



COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY

Building
Planning
Code Compliance
Environmental Health

December 3, 2009

TO: Charles Watson, Advanced Geologic
FROM: Jessica Hankins, Nevada County Planning Department
SUBJECT: Blue Lead Mine – Reclamation Plan comments

Charlie,

Here are my comments on the revised Reclamation Plan and appendices submitted on October 26, 2009.

Reclamation Plan

1. In Rec Plan, need estimated start and end dates and estimated costs for completion of each phase per LUDC Sec. L-II 3.22 H.2.
2. Clarify total acreage of mining. Page ii says 50 acres and other places (including site plan) show entire site being mined or “occupied by mine.” Appears to be 75 acres of surface disturbance.
3. Under Section 2.8.2 (Groundwater), explain that well depth is 70 feet *below XX elevation* or specify elevation.
4. Section 3.2 (Water Cycle): Clarify amount of water being used per hour. H&K says 1,200 gpm and 500,000 gpd max, this says 1,200 gph and 10,000 gpd max. Explain that it’s mostly recycled water.
5. Section 3.2 (Water Cycle), page 16: Says that the H&K reports found that the ponds were adequate for settling and storm water detention. Both reports (Erosion Mgmt Plan and Drainage Plan) say the freshwater pond is not large enough. Revise second paragraph accordingly.
6. Also related to this item, the H&K Drainage Study had seemingly different conclusions from the Erosion Mgmt Plan re the sizing of the ponds for storm events. The Drainage Study says that seasonal storm water volume is 135 acre-feet whereas the combined pond volume is 9 acre-feet. Clarify what this difference is (probably annual versus event volumes).
7. Section 3.2 (Water Cycle), top of page 17: My interpretation of the H&K report is that it says down to the 3-4’ level. See page 11 of Erosion Mgmt Plan.
8. Page 17. Should add BMPs in Erosion Mgmt Plan to SWPPP if not done already. State in Rec Plan.
9. Page 18. “The footprint for the processing area will be minimized to reduce the amount of erosion.” Clarify/quantify “minimized” if possible to explain what maximum amount of processing would be acceptable to ensure no significant erosion impacts.

10. Page 19. "Will" instead of "can" in sentence "Once an area has been sufficiently mined, reclamation procedures can begin."
11. Page 20. Says a "potential hazard evaluation of the Starr and Red Dog sluice channels will be performed." Please state whose requirement this is.
12. Page 20. Says "potential reclamation of the Starr and Red Dog sluice channels and tunnels will be performed." Also says same reclamation will occur in Phases 5 and 6. Clarify what the reclamation may consist of (e.g., remediation – removing contaminants and sealing off in Phase 2).
13. Page 23. Under Post-Closure Efforts, add that revegetation monitoring will also occur for 5 years pursuant to the recommendations of the Reveg Plan.
14. Section 3.5.7 (Unfinished Business), page 23. Says that removing hazards on adjoining properties is not part of project. Clarify that no hazardous conditions will be created by mining up to property line and creating new steep slopes.
15. Actions. General comments:
 - a. There should be an action stated wherever you will be implementing an action (rather than describing actions in narrative sections). This will make it easier to implement in the field, easier to reference, and will give you credit for all the actual reclamation actions that will be implemented.
 - b. Rec Plan actions and/or mine operations sections should incorporate studies by reference, e.g., "Revegetation will be implemented pursuant to recommendations of Revegetation Plan prepared by XX and dated XX, as approved by the lead agency."
 - c. Sometimes difficult to tell whether Rec Plan is proposing something or reporting something: e.g., see last sentence of last full paragraph on page 16 of Rec Plan. This ties in to comment 16a above, too.
16. Section 5.2.1 (Water Quality), page 25: May want to reference SWPPP.
17. Section 5.3.1.2 (Wetland Habitat), page 26: NRCS recommends 3:1 or shallower for ponds providing permanent habitat. Also correct on page 28, section 5.3.2.1.
18. Section 5.3.1.2, page 26: Please clarify last sentence.
19. Page 27, under Actions: There is potential for special-status species, if the species are found. Can just state that mitigation would occur in accordance with agency conditions or something like that.
20. Section 5.3.2.1, page 28. FYI, there are three separate parcels and thus 3 primary and 3 secondary residences are allowed with proper permits.
21. Clarify that reclaimed areas will not be compacted.
22. Section 5.3.2.5 (Protection for Wetlands), page 30: Give the action a number and modify to read "will occur within the seasonal wetlands or non-disturbance buffer."
23. Section 5.3.3.4 (Species, Planting Densities, etc), page 32: Add "as shown in Tables 2 and 3" to end of Action R-2.
24. Section 5.3.3.4, page 33: Actions R-4 and R-5 should use the recommendations from the Reveg Plan. I would recommend adding an action that says revegetation/ seeding/etc will be carried out in accordance with the Revegetation Plan. Discrepancies between rec plan and reveg plan regarding planting times. Need to use reveg plan recommendations (see CCR 3705.h.).
25. Section 5.3.3.5 (Irrigation), page 33: Add "as detailed in the Reveg Plan (Appendix O)" to end of sentence and make into action.

26. Section 5.3.3.7 (Revegetation Protection Procedures), page 34: Actions are good, but are included in monitoring stds and a few things left out. Should include all or none to make it clear. Could have just one action to implement reveg plan. See also comment 17.b above.
27. Section 5.3.9.3, page 40. SMR-4, add “such as Scotch broom or Himalayan blackberry” or “as identified in the Reveg Plan” after “if weeds”. Add “as determined by the project biologist” at end of sentence.
28. Table 4, Summary of Rec Stds and Actions, page 41. Not all actions match up to text (e.g., CSS-1, SER-1). Check for consistency and update when actions revised.
29. Table 4, Summary of Rec Stds and Actions, page 41. Change “woulds” to wills.
30. Table 5, Summary of Rec Actions, page 46. Is title of this table correct?
31. Table 5, Summary of Rec Actions, page 46. CSS-2 and CSS-3 don’t exist.
32. Need description in Mine Operations sections that temporary access won’t be bladed per CCR 3705.f.
33. **Submit an addendum or revised Rec Plan.**

Site Plans (also in Appendix D)

1. Phase 1 and 2 maps. On both, says “These stockpiled tailings will be used for reclamation during the final phases of the mining operation.” Contradicts rest of Rec Plan.
2. Show offsite seasonal drainage to NW as required by SMARA Sec 2772.c.5. Also, any utilities on or adjacent to site?
3. Submit final reclaimed area map.
4. **Resubmit applicable Phases.**

Final Reclamation Topography

1. Show more surrounding topography or show profile through middle sections (between A/B and B/C).
2. **Revise and resubmit.**

Appendix C: Archaeological Resources Survey

1. Please ask John Furry to find out what “archaeological clearance” entails and have him submit his comments in writing (email okay). Amend page 5, last paragraph above section 2.3 of Rec Plan as necessary.

Appendix G: Drainage Study

1. For CEQA document, we’ll need some performance standards to ensure that there won’t be any drainage impacts to southern staging area. No need to include with Rec Plan now. Will require Drainage Study/Sediment Retention Program for southern staging area and sluice tunnels prior to pulling permits to build drainage basins. No action necessary right now.

2. A number of recommendations are included in the H&K Drainage Study, including reducing drainage area by redirecting flows and constructing additional basins. Are you proposing to implement any of these recommendations? Drainage study says that it “relies heavily” on the modification and maintenance of these ponds – which recommendations for modification is it relying on? Please have them clarify.

Appendix I: Biological Resources Assessment

1. Confirm no impacts to landmark oak trees/groves and onsite ponds/offsite drainage.

Appendix J: Slope Grading Recommendations

1. Page 7. States that there are 10 inches of gravelly loam underlain by 40 inches of clay loams. Very gravelly loam only encountered at depth of 50 inches, and tertiary and sand gravel deposits at 60 inches. I would like to call biologist to ask how she came up with topsoil and duff horizon (6 inches topsoil underlain by unspecified duff) – unclear whether she’s speaking generally or about site specifically. Is clay loam going to be run through trommel? If not, can we set aside? Please clarify in Rec Plan.

Appendix M: Erosion Management Plan

1. Page 3. Says “according to the draft rec plan, the ponds are to be enlarged as required to accommodate the required settling velocity for the tailings pond effluent and holding capacity for the freshwater pond.”
2. Page 11. Says sediment from basins should be stockpiled for reclamation. Not in rec plan. Should include. (see #4 under Reveg Plan below)

Appendix O: Revegetation Plan

1. Page 1, 2nd paragraph under Environmental Setting. Where is undisturbed project area? Need map per CCR Sec 3711.b. Perhaps soil recovery in the undisturbed area could be at greater depth.
2. Just a reminder to start gathering seed and cuttings now to start growing plants for revegetation. Expensive and difficult to come by otherwise.
3. Page 3, Section 5.2. Add section on using dredged materials from ponds at end of this section or add action to rec plan.
4. Either need planting plan (e.g., for dispersal of plants) or simply can condition to have restoration biologist onsite to advise during revegetation.

Appendix P: FACE

1. The attached FACE appears to be the original FACE submitted for existing disturbance. **We’ll need a new FACE for existing disturbance and proposed Year 1 operations.**