EIS in response to this comment.

Comments

Letter 838 Comment 11, Letter 838 Comment 14

CC-082-Mitigation to Water Resource Impacts

The commenters expressed concern regarding the mitigation measures impacting water resources. The EIS's failure to treat this resource with requisite attention, detail, and quantification affects the sustainability of this resource on its own; but perhaps more importantly, the failure to protect water produces a failure to protect resources critical to Eureka County agriculture and recreation and the health and well being of the County's residents. Diamond Valley is already over adjudicated in water rights and is also inclined to be of an arid climate, therefore the Mt. Hope Project can, and will, have a negative impact on the water table in Diamond Valley and the farming industry in Diamond Valley.

Response

The EIS takes a hard look at potential impacts from ground water consumption by the proposed project. Monitoring to provide advance warning of impacts would be required as part of project approval. The EIS has been revised to make clear that mitigation may be required for Project-caused reductions, rather than "cessation" of flows. Enhancement or replacement of surface flows with ground water is one of the potential mitigation options, should impacts occur, as described in the EIS. The BLM may select other options from that list or identify other effective mitigation options, should impacts occur or be deemed imminent.

Should EML be required to implement mitigation, and should that mitigation consist of providing ground water to replace diminished surface water flows, EML would be responsible for obtaining the necessary water rights. It is anticipated that the water would come from EML's existing water rights. However, the water rights could come from transfer of existing EML water rights, purchase of water rights from other parties and transfer of those purchased rights as needed, or acquisition of new water rights in accordance with Nevada water law. Attempting to identify the exact mechanism for obtaining water rights, in such an eventuality, would be speculative.

The amount of water for mitigation at each potentially impacted water source is identified in Table 3.2-9 of the EIS. Implementation of mitigation outlined in Table 3.2-9 would be assessed on a specific basis as determined by the BLM. In addition, the potential impacts to wetlands and riparian are outlined in Section 3.11.3 of the EIS. If mitigation needs to be implemented as a result of ground water pumping in the well field area and north into the Roberts Creek drainage, the duration mitigation would need to be implemented would likely be less than 100 year as the table recovery would be more than 90 percent by that time (Figure 3.2.19 of the EIS).

In Addition, Section 2.1.16.1 of the EIS has been revised to provide details on the establishment of a Long-Term Financial Mechanism to ensure that adequate funding is available for the implementation of mitigation in the post reclamation and closure period.

Also refer to the Response to Group Comments CC-009.

Comments

Letter 363 Comment 1, Letter 384 Comment 1, Letter 409 Comment 3, Letter 409 Comment 4, Letter 796 Comment 3, Letter 803 Comment 3, Letter 803 Comment 125, Letter 803 Comment 138, Letter 803 Comment 255, Letter 805 Comment 12, Letter 805 Comment 14, Letter 823 Comment 3, Letter 823 Comment 4, Letter 824 Comment 1, Letter 836 Comment 2, Letter 855 Comment 8, Letter 855 Comment 13, Letter 855 Comment 29, Letter 855 Comment 40, Letter 855 Comment 41, Letter 855 Comment 42, Letter 855 Comment 45, Letter 855 Comment 47, Letter 855 Comment 57, Letter 855 Comment 189, Letter 859 Comment 16, Letter 859 Comment 46, Letter 859 Comment 69, Letter 859 Comment 82, Letter 859 Comment 86, Letter 859 Comment 87, Letter 859 Comment 88, Letter 859 Comment 89, Letter 859 Comment 90, Letter 859 Comment 91, Letter 859 Comment 117, Letter 859 Comment 120, Letter 859 Comment 121, Letter 859 Comment 127, Letter 859 Comment 128, Letter 859 Comment 129, Letter 859 Comment 133, Letter 859 Comment 134, Letter 907 Comment 5, Letter 928 Comment 2, Letter 941 Comment 1, Letter 941 Comment 7, Letter 941 Comment 8, Letter 941 Comment 27, Letter 941 Comment 29, Letter 941 Comment 30, Letter 941 Comment 34, Letter 941 Comment 35, Letter 941 Comment 59, Letter 941 Comment 60, Letter 941 Comment 61, Letter 941 Comment 67, Letter 941 Comment 68

CC-083-Project-related Acreage Disturbance

The commenter requests clarification on the acreage of disturbance associated with the Project as well as the extent to which acreage will be disturbed and how these acres will be reclaimed.

Response

Table 2.1-1 in the EIS describes the acreages associated with each Project-related disturbance type. Where relevant, the EIS discloses impacts associated with Project-related acreages in text. For a number of resources (water, air, visual, soils, vegetation, livestock grazing and production, wild horses, land use, recreation, historic trails, wildlife, and forest products) figures illustrate the Project-related impacts. These acreages have been updated to reflect the revised powerline portion of the Project Area. Project reclamation is described in Section 2.1.16 of the EIS. No change has been made to the EIS in response to this comment.

Comments

Letter 855 Comment 96, Letter 855 Comment 97, Letter 855 Comment 98

CC-084-Weed Control Mitigation

The commenter expresses concern that the EIS does not provide sufficient mitigation for weed control, and requests mitigation for 1) preventative and corrective measures, and 2) failed reclamation or noxious species establishment despite reclamation efforts. The commenter also requests that the EIS describe, in detail, how long weed control will continue beyond the scope of the Project and requests monitoring for and control of weeds under reclamation is complete.

Response

Section 2.1.14.7 of the EIS describes the noxious weed plan which includes preventative measures, treatment, and monitoring. Section 2.1.16 in the EIS describes reclamation and closure for the Project, which would be bonded for by EML and completed according to BLM and NDEP regulations. No change has been made to the EIS in response to this comment.

Comments

Letter 855 Comment 104, Letter 855 Comment 105, Letter 855 Comment 106, Letter 855 Comment 108

CC-085-Preventive Weed Control Mitigation

The commenter expresses a desire that preventive weed control measures be carried out in the Project Area and that these measures are disclosed in the EIS, and that the on-site storage of pesticides should be disclosed in the EIS.

Response

Section 2.1.14.7 of the FEIS has been revised to include a second paragraph that reads as follows, "The Project would have areas of disturbance, including those associated with ROWs, roads and travel corridors, where management for the prevention of invasion by noxious weeds and nonnative invasive plant species and infestation of rodents would be implemented. Nevada certified licensed applicators would be contracted, as necessary, to apply any chemical pesticides determined to be required to control invasive pests in accordance with federal and state laws and regulations. This would include both restricted-use and general-use pesticides as regulated by FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and NRS Chapter 555. All pesticides and herbicides would be used in accordance with their individual labeling, which contains the requirements and procedures for transportation, use, storage, and disposal."

Comments

Letter 803 Comment 57, Letter 855 Comment 107

CC-086-Impacts to Key Management Areas

The commenter is concerned regarding the potential impacts to Key Management Areas. The FEIS should acknowledge that the Mount Hope Project will impact KMAs and it should address, in detail, how these impacts will affect vegetation monitoring, data collection, and management practices.

Response

The BLM did not identify impacts to Key Management Areas as a result of the Proposed Action. In sections of the EIS identified by the commenter, potential impacts to Key Management Areas as a result of mitigation proposed for wild horses would be avoided. No change has been made to the EIS in response to this comment.

Comments

Letter 855 Comment 82, Letter 855 Comment 83

CC-087-Surface Disturbance Associated with Fencing

The commenter expressed concern regarding the surface disturbance impacts associated with the fence used for the project as well as what the reclamation measures will be.

Response

The EIS discloses impacts to resources from the Proposed Action. Impacts to resources within the fenced area as well as outside of the fenced area are disclosed in the EIS. No change to the EIS has been made in response to this comment.

Comments

Letter 855 Comment 100, Letter 855 Comment 101

CC-088-Roberts Mountain HMA and Allotment

The commenter requests that the DEIS disclose the acreage of the Roberts Mountain HMA and Roberts Mountain Allotment that is located within the Project Area.

Response

The EIS discloses the Project-related impacts to the Roberts Mountain HMA in Section 3.13.3.3 and impacts to the Roberts Mountain allotment in Section 3.12.3.3. Impacts to the Roberts Mountain Allotment were quantified based on the loss of AUMs within the fenced portion of the Project Area. No loss of AUMs are expected as a result of Project activities outside of the Project Area. Impacts to the Roberts Mountain HMA quantified the loss of habitat within the fenced area as well as loss of habitat as a result of the Project located outside of the fenced area. No change has been made to the EIS in response to this comment.

Comments

Letter 855 Comment 177, Letter 855 Comment 178

CC-089- Socioeconomic Impacts to Local Businesses

The commenter is concerned regarding the level of analysis associated with local businesses. The EIS also needs to examine the impacts to the value of the ranch operation as a result of a loss in the AUMs. The analysis fails to make the strong connection to impacts to individuals and family businesses, primarily the Etcheverry family at Roberts Creek Ranch.

Response

The text in the paragraph following Table 3.12-2 has been revised in the FEIS as follows, " The grazing and agricultural service sectors of the Eureka County economy would be marginally affected by the reduction in AUMs associated with the Proposed Action due to the construction of the fence around 14,204 acres of the Project Area. The fence would exclude access to portions of the Roberts Mountains and Romano Allotments and result in a reduction of 781 AUMs for approximately 70 years and 32 AUMs permanently from the development of the open pit. According to the Nevada Grazing Statistics Report and Economic Analysis for Federal Lands in Nevada (Resource Concepts, Inc. 2001), the total economic impact associated with each AUM equals \$53.40 (1999 dollars) (\$73.75 in 2012 dollars) annually. This value specifically estimates the direct, indirect, and induced impacts of industry output and added value of grazing in Nevada. Applying this value to the potentially and temporarily AUMs displaced under the Proposed Action, the total economic impact could be an annual reduction of \$41,705 (1999 dollars) (\$57,597 in 2012 dollars). This would be a \$15,539 (1999 dollars) (\$21,460 2012 dollars) impact resulting from displaced Romano Allotment AUMs and a \$26,166 (1999 dollars) (\$36,137 2012 dollars) impact resulting from displaced Roberts Mountain Allotment AUMs. While the impact may not be significant to the ranching community, the impact may be meaningful to individual ranch operations. However, it is important that this impact reflects the total economic impact not lost revenue for specific operators. The subsequent two paragraphs in greater detail the economic impact to grazing investigated in the Nevada Grazing Statistics Report and Economic Analysis for Federal Lands in Nevada Report." All the dollar values in this section of the range analysis have been revised to include 2012 dollar values in parentheses. The analysis can only reflect impacts to BLM-administered allotments, not individual ranch operations. The years for the dollar figures are parenthetically disclosed in the FEIS. The text in the FEIS also includes inflation-adjusted values based on the average consumer price index value. The BLM has conducted a reasonable and rational assessment of potential impacts to socioeconomics in the livestock sector. In addition, the text in the impact analysis for each of the alternatives has been revised to incorporate the permanent loss of AUMs.

The following text has been added to the third paragraph under subsection "Effects on Other Sectors of the Local Economy," which is under Section 3.17.3.3.1, " A large body of research has shown that public land grazing permits increase the property value of the ranch holding the permit, in most cases. Various factors have been explored to explain this effect. Significantly, the research has found that the added forage and relatively low permit fees for grazing on public lands do not entirely explain the increase in property value associated with the permit itself. Research has found that the added acreage associated with a public land permit is perceived as adding semi-private open space to the property and thus increases the value of the ranch. Examples of this research include Rimbey et al. (2007) and Torrell et al. (2005). This perceived value cannot be quantified. The permanent displacement of 32 AUMs associated with the open pit would unlikely affect any premium to the property value of the current permittee's ranch associated with the permit."

Comments

Letter 803 Comment 244, Letter 803 Comment 246, Letter 803 Comment 247, Letter 803 Comment 252

CC-090-Analysis in Table 4.3-1

The commenter expressed concern regarding the analysis in Table 4.3-1. The FEIS should specify how sampling locations will be selected, require that sampling be conducted at the same locations in the future, and identify the specific procedure employed for utilization studies. Furthermore, the FEIS should specify which key species will be measured for utilization at each location. The FEIS should clearly define condition scores for each category for which they are used, describe how the scores were determined, and explain how the scores will be used.

Response

As stated in the EIS, Table 4.3-1 includes BLM wildlife management objectives defined in the Shoshone-Eureka, Egan, and Elko Rangeland Program Summaries. These objectives are outside the scope of this EIS for the Project. No change has been made to the EIS in response to this comment.

Comments

Letter 855 Comment 130, Letter 855 Comment 131

CC-091-Wild Horse Analysis

The commenter expressed concern regarding the level of analysis used for wild horses in the EIS. As reported in the DEIS, current AML in the Roberts Mountain Complex already is being exceeded with currently available water sources and forage and the fecundity of these herds shows no potential for impact under the Proposed Action. Further, there is a call for an increase in water availability from sources that are not currently being used, nor have been in recent years (or really ever). The document must be consistent in its approach across resources and multiple uses.

It is invalid and unacceptable merely to combine HMAs on paper, and then declare them to constitute a metapopulation, a “complex”. This ploy is proffered by numerous BLM offices so that individual herd numbers can be kept well below what is needed for them to be genetically viable while pretending that they are right-sized. The alleged metapopulation – referred to as the Wild Horse Complex – along with BLM’s tales of horses cleverly getting around fences and through closed gates – does not pass muster. The stories are disingenuous. True reform is urgently required. These herd populations need to grow.

Response

An evaluation of the BLM’s Wild Horse management system is beyond the scope of this EIS.

Comments

Letter 803 Comment 260, Letter 864 Comment 10

CC-092-Wild Horse Movement Patterns within HMA

Commenters express concern that the wild horse analysis fails to incorporate known patterns of movement that defy HMA boundary lines.

Response

HMA boundary adjustments are outside the scope of the EIS analysis for the Project. HMA boundaries can only be adjusted through the RMP process. HMA boundaries will be re-evaluated during the current RMP revision. No change has been made in the EIS in response to this comment.

Comments

Letter 386 Comment 6, Letter 391 Comment 6, Letter 393 Comment 5, Letter 395 Comment 7, Letter 397 Comment 6, Letter 401 Comment 6, Letter 402 Comment 6, Letter 403 Comment 6, Letter 404 Comment 7, Letter 405 Comment 6, Letter 797 Comment 6, Letter 801 Comment 6, Letter 839 Comment 5, Letter 840 Comment 4, Letter 840 Comment 5, Letter 841 Comment 6, Letter 844 Comment 6, Letter 847 Comment 7, Letter 848 Comment 6, Letter 849 Comment 6, Letter 851 Comment 6, Letter 853 Comment 6, Letter 854 Comment 5, Letter 855 Comment 174, Letter 855 Comment 183, Letter 860 Comment 7, Letter 861 Comment 4, Letter 862 Comment 7, Letter 863 Comment 6, Letter 865 Comment 8

CC-093-Private Property Impacted by the Project

The commenters are concerned with potential impacts from the Project to private property, as well as activities on private lands controlled by EML or their subsidiaries.

Response

Those activities on private lands that have been included as part of the Proposed Action are those activities that are tied to the applications that EML has submitted to the BLM. This includes the mining and processing activities on the private land on Mount Hope and the trucking of stockpiled gravel from the Romano Ranch for construction activities. Activities on private lands controlled by EML or their subsidiaries that are unrelated to the proposed mining operations are not connected actions under the NEPA. No changes to the text in the EIS have been made to address this comment.

Comments

Letter 805 Comment 2, Letter 907 Comment 1

CC-094-Long-term Water Mitigation

The commenter expresses concern regarding the long-term mitigation of water resources that involve man-made structures. The long-term effectiveness of the water mitigation is diminished by the fact that all other sources proposed for mitigation have strict reliance on anthropogenic maintenance that generally declines through time and has no guarantee of happening, even with a long-term trust account.

Response

EML would be required to either place a bond or a long-term financial instrument to ensure that the mitigation is appropriately implemented. No change has been to the EIS in response to this comment.

Comments

Letter 803 Comment 130, Letter 803 Comment 232

CC-095-Noise Impacts to Residents

Commenters expressed concern regarding noise impacts to nearby residences. The commenters request that the analysis must be redone to incorporate the sensitive receptors placed at residences that are much closer to the mine site than Alpha Ranch.

Response

As discussed in Section 3.16.2.1 of the EIS, the modeled noise impact analysis conducted for the Project conservatively did not account for topography. Therefore, it is expected based on the modeling that residences in Diamond Valley would experience noise levels equal to or more than those at the Alpha Ranch (0 dB increase) since the Diamond Valley residences are closer to the Project. Noise impacts to residences in Diamond Valley are expected to be less than those modeled for Roberts Creek Ranch (1 dB increase). No changes have been made to the FEIS in response to this comment.

Comments

Letter 803 Comment 289, Letter 805 Comment 47, Letter 805 Comment 48, Letter 805 Comment 49

CC-096-Ten-Foot Isopleth

Commenters expressed concern about the use of the ten-foot isopleth in the analysis. Commenters want an isopleth used that would show a smaller amount of drawdown (one foot or five feet).

Response

BLM believes that use of the maximum predicted ten-foot drawdown contour for evaluating potential impacts for the purposes of NEPA is correct.

There are several reasons why the ten-foot contour is reasonable. First, in most locations in Nevada, ten feet of change in ground water levels is within the range of seasonal ground water level variations. Second, the ground water modeling is less precise at predicting ground water changes at levels less than ten feet, particular in areas distant from the pumping sources. Models are mathematical representations and simplifications of complex and incompletely understood systems; as such, using the hydrologic model to predict drawdown to a level less than ten feet does not represent the best science and is not needed for the BLM to take a hard look at the potential environmental consequences. BLM has relied and continues to rely on this methodology for identifying potential impacts. No changes to the text of the EIS have been made to address this comment.

As noted repeatedly in the FEIS, monitoring and mitigation of potential impacts are not limited by the predicted 10-foot drawdown contour. The comment is correct that impacts to surface resources can occur as a result of ground water changes of less than 10 feet and those potential impacts are incorporated into the environmental analysis. However, for purposes of identifying potential impacted areas on a large scale, the 10-foot drawdown contour remains the appropriate tool.

Comments

Letter 803 Comment 89, Letter 855 Comment 117, Letter 855 Comment 123, Letter 855 Comment 124, Letter 858 Comment 41, Letter 859 Comment 114, Letter 941 Comment 37

CC-097-2009 Steady State Condition

Commenters expressed concern about the use of 2009 as the steady state condition in the ground water flow model. We question the ability of the local model to accurately and adequately consider the impacts of the project given the arbitrary steady state of 2009. Please revise the local model to provide for a reasonable steady state condition and more defensible conclusions.

Response

Using 2009 as the steady-state year is acceptable because historical groundwater levels in the pit area are too sparse for calibration purposes and the data that are available support the conclusion that regional pumping has not affected pit area water levels.

At the time of model construction in 2009, historical ground water level data was available for an approximate four-year period of record (2006 through 2009) for six pit area monitor wells constructed in late 2005, and for two other wells near Mt. Hope. Hydrographs were prepared for these eight wells and are included in Appendix B (B-38 through B-45) of the Hydrogeologic Characterization Report (Montgomery 2010). Ground water levels in the mine area are discussed in Section 7.2 of the same report, including discussion of the eight wells with records from 2006 (Section 7.2.2). Five of the six wells in the mine area do not demonstrate a definitive trend. The sixth well, IGM-169, shows a gradual decline which may still be demonstrating a delayed equilibration after construction in low-permeability rock, rather than a regional decline. Of the two wells outside the pit area, one shows declining ground water levels; well IGM-158 located approximately 4.7 miles east from the pit in Diamond Valley on the edge of the local model domain. This well shows a ground water level decline of about three feet over the four-year period of measurement and may be responding to agricultural pumping in Diamond Valley.

The intent of the local model was to accurately determine ground water withdrawals from pit dewatering and pit lake development. These withdrawal stresses were then simulated in the regional model to evaluate impacts to the regional system. As noted in the comment, the regional model does show slight impacts in the mine area due to Diamond Valley agricultural pumping, over which impacts from pit ground water withdrawals are superimposed.

No changes to the text of the EIS have been made to address this comment.

Comments

Letter 803 Comment 102, Letter 858 Comment 42

CC-098-Recharge in the Model

Commenters expressed concern about how recharge was incorporated into the ground water flow model. There are two major points of error surrounding the water modeling that the BLM must consider in order for the EIS to be a complete disclosure document. These pertain to dewatering rates and the extent of drawdown around the pit lake and to whether the pit lake will be a terminal lake. The EIS estimated unrealistically high recharge rates on siliclastic rock on the Roberts Creek Mountains. The combination of high recharge near the massif and low conductivity near the pit prevents the drawdown from extending far north into the massif. The low conductivity near the pit lake limits the estimated dewatering rates at the mine; if the conductivity at the pit were as high as near the Roberts Creek Mountain massif, the dewatering rates could be much higher.

Response

Recharge quantities in the model were partitioned amongst the mountain ranges bounding the basins based on proportion of PRISM precipitation that each mountain range receives. Furthermore, recharge was partitioned between the mountain block, alluvial fan and major streams flowing across the alluvial fans. The recharge distribution was further refined for the siliclastic versus carbonate rock types in the Kobeh Valley portion of the Roberts Mountains.

Refinement of recharge in this area was deemed appropriate because of the proximity to the Project pumping center in Kobeh Valley and the desire to provide more refined calibration to water level and hydraulic property data at the southern base of the Roberts Mountains. Recharge zone 3 represents the carbonate rock terrain and thorough calibration efforts were assigned a recharge rate 4x, the rate representing recharge in the siliclastic rocks. Refinement of rock-type specific recharge partitioning throughout the model domain, including northern and eastern portions of the Roberts Mountains (recharge zones 40 and 63) and surrounding Mount Hope (variable recharge based on PRISM), was not deemed necessary to achieve a reasonable distribution of recharge on the regional scale. Revisions or refinements to lithologies in the areas near Mt Hope and throughout Garden Valley area nearest Mount Hope (Recharge Zone 63) would not have resulted in any changes to recharge distribution because the rock types are siliclastic.

Differences in recharge rates does however result for each hydrographic basin portion of the Roberts Mountains due to differing and independently determined water budgets for basin, which results in differing total quantities of recharge being assigned to the mountainous regions.

No changes to the text of the EIS have been made to address this comment.

Comments

Letter 858 Comment 30, Letter 858 Comment 53

CC-099-Salt Desert Scrublands

The commenters request use of the word "shrub" rather than "scrub" throughout the EIS.

Response

The word "scrub" is a technically appropriate term. No change to the FEIS has been made in response to this comment.

Comments

Letter 803 Comment 206, Letter 885 Comment 1

CC-100-Waste Rock Seepage

Commenters expressed concern about waste rock seepage analysis. Modeled WRDF seepage estimates are not provided in the Draft EIS to support any conclusions regarding the seepage movement through the non-PAG WRDF during the periods either before or after closure of this facility. Also, a contingency measure should be included to convert the non-PAG sedimentation ponds into ET cells after closure should monitoring of seepage from the non-PAG WRDF during operations indicate the need to preclude it from being discharged to surface waters.

Response

As described in the 2008 Mount Hope Project Waste Rock and Pit Wall Rock Characterization Report, a prediction of the concentrations of constituents that would likely be released from the waste rock facilities was completed using the USGS-developed software, PHREEQC. The resulting source term chemistry for the non-PAG WRDF predicts seepage with neutral pH (around 7 s.u.) and constituent concentrations below NDEP reference values for all constituents with the exception of manganese and aluminum. The source term modeling predicts that manganese would be elevated above the NDEP comparative values in the seepage at concentrations comparable to those observed in background groundwater wells for the Project and therefore no degradation of waters of the state are predicted (i.e., in the range of 1 mg/L). Aluminum is also predicted to be elevated above NDEP reference values in the non-PAG WRDF seepage. However, the predicted aluminum concentration of 0.87 mg/L is less than an order of magnitude higher than the respective reference value of 0.2 mg/L, indicating a low probability to degrade groundwater or surface water resources. Lead, zinc, and cadmium are not predicted to be leached from the non-PAG WRDF at concentrations above the NDEP reference values. Therefore, the predicted chemistry of seepage and run-off from the non-PAG WRDF indicates the level of protection that is proposed for the PAG WRDF is not warranted for the non-PAG WRDF.

A description of the source term modeling completed for the non-PAG WRDF is provided in the 2008 Mount Hope Project Waste Rock and Pit Wall Rock Characterization Report. The results of this modeling indicate a low probability to impact groundwater or surface water resources and further fate-transport modeling exercises are not necessary. Management of the non-PAG waste rock is adequate as proposed.

No changes to the text of the EIS have been made to address this comment.

Comments

Letter 941 Comment 43, Letter 941 Comment 44, Letter 941 Comment 45, Letter 941 Comment 46, Letter 941 Comment 47

CC-101-Waste Rock Characterization Adequacy

Commenters expressed concern about the adequacy of the waste rock characterization. We do not believe that the analysis is adequate to conclusively make the determination that there will not likely be acid generation, acid run-off, or a cid drainage. GBRW does not see the sampling rate for the Project to be sufficient.

Response

The geochemical assessment for Mount Hope waste rock utilized industry standard methodologies for assessment of acid neutralizing capacity. All rock types and alteration types and significant combinations of both were assessed in the study. In addition, qualitative support for the predictions came from leachate pH from static and kinetic leaching tests. The results conclude that there is a potential for some of the waste rock material to generate acid drainage. Waste rock generated during operations would be classified as PAG or non-PAG material and segregated for disposal. The material classified as PAG would be managed in the PAG WRDF designed with a low-permeable base layer in order to minimize the potential for downward migration of infiltration into the subsurface. Storm water that contacts the PAG waste rock would also be managed during operations and prior to placement of a reclamation cover in order to prevent impacts to surface water resources. The proposed waste rock management, PAG facility design and closure approach sufficiently address the potential for long-term water quality issues associated with the PAG waste rock. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 803 Comment 158, Letter 858 Comment 5, Letter 858 Comment 6, Letter 858 Comment 21

CC-102-Riparian Vegetation Reclamation

The commenter requests that reclamation is carried out until riparian vegetation is successfully reestablished, and that it occur within the same grazing allotment from which it was disturbed. The FEIS should carefully detail subsequent action required if mitigation attempts are unsuccessful in restoring riparian and wetland areas.

Response

The last sentence of Mitigation Measure 3.11.3.3-3, 3.11.3.5-3, 3.11.3.6-3, and 3.11.3.7-3 have been revised to state, "EML, in coordination with the BLM, would identify sites for mitigation in the area affected and implement mitigation measures within one year of direct disturbance. EML would monitor these sites on an annual basis for at least three years after treatment to ensure effectiveness." The phrase "in the area affected" specifies that the mitigation would occur in the location where the vegetation is impacted (i.e., the same allotment).

Comments

Letter 855 Comment 133, Letter 855 Comment 134, Letter 855 Comment 137

CC-103-Water Quality Significance Criteria

Commenters expressed concern about water quality significance criteria. Why is degradation limited to only chemicals? Do "chemicals" include biological materials or other substances? If the water already exceeds standards for Mn, does the DEIS conclude that Mn releases in the drawdown cannot degrade water quality?

Response

Based on the geologic information and hydrologic modeling that is presented in Sections 3.3 of the EIS, it is not expected that waters of the state will be degraded by the Mount Hope Pit Lake and BLM has determined that additional mitigation is not required. However, additional monitoring is warranted to refine available information and confirm that conclusion. The monitoring network for the Mount Hope Pit would (1) evaluate the impact of drawdown in the bedrock and alluvial aquifer from dewatering of the Pit lake, (2) provide additional geologic structure information, and (3) serve to determine the potential of a post-mining flow-through pit lake after the pit lake water level reaches approximately steady state. BLM, in coordination with NDEP, will continually evaluate the monitoring data and analysis through the life of the project, including the post-mining stage, to further understand the ground water and surface water hydraulics and any potential impacts to waters of the State. Based on further monitoring and evaluation, additional mitigation measures and bonding requirements can be implemented at any time during the life of the project if conditions warrant. EML would remain financially responsible for any additional mitigation that might be required.

The EIS uses appropriate criteria for impact significance determination. Impairment of designated uses would constitute a significant impact, whereas mere changes in chemistry that do not impair designated beneficial uses would not be significant. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 859 Comment 106, Letter 859 Comment 109

CC-104-Clarification of Mitigation Measure Impacts

The commenter expressed concern regarding the impacts and level of analysis for mitigation measures in the EIS. A figure should be added for mitigation measures in the EIS. A figure should be added to show the location of these features so the reader better understands the mitigation specified in Table 3-2.9.

Response

The EIS has been revised to include a map showing the location of the pipeline and any additional disturbance or facilities that would be required if ground water is pumped to mitigate decreased surface flows. Pumping ground water to mitigate for potential reduction of surface water flow is only one mitigation option identified in the EIS. Potential impacts from implementation of mitigation are disclosed in the EIS.

Comments

Letter 813 Comment 11

CC-105-Modeled Air Quality Impacts

Commenters expressed concern about the results of the air quality model. It seems to be that the best available data for quality is from Ely and Elko. Wind direction data is from Mercury. The proposal by EML contains a reference to consumption of 40,000 gal/day of diesel fuel in off-road equipment, this level of consumption is greater fuel use in one week than used in Diamond Valley and the town of Eureka on an annual basis. We believe this will have significant impacts on air quality especially in Diamond Valley not addressed by the BLM. The EIS does not identify any hazardous air pollutants (HAP) associated with the proposed Mount Hope roasters.

Response

The air dispersion model has been revised and the FEIS discloses the results of the updated model. Results from the revised model indicate that the 1-hour average SO₂ concentration is higher than the 3-hour average.

Comments

Letter 803 Comment 180, Letter 805 Comment 24, Letter 805 Comment 26, Letter 805 Comment 29, Letter 805 Comment 31, Letter 813 Comment 13, Letter 816 Comment 3, Letter 907 Comment 7, Letter 941 Comment 74

CC-106-Run-on Channel Design

Commenters expressed concern about the design of the run-on channel for the North Tailings Facility. The Draft EIS states that the run-on diversion channel for the North Tailings Facility will not be designed until two years before closure.

Response

The comment is incorrect. The DEIS states (on page 2-195) that the design would be submitted to the BLM 24 months prior to the anticipated start of construction. No change to the text of the EIS has been made to address this comment.

Comments

Letter 941 Comment 57, Letter 941 Comment 58

CC-107-Air Quality Monitoring and Mitigation

Commenters expressed concern regarding impacts to air quality and request monitoring and mitigation. As the mine proceeds into operation, determining the Project's actual air quality impacts and effectively managing and mitigating them will require robust monitoring. The EIS does not require sufficient air quality monitoring or mitigation for air quality.

Response

The impact analysis demonstrates that the Project would meet the ambient air quality standards which are health-based standards. EML is required to conduct continued emissions monitoring for the roaster as part of their Class II permit. No change has been in the EIS in response to this comment.

Comments

Letter 803 Comment 14, Letter 805 Comment 30, Letter 823 Comment 11, Letter 824 Comment 2

CC-108-Scope of Cumulative Impacts

Commenters expressed concern regarding the scope of cumulative impacts to vegetation from greenhouse gas emissions, metal flue dust particulates, fugitive dust, or water shortages in Diamond Valley from the Mount Hope Mine.

Response

Section 4.4.7 of the EIS includes an analysis of all of the anticipated cumulative impacts to vegetation. No change to the EIS has been made in response to this comment.

Comments

Letter 805 Comment 36, Letter 805 Comment 37

CC-109-Purpose and Need

Commenters expressed concern regarding the purpose of and need for the Project. In addition to making arbitrary and capricious decision without evidentiary support, the BLM violated the Federal Land Policy and Management Act (FLPMA) and the 1872 Mining Law (as amended) by not requiring EML to pay Fair Market Value (FMV) for the use of public lands not covered by valid mining claims, based on the lack of any evidence that the vast majority of the claims at the Project site are valid under the Mining Law. Similarly, BLM's position also violates provisions of the FLPMA and the Multiple Use Sustained Yield Act and other laws mandating that BLM manages, or at least considers managing, these lands for non-mineral uses – something which BLM refused to do or consider in this case. The DEIS's review and the BLM's proposed approved of the Project are based on the overriding assumption that EML has statutory rights to use all public lands at the site under the 1872 Mining Law. However, where Project lands have not been verified to contain, such rights, the BLM's more discretionary multiple use authorities apply.

Response

The FLPMA and the 43 CFR 3809 regulations require that BLM prevent unnecessary or undue degradation of public lands by operations authorized under the mining laws, and anyone intending to develop mineral resources on public lands must prevent unnecessary or undue degradation of the land and reclaim disturbed areas. "Unnecessary or undue degradation" is defined at 43 CFR § 3809.5.

As discussed in Section 1.1 of the EIS, in order to use public lands managed by the BLM's Battle Mountain District Office, EML must comply with the BLM Surface Management Regulations (43 CFR 3809), BLM's Use and Occupancy Regulations (43 CFR 3715) and other applicable statutes including the Mining and Mineral Policy Act 1970 (as amended) and FLPMA. Also as discussed, the BLM must review EML's proposed plan of operations to ensure: (1) adequate provisions are included to prevent unnecessary or undue degradation of Federal lands; (2) measures are included to provide for reclamation of disturbed areas; and 3) proposed project activities comply with all applicable state and Federal laws.

In assessing compliance with the unnecessary or undue degradation standard, BLM looks at the law, the regulations, and agency guidance. The federal district court decision referred to in the comment, *Mineral Policy Center v. Norton*, 292 F.Supp. 2d 30 (D.D.C. 2003), affirmed the regulations, including the definition of "unnecessary or undue degradation" adopted in those regulations. Subsequent to the decision, BLM instruction memoranda have been updated to include the court's direction on this issue. BLM's analysis of EML's Plan of Operations (BLM NVN-082096) for the Mt. Hope Project complies with the statute, the regulations, and applicable guidance.

Additionally, the 43 CFR 3809 regulations require a validity examination only when an applicant: (1) Proposes operations on lands that have been segregated or withdrawn from the operation of the Mining Law or 2) applies for a patent. Neither of these conditions apply to the proposed project. Therefore, the BLM is not required to conduct a validity examination. This question also was addressed by a Solicitor's Opinion in 2005, which concluded that no law requires a claim validity determination before mine plan approval on lands open to the operation of the Mining Law (Solicitor's Opinion M-37012, November 14, 2005). As clarification, the Mineral Policy Center decision cited in the comment does not require that the BLM perform mineral validity examinations of unpatented mining claims or millsites, except where a plan of operations has been located on segregated or withdrawn lands, or an examination is necessary to determine whether the minerals are uncommon varieties (BLM Instruction Memorandum 2004-113 [March 11, 2004]).

BLM's Surface Management Regulations specifically do not require payment of fair market value for use of public lands for mining purposes. 43 CFR 3800.6.

Finally, these arguments have already been considered by the Interior Board of Land Appeals and the BLM's position has been affirmed. In *Great Basin Resource Watch and Western Shoshone Defense Project*, 182 IBLA 55 (2012), this commenter raised the same argument in appealing the BLM's decision approving a plan of operations for expansion of the Round Mountain Mine. The Board rejected the argument raised by the comment and, in fact, stated that it was "glaringly inconsistent" with applicable BLM regulations. 182 IBLA 67.

No changes to the text of the EIS have been made to address this comment.

Comments

Letter 385 Comment 2, Letter 858 Comment 49

CC-110- Impacts to Soils

The commenter is concerned regarding impacts to soils from flash floods, seepage under the PAG WRDF and cumulative impacts to soils from greenhouse gases, metal flue dust particles, and fugitive dust prior to capping or leakages from TSFs.

- **Comment acknowledged; does not provide new information**

Response

Impacts to soils from the Project are detailed in Section 3.8.3. Soil erosion is specifically discussed under Section 3.8.3 of the EIS. As outlined in the Proposed Action (Section 2.2 of the EIS), soils would be removed from the WRDFs prior to construction, therefore, if there was seepage beneath the WRDFs there would be no soils to be affected. Section 3.6 of the EIS analysis potential emissions of pollutants from the Project, including fugitive dust from the TSF, and as outlined in Section 3.6 of the EIS, the Project emissions would meet the ambient air quality standards, which are determined the acceptable emissions, using a health based standard. In addition, the emissions would be gaseous pollutants or particulates that would behave as gases. Therefore, these pollutants would not be deposited on the soils near the Project Area, but would instead disperse in the atmosphere.

Comments

Letter 805 Comment 33, Letter 805 Comment 34, Letter 805 Comment 35

CC-111-FLPMA Compliance

The commenter is concerned that the analysis does not meet the policy directions set forth in the FLPMA.

Response

The purpose and need are outlined in Section 1.4 of the EIS. No changes have been made to the EIS to address this comment.

Comments

Letter 385 Comment 3, Letter 385 Comment 12, Letter 802 Comment 1, Letter 823 Comment 13

CC-112-Potential Impacts to Air Quality

The commenters are concerned regarding potential impacts to air quality. It is essential that BLM ensure that the air quality of southern Eureka County is protected and that the EIS discloses all air quality impacts as defined by federal standards and regulations.

Response

Section 3.6 of the EIS fully evaluates the potential impacts to air quality. No change has been made to the EIS in response to this comment.

Comments

Letter 254 Comment 3, Letter 254 Comment 5, Letter 368 Comment 4, Letter 369 Comment 2, Letter 370 Comment 3, Letter 836 Comment 4, Letter 906 Comment 4

CC-113-Project Mitigation and Monitoring

The commenter are concerned with the extent of mitigation measures and monitoring for the Project.

Response

See the Mitigation Plan in Appendix D of the FEIS. No change has been made to the EIS in response to this comment.

Comments

Letter 823 Comment 14, Letter 855 Comment 2

CC-114- Livestock Mitigation Measures

The commenter is concerned with the level of mitigation applied for livestock in the EIS. Revise to make it clear that EML will mitigate the impacts to grazing permittees, not "would work" to mitigate the impact. We request the revision to read, "EML will fully mitigate and offset the loss of AUMs as a result of the Proposed Action by agreement with impacted grazing permittees. For purposes meant to inform the discussion between EML and the impacts grazing permittee, mitigation could include, but is not limited to: 1) Provide a livestock forage seeding on federally administered land on which the impacted grazing permittee is authorized to graze livestock or on private land owned by the impacted grazing permittee; 2) Provide an alternative livestock watering source in any area where forage was previously unused or underused due to lack of a viable water source on either federally administered land on which the impacted grazing permittee is authorized to graze livestock or private land owned by the impacted grazing permittee; 3) implement a Rangeland Improvement Project on federally administered land on which the impacted grazing permittee is authorized to graze livestock or a project on private land owned by the impacted grazing permittee which would improve livestock production, forage availability, or rangeland condition (e.g., fencing, weed control, brush management, pinion-juniper thinning)." This language is consistent with (and nearly identical to) Eureka County's policy regarding AUM loss.

Response

The mitigation measure has been revised in the FEIS to read as follows, "The BLM recommends that EML work with local permittees to offset the loss of AUMs as a result of the Proposed Action." The effectiveness of mitigation has been revised in the FEIS to state, "Ongoing cooperation with the local permittees would ensure the effectiveness of this mitigation and essentially reduce the AUM impacts to zero." The BLM does not have the legal authority to require implementation of the type of mitigation discussed in the comment. However, potential mitigation that may be implemented by other regulatory bodies has been added to Section 3.26 of the EIS.

Comments

Letter 803 Comment 251, Letter 855 Comment 17, Letter 855 Comment 143, Letter 855 Comment 147, Letter 855 Comment 149, Letter 855 Comment 151, Letter 855 Comment 166

CC-115-Baseline Conditions Used for Analysis

The commenter is concerned regarding the level of analysis used to determine baseline conditions in the EIS. The EIS does not accurately or adequately portray the severity of degradation that exists, the extensive desertification caused by livestock grazing, or the risk that continued grazing and other disturbances pose to native vegetation, native biota, and watersheds of this landscape. All rangeland aspects discussed in the FEIS should be analyzed based on Interpreting Indicators of Rangeland Health Version 4.

Response

The BLM used the best available data for assessing the baseline condition of the allotments located within the Project Area. No revisions have been made in the EIS in response to this comment.

Comments

Letter 838 Comment 7, Letter 855 Comment 65, Letter 855 Comment 66

CC-116-Mitigation for Eligible Cultural Sites

The commenter expresses concern regarding the eligible cultural sites within the Project Area and requests which segments of the Pony Express Trail would be mitigated under the Proposed Action. Commenters also request that the cultural resource treatment plan be included in the EIS for public review.

Response

The Pony Express Trail is one of the eligible cultural sites. This site, along with other sites are addressed under the Programmatic Agreement. Under the BLM's cultural resource program the implementation of the Programmatic Agreement, by definition, fully mitigates the affected cultural resources. Eligible cultural sites are not public information and the BLM does not disclose the location or specifics of the eligible sites. The property and Project are not being sold as part of the Proposed Action outlined in the EIS. No changes to the EIS have been made to address this comment.

Comments

Letter 233 Comment 2, Letter 233 Comment 3, Letter 858 Comment 45, Letter 858 Comment 46, Letter 858 Comment 47

CC-117-Reclamation after Project Completion

The commenter is concerned whether EML has the funding to reclaim the project site after the Project is completed. There could be a huge economic burden if the mine company files bankruptcy or refused to cover treatment costs.

Response

The regulations under 43 CFR 3809 require that EML post a bond in an amount determined by the BLM to be sufficient to reclaim the Project as outlined in the Plan of Operations. Section 2.1.16 of the EIS outlines the requirement of the establishment of a financial guarantee. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 368 Comment 1, Letter 370 Comment 2, Letter 805 Comment 9

CC-118-Range Mitigation

The commenter requests additional water mitigation specific for livestock as well as other mitigation for loss of AUMs. The FEIS should clarify that mitigation for many water sources will preclude livestock use. The FEIS should be clear in its explanation that current mitigation for impacted water sources does not mitigate impacts livestock water sources.

Response

Mitigation for impacts to wild horses includes the development of a water source at the Romano stock well and five other sources (see EIS Mitigation Appendix, Attachment 2). Mitigation for water resources has been revised and is outlined in Section 3.2.3 in the EIS.

Comments

Letter 792 Comment 1, Letter 792 Comment 2, Letter 792 Comment 3, Letter 855 Comment 168, Letter 855 Comment 169, Letter 855 Comment 170, Letter 859 Comment 119

CC-119-Diamond Valley Sensitive Receptors

The commenter requests that the EIS include sensitive receptors in the Diamond Valley. Why were there not any sensitive receptors placed at any Diamond Valley residences, farms, or ranches? It is arbitrary to place a sensitive receptor at Alpha Ranch almost 15 miles to the north of the mine when dozens (nearly all) of the residences in Diamond Valley north of 6th street are as close, or closer, to the mine than Alpha Ranch.

Response

Sensitive receptors in Diamond Valley were added to the revised AERMOD dispersion model. The results of this revised model and the potential impacts to those sensitive receptors are included in the FEIS.

Comments

Letter 803 Comment 193, Letter 805 Comment 1

CC-120-Dust Control Mitigation

The commenter is concerned with mitigation measures to control fugitive dust. How much water would it take to wet 8,318 acres of disturbed Nevada surface so that it is not dusty during mine operations? Will the dust we breath contain toxic fugitive dust from the tailings facility?

Response

See Section 2.1.14 of the Proposed Action for the air quality control measures. Also see the air quality impact analysis in Section 3.6 of the EIS for the scope of anticipated impacts from the Proposed Action. No change has been made to the EIS in response to this comment.

Comments

Letter 805 Comment 22, Letter 805 Comment 23

CC-121-Livestock Impacts

The commenter is concerned regarding potential direct and indirect impacts to livestock – including harassment, and reduced water availability – will interact and compound over time. The FEIS should include an analysis of impacts of the well field and associated disturbances on livestock grazing.

Response

The EIS discloses impacts to livestock grazing and production throughout the project area in Section 3.12.3. In addition, Table 3.2-9 in the EIS outlines the mitigation for water resources that are utilized by livestock. No change to the text in the EIS has been made in response to this comment.

Comments

Letter 855 Comment 132, Letter 855 Comment 146, Letter 855 Comment 150, Letter 855 Comment 156

CC-122-Recovery of Temporarily Lost AUMs

Commenters express concern regarding when temporarily lost AUMs would be recovered. If an impact were to occur to vegetation due to the Project, the areas re-vegetated would likely be subject to BLM grazing closures until the area were to meet BLM established objectives. Through no fault of their own, a grazing permittee would be impacted while re-vegetation efforts are taking place and would likely suffer large economic impacts.

Response

] Section 3.12.3.3 has been revised in the FEIS to include the following text after the second sentence in the paragraph directly preceding Impact 3.12.3.3-1, "Following reseeding, the BLM would evaluate and determine if there is a need to suspend livestock grazing for two years or until the objectives of the seeding are met."

Comments

Letter 803 Comment 250, Letter 855 Comment 152, Letter 855 Comment 153

CC-123-Analysis of Big Game and Livestock Habitat

The commenter is concerned regarding the analysis of the historic use of AUMs and big game habitat in the EIS. The FEIS should analyze present big game habitat and historical use and then provide quantified support for the proposed increase in big game habitat. The FEIS should also report an inventory of the current range conditions.

Response

This section of the EIS describes cumulative impacts. Impacts to AUMs from the Proposed Action are disclosed in Section 3.12.3 of the EIS. The assessment of the current condition of the range is disclosed in Section 3.12.2 of the EIS. No change in the EIS has been made in response to this comment.

Comments

Letter 855 Comment 67, Letter 855 Comment 69, Letter 855 Comment 70, Letter 855 Comment 71, Letter 855 Comment 165

CC-124- Significant thresholds for Grazing

The commenter requests the FEIS provide measurable thresholds for the significance criteria of livestock grazing.

Response

The BLM determined that the significance criteria identified in Section 3.12.3.1 are adequate for identifying impacts to livestock grazing and production. No change has been made in the EIS in response to this comment.

Comments

Letter 855 Comment 145, Letter 855 Comment 148

CC-125- Mitigation/Monitoring Plan

The commenters suggest that the BLM require a monitoring, management, and mitigation plan to address potential Project impacts.

Response

See Appendices C and D of the FEIS.

Comments

Letter 859 Comment 2, Letter 859 Comment 5, Letter 859 Comment 11, Letter 859 Comment 12, Letter 941 Comment 64, Letter 941 Comment 66

CC-126- Air Model Calculations

The commenter expresses concern regarding the methods utilized in the DEIS to calculate potential 1-hour NO₂ impacts. We believe that there is an error in the modeling that has resulted in showing that the facility can comply with the one hour NO₂ standard. There was no reason to change the pit from an OPENPIT source to a POINT source – in fact it should not be a POINT source, it is obviously an open pit and is appropriately characterized as an OPENPIT source, not a smoke stack.

Response

Fugitive emissions have been modeled as volume sources in the updated AERMOD model to address Eureka County's previous concerns with the modeling methodology. The Final EIS discloses the potential 1-hour NO₂ impacts as well as the potential impacts for other modeled pollutants.

Comments

Letter 803 Comment 181, Letter 803 Comment 182, Letter 803 Comment 183, Letter 803 Comment 184, Letter 803 Comment 185, Letter 803 Comment 186, Letter 803 Comment 187, Letter 803 Comment 188, Letter 803 Comment 189, Letter 803 Comment 190, Letter 803 Comment 191

CC-127- Socioeconomic Impacts to Eureka County

The commenter is concerned regarding the socioeconomic impacts of housing and infrastructure development to Eureka County from the Project. The EIS fails to include a beneficial feature of the mine as initially proposed: the applicant's responsibility for housing for construction and mining workers. Without providing that the applicant meet this obligation, the EIS essentially forces the County to assume the entire financial risk and burden of investing now in the creation of housing, infrastructure, and public services to be available when Project construction begins.

Response

The BLM recognizes Eureka County's valid concerns regarding potential housing impacts to southern Eureka County from the Proposed Action. The BLM is confident that the EIS, as accurately as possible, discloses the potential housing impacts consistent with NEPA and other laws, regulations, and policies. The BLM's authority in requiring mitigation related to socioeconomic impacts, including housing, is extremely limited and related measures are generally outside the BLM's jurisdiction. Specifically, because the socioeconomic impacts would occur off BLM-administered lands, the primary responsibility for mitigating community social and economic impacts rests with state and local governments. However, BLM-administered lands will continue to be managed consistent with existing laws, regulations, and guidance. As such, the BLM would manage these lands such that any "unsupervised encampments of these workers as trespassers on federal lands" would not be anticipated. Impact 3.17.3.3-3 states "Significance of the Impact: This impact is considered significant and has both beneficial and potentially adverse aspects. No mitigation measures are proposed. Nevertheless, it is suggested that EML and Eureka County build on previous and current planning efforts to develop housing resources to accommodate the needs of the construction and operations-related population." The BLM continues to suggest that EML and Eureka County resume discussions, in good-faith, regarding planning options related to housing. In addition, the current Plan of Operations does not include any discussion of EML-provided housing for employees, even though it was incorporated in a previous version of the Plan of Operations. Therefore, the FEIS does not include any discussion in the Proposed Action. Section 3.17.3.3.3 includes a discussion of housing resources including EML's role in helping to develop additional housing in the Town of Eureka.

As stated above, the BLM does not have the legal authority to require implementation of the type of mitigation contemplated in the comment. In addition, a new Section 3.26 has been added to the EIS that outlines mitigation measures, such as those for socioeconomics, that are outside of BLM's jurisdiction to implement.

Comments

Letter 803 Comment 16, Letter 803 Comment 17, Letter 803 Comment 320, Letter 803 Comment 321

CC-128-Authority for Water Mitigation

The commenter expresses concern regarding the authority for implementing water mitigation. Most of the measures outlined would require further NEPA analysis and would contribute to the impact through a feedback loop. All references to "new water" or "new sources" should be removed as there will be no "new" water, but redistribution of water in the same hydrologic system. Please make it explicitly clear that curtailing the Project's groundwater pumping is a mitigation measure provided in Nevada water law.

Response

As required by the NEPA, the EIS discloses the potential impacts from the proposed Project, including those to water sources on private land. Appendix D of the EIS is a mitigation plan to address potential impacts on BLM-administered resources on public lands. The EIS has been revised to include a new Section 3.26 that outlines potential mitigation measures that are outside the authority of the BLM to implement, but are reasonable and could be implemented by other regulatory agencies. The number of the section labeled "Relationship Between Short-Term Uses and Long-Term Productivity of the Human Environment" has been changed to Section 3.27.

Comments

Letter 803 Comment 120, Letter 803 Comment 128, Letter 803 Comment 129, Letter 803 Comment 136

CC-129- Baseline Air Pollution Levels

The commenter is concerned that the DEIS does not adequately discuss baseline air pollution values. The EIS's air quality section fails to establish baseline air pollution values derived from monitoring within the affected area. The EIS instead utilizes data from several other locations around Nevada as its baseline for assessing the Project's impacts.

Response

The BLM used the best available data in the DEIS. Typically, a PSD source is required to conduct onsite baseline air quality monitoring, at a regulatory agency's discretion. The proposed Mount Hope facility would not be a PSD source (it would not even be a Title V source), and therefore, it is not subject to regulatory requirements of onsite baseline air quality monitoring. The Mount Hope facility falls under the jurisdiction of the NDEP for air permitting, and BLM directed EML to follow NDEP's guidance in selecting the background concentrations for the air quality analysis. The revised modeling does not use the pollutant concentrations from Boulder City or Jean. However, O₃ concentrations from Great Basin National Park are used as an input for the PVMRM option for NO₂ modeling. The particulate matter background concentrations are NDEP-approved values to be used in rural unmonitored locations like the Mount Hope site.

Comments

Letter 803 Comment 8, Letter 803 Comment 9, Letter 803 Comment 10

CC-130- Cumulative Effects Analysis

The commenter is concerned regarding the methodology utilized to analyze cumulative effects. The EIS's discussion of cumulative impacts fails to inform the public and decision-makers of the true likelihood and magnitude of such impacts. This failing results partially from the EIS's analysis of artificially circumscribed cumulative effects study areas (CESAs) that ignore major projects barely outside of the CESAs borders but well within the range of cumulative impacts.

Response

The BLM utilized the approach in the CEQ's "Considering Cumulative Effects Under the National Environmental Policy Act". For each environmental resource affected by the Proposed Action, the BLM determined the geographic extent of that resource to be analyzed for cumulative impacts. This area is the cumulative effects study area in the EIS. The CESAs are supposed to focus on project-related effects. CESAs are designed so that the CESA boundaries are not so broad that the analysis does not become too unwieldy and not so narrow that significant effects are missed or decision makers would be incompletely informed about the consequences of the action. Based on the comments received on the DEIS, the BLM has determined that no substantive issues have been identified that would result in a change to the CESA boundaries.

The CESA boundaries for surface water and ground water were determined to be those sub-basins within which the Proposed Action had an effect to either surface water or ground water. The Proposed Action would have no effect to the Antelope Valley or Monitor Valley sub-basins; therefore, they were not included in the CESA for surface water or ground water. No changes to the text of the EIS have been made to address this comment.

Comments

Letter 254 Comment 4, Letter 803 Comment 18, Letter 803 Comment 398, Letter 803 Comment 401, Letter 803 Comment 402, Letter 803 Comment 405, Letter 803 Comment 406, Letter 805 Comment 38, Letter 805 Comment 39

CC-131- NEPA Compliance with Eureka County

The commenter is concerned that the DEIS does not comply with various Eureka County regulations and policies. The DEIS makes no effort to discuss these inconsistencies. Include the following language “Some elements of the Proposed Action would be in conformance with these plans and policies while other elements of the proposed mine could prove inconsistent with these plans and policies.”

Response

The BLM requested that Eureka County identify all perceived inconsistencies in a letter dated May 30, 2012. On June 22, 2012, Eureka County provided a response that has been addressed in an appendix to the FEIS. The BLM is not required to reconcile all perceived inconsistencies, but the appendix discloses any reconciliation efforts or rationale leading to a lack of reconciliation where applicable. A sentence has been added to the end of the first paragraph in Section 1.5.4 that identifies this appendix.

Comments

Letter 803 Comment 29, Letter 803 Comment 32, Letter 803 Comment 245, Letter 803 Comment 275, Letter 803 Comment 295

CC-132-Spring Mitigation on Private Land

The commenter expresses concern regarding mitigation for springs located on private land. There is still a general downplay of impacts to phreatophytes, riparian vegetation, and wet meadows. This is a great example of how the impacts to private property are not disclosed or discussed.

Response

Where there is the potential for the loss of forage on private land (which would include riparian areas associated with flowing streams and springs, wetlands, as well as areas of greasewood, rabbitbrush, saltgrass, and meadow grass) mitigation is identified in Sections 3.2.3, 3.9.3, and 3.11.3. This mitigation in water, vegetation, and wetlands indirectly addresses the potential loss of forage on private land. An exception to this is where there are springs located on private land that are within the ten-foot drawdown, the BLM cannot require mitigation be implemented. Therefore, there is a potential loss of forage associated with the loss of those specific springs and this has been disclosed in the EIS. No changes have been made in the FEIS in response to this comment.

Comments

Letter 803 Comment 211, Letter 803 Comment 231

CC-133-Greater Sage-grouse Lek Sensitive Receptors

The commenter requests that the document provide language regarding sage-grouse leks as sensitive receptors. The BLM's new IM states that projects that raise the noise level 10 dBA above ambient can have a significant impact on greater sage-grouse lek activity. This analysis should be reevaluated.

Response

In order to be consistent with BLM Instruction Memorandum No. 2012-044 (Attachment 1: Sage-Grouse National Technical Team - A Report on National Greater Sage-Grouse Conservation Measures), which identifies an impact to greater sage-grouse leks with an increase of 10 dB above ambient noise levels during active lek season, Sections 3.16.3 and 3.23.3 have been revised as follows. Section 3.16.3 has been revised to remove reference to a 55 dB increase impacting greater sage-grouse. Section 3.23.3 has been revised to describe where greater sage-grouse leks occur relative to the 10 dB modeled increase in noise. Conservation measures included in Appendix D, Attachment 3 have been included to mitigate impacts to greater sage-grouse leks from the noise at the booster pumps in Kobeh Valley.

Comments

Letter 409 Comment 5, Letter 409 Comment 6, Letter 409 Comment 7, Letter 803 Comment 290, Letter 803 Comment 292, Letter 838 Comment 12

CC-134- NEPA Significance Threshold and Mitigation

The commenter expresses concern regarding the NEPA significance threshold and respective mitigation. The CEQ regulations refer to both significant effects and significant issues (for example, 40 CFR 1502.2(b)). The meaning of significance should not be interpreted differently for issues than for effects: significant issues are those issues that are related to significant or potentially significant effects.”

Response

As stated in 40 CFR 1502.1, "The primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. Agencies

shall focus on significant environmental issues and alternatives and shall reduce paperwork and the accumulation of extraneous background data."

Also see 40 CFR 1502.16, which states that an EIS "shall include discussions of:

- (a) Direct effects and their significance (Section 1508.8).
- (b) Indirect effects and their significance (Section 1508.8)."

Therefore, discussion of significance in the EIS is appropriate and no change has been made in response to this comment. The NEPA does not require that the analysis disclose every potential impact or develop mitigation for every impact identified. Mitigation measures in the FEIS are identified for impacts that by themselves would not be considered "significant" and mitigation measures have been developed where it is feasible to do so (43 CFR 1502.14(f), 1502.16(h), 1508.14).

Comments

Letter 803 Comment 25, Letter 803 Comment 285, Letter 803 Comment 371