January 20, 2009
Tom Last
Planning Director, City of Grass Valley
Grass Valley City Hall
125 E. Main Street
Grass Valley, CA 95945

Comments on the Idaho-Maryland Mine Project Draft Environmental Impact Report

Dear Mr. Last,

I appreciate the opportunity to offer specific comments on the draft EIR. As a country resident living just outside the City of Grass Valley limits and approximately 1/2 mile from the proposed project site I am offering comments regarding potential impacts to my neighborhood, on Gold Hill Drive, and to the county as it affects its future. Further, as a long-time volunteer monitor of the South Fork Wolf Creek with *Wolf Creek Community Alliance*, I give particular attention to potential impacts to hydrological features and biological resources.

Summary

I believe that the DEIR is inadequate. The city as lead agency cannot reasonably fulfill its obligations under CEQA by certifying a document that communicates so poorly and incompletely the potential impacts of this project. As a citizen expecting clear and complete analysis of a large, industrial project proposed in my 'backyard,' I cannot see any alternative other than substantial additional data followed by extensive rewriting. Only then would I expect that the new document could be recirculated for public comment.

Specifically, the draft EIR does not offer sufficient data upon which to base decisions, making it impossible for the public to consider its conclusions. It fails to adequately describe project features in detail, not allowing the public to consider the merit or failure of those features. It inappropriately obscures consideration of the project by failing to determine the actual participation of Golden Bear Ceramics in the project. It completely leaves out of analysis impacts relating to aesthetics, air, biology, noise, hazards, hydrology, traffic and recreation. It repeatedly minimizes without justification, analysis or recourse to scientific data potentially significant impacts. At the same time, it presents mitigations to potential impacts without offering specifics, often simply referring to city, state or county regulations, or 'best practices.' Moreover, the monitoring guidelines suggested are insufficient to address the complexity and potential impacts of the project. Because of these many defects, the EIR offers analysis of project alternatives and project impacts that are incomplete, inaccurate and, indeed, misleading to the public.

Therefore, I strongly suggest that this draft EIR not be certified, but rather rewritten and recirculated, allowing the public a full opportunity to consider a complete, accurate document.

Specific Questions and Comments

What follows are questions and comments raised during the reading of the draft EIR, referenced according to chapter, section and page, as well as a summary of my concerns.

<u>Ch. 1. Introduction – The EIR does not comprehensively consider impacts</u>

1. **"The Scoping Report in Appendix A is a compilation of all scoping comments received. The overarching themes in the written and oral comments received are as follows...• Potential impacts to biological resources including wetlands, Wolf Creek and South Fork Wolf Creek as associated habitat and species." 1-3:** In spite of

comments made in the Scoping Report, the DEIR has inadequately addressed impacts to biological resources within Wolf Creek and the South Fork of Wolf Creek. Why have potential impacts to hydrology and biological resources in the areas of Wolf Creek and the South Fork of Wolf Creek not been addressed? What are these potential impacts? How can the DEIR be considered adequate without addressing these potential impacts?

2. **"To identify and evaluate potential environmental consequences of the proposed project, to identify mitigation measures that would lessen or avoid significant adverse impacts, and to examine feasible alternatives to the project." 1-4:** Why does the DEIR limit its study area so narrowly to wholly exclude potential environmental consequences outside the property boundaries of the site for both biological resources and hydrology when there is a clear history of gold mining altering, contaminating and degrading areas downstream?

3. **"The IS found that there are no adopted habitat conservation or natural community conservation plans in the project area. Therefore, the proposed project would have no impact to adopted habitat conservation or natural community conservation plans. This impact will not be addressed further in this EIR." 1-8:** Empire Mine State Historical Park has developed habitat conservation plans within its park boundaries for various species of special concern, including the California Spotted Owl. As the proposed project will directly impact the hydrology, water quality and thus the biological resources of state park properties downstream of the New Brunswick site, why are these plans not considered?

4. **"Therefore, solid waste impacts from mine tailings will not be addressed further in the EIR." 1-9:** Given the uncertainty of waste rock utilization in an as yet untested and currently undercapitalized 'ceramics plant,' how can the conclusions of the IS in this regard be sustained? Are there not real and present concerns with solid waste, given that the ceramics facility might not even exist or might not be technically of financially feasible?

<u>Ch. 2. Project Description – the EIR inadequately describes the project</u>

1. Identify areas of construction staging and evaluate the impacts of these staging areas throughout. These are part of the project and must be evaluated as part of the "whole of the project" under CEQA, given that they could have physical environmental impacts.

2. **"rehabilitating the historic Idaho-Maryland Mine workings to transform the site from an underutilized and environmentally contaminated site." 2-3**: How, specifically, will the site be decontaminated? Where is a specific plan included in this plan? How can this report be adequate without including specific details regarding this transformation from an environmentally contaminated site?

3. **Site Clearing and Grading, 2-7:** Why is there no consideration of dealing with contaminated soil in the process of cut and fill?

4. **Mine Water Settling Pond & Storm Water Retention Pond, 2-12:** Why are these ponds not covered to assure it does not become a source of toxic contamination for birds?

5. **"Water from the mine water settling pond would be treated and also directed to the storm water detention pond. Drainage from the detention pond would then be**

discharged into Wolf Creek using a second diffuser." 2-16: Could not surface contamination thus avoid treatment by going directly to the storm water detention pond and then to Wolf Creek?

New Brunswick Site

6. **"Surface development would include," 2-19:** Why is there no consideration of surface contamination on the New Brunswick site?

7. **"waste materials hoisted to surface may either be placed in an engineered storage area or transported to the Idaho-Maryland site for processing." 2-19:** Is this transport of materials from site to site incorporated into the analysis of traffic impacts and hazardous waste management?

8. ***Surface Drainage 2-19:*** Why is there no storm water retention pond? Isn't there a need for controlling potentially toxic runoff?

9. **Process Water, 2-34:** What are the impacts on the local water system of using 250 gpm of NID water? What will the usage be per year? How capable will NID be in supplying this water need along with the potential water needs of homes with failed wells or the many new homes proposed in special annexation projects such as Loma Rica? Isn't there a cumulative impact regarding water availability?

10. **Mine Water Treatment 2-35**: Since the NB treatment plant would not include a water-settling pond to "remove the majority of solids prior to pumping it through the water treatment system" how does this plant remove solids? Why is removal of solids through settling not necessary at New Brunswick?

11. **"Alternatively, the sludge may be transported by truck offsite to a waste disposal facility." 2-35:** Given the uncertainty of the ceramics production shouldn't the transport of sludge to a waste disposal facility be assumed and not just seen as an alternative? Is this transportation of toxic sludge incorporated into traffic and hazardous waste analysis?

12. **"The spent resins would be taken off site and recycled by the resin manufacturer". 2-36:** Again is the transport of spent resins from the Idaho Maryland and New Brunswick sites fully incorporated into the analysis of traffic and hazardous waste?

<u>Ch. 3. Alternatives – Alternatives are omitted</u>

1. **" alternatives capable of eliminating or reducing significant adverse environmental effects of a proposed project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." 3-1:** As the environmental analysis offered in chapter 4 omits a number of significant impacts, this chapter needs to be rewritten to address alternatives that eliminate or reduce those significant and unaddressed impacts. The unaddressed impacts and possible project alternatives include:
    a. **Water Discharge Pipeline to Ophir Street** - Impacts 4.3-1, 4.3-2, 4.7-4: The proposed dewatering and discharge into South Fork Wolf Creek has unaddressed biological and hydrological impacts (see comments to chapter 4, below). Why not consider an extension of the proposed pipe so that instead of discharging water 1000 feet downstream the discharge point completely avoids the Empire

Mine State Park stream reaches of South Fork Wolf Creek, discharging directly into the channelized creek at Ophir Road? Wouldn't this alternative avoid possible impacts to the stream reaches of Empire Mine SHP in question?

b. Daytime Operation - Impacts 4.2-1, 4.9, 4.13: As mitigation measures regarding beeper noise are inadequate and operation noise levels in general are not adequately considered (see below), why not consider as an alternative day-time operation only? This is already suggested as a mitigation for construction noise. Why shouldn't daytime operation be considered, if, as suggested below, noise abatement mitigation measures are insufficient? Further, as impacts of diesel pollutants and truck noise (along with their full traffic impacts) are not considered (see below), limiting truck traffic to daytime operation should be an alternative considered.

c. **Eliminating the Ceramatex Plant** – Impacts 4.2-1, 4.15-2, 4.15-3: Why is the Golden Bear Ceramatex Plant not considered separately or analyzed separately by creating a no ceramics plant option? The applicant is vague and uncommitted about the status of this project feature. It could operate, or not, at full level or not. A plant could be constructed off-site or not. Shouldn't this EIR clearly address specific impacts by isolating elements that may not actually be part of the project?

2. **"This screening analysis does not focus on relative economic factors or costs of the alternatives (as long as they are found to be economically feasible)" 3-3:** How is economic feasibility determined? I see no quantitative numbers or tables. How are we to consider feasibility without such detailed information? Are we relying only on the opinion of the applicant here, or some other authority?

3. **3.5.2, Night-Time Operations Limitations, "Rationale for Elimination…revenue would be decreased by at least 50%. This reduction in revenue makes the alternative not viable from an economic perspective." 3-13:** Why is no economic analysis given for the last point, only an unsubstantiated assertion? With the price of gold currently well above the figure given for the mine's economic viability, isn't it possible that a 50% reduction is still economically viable? By eliminating this alternative the EIR unfairly limits a full consideration of alternatives. Please give further data and justification here. Further, cannot this document identify commonly accepted standards of economical viability as used in the CEQA process? Shouldn't we actually be looking at ranges of possible viability here, not unsupported blanket statements?

<u>Ch. 4.1 Aesthetics – impacts to aesthetics are disregarded</u>

1. **"seven key viewing locations," 4.1-13:** Why are there no viewing locations somewhere from the Gold Hill Drive - Grandview Terrace neighborhood? This area has sufficient elevation above its surroundings to allow substantial views of the visual changes to the Idaho-Maryland site as proposed by the project. Would not this location experience a significant change in its scenic vista? How can the report adequately assess visual impacts without taking into account these vistas as seen to the south of the proposed project sites at the location indicated?
2. **Impact 4.1-1, 4.1-27:** The argument is used that because the City doesn't have *designated* scenic vistas, there would be less-than-significant (LTS) impacts related to scenic vistas. The site is in a prominent visual location and is part of the scenic backdrop immediately in the front of the Empire Mine State Historic Park site when viewed from

the north. Isn't this a scenic vista whether or not officially designated as such by the City? While the thresholds may be determined by the lead agency, all impacts, including those not foreseen in Appendix G of the Guidelines, must be evaluated (CEQA Guidelines section 15003.f, 15064.d).

3. **Impact 4.1-1, 4.1-27:** How long will it take for the screening landscaping that will act as a visual buffer to grow in? It may be a short-term impact not to have the screening for several years, and if so, should be evaluated and mitigated as such.

4. **Impact 4.1-1, 4.1-27:** Regardless of the fact that the site structures will be eventually screened by vegetation, why is the removal of 1,216 trees <u>not</u> considered an adverse effect of a scenic vista? As noted above, while the thresholds may be determined by the lead agency, all impacts, including those not foreseen in Appendix G of the Guidelines, must be evaluated (CEQA Guidelines section 15003.f, 15064.d).

5. **Impact 4.1-2, 4.1-29:** Why is the impact to "trees, rock outcroppings, and historic buildings" found to be LTS without mitigation even though there are 1,216 trees proposed for removal? This impact discussion should address or evaluate visual impacts related to tree removal.

6. **Mitigation Measure 4.1-3, 4.1-31:** Bullet 1 states "The project design shall retain mature trees and existing woody vegetation to the maximum extent practicable." Who will determine whether it is "practicable" for the applicant? What is the definition of "practicable," and what are the criteria for determining it? Is it determined by financially or physically feasible alternatives to the removal of trees?

7. **Mitigation Measure 4.1-3, 4.1-31:** Bullet 2 relies on Mitigation Measure 4.2-1a and b. This mitigation measure does not require replanting of trees in the same place or even onsite, so how would this measure reduce visual impacts to this location?

8. **Mitigation Measure 4.1-3, 4.1-31:** Bullet 3 tries to reduce short-term construction impacts, but only requires this mitigation "where possible." Again, who will determine whether it is "possible" for the applicant to do this? What are the criteria? What if this mitigation is not possible? Is the impact significant? Are there alternative measures available that could reduce the impact?

9. **Mitigation Measure 4.1-3, 4.1-31:** Because none of these bullets may even be implemented, how is the impact reduced to a LTS level? Please tighten this mitigation language to ensure that these measures will be implemented and identify what any contingency measures may be for those that are not guaranteed. Alternatively, identify this impact level should be identified as significant and unavoidable.

10. **Impact 4.1-4, 4.1-36 and Mitigation Measure 4.1-4, 4.1-38:** Why aren't any of the proposed landscaping plants native species? These plants are widely available, non-invasive, adapted to our climate and precipitation cycles, and attractive. Mitigation and conditions may be based on City codes, but CEQA requires that mitigation must reduce the adverse effects of significant impacts to the ***maximum extent feasible*** (CEQA Guidelines section 15002.h, 15021).

11. **Impact 4.1-4, 4.1-36:** Why can't the applicant use native tree species for his landscaping to offset the removal of 1,216 native trees?

12. **Impact 4.1-4, Page 4.1-38:** Why is applicant required to replace any landscaping plants that may die, but not to replace any trees that are replanted? Mitigation and conditions may be based on City codes, but CEQA requires that mitigation must reduce the adverse effects of significant impacts to the ***maximum extent feasible*** (CEQA Guidelines section 15002.h, 15021).

13. **Impact 4.1-5, 4.1-39:** States that exterior lighting would be "shielded where necessary." When is this? Is it determined by the City's design guidelines for light spill**?** If so, how can the design guidelines serve a threshold here when they are inconsistently brushed aside below?

14. **Impact 4.1-5, 4.1-39:** States that surfaces would be treated with non-reflective treatment "as feasible." Who will determine whether it is "feasible" for the applicant to do this? What are the criteria?

15. **Impact 4.1-5, 4.1-39:** Indicates that even though lighting poles may be 10 feet or 50% higher than the design guidelines recommend, this impact is still LTS. Why must the applicant do this? Won't it result in greater light pollution? Is an alternative feasible from a physical standpoint (would it provide adequate lighting needed)?

16. **Impact 4.1-5, 4.1-40:** Indicates that the Reclamation Plan for the site does not include a plan to remove lighting. Why not? What would the purpose be of retaining the lights and continuing unnecessary light pollution? Lighting should be removed where unnecessary for safety reasons to reduce permanent light and glare and energy impacts.**4.1.3**

Ch. 4.2 Air Quality – incomplete data

1. **"The closest monitoring site to the project sites is in Grass Valley (at the Litton Building), approximately two miles from the project sites." 4.2-1:** Is two miles away adequate to provide data for the areas within two miles of the project sites? Wouldn't there be a fair amount of 'dispersal' of pollutants in two miles of travel?Is one monitoring site adequate to monitor the air quality all around the three project sites? Does this monitoring station account for/ or is within prevailing wind patterns that will carry air pollutants associated with the proposed project?

2. **Sensitive Receptors**, 4.2-2: Hennessey School, Nevada Memorial Hospital and numerous residences (all considered sensitive receptors) are located within a mile of the project site. Is this close proximity to the site quantitatively considered in regard to the degree of impact to these individuals? Is this data translated into probable levels of health issues and their subsequent health costs? What are the relative impacts to sensitive receptors further from the site, for example 5 miles away or 20 miles away? An understanding of the local and regional impacts to air quality is essential. Can you include a map showing varying levels of exposure, including such considerations as prevailing winds and the impacts of Ozone precursors as they linger or travel in the air shed?

3. **Ozone -"ROG and NOx are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable**

atmosphere with strong sunlight for approximately three hours." 4.2-3: How many days a year does this occur in Western Nevada County?

4. **Sulfur dioxide (SO2) 4.2-5:** In addition to being a "combustion product," isn't SO2 also used in the cyanide destruction process? Does this lead to further SO2 emissions?

5. **Toxic Air Contaminants (TACs) 4.2-5**: Can this report list the 3 specific TACs of concern in this project?

Applicant Proposed Measures

6. **APM 14: Operation of day shift equipment will be restricted to no more than 8 hours per work day, , 4.2-18:** Which equipment is NOT considered 'day shift?' Does this apply only to construction and not operation?

7. **Operation 4.2-20:** "ventilation of the underground workings would result in the release of emissions to the atmosphere." What mitigations will be undertaken to eliminate emissions from underground?

8. **"The NSAQMD does not have significance criteria for SO2, CO, or PM2.5." As PM2.5 "is thought to have greater effects on health, because these particles are so small and thus, are able to penetrate to the deepest parts of the lungs" 4.2-4:** What monitoring or mitigation should take place for PM2.5? Even though no criteria has been set, the particles are clearly a health risk at some level. At the very least, shouldn't monitoring of PM2.5 take place? A significant amount of PM2.5 will be produced by the project? Shouldn't some criteria apply in order to monitor potential health concerns?

9. **Mitigation Measure 4.2-1a**: Why is no air monitoring or bulk sampling required? Doesn't ATCM require air monitoring, upwind and downwind? How will dust be limited to site boundaries so that dust does not cross property lines as required by law? Why are wind barriers not considered as indicated in ATCM provisions? What is the estimate of water needed to keep down dust during construction or operation? What will be the frequency of watering – every 2 hours as suggested by ATCM, or at a different frequency? Is this amount of water considered as an impact in the hydrological section, 4.7? Will this mitigation be implemented differently for surface construction compared to operation? Specifically, what ongoing operations will require these mitigation measures?

10. **Impact 4.2-2 "Overall cancer risks are determined by summing the individual risk for each TAC."4.2-26:** Why is the actual data for cancer risks not available in the EIR or its appendix? Neither the output from AERMOD or HARP are included. How can the public consider the veracity of the statements without seeing the original data? Please include a table giving the data.

11. **Impact 4.2-3, 4.2-28:** Can this report or its appendix include data regarding traffic at intersections that includes number of truck stops at intersections and average stop-time? The data presented shows only results and cannot be analyzed.

12. **Odorous Emissions - Diesel truck emissions could also be an odor source. However, since trucks would pass by the nearest receptors without stopping, and would not idle their engines nearby, the exhaust emissions and associated odors would disperse before affecting a substantial number of people.4.2-28):** These assertions appear to be

untrue. Surely pedestrians walking on streets would encounter trucks stopped at intersections and idling? What is the justification for these statements?

13. **Mitigation Measure 4.2-5: "Within one year of project approval, or prior to construction of the ceramics plant, whichever occurs first, the applicant shall develop and implement a *Greenhouse Gas Reduction Plan,"*4.2-32:** Given that the ceramics plant would be a "major source of GHG emissions" shouldn't a plan be developed prior to project approval? Shouldn't the plan be part of this EIR? Moreover, ARB recently released interim draft thresholds for greenhouse gas emissions for industrial, commercial, and residential projects. OPR also released their draft CEQA Guidelines for GHG analysis. This project should be evaluated against those thresholds and guidelines.

14. Even if other projects cause odor complaints in the future the project would not have a cumulatively considerable odor impact for two reasons. First, the project would generate less than significant odorous emissions and the second reason is that odors are site specific in nature and odors affected by one source generally would not be affected by another source" 4.2-34: Again, the reasoning about odors appears unjustified. Can this report identify a study or some other science supporting these claims about odors? Odors, both mobile and on-site deserve more consideration, both in the local impacts and their affects due to prevailing wind patterns.

Ch. 4.3 Biological Resources – the EIR excludes habitats & species from consideration

3.5.2 **Setting**

1. **"The study area comprises three properties ," 4.3-1:** Why was the study area limited to the three properties? Why are areas downstream, particularly Wolf Creek and South Fork Wolf Creek not considered for potential impact to their biological resources? How can this EIR be considered adequate without consideration of these potential impacts?

2. **Page 4.3-5:** Please include figures that show project components over the resource (GIS) layers in order to provide full public disclosure and opportunity for evaluation.

3. **Montane Hardwood-Conifer (Mixed Evergreen Forest), 4.3-6:** Montane Hardwood-Conifer habitat continues downstream of the proposed project in the canyons of Wolf Creek and South Fork Wolf Creek. Why are not potential impacts to the biological resources to these habitat areas considered? Couldn't there be potential disruption of habitat in these areas due to noise, air pollution or cascading effects into this habitat due to disruptions within the riparian zone? Empire Mine State Historical Park in its recent Initial Study pertaining to its Osborne Hill Trail Network Project states that Northern Spotted Owl (a California Species of Special Concern) "are known to occur in Empire Mine SHP" and identifies noise during construction activities as a potential impact to this species. (page 28). Why has the DEIR not considered this impact given the two Empire Mine SHP parcels that occur along South Fork of Wolf Creek, just downstream of the New Brunswick site and less than a half mile from the main project site? The study just cited suggests that the Northern Spotted Owl is "resident in mixed-conifer and oak-conifer forests…in canyons or on north facing slopes in proximity to water." (page 28). The state park parcels along South Fork Wolf contain north-facing canyon slops in proximity to water. Shouldn't the presence of Northern Spotted Owl is considered in the DEIR? And if not, why not? Other flora and wildlife of concern resident within Montaine

Hardwood-Conifer habita also need to be addressed as part of EIR. Humboldt Lily (*Lilium humboldtii* ssp. *Humboldtii*, CNPS List 4.2) and True's manzanita, (*Arctostaphylos mewukka* ssp. *Truei*, CNPS List 4.2) also are known to exist in Montaine Hardwood-Conifer habitats within the state park. Why are impacts to these species not considered? Other special-status species found within Montaine Hardwood-Conifer habitat in this area and listed in the DFG's Natural Diversity Database (CNDDB) and the California Native Plant Society's Inventory of Rare and Endangered Plants of California list of potentially occurring special-status plant species (CNPS 2008).also need to be considered. Why are these species not listed? Why have plant surveys in these areas of potential impact not been undertaken?

4. **Montane Riparian (Montane Riparian Woodland/Montane Riparian Scrub), 4.3-8:** Why are potential impacts to riparian habitats immediately downstream of the project sites not considered? These "extrtemely valuable" (4.3-8) habitats are susceptible to potential impacts that could severely degrade their biological integrity. Could not increased stream flow due to dewatering cause increased tree fall in the creek? Might not increased undercutting of stream banks significantly alter streamside plant diversity or encourage further intrusion of invasive, non-native species? Why have these impacts not been considered?

5. **Wet Meadow (Montane Meadow/Seasonal Wetland), Fresh Emergent Wetland (Montane Freshwater Marsh). 4.3-9:** Downstream of the project site at New Brunswick South Fork Wolf Creek loses stream gradient and enters habitats that can be characterized as Wet Meadow or Fresh Emergent Wetland. This stream reach occurs within Empire Mine SHP. Why have potential impacts of increased stream flow not been considered for this potentially impacted downstream habitat?

6. **Annual Grassland (Non-native Grassland), 4.3-9:** An extensive and rare example of mixed native and non-native grassland occurs just downstream of the New Brunswick site and just on the other side of Bennett Road, adjacent to the proposed main site. Why are potential impacts to this state-protected habitat not considered in the DEIR?

7. **Riverine, 4.3-10 & 11:** Why are riverine habitats downstream of the project sites not considered? Could not long-term, persistent increase in stream flow significantly impact benthic macroinvertebrates in the creek bed? Where is the justification that these potential effects need not be considered? Might not salmonids be affected by increased stream surge and changes to turbidity, temperature or alteration of aquatic food supply? Why are potential impacts to amphibians not considered?

8. **Impact 4.3-1: Construction, operation and reclamation of the proposed project could affect potentially jurisdictional wetlands and waters of the U.S. on/in the vicinity of the Idaho-Maryland and New Brunswick sites. *Less than significant with mitigation (Class II)*, 4.3-35:** Why have flow changes to wetland areas of South Fork Wolf Creek not been considered?

9. **"CDFG requires a Streambed Alteration Agreement for activities that result in alteration of the bed or bank of a stream (typically the top of bank or edge of riparian habitat, whichever is greater), or that adversely impact fish or wildlife resources. " 4.3-36:** What analysis has been given to streambed alteration downstream in Wolf Creek and South Fork Wolf Creek? Why is there no scientific data showing the potential for streambed alteration? Streambed alteration needs to be more adequately

addressed.

10. **"potential sedimentation impacts" 4.3-37:** Why are potential impacts limited to sedimentation? Shouldn't scouring, streambed and streambank alteration also be addressed? What are the potential downstream impacts to the jurisdictional waters of Wolf Creek and South Fork Wolf Creek?

11. **Mitagation Measures, General re impacts, 4.3-:** Many of the mitigation measures (including 4.3-1a, 4.3-3a, 4.3-f) state that it is preferable to avoid a species (by modifying project design), but do not require redesign, *even if it is feasible*. Why haven't modifications to the project design been incorporated to reduce impacts *prior to this environmental analysis* so that the actual level of significance may be determined? Has redesign been discussed? Is it possible to achieve the primary objectives of the project without "taking" special-status species or destroying sensitive habitats? If so, this should be considered. Currently, the project proposal includes removing all seven (7) of the elderberry shrubs (one with an observed exit hole), all hundred (100) of the Pine Hill flannelbush, 1,216 native trees and associated understory, and 4.5 acres of wetlands. Given that most of these impacts would occur on the Idaho-Maryland site, which is over 100 acres, it seems that the project should be able to avoid some of these resources. Figure 4.3-7 shows that the flannelbush and elderberry shrubs occur in relatively small, isolated pockets on the perimeter of the site. It is also stated that 36 native trees will be removed for the construction of a 200 square-foot building (the size of a small shed) at the Round Hole site (page 4.8-26). Shouldn't these special-status species and trees, or at least most of them, easily be avoided with a minor amount of cooperation and ingenuity from the applicant? Please address this issue. As noted above in item 1, a map that shows the resources with the project components overlaid is necessary to determine whether project modifications are feasible.

Mitigation Measure 4.3-1a

12. **"This shall be achieved by redesigning project facilities to avoid impacts where feasible." 4.3-37:** Where will these measures be feasible and where infeasible? What will be the criteria for feasibility? Are we considering 10% or 90% feasibility here? How can compliance be addressed when there are no specifics given? Why is no oversight or measurable criteria mentioned? How is the lead agency or the public to know that all avoidable impacts to jurisdictional waters have been avoided?

Mitigation Measure 4.3-1b

13. **"The performance and effectiveness of these BMPs shall be determined either by visual means, where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where the verification of containment reduction or elimination (e.g., inadvertent petroleum release) is required to determine adequacy of the measure." 4.3-37:** Specifically, will visual observations and water sampling be built into the construction process or simply considered on an ad hoc basis? Shouldn't some level of formal observation and water sampling be required? Further, should this information be noticed and made available to the public in as close to real time as possible?

Mitigation Measure 4.3-1c

14. **"If discharges of sediment or hazardous substances to drainage ways are observed, construction shall be halted until the source of contamination is identified and remediated. Visual indications of such contamination include an oily sheen or**

coating on water, and noticeable turbidity (lack of clarity) in the water." 4.3-38: Will the City be observing this? How will observations be recorded and made public? If there is no transparency of the accountability IMM or the City have to follow mitigation guidelines, how can the public trust that the project is being safely pursued?

15. **Mitigation Measure 4.3-3e (Page 4.3-38)**: Mitigation should also include measures in the event that construction stops for a sufficient amount of time for a bird to begin nesting.

16. **"This plan shall be submitted to the appropriate regulatory agencies for approval." 4.3-38:** What amount of wetland will be impacted? What amount of wetland will need to be restored or preserved in compensation? Why are there no specifics here? Shouldn't a preliminary plan be in place that estimates the extent of needed restoration or preservation work? Are impacts to wetland areas downstream of the project sites being considered as part of such a plan? Why is there no scientific analysis relating to the biological value of particular wetland areas potentially impacted? All wetland sites are no biologically equal. Why are no delineations of biological value or significance given?

Impact 4.3-2

17. **"At no time or place shall the temperature of COLD or WARM intrastate waters be increased more than 5°F above natural receiving water temperature." 4.3-39:** Why is 5 degrees increase in temperature a benign increase? What are the temperature tolerances in the creeks for salmonids, invertebrates, and amphibians?

18. **"the mean daily dissolved oxygen (DO) concentration shall not fall below 85 percent of saturation in the main water mass, and the 95 percentile concentration shall not fall below 75 percent of saturation. The dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time: • Waters designated WARM 5.0 mg/l • Waters designated COLD 7.0 mg/l" 4.3-39**: Again, what assurances do we have that this decrease in dissolved oxygen is safe? What are the minimum levels for salmonids, invertebrates and amphibians? Both concentrations given are significantly below the mean numbers for dissolved oxygen in both Wolf Creek and South Fork Wolf Creek. Why shouldn't the mean temperature be considered the threashold, or better yet the mean level for that month of the year? Isn't a general percentage and minimum number too coarse a criteria to assure the success of aquatic species? Further, why isn't a provision included stating that the applicant shall stop discharge of water until appropriate dissolved oxygen concentrations in the water can be achieved?

19. **Mitigation Measure 4.3-2a, 4.3-40:** Why would this monitoring only be scheduled for the warm months of the year? Isn't year-round monitoring required? Why not? Also, shouldn't data be reported directly to the public and be readably accessible on the internet in the way that stream flow is often reported. Given that even daily fluctuations in temperature or dissolved oxygen might be severely detrimental or fatal to aquatic species, why is weekly monitoring sufficient? Shouldn't monitoring be done daily or continuously and reported as close to real-time as is feasible? Why not?

20. **Mitigation Measure 4.3-2b, 4.3-40:** Again, we are dealing with aquatic species here, not abstract numbers. In order to protect these species why shouldn't there be year-round, real-time, continuous monitoring data available to the public on the internet? How can making data available only upon request be adequate to protect the public good? Finally,

for both dissolved oxygen and temperature shouldn't multiple monitoring locations be stipulated, one of the water prior to release into the watershed, one upstream of the discharge point and a third downstream of the discharge point? Shouldn't this be established for both Wolf Creek and South Fork Wolf Creek?

21. **Increased Erosion and Flooding, 4.3-40 & 41:** How does moving the discharge location 1000 feet downstream assure that there will be no increase of sedimentation or base flow further downstream, for example in the biologically rich reaches of South Fork Wolf Creek found in the two sections of Empire Mine SHP? Is there not clear potential for increased sedimentation at sites downstream with finer particle stream bed for the same kinds of high sedimentation and turbidity demonstrated to likely be the case at the originally proposed discharge site? Will not increased stream flow continue all the way down the reach, though areas of equal or less streambed volume and thus potentially contribute to the habitat degradation suggested as a potential impact above? Further, the proposed mitigation cannot work only in winter months, with its larger stream flows. Why are the summer periods, with far less stream flow discounted in the discussion? Why is the greater potential for aquatic habitat degradation due to greatly increased stream flow in summer not addressed? This is inadequate. Why is no data given as to key months for spawning, foraging, mating and other key survival moments in the life cycle of salmonids, invertebrates or amphibians? Aquatic habitat needs to be protected and preserved regardless of the presence of absence of species of special concern. Why is no attention given to life-cycle issues of aquatic species found in these creeks?

Mitigation Measure 4.3-2d, 4.3-41

22. **"A fish rescue and relocation effort shall be made to reduce the risk of aquatic wildlife being stranded within the cofferdam." 4.3-42:** Shouldn't the results of these mitigation measures be reported to the public?

Impact 4.3-3

23. **"the number of species with high or medium potential to occur in the study area was reduced to the six species," 4.3-42:** What is your methodology here? The USFWS Species Status Species List in Appendix C in its cover letter states that an updated list should be obtained every 90 days, for the purposes of this DEIR, on March 3rd 2008 and on the following dates, June 3rd & Sep. 3rd. All these dates were prior to the release of the DEIR. Has this DEIR process included the use of these California Natural Diversity Database (CNDDB) updates? Second, this report does not detail its reasons, species by species, for excluding consideration for mitigation measures. Where is the data or the specific justification for each excluding a specific species? Species discussion found within *Initial Study Mitigated Negative Declaration – Osborne Hill Trail Network Project, State of California Department of Parks and Recreation, November 2008* (DPR, 2008), for example, comments with this kind of specificity for each species found in the CNDDB database. Why has this report not done so? Further, a number of species, found within the CNDDB database, but apparently NOT considered (based on statements within this report and Appendix C) should be included in the biological resources analysis. These include Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), True's Manzanita (*Arctostaphylos mewukka* ssp. *truei*), California Spotted Owl (*Strix occidentalis occidentalis*), Bacigalupi's Yampah, *(Perideridia bacigalupii),* Sanborn's onion, *(Allium sanbornii var. sanbornii),* Congdon's onion, *(Allium sanbornii var. congdonii)*, Thread-leaved beakseed, *(Bulbostylis capillaries),* and Mexican Mosquito Fern, *(Azolla mexicana)*. Comments from DPR 2008 also indicate that Olive-sided Flycatcher (Contopus cooperi), and Yellow Warbler (*Dendroica petechia*) may be present in the

Grass Valley quad and thus are considered in that Initial Study. Why are these species not considered? Additionally, the project site and areas affected by it are within the potential range of several sensitive bat species, including the Pallid Bat (*Antrozous pallidus*), a California Species of Special Concern, as well as Hoary Bat (*Lasiurus cinereus*), Yuma Myotis (*Myotis yumanensis*), Long-eared Myotis (*Myotis evotis*), and Long-legged Myotis (Myotis volans) – as cited in DPR, 2008. These bat species should be included for consideration. In sum, a significant number of species of concern, some potentially present in the area and others known to exist in the area are not considered in this report. Why are these species not considered? Where is the analysis concluding that they do not occur in the project site or areas affected by the project? Beyond the omission of species, a further problem also exists. This report considers impacts to species of special concern only within the project site boundaries when, clearly, there are potential impacts to species in areas outside of these boundaries. Why is this kind of analysis left out? How can this be adequate when there are potential impacts well beyond property boundaries due to water quality, air quality, sedimentation, increased stream flow, and noise during construction or operation? California Spotted Owl, a California Species of Special Concern, is known to nest in Empire Mine SHP, a property in close proximity to both the New Brunswick and Idaho Maryland sites. DPR, 2008 considered construction noise during breeding season as a potential impact. What are the potential impacts of construction and operation noise on California Spotted Owls due to the Idaho Maryland Mine Project? This is not considered. Similarly, potential species of special concern immediately downstream of water discharge locations on Wolf Creek and South Fork Wolf Creek are not inventoried or considered. There are potential impacts due to increased changes in water quality, sedimentation, stream bank erosion and undercutting. Why are no species downstream considered nor any potential impacts affecting them? Bog Club Moss, Brownish Beaked-rush and Red-anthered Rush, for example, are all known to occur in wetland habitat such as exists downstream of the project sites along Wolf Creek and South Fork Wolf Creek. Why has this not been considered? Finally, what are the potential impacts to species of special concern due to impacts to air quality? Overall, in regard to protecting biological resources, this report exhibits a narrowness of concern that disregards the potential, cumulative biological impacts of this project. Why has such a narrow, incomplete survey of species been undertaken here? How can the EIR be considered adequate without a full consideration of species of special concern that may be impacted?

24. **"Based on current site plans, all seven elderberry shrubs would likely need to be removed," 4.3-43:** Can potential relocation of the Ceramics Plant and Storage areas be detailed here? Wouldn't it be preferable to avoid impact and "take" rather than transplant? Shouldn't there be a detailed reconsideration of building location as part of this mitigation?

25. **Mitigation Measure 4.3-3a: Valley Elderberry Longhorn Beetle, 4.3-44**: Shouldn't the priority be on preserving and maintaining species of special concern at the site, within the watershed and within the county? Why are credits considered an adequate mitigation when mitigation on-site is possible? Shouldn't transplanting be the only option?

Mitigation Measure 4.3-3b: California red-legged frog

26. **"during the non-breeding season)," 4.3-46:** Why does this mitigation measure not consider potential impacts to California red-legged frog downstream of this project sites due to water discharges? Shouldn't a biological survey for Californa Red-legged Frog be

conducted downstream? Shouldn't potential impacts on habitat due to water discharge be analyzed in this report? Shouldn't special water discharge protocols be in place during breeding season? What other mitigations might be necessary to protect California red-legged from downstream?

27. **Mitigation Measure 4.3-3c: Northwestern pond turtle, 4.3-46:** Again, why is there no analysis of impacts to Northwestern pond turtle downstream due to water discharge?

Mitigation Measure 4.3-3d: California horned lizard

28. **"If the CDFG approves moving lizards," 4.3-47:** What is the mitigation if moving lizards is not approved? Doesn't this report need to detail the other alternative? If mitigation might include relocating a building or redesigning building layout shouldn't that be indicated in this mitigation?

Mitigation Measure 4.3-3e: Raptors.

29. **"If an active nest is located within 250 feet of the study area," 4.3-4:** Why is the distance 250 feet considered sufficient? DPR, 2008 lists 1,000 feet as the necessary distance for considerations of nesting disturbances to California Spotted Owls caused by construction. Shouldn't a qualified biologist conduct a preconstruction survey within 1,000 feet of construction activity? Further, shouldn't a noise analysis take be undertaken to evaluate the impacts of ongoing operational noise to raptors and the California Spotted Owl?

30. **"If construction activities commence during the non-breeding season and continue into the breeding season, no mitigation is required. Birds that nest in the project area after construction activities are underway are assumed to be acclimated to construction activities." 4.3-38:** Why would construction be allowed to proceed during breeding season? Would not birds likely be turned away from essential nesting and breeding habitat BECAUSE of construction? Further, why is it accurate to suggest that birds nesting in the proximity of construction would therefore be "acclimated" to construction. Isn't it just as likely that construction might reduce the reproductive success of raptors who are forced due to attachment to previous nesting sites or lack of other suitable sites? Where is the science to justify these assumptions?

31. **"In spite of the best efforts to minimize avian electrocutions, some degree of mortality may always occur due to influences that cannot be controlled, e.g. weather." 4.3-48:** 48 inches of vertical separation and 60 inches of horizontal separation accords with current best practices. Shouldn't visual markers for the lines themselves, however, also be considered? Also, given the current state of "avian-safe" power structure mitigation, shouldn't some kind of reporting mechanism be in place as part of this mitigation? For example, why not simply include data of any raptor deaths in a quarterly report, or in semi-annual reports timed to follow raptor migration? Finally, what number of raptor deaths is considered to have no significant impact? Shouldn't some kind of threshold figure be in place to judge the adequacy of this mitigation?

Mitigation Measure 4.3-3f: Pine Hill Flannelbush

32. **"In the event that relocation to avoid disturbance or mortality is infeasible," 4.3-49:** How is feasibility of avoiding disturbance or causing mortality determined? If it is physically possible, regardless of cost, will project facilities be redesigned? Or is that some monetary boundary beyond which relocation is considered infeasible?

Impact 4.3-4 Construction and operation of the proposed project could interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

33. **"Although Wolf Creek and South Wolf Creek support resident populations of fish, these reaches are not used by migratory species such as salmon as upstream migration of anadromous species is halted by the dam at Camp Far West Reservoir on the Bear River." 4.3-50:** Does not CEQA mean this consideration as the report itself states to apply to "native resident" fish as well as migratory ones? Why then are the native resident fish (e.g. trout) of Wolf Creek and South Fork Wolf Creek not considered? Further, why are "native wildlife nursery sites" for these native resident fish not considered? South Fork Wolf Creek may contain critical nursery habitat for native fish, as may Wolf Creek. Why are the potential impacts of this not considered? Might not increased flow, sedimentation and undercutting interfere with movement or with nursery habitat? How can no mitigation be required when the language of CEQA is ignored and native resident fish are not adequately considered?

Impact 4.3-5

34. **Construction of the proposed project has the potential to result in adverse impacts to native trees, including oaks and ponderosa pine. 4.3-51:** Why are trees located in the riparian zone along South Fork Wolf Creek or Wolf Creek not considered? Isn't there the potential that increased flow, sedimentation, and undercutting would "result in adverse impacts to native trees?" The riparian habitats of South Fork Wolf Creek in particular are rich with a diversity of native trees, including White Alder, Black Oak, Incense Cedar, Ponderosa Pine, Big-Leaf Maple and Yew. These trees are significant habitat for species. Increased tree-fall in these riparian habitats could potentially adversely impact their biological integrity. Why are these potential impacts not considered?

35. **4.3-51:** It is common knowledge in the biological sciences community that dead and dying trees are very good habitat for many species, including birds (including roosting, foraging, and nesting habitat). Yet Mitigation Measure 4.3-5 only requires mitigation for healthy trees that will be removed. This does not fully mitigate the impact to valuable habitat. Therefore, all removed trees should be mitigated.

36. **Impact 4.3-5 and Mitigation Measure 4.3-5, 4.3-52:** Impact discussion states, **"Because of declining tree population in the project area and the State, and the recognized value of native trees by the City, the loss of native trees as well as woodland habitats would be a potentially significant impact."** If the City finds the loss of native trees in particular be a substantial adverse impact, why doesn't Mitigation Measure 4.3-5 require replacing the removed native trees with other native trees? Replacing them with non-native trees would not mitigate the impact the City has identified. Furthermore, native trees are a feasible option with many more ecological and conservation (and to some, visual) benefits than non-natives, and they are widely available at a comparable cost.

Mitigation Measure 4.35a

37. **"The replanted tree shall be of a species that will eventually equal or exceed the removed tree in size if appropriate for the new location." 4.3-52:** Would these replacements be of the same species as the trees removed? Would these replacements be

trees? Would they, in other words have a "trunk eight inches or larger in diameter at breast height?" How long would it take for these replacements to attain size sufficient to restore the forest cover that would be logged? Since full-sized trees are being replaced by much smaller plants and the time to restore forest cover would be years, should a replacement ratio of much more than 1 to 1 be part of this mitigation? Wouldn't a forest replaced by "one and a half inch" saplings be a very significant impact? Wouldn't replacing at a ratio, let's say of three to one (two acres off-site for every acre restored on site) come closer to reducing the impact to less than significant? Even so, wouldn't the impact of losing 905 trees be significant for a number of years to neighbors and the community? Even if it is possible to quantity in this way, replanting at a one-to-one ratio per tree will likely prove to be ineffective and insufficient due to the fact that some trees will inevitably die. In other words, the City would be allowing one tree of any size to be removed and replaced with one 1.5-inch tree. It is much more common that tree replacement mitigation requires replacement at a one-to-one ratio per inch, not per tree, in order to ensure that mitigation will ultimately be roughly proportional to the impacts (as required by CEQA Guidelines section 15126.4.a.4.B). So, if a 10-inch tree is removed, one 10-inch tree or two 5-inch trees, or 10 one-inch trees would take its place. This ensures an ultimate replacement of 100% or greater, since existing habitat is much more valuable than that which must be created and is generally superior in its ecological capabilities. Finally, This mitigation measure needs to identify how the trees will be maintained, what the monitoring period will be, and what and when success in implementing this measure constitutes. A set of performance standards (e.g., 100% replacement with 40% of full-growth canopy or a five-year term, whichever is sooner) should be included to ensure that this mitigation measure will ultimately do its job and reduce this impact.

38. **"Replanting Off-Site" 4.3-52:** The mitigation measure doesn't state whether planting on- or off-site is preferable. Shouldn't the preference be onsite if that is feasible from a physical/design standpoint, since that would mitigate the physical impacts onsite to the greatest extent? This should be stated in the mitigation measure and made a preference by the City that will be required if physically feasible. Second, Why can't replanting location (on- or offsite) be determined at this time? This is information that the public and decision makers need to conduct an informed evaluation of the project. Finally, why not stipulate that the city create a native reforestation plan that best makes use of this option? Will ad hoc plantings really have the effect of replacing lost forest?

39. **"Payment in Lieu of Planting." 4.3-52:** How can mere payment in itself mitigate the loss of these trees? Shouldn't the city have a plan in place, so that the community knows that native forest will be adequately restored as part of this mitigation? Further, How much will be required for the tree mitigation, and how is this number determined? There should be some guarantee that this fund would be used to plant trees on in-kind habitat/lands, and that these lands will be as close to the site as possible and preserved in perpetuity. Without the follow-up standards for preservation of planted trees, this mitigation would not reduce the impact. Also, if there is nowhere found to plant trees, how will payment into a fund actually mitigate the impact?

4.3.4 Cumulative Impacts

40. **"The majority of the projects listed in Table 3-2 (specifically, from Figure 3-1, Projects 1-4, 6-13, 15-34, 37-48, 50-52, and 58-63) are found in urban or semi-urban settings, mostly within the city limits of Grass Valley, and would have insignificant to minimal impacts to regionally common habitats," 4.3-53:** The riverine and riparian

habitats of Wolf Creek and South Fork Wolf Creek immediately downstream of the proposed project water discharge locations represent some of this best preserved, unique and biologically significant habitat in the city of Grass Valley and the Wolf Creek Watershed. Though they are not within the project site boundaries themselves how can they be ignored when overall and cumulative impacts are meant to be addressed as part of the CEQA process? Why is their unique and significant biological value not addressed in this report?

Ch. 4.5 Soils – contaminated or hazardous soil is not adequately considered

1. **Bedrock containing Asbestos, 4.5-5:** Shouldn't surveys for serpentine, ultramafic soils take place at the sites prior to construction?

Ch. 4.6 Hazards – plans for deailing with hazards are not fully described

1. **"The analysis of several of the samples revealed concentrations of arsenic, lead, nickel, and mercury that are above background levels for the area as well as above California hazardous waste levels…It should be noted that subject clean-up activities are not part of the scope if this EIR review." 4.6-5:** How can this EIR be complete without considering clean-up activities as part of the project? Shouldn't clean-up be approved, monitored and completed before approval of any future project on the site? This consideration should apply to all three sites.

2. "**The Initial Study found that the proposed project would not be located within one-quarter mile of an existing or proposed school site." 4.6-12:** Although the project sites are not within 1/4 mile of a school, exit routes from the sites and travel routes of trucks transporting hazardous material would pass much less that 1/4 mile from Hennessey School. Why is this proximity to Hennessey School not considered?

3. **Impact 4.6-2, 4.6-14:** Beyond an emergency plan that includes phone numbers, shouldn't an emergency response plan also include immediate remediation actions to be taken on site?

4. **Impact 4.6-3, 4.6-15:** Instead of referring to requirements, why can't this report clearly list the hazardous materials to be stored, the specific safety requirements for each and the specific procedures required to safely transport each of these hazardous materials? General assurances about following " applicable requirements are not adequate. A specific mitigation plan assuring the safe storage and transport of the various hazardous materials should be created.

5. **Cumulative Impacts, 4.6-18:** Why is the area within a one-quarter-mile radius used to define the area subject to impacts due to hazardous materials? Does not wind play a factor, potentially sending hazardous materials much further? Should not the transportation corridors themselves be considered as part of this general area, as hazardous materials would be transported along those routes?

Ch. 4.7 Hydrology – hydrological impacts are not fully considered

1. **"The South Fork Wolf Creek, located approximately 300 feet south of the New Brunswick site, has average flows of approximately 0.68 cubic feet per second (cfs) during the dry season (May through October) and can reach 5.5 cfs in wet weather**

and spring months. Winter flows at South Fork Wolf Creek can be greater than 700 cfs during a 10-year rainfall (Todd Engineers, 2007). 4.7-1 &3: How can we evaluate the accuracy of these comments without published flow data? Why isn't Todd Engineers, 2007 readily available as part of the appendix to this report? What is offered here is simply a cursory and questionable summary of flow data. How can this report be considered adequate without detailed flow data that can be checked for accuracy? Further, the Wolf Creek Community Alliance has collected flow data recently for both of the creeks in question. Why is their data not incorporated into the report's conclusions about stream flow?

2. **"Mercury is present in both watersheds;" 4.7-3:** What is the source of this mercury in the creeks? If its origins are uncertain then why have samples of creek sediment not been taken? On page 4.7.21 the report suggests that analysis of mercury-laden sediments need not be undertaken. Yet, without sources of mercury being identified how can we be certain of the potential of further mercury contamination due to increased erosion to stream beds?

3. **"therefore, it is unlikely that sediment in Wolf Creek and South Fork Wolf Creek would be laden with mercury." 4.7-21:** Where is the data for the assertions regarding mercury in sediments or in tailings? I see no citations or references. Can the report supply specific, publicly accessible data regarding this issue?

4. **"The proposed project would not increase erosion to the beds and/or banks of Wolf Creek and/or South Fork Wolf Creek. Accordingly, potential impacts caused by erosion of mercury laden sediment are not considered an impact and are not analyzed further in this EIR (Walker and Associates, 2008)." 4.7-21:** The report itself does not give any data regarding erosion to beds and/or banks. Therefore, how can this statement be considered adequate? Where is the data to support this claim? The other documents included in Appendix F do not address stream flow. Thompson, 2007, cited in regard to stream flow earlier, is not available in this report. How can this lack of available data be considered adequate?

5. **"the parameters to be included in the NPDES Monitoring Plan " 4.7-28:** How can these intervals of monitoring be considered adequate when even daily changes in flow rate, metals, VOCs or dioxins could significantly damage the biological resources of Wolf Creek and South Fork Wolf Creek? Shouldn't the requirement be as close to daily or continuous monitoring as feasible? Why is so much gap being proposed being monitoring? Further, nothing is stated as to when discharge would be stopped if there were high levels of any of these criteria. Would the discharge stop immediately? Would a second or third sample be taken, immediately or at the next interval? Would, for example, high levels of dioxins be tested for again in 6 months? Is not the lack of specificity regarding the manner in which discharges of water is stopped inadequate? A treatment and monitoring system worthy of its legal obligations needs to be held accountable in ways that project the biological integrity of creeks and the safety of water users downstream. How does the protocol of monitoring given here assure this?

6. **"The project proposes a system to treat wastewater streams before they are discharged to Wolf Creek and South Fork Wolf Creek," 4.7-28:** Is runoff water being monitored or treated? The project description itself mentions that surface deposits from previous mining that is toxic would be cleaned up. Yet, where are the mechanisms or assurances for that in the project description or mitigation measures? Without such

measures, how can we assure that runoff stored in the storm water collection pond will not itself contain toxics, that untreated, would discharge directly to Wolf Creek? Downstream monitoring would not be enough. Shouldn't the project assure that toxins are not being discharged into the creek in the first place?

7. **"However, water quality impacts from the gold mill process water could present a significant impact because the project has not proposed a wastewater treatment system that is capable of treating the gold mill process water. Cyanide and its by-products," 4.7-28:** How is it that a gold mining company has proposed a water treatment that is not capable of treating the gold process, most particularly cyanide and its by products? I appreciate that a mitigation is suggested to solve this difficiency, but what confidence does this give the public or the lead agency that IMMC is capable of properly and safely treating water when is own judgments are deficient?

8. **"The City of Grass Valley and its consultants shall participate in the review process with the RWQCB, and the RWQCB must approve the treatment strategy prior to implementation by the applicant." 4.7-29:** Given the negligence of the applicant in its initial proposal regarding cyanide treatment, shouldn't any redesigned treatment system be detailed in the final EIR? This is a crucial detail. Why would it be allowed to take place after EIR approval? Shouldn't it be in place and available for consideration by the public prior to approval?

9. **"The analysis presented below, therefore, considers the 1995 EIR analysis but is principally based on the more recent hydrogeologic study conducted by Todd Engineers (2007)." 4.7-30**
10. Given the central importance of this report, why is it not included in the DEIR? How can the public adequately consider questions of hydrology if during the whole comment period the document is not readily available to the public?

11. **"a temporary settling pond prior to being treated." 4.7-38**
12. Is this settling pond located on any of the project description maps? Is it described in the project site description for New Brunswick? If not, shouldn't it be fully described and detailed on site maps?

13. **"Therefore, conceptually, the 500 to 1,200 gpm operational mine dewatering rate is expected to be split between the Idaho-Maryland site and the New Brunswick site (though the majority is expected to occur at the New Brunswick site)." 4.7-38**
14. Why are the numbers so vague here? A majority means what flow rate? If the flow will be split between 2 sites yet the majority occurs at New Brunswick, what is this majority amount? Absent of any qualitative figure shouldn't any analsis be considering the maximum flow rate at EITHER site? Is this uncertainty incorporated into the following analysis?

15. **"the alternate discharge location," 4.7-41**
16. How does this second,alternate site change the potential for sedimentation and increased instream flow downstream? Is there any data presented showing these effects or why these effects will be negligible? In the absence of such data, isn't any conclusion about the overall impacts of sedimentation and instream flow to South Fork Wolf Creek inadequate?

17. **"Throughout the entire project site, South Fork Wolf Creek generally exhibits a**

coarsening of the bed material in the downstream direction, an occurrence that has been previously documented in headwater channels (Brummer and Montgomery, 2003). Therefore, the *average*, as reported in Table 4.7-2, is a reasonable and conservative estimate of the sediment transport parameters for the reach of South Fork Wolf Creek that comprises the alternate discharge location.," 4.7-41

18. Why is this trend not confirmed observationally or with specific data for the whole reach of South Fork Wolf Creek? In fact, observations in both stream reach sections flowing through Empire Mine SHP made by Wolf Creek Community Alliance streamwalks show notable variation of streambed material with substantial areas of medium and fine gradation (especially in the meadow reach). If this is the case, wouldn't the generalizations and estimates given in the following paragraphs be unfounded? Shouldn't more comprehensive streambed data be part of the analysis of this report? Without it, how can its conclusions (Less than significant with mitigation) be considered valid? Might not the impacts in fact BE significant due to different streambed characteristics of South Fork Wolf Creek downstream?

19. **"would still be moderately protective of resident salmonid species (as determined by Lloyd, 1987)." 4.7-42:** Are the projections of moderately protective of salmonids enough given the lack of downstream streambed data? There would seem to be a low margin of error here in the initial year. Given the lack of comprehensive data, is not more study warranted? At the very least, shouldn't the mitigation proposed (4.7-4) include monitoring of actual sedimentation transport and sediment concentration not only at the discharge site but downstream on the South Fork Wolf Creek (for example, in the meadow reach)?

20. **"and that process water used and discharged at this site would only be some fraction of the operational discharge," 4.7-42:** What fraction of the dewatering are we talking about at Idaho Maryland? Without more precise numbers how can we accurately and adequately consider sedimentation issues on the main fork of Wolf Creek? Further, if the project is approval and dewatering plans change, how will those potential changes in flow to the two creeks be anticipated to assure no adverse impact? Here, as in many places, the project proposal is vague and subject to change apparently without consideration or need or subsequent approval. In that case, shouldn't this EIR consider all possible scenarios or stipulate that changes in the project operation go through a specific approval process?

21. **"flows in South Fork Wolf Creek could be reduced in response to lowering groundwater levels during dewatering. The quantity of surface water lost to infiltration could not be predicted with certainty. However, under worst-case conditions, the creek could experience a reduction of flow in most years or elimination of flow in summer months of certain dry years." 4.7-43:** These are serious potential effects. Why is not loss of groundwater to the habitat adjacent to the creek and part of the Empire Mine SHP not also considered? Might not reduced stream flow coupled with a lowered water table adversely affect plant species, for example in the meadow or wetland areas downstream of the project site? Why is this effect not considered?

22. **"this low flow supply shall be installed, maintained and energized concurrently with the main discharge pipe from the water treatment plant." 4.7-44:** Does this mean that an addition 1-2 cfs will flow down the creek at all times? If so is this additional flow being considered for its effects relating to increased sedimentation or instream flow?

Both of the uncertainties presented – high flow or low flow – could have significant negative impacts. How exactly will these two opposing issues be managed in the day-to-day, year-to-year operation of the mine? Shouldn't some observation-based contingency be clearly stipulated so that the desired effect – normal stream flow – is accomplished?

23. **"shall be permanently marked (e.g., with a staff plate) at each of the four culvert locations. During the period of initial dewatering, these locations shall be monitored by the applicant during periods of high flow (e.g., storm events)." 4.7-46:** Is this kind of human-intensive, low-tech monitoring sufficient and reliable? Why wouldn't a real-time stream flow gauge be preferable? It would not be dependant upon IMMC staff driving to each site whenever they deemed a storm might be sufficient to warrant inspection. Would IMMC staff monitor these sites upon the onset of every storm? Would they be required to check NOAA data of storm potential? How could monitoring, the cornerstone of this mitigation, be made more certain and more reliable?

24. **"Through RWQCB oversight," 4.7-52:** The crux of this argument is oversight. How frequently will this oversight take place? How much of the classification would be physically overseen by RWQCB and how much only inferred or checked infrequently? Once mining waste is backfilled it cannot be inspected. If acidic conditions unexpectedly do begin to exist what protocol is in place that would immediately halt backfill operations and any other mine operation that contributed to water contamination? How do title 27 regulations ensure that proper water characterization is performed for ALL generated mine waste rock? Do independent inspectors test each load of waste rock? Do they test one of 1,200 tons generated each day, one ton of 12,000 tons generated each week? How reliable is any of this? What is the record of RWQCB in assuring that water contamination is avoided? What is the record of gold mines in general in avoiding water contamination?

25. **"Therefore, the proposed project would not contribute to regional degradation of water quality in South Fork Wolf Creek or Wolf Creek." 4.7-53:** How can this assertion be true? Is it not more truthfully the case that the writers of this report believe that the chances are strong that the proposed project will not contribute negatively to water quality, but that there is no actual certainty of that being the case? Would it not be more fair and helpful to the public for the report to suggest the DEGREE to which the writers expect no harm to be the outcome of this project?

Ch. 4.9. Noise – noise impacts are underestimated and ignored

1. **Figure 4.9-3** shows residences that are considered potentially sensitive to noise from the project. This figure should also include the closest dense residential neighborhood to the Idaho-Maryland site, the Gold Hill neighborhood. Many of the homes in this neighborhood are located on a hillside/ridgetop facing the site, and have direct visual and therefore noise contact with the site. Noise and visual impacts to this neighborhood should be evaluated.

2. **Mitigation Measure 4.9-1b (Page 4.9-22):** Include performance standards to meet City noise standards at nearby residences and other sensitive receptors in order to ensure that this mitigation will actually reduce the impact below the threshold. If pneumatic tools are "unavoidable," will the impact exceed the threshold? If so, this impact should be found as significant and unavoidable.

3. **Mitigation Measure 4.9-2a (Page 4.9-27):** Why does this mitigation measure allow 80dBA at 50 feet for stationary noise sources, rather than using the standards for residential uses? Will the noise standards for residential uses be enforced? What will happen if a stationary noise source produces noise in excess of standards for residential uses? Which standard (County or City) will be used if a residence in the County limits is affected by this City project?

4. **Mitigation Measure 4.9-2b (Page 4.9-27):** This mitigation measure states that it will not be implemented unless complaints are received by the City. How many complaints will trigger this mitigation? How will they be tracked? How does this approach work to reduce actual noise impacts that will likely occur and not be reported because people are unaware that they should be reporting them, or even can report them and receive a response? Back-up beepers are heard from the Hills Flat site in several areas of the Gold Hill neighborhood to the south. Given this fact, this mitigation measure should acknowledge that back-up beepers will be audible and require implementation of the second bulleted item for all equipment. Shielding should also be considered.

Ch. 4.12. Recreation – impacts to recreation are not considered

1. The development of the sites as heavy industrial operations would preclude regional trails or bikeways from passing through or adjacent to these sites. The proximity to Empire Mine SHP, South Fork Wolf Creek and Wolf Creek are all connecting points for a regional trail system that this project could impact. In this sense, recreational impacts are not being considered. Reference to the Western Nevada County Recreational Trails Master Plan should be included in this report and mitigations detailing how the presence of the project would not impede the growth of a regional trail system.

Ch 8. Mitigation Monitoring – monitoring is inadequately designed

1. The phrases "if possible," "if feasible," "if practicable," are used in mitigation measures throughout the document. When these are used, the responsible party for determining feasibility should be identified, along with criteria for how it will be judged by the person who makes the decision. The public has a right to know whether the applicant is judging feasibility. CEQA requires that mitigation measures be fully enforceable (CEQA Guidelines section 15126.4.a.2). Also, if staff makes the determination and discretion is involved, it could be a discretionary action that must legally go back to public hearing.

2. There are many mitigation measures for this project, much more so than for a typical small to mid-sized project that the City sees. Most of these mitigation measures only require reporting to the City. A more appropriate method for this project would be an independent monitor hired and administered by the City (but completely paid for by the applicant) to ensure that these measures are implemented and implemented correctly. See CEQA Guidelines section 15097.c.2-3.

3. Monitoring results should not need to be requested by the public. Monitoring data results should be immediately posted to the internet so that they are easily available to the public. As much as possible, real-time monitoring using instruments connected to the internet should be used whenever it is standard or available scientific practice. For example, water temperature in the creeks and stream flow could be set up this way.

4. For monitoring that cannot be done continuously, generally shorted intervals than those suggested in the report should be undertaken. The guideline should be the quickness of potential impact. For example, spikes of low dissolves oxygen can quickly become fatal in streams. Therefore frequent monitoring would need to take place to assure the biological integrity of the creeks.

Conclusion

Though I believe this document to be inadequate, I acknowledge the substantial work this draft EIR represents for ESA, the city of Grass Valley and the applicant. Nonetheless, in order to satisfy the requirements of CEQA and honor the public trust we place in our government, it is imperative to produce an EIR document that the community as a whole acknowledges as complete, comprehensive and accurate. I welcome the opportunity to continue being part of that process so that the applicant's proposal can be fairly considered, and so that the best interests of our great community are protected, not just for us, but for future generations.