18 January 2009

Mr. Tom Last, Planning Director
City of Grass Valley, IMM Project
1125 East Main St.
Grass Valley, CA 95945-6588

Dear Mr. Last,

I appreciate the opportunity to comment on the DEIR for the Idaho-Maryland Mine Project.

In summary, I found the DEIR is inadequate for a number of reasons. Faulty assumptions, incomplete or incorrect data, inappropriate designation of "less than significant" after mitigations, and quite alarmingly, the ubiquitous use of framing language throughout the DEIR which made it appear as a biased sales pitch (pro-project) rather than objective reportage of data to inform the public so that we may arrive at our own conclusions.

Until the DEIR is completely objective, corrects errant information, provides missing information, and examines other alternatives, the DEIR cannot be considered as an adequate document upon which sound decision-making can be based. As a result, significant revisions are needed for the DEIR, which should then be re-circulated for public input.

I approached inadequacies in the document from beginning to end. I have tried to address the DEIR itself rather than the project itself, with the exception of a concluding statement.

Executive Summary

Table ES-4 is inadequate in that it omits the No Project Alternative. As presented, the column "Electrification of Mine Operations and Reduced Plant Production" appears as the "preferred" alternative – as evidenced by the bold print used to spell "preferred, when in fact the DEIR later concludes that the No Project Alternative is preferred. By omission, this presentation demonstrates (intentional or not) a bias toward the project. To be adequate and objective a column including the No Project Alternative needs to be included.

Chapter 2 Project Description

2.2 Project Objectives (pg 2-3)
Bullet 4 - "Processing the precious and industrial mineral deposits to produce gold and manufactured stone and ceramic building products, thereby reducing the environmental impacts…"
?Since much of the overall economic viability of the proposed project rests on the success/viability of the ceramics plant, and there is much speculation as to whether the ceramics plant will operate, Is this still an accurate statement in the DEIR?

2.6 Proposed Project Components (pg 2-6)
"Ceramics production could proceed past 2029."
?Will the ceramics plant proceed at all?
?Based on projections, just how much past 2029 could ceramics operations continue?
Based on proposed extraction rates, there should be some parameters more specific than simply running "past 2029."

Table 2-1 (pg 2-11-13)
There is no mention of the possible "small permanent crushing and screening plant" that would be built as part of the Alternatives, either Reduced Ceramics Operations or Electrification of Mine Operations and Reduced Ceramics Operations. If it's possibly going to be built it should be included in the Table 2-1.

2.8 Mining Operations and Associated Processes
Gold Plant (pg 2-30)
?What happens with the sulfur dioxide gas used to remove remaining cyanide?
More detailed explanation of the process and associated uses of all hazardous materials should be provided here.

Ceramics Plant (pg 2-33)
"Hazardous materials are not expected to be used in the ceramics manufacture"
"Not expected" is vague and ambivalent. It is implied that hazardous materials MAY be used.
?What hazardous materials may be used at the ceramics plant?
The above statement also obfuscates that TACs, i.e. hazardous materials, will result form the Ceramics Plant Kilns. By reducing the context of the comment to only "manufacturing," the DEIR chooses to gloss over other aspects of hazardous materials associated with the ceramics operation.

2.8.2 Mine Water Treatment (pg 2-35)
"Alternatively, the sludge may be transported by truck offsite to a waste disposal facility."
?Is this possibility accounted for in projections for Traffic, as well as for increased emissions related to Air Quality?

Chapter 3.0 Alternatives and Cumulative Projects

3.2.2Feasibility (pg 3-3)
?What is "economic feasibility" as compared to the given CEQA definition of 'feasibility?"
?Who is it that makes the determination of "economic feasibility?" Is it the applicant? Is it a third party? Is it the City?

3.2.3 Potential to Eliminate Significant Environmental Effects
"The primary significant and unavoidable environmental impact associated . . .with the proposed project 'would be associated potential' for degradation of . . . air quality…"
?This is a perfect example of framing language. "Would be?" No. Why not "definitely will be?"
The findings presented about impacts to air quality aren't "potential' or a "maybe." As proposed, the impacts to air quality ARE significant and unavoidable. This wording appears as softening of actual environmental impacts. Let's not mince words. To be adequate this needs to be written to be objective and honest.

"however, the analysis concluded that all identified impacts could be mitigated to less than significance with proper implementation of the mitigation measures identified in this EIR."
This is more framing language. As currently written, it appears as if ALL impacts 'could be mitigated to less than significance." By the DEIR's own admission this is clearly not the case. This whole paragraph is poorly written. Thusly it gives improper impression of mitigability. To be adequate, it needs to be re-written.

Table 3-1 (pg 3-5)
Again, graphically this is a misrepresentation. By omitting the No Project Alternative, it appears as there is a bias towards any other alternative BUT the No Project Alternative. To be adequate and objective, the No Project Alternative must be represented with the other alternatives.

3.4.2 Reduced Ceramics Plant Production (pg 3-9)
"reducing the production of the plant by 50 percent…size of plant would not change under this alternative, nor would the number of employees required."
?How can this be accurate? A 50 percent reduction in production somehow requires the same number of employees? This simply baffles intuition. If in fact this is accurate, details should be provided to explain how this is possible.

"a small permanent electric crushing and screening plant would be installed at the Idaho-Maryland site in the temporary stockpile area."
?What size, exactly, would this "small" plant be?
?As this crushing plant would be above-ground, are it's associated emissions accounted for in DEIR projections?
?Are increased energy demands for this crushing plant accounted for in DEIR projections?

3.5.1Electrification of Ceramics Plant
Rationale for Elimination (pg 3-12)
"However, this project is not technically feasible."
?I would wager that this alternative IS technically feasible, but perhaps not economically feasible.

3.5.2 Night-Time Operations Limitations (pg 3-12)
". . . cutting daily productivity, ceramics plant size, . . . "
?This is a contradiction with 3.4.2, which stated that reduced production would NOT change the size of the ceramics plant. Which projection is accurate?

Chapter 4.0 Environmental Analysis

4.1 Aesthetics
Figures 4.1-15a – 4.1-21 are inadequate simulations of the proposed project, particularly "after" projections. For example, I cannot, even with magnification, identify the 10 silos associated with the ceramics plant.
?Wouldn't a truthful simulation depict the silos while emitting during operations?
To be fair and adequate, the quality of these simulations must be better, and they definitely leave much to be desired as to their accuracy i.e. I don't see conveyors, trucks, heavy equipment, or employee/visitor center vehicles parked.

Impacts and Mitigation Measures
Impact 4.1-1 (pg 4.1-27)
"Existing trees bordering the Idaho-Maryland site would be maintained to the extent feasible . . ."
?Who determines, ultimately what is feasible in this particular context? As currently proposed in the DEIR, this is inadequately vague. The applicant should make a definitive commitment to maintain these trees. Period.

Impact 4.1-4
Neither mitigation measure is adequate to reduce significance of a 72' headframe or the 10 silos at the ceramics plant at 75' in height to "less than significant" after mitigation. Those structures are, for 20 or so years going to be "significant and unavoidable."
To be adequate, this impact must be honestly assessed and therefore changed.

4.2 Air Quality

4.2.1 Setting

Regional Climate (pg 4.2-1)

Paragraph 3 - "Surface and elevated inversions are common in the late summer and fall. These inversion layers can cause stagnation of airflow, allowing air pollutants to become concentrated."

?How many days, specifically, are conditions prime for "pollutants to become concentrated" in Western Nevada County?

?How will proposed project emissions affect the amount of days where pollutants will become 'concentrated?'

Existing Air Quality in the Project Vicinity (pg 4.2-1)

"The closest monitoring site to the project sites is in Grass Valley (at the Litton Building), approximately two miles from the project sites."

?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?

Sensitive Receptors (pg 4.2-2)

I object to the term "receptors" being used as a substitute for human beings. This is an example of framing language that diminishes the impacts of pollutants. The term “Receptors” is quite sterile as compared to "the most vulnerable citizens of our community."

If this document is supposed to be objective, then it shouldn't try to soften the impact of the proposed project by using such language.

?Shouldn't 'sensitive receptors' include animal life other than human?

?As ozone is known to damage and diminish yields of forestry and agriculture, shouldn't these be considered as 'sensitive receptors?

?As there is more to Environment than human beings, shouldn't all members of the Environment be accounted for in an Environmental Impact Report?

Criteria Air Pollutants

Ozone (pg 4.2-3)

"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."

?Is there any quantitative data available to show the average number of days that meet these criteria in Western Nevada County?
?Under the Clean Air Act, emissions of ozone precursors must be reduced every year until attainment is reached. The proposed project will locally increase ozone precursors. How can this project be considered if in violation of the Clean Air Act?

Respirable Particulate Matter (PM10 and PM2.5) (pg 4.2-4)
Paragraph 3 - "Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite gaps in scientific knowledge and continued reasons for some skepticism ..."
Again, I object to the framing language used by the preparers of this DEIR. The use of the word 'important" is totally subjective. It should be removed. Perhaps just 'gaps in scientific knowledge exist' would be acceptable. Perhaps. The reader of the DEIR can form his/her own skepticism as they see fit; the preparers need not suggest it for us. This framing language serves to cast doubt as to the veracity of the mortality studies - and thus tramples upon the principle of objectivity. I read it as a transparent attempt to sell the project .
If there are 'gaps" then identify at least some of them. Else it's an anecdotal projection inappropriate for inclusion in an objective report.

Sulfur dioxide (SO2) (pg 4.2-5)
It is stated in the DEIR that SO2 will be used in the cyanide destruction process, i.e. the tailings from the leach process (pg. 2-30, Gold Plant, Paragraph #3).
?In 4.2, SO2 is only mentioned as a "combustion product," and that "the area does not have major emitters of SO2."
?How much SO2 will be used in the cyanide destruction process?
?Since SO2 is a precursor to acid rain, will the proposed project's use of SO2 contribute to acid rain?

Toxic Air Contaminants (TACs) (pg 4.2-5)
Paragraph 1 - "Three TACs are of specific concern (diesel particulate matter (DPM), asbestos, and silica)..." ...versus
Paragraph 2 - which states that "diesel exhaust contains about 40 different TACs."
?Exactly how many TACs are affiliated with the proposed project?
?Who is it that decides which of the TACs "are of specific concern? This is more framing on the part of those preparing the DEIR. The readers of the DEIR should be presented a list of ALL TACs associated with the proposed project and then the reader can decide which are of "specific concern" or not. I don't want to be limited by somebody else's perspective.
?The ARB study on TACs used is from 2000. Are there any updates or additions to the data from this study as it is eight years old?

Paragraph 1 - "TACs would also be released within the processing operations such as the ceramic and gold plants." However, in the Air Quality Appendix, there are 10 TACs listed- related to dust, fuel or ceramics, BUT not the gold plant.
?Are there TACs from the gold plant operations that are missing? If so, what are they? If not, then the statement is erroneous.

Table 4.2-2 (pg 4.2-9)
For information concerning the pollutants 'Hydrogen Sulfide' and 'Sulfates' the information provided in the table under the columns "Pollutant Health and Atmospheric Effects" and "Major Pollutant Sources" were apparently switched and placed into the wrong column. This will be an easy editorial fix, yet necessary for accuracy.

Nevada County General Plan (pg 4.2-15)
"As noted above, the overall air quality in Nevada County is very good. HOWEVER, there are several pollutants that do not meet State and Federal ambient air quality standards." This is another example of more framing language.
?Is there a definition of "very good" air quality?"
?Several pollutants not meeting air quality standards sure doesn't sound like "very good" to me. More use of subjective, suggestive language that attempts to persuade the reader.
?In the name of objectivity, shouldn't this simply read that "there are several pollutants that do not meet .... air quality standards?"
Goal 14.1: Attain, maintain and ensure high air quality.
?How can a project that adds significant amounts of air pollutants to local air "ensure high air quality?"

Objective 14.1: Establish land use patterns that minimize impacts on air quality.
?How can a project that adds significant amounts of air pollutants to local air "minimize impacts on air quality?"

Objective 14.2: Implement standards that minimize impacts on and/or restore air quality.
?How can a project that adds significant amounts of air pollutants to local air be congruent with the above "standards?"

Footnote #3 (pg. 4.2-15) "Under the proposed project, Nevada County plans and policies would only apply to the New Brunswick site, which would not be annexed into the City of Grass Valley as part of this proposed project."
?The County policies and goals are more comprehensive, and they aspire to higher standards as noted in the DEIR. How can part of the proposed project adhere to one set of standards, while the majority of the project would merely have to meet the lower City standards?
?Since the air pollutants will not simply stay within the City of Grass Valley's limits, but will travel throughout the County and beyond, shouldn't the more stringent goals and policies take precedence?

City of Grass Valley General Plan (pg 4.2-16)
Goal 6-COSG: Assure compliance with and understanding of air and water quality regulations and standards.
?If the Clean Air Act requires reductions of ozone precursors until attainment is achieved, how can a project that increases ozone precursors be in "compliance" with regulations?

4.2.3 Impacts and Mitigation Measures
Applicant Proposed Measures (pg 4.2-18)
APM 14: Operation of day shift equipment will be restricted to no more than 8 hours per workday.
?Which equipment, specifically, is considered "day shift equipment?"
?How will restricting use of this equipment mitigate impacts to Air Quality?
APM 14 (continued)
?Is the applicant or the DEIR basing projected air pollutant/ TAC emissions on this 'restricted" schedule? If so, isn't this APM redundant?

Impacts and Mitigation Measures
Impact 4.2-1

Construction (pg 4.2-19)
Paragraph 1 - "construction activities may result in significant quantities of dust, and as a result, local visibility and PM10 concentrations may be adversely affected on a 'temporary and intermittent basis during the construction period."
Again, more framing language; the adverse affects may indeed be "intermittent," but since construction is scheduled to last seven years, it's hardly "temporary." (in human time) The word 'temporary' should be removed.
?Is there a definition of "nuisance-type impacts?" Heavy particulate matter would seem to plainly be a nuisance; NOT the softened "nuisance-type impact."

Operation (pg 4.2-20)
Paragraph 3 - "After the crushing operation is moved underground and the ore is moved to the surface stockpiles via conveyors rather than with haul trucks, most of these emission sources would occur underground. HOWEVER, ventilation of the underground workings would result in the release of emissions to the atmosphere."
Good grief! Still more framing language. Frankly, it doesn't matter one iota that the emissions are underground - they will be ventilated to the surface and hence, they will impact the local air. This kind of pseudo-deception is inadequate for its vagueness and misdirection.
?In the Scoping Report, the NSAQMD stated that "The EIR should also discuss control technologies that are available to the vent shafts (regardless of cost) and their effectiveness for controlling the various pollutants." This discussion is absent, after

recommendation from the jurisdictional regulatory body for this project; Why is that?

Paragraph 5 - "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" (pg4.2-4) - this concerns me that there is no significance criterion.
?Does any other agency have significance criteria or other valuable data concerning the impacts of PM2.5? I assume that PM2.5 weighs approximately 25% of PM10. Based on information in the Appendix, a significant amount of PM2.5 will be emitted from this operation -
?What are the adverse affects that this poses? The information on this pollutant seems inadequate, particularly as it is deemed more dangerous than PM10. More information should be provided.

Mitigation Measure 4.2-1a: ***Dust Control Plan*** **for Construction.(pg. 4.2-23)**
"The applicant shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during construction."
?Is there a definition for "timely manner?"
?How will monitoring and compliance be ensured?
"have dust palliative applied . . . for dust emissions"
?What material/product will be used as a "palliative?"
?Will this material/product have its own environmental impacts? What are they potentially?
"activities shall be suspended . . . when winds are expected to exceed 20 mph."
?Does this apply to gusts or only to sustained winds? Who determines?
?How will this be monitored?
?20 mph is strong wind; how was this threshold determined? A lower number would be better at containing dust.
Massive amounts of water are proposed to be used to keep the site and trucks "clean."
?Is it realistic that water will be available for the life of this project for this constant cleaning?
?Since NID is already 'walking on thin ice' as to water available, is there a contingency plan of any sort?
?Won't the proposed 'daily sweeping" contribute more fugitive dust emissions to the local air? Has this possible impact been examined?

Footnote #7 (pg. 4.2-24) "Diesel particulate filters, however, would not be installed in "Jumbos" and "Rockbolters". Assumed to reduce DPM emissions by 85% and CO emissions by 69%.
?Do these figures apply to the overall reduction of emissions, or specifically to the equipment that use the filters?

Mitigation Measure 4.2-1e: Off-site Mitigation. (pg 4.2-25)
"The goal of the Plan shall be to achieve off-site emission reductions of NOx, ROG, and PM10 equal to a minimum of 10 percent of the project-related emissions..."
?On principle alone, 10% is inadequately low for compensating for air pollution. Why such a low threshold?
The idea that a scant improvement in air quality somewhere else will compensate for the local air pollution is ludicrous.
?How can off-site mitigation of air offset local adverse affects to local health?

Significance after Mitigation: (pg 4.2-25)
"... because the NSAQMD does not currently have any established off-site emission reduction programs. As a result, for the purpose of this EIR analysis, air emissions from construction and operation of the proposed project would remain Significant and Unavoidable."
More framing; the proposed project itself produces the emissions from its operations, NOT because there isn't off-site reduction programs, but because the nature of the business is polluting to the air.. This is a transparent attempt to shift responsibility for the Significant and Unavoidable impacts from the project to the NSAQMD.

Impact 4.2-2
Cancer Risk (pg 4.2-27)
"Overall cancer risks are determined by summing the individual risk for each TAC."
?Where is this data? It is inadequate to not present it. It is in no greater detail in the Appendix.
?Why isn't there a comprehensive list of each and every TAC associated with this project?
?The "three TACs of "specific concern" is not an adequate provision of information. It needs to be made available for readers to examine, thoroughly and easily. The "Less than Significant" determination 'after mitigation' is therefore inadequate.

Impact 4.2-4:
Odorous Emissions (pg. 4.2-28)
Contradiction: On page 4.2-6, the DEIR states that "Odors may be associated with the ceramic AND gold processing AND the water treatment plant." Yet in the impact statement on page 4.2-28 it only mentions 'land uses' which pose potential odor problems that don't apply to the proposed project.
?Which projection is true (or at least most accurate)?
"Diesel trucks could also be an odor source . . . since trucks would pass by the nearest receptors without stopping, ...the ...odors would disperse before affecting a 'substantial number of people." This is yet more very subjective framing. Odor is a very subjective matter.
?Are there threshold criteria for what is and isn't "affecting in regards to odorous emissions?"
?What is a "substantial number of people?"

Contradiction: In 4.2-4 there would be an "idling time" of 5 minutes, yet it isn't specified where the trucks can idle, therefore the assertion that the trucks "would not idle their engines nearby" isn't guaranteed. The preparers of the DEIR should provide threshold criteria for all mitigations - how is it determined what is "less than significant?"

4.2.4 Cumulative Impacts

Paragraph 5 (pg. 4.2-31) - "With regard to item B, . . . When compared to the overall State reduction goal of approximately 174 million metric tons/year CO2e, the maximum greenhouse emissions for the project are small..."
?More framing language. Why would one compare a single project to the "overall State reduction goal?" - except to make the project 'appear more palatable.
?Wouldn't all individual projects seem "small" in comparison with the "overall State reduction goal?"
Again, this appears as some effort to make the proposed project seem "not-as-bad-as-it-seems." The simple truth is that the project emissions for the life of the proposed project will be approximately 3-4 times the "major project" emission threshold of 25,000 metric tons/year CO2e. Don't try to soften the blow.

Paragraph 5 (pg. 4.2-31) - "without mitigation the project could conflict with the State's ability to meet the AB32 goals."
?Wouldn't the project conflict with the State's ability to meet the AB32 goals EVEN WITH MITIGATION? More framing.

Paragraph 6 (pg 4.2-31) - "With regard to Item C, the proposed project cannot be considered inherently energy efficient." More framing, just come out and state that the proposed project IS NOT ENERGY EFFICIENT.
?"aggressive energy consumption mitigation measures" Are you kidding me?
?Is there a definition of "Aggressive energy consumption mitigation measures" somewhere or is this just trying to put a positive spin on things? The word "aggressive" needs to be removed, else this is just a hack sales pitch.

Mitigation Measure 4.2-5 (pg 4.2-32)

Significance after Mitigation - "Specifically for this proposed project, even with 'aggressive energy efficiency measures . . . it is unlikely that the applicant could achieve GHG reductions on the order of 50 percent absent these broader market-based reduction strategies. As a result . . . impact [sic] is considered Significant and Unavoidable."
Still more framing by those preparing this 'document.' It is implied that the impacts are a result of absence of "market-based reduction strategies." Firstly, it has yet to be determined if those "strategies" in fact work effectively. So this is mere projection. It is also the same tired tack of trying to soften the blow by shifting blame. The bottom line is that the impacts are Significant and Unavoidable simply because the proposed project is a major emitter of GHG pollutants.

Cumulative Impact 4.2-6 (pg. 4.2-33)
Paragraph 2. Still more framing; this time in the presentation. The paragraph begins and ends with the message that the impact "depends on the pollutants," or ,that during reclamation, the impacts would not be "considerable."
?Is there a definition of "considerable?"
?Why is the Class I, Significant and Unavoidable impact conclusion buried in the middle of the paragraph, with yet more framing to soften the impact, that "even after mitigation, the impacts would be significant and unavoidable?" The framing lies with the cute little caveat that "although implementation of Mitigation Measures ... would reduce impacts" those same impacts would still be significant and unavoidable.
?Do these people think they're fooling anybody?"

Paragraph 3 (pg. 4.2-33) - "the contribution of the proposed project to health risk impacts (the incremental cancer risk from the project impact would be less than 10 in a million at all locations) would not be cumulatively considerable."
?Why is this statement only specifying cancer risk under the umbrella of "health risk impacts?"
"Health risk impacts" sounds more dynamic; like any and all affects to health, not simply cancer. This appears disingenuous at best.

Contradiction: If "other projects result in a significant cumulative impact from TAC emissions" then the cumulative impact is significant, regardless of contributions from the proposed project. Cumulative means cumulative, the preparers don't get to change the definitions in the middle of the document. Another transparent attempt to "soften the blow."

Paragraph 5 (pg 4.2-34) - "Even if other projects cause odor complaints . . . odors are site specific..."
Again cumulatively MEANS cumulatively. I again disagree with the assertion that the project will generate "less than significant" odorous emissions."
?What is the threshold for "Less than significant" in this case?
The assertion that odors are "site specific" is patently false. The trucks aren't "staying on site." ?
Won't wind and airflow continually transmit on-site odors to other off-site areas?
In the Scoping Report, the NSAQMD recommended a "discussion of how the prevailing winds may affect air pollution."
?How will prevailing winds affect odorous emissions?

4.3 Biological Resources
4.3.1 Setting

Existing Conditions (pg 4.3-1)
?Habitats were classified using a guide dating back to 1988. Is the information from this guide still accurate? Lots of changes have occurred in 20 years, could habitats be one of them?

Site Hydrology Overview (pg 4.3-11)
Average flows are presented for the South Fork Wolf Creek, but not for Wolf Creek.
?What are the flow rates for Wolf Creek?
This omission of data is potentially important and should be added.

Mitigation Measure 4.3-1c (pg 4.3-38)
"Compensatory mitigation for temporary AND PERMANENT impacts to wetlands and riparian habitat …."
?How can any "permanent impact" be reduced to less than significant?
?Compensatory mitigation is a nice way of saying that money can be thrown at a problem. No matter how much money, a "permanent' impact will always be – hence the word permanent i.e. 'eternal' or 'Forever.' That permanent impacts may occur isn't the issue; it's inappropriate to downplay a permanent impact to "Less than Significant."
In order to be adequate and maintain integrity this must be changed to 'Significant.'
"Off-site mitigation for a permanent impact is also inadequate, no change elsewhere can alter a local, permanent impact.
Mitigation Measure 4.3-1c (continued)
The proposed wetland mitigation and monitoring plan needs to be issued prior to approval of permits, NOT afterwards, for adequate appraisal by the public.

Impact 4.3-2 (pg 4.3-38)
?Why is there no mention of the effects of the blasting part of operations on aquatic species?

Mitigation Measure 4.3-2b (pg 4.3-40)
?What specifically are the potential impacts on aquatic life if discharge water exceeds the +/-5 degrees F?

Mitigation Measure 4.3-3a (c) (pg 4.3-44)
"compensatory mitigation." Again, money is unacceptable as a form of "mitigation." Using the "compensatory" tactic, then any and all impacts are conceivably mitigable; it just depends on how much. This tactic in no way safeguards the local environment or calls for responsible stewardship. If "compensatory" is needed, then the impact is "Significant."

Impact 4.3-4 (pg 4.3-50)
"wildlife that could use the sites are highly mobile and could easily adjust their movement to open lands adjacent to the project sites."

?Is a Northwestern pond turtle considered "highly mobile?"
The above statement is another example of framing language that illustrates a bias. It's simply not true that all wildlife that could use the sites is highly mobile. And, it's totally subjective to project that adjustments could be made "easily." To be fair and/or honest this statement needs to be re-written in objective language.

4.5 Geology, Soils, and Seismicity
?Have any studies of the project areas been conducted for the presence of "SLIMEs (sub-surface lithoaoutotrophic microbial ecosystems)? They generally occur deeper than the mine's proposed depth, but blasting, drilling could impact them.

4.5.2 Regulatory Context
SMARA (pg 4.5-13)
"Significant amounts of gold are likely to exist at deeper levels . . . "
?What is the threshold for "significant" as used in this context?
?How "likely?"

City of Grass Valley Plan
Mineral Management Element
Action 10 (pg 4.5-17)
"The city shall require satisfactory and credible forms of accessible security from all mining projects to cover all damages which may occur from the projects."
?What "accessible security" has the City secured at this point in time?
?What "securities" are projected for this proposed project? Up to what value?
?How can "all damages which may occur" be determined? Is there a protocol for this type of determination?

4.6 Hazards and Hazardous Materials
4.6.1 Setting

Historical Land Uses and Current Site Conditions (pg 4.6-2)
"Some portions of the Idaho-Maryland site appear to have been previously graded and covered with waste rock, presumably associated with past hard rock mining."
?This waste rock is not mentioned in the Due Diligence Site Investigations. Has this rock been tested? If not, why not and when will it be tested to determine if toxins are present, and in what amounts?
?Same question to the "waste rock piled to a height of 10 feet" near the proposed ceramics plant. As well, what are the plans for this pile? It is not adequately clear in the DEIR how this rock will be handles.

Results of Due Diligence Site Investigations
Idaho-Maryland Site (pg 4.6-5)
?Why are IMMC "tailings characterizations" included, yet there is no mention of MACTEC assessing concentrations of heavy metals? A third party should conduct all the process of testing for heavy metals and subsequent results.
The areas IMMC tested and fund contamination should be presented in greater detail, perhaps graphically.

"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."
This is woefully inadequate to not present this data graphically, accompanied by potential impacts if/when these areas are disturbed by construction operations.

"It should be noted that subject clean-up activities are not part of the scope of this EIR review."
Well, since perturbation of those hazardous materials could pose a risk to the local environment, clean-up activities and their potential impacts must be part of the DEIR for it to be considered complete in informing the public.

Mitigation Measure 4.6-1a (g 4.6-13)
"Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel."
?How effectively can a "tarp" contain and capture spilled fuel?
?What is the protocol for handling the tarps and adsorbent pads? How are they cleaned, and how is the spilled fuel managed?
?How, in detail, will the city mitigation monitor assure compliance? Without these details the measure is inadequate to be considered reduced to "Less than Significant."

Impact 4.6-2 (pg4.6-14)
?Would the areas previously mentioned i.e. the portions of the Idaho-Maryland site covered with waste rock, be considered as "unidentified hazardous materials?

Much of this section is inadequate because it is based on assumptions of "DTSC's anticipated oversight" and "not anticipating" that construction activities would create a 'significant' hazard to the public.
?What qualifies these assumptions? It's stated that IMMC tests revealed high levels of heavy metals – above level. If these areas are disturbed, what are the impacts, in detail? Until such detail is provided, this entire section of the DEIR is inadequate.

Impact 4.6-4 (pg 4.6-17)
"the applicant is working with the DTSC to remediate arsenic, lead, and mercury contamination that currently exists at the site associated with past mine tailings."
?How are they working to remediate contamination, specifically?

"There remains a potential that residual contamination associated with the site could be encountered…"
In fact, there will definitely be residual contamination encountered, i.e. the 10 foot high pile of waste rock in the vicinity of the ceramics plant. And what about the portions of the Idaho-Maryland site already noted that appear to have been covered with waste rock? Won't they be disturbed by construction activities?

The mitigation measures for this impact are inadequate. An Emergency Response Plan is mitigation after the fact. Hazardous material needs to be accurately identified as to location, then consideration of future activities must be taken. To be adequate mitigation, action must be taken prior to beginning of proposed project. As it stands, the "less than Significant" designation after mitigation is inadequate.

Impact 4.6-5 (pg4.6-17)
It doesn't appear to me that meteorological data from Blue Canyon meteorological station would give an accurate portrayal of local dispersion of DPM and TACs..
?Can any assurances be made that a station so far from the proposed project will give local, accurate, contextual information?

4.7 Hydrology and Water Quality
Mitigation Measure 4.7-2 (pg 4.7-28,29)
The promise of an effective wastewater treatment system in the future in no way is adequate. It is a promise that does nothing, in real terms, to demonstrate that the applicant can and will "design and construct" an effective wastewater treatment system. The treatment system must be designed and proven effective prior to approval.
The public should be able to see that the system works and will protect the environment prior to any permitting.
Until a working example has been designed and proven via testing to effectively treat wastewater from mining operations, then this mitigation measure is extremely inadequate. As a result, the finding of "Less than Significant" after mitigation is inappropriate; nothing more than speculation.

APM 8 (pg 4.7-36)
It is inadequate that a third party consultant be retained for 12 months after completion of dewatering. Impacts are unknown and as such a consultant should be retained for the life of this project.

APM 9 [a]pg 4.7-36)
?What, exactly, constitutes "conclusive sign of impact?"
10 working days is too long for a temporary water source to be in place and operational.

Mitigation Measure 4.7-3b (pg 4.7-37)
14 days is too long to be connected to NID system. Guarantees need to be in place prior to dewatering activities. Until this time period can be significantly shortened, this mitigation measure is inadequate.
?Can NID guarantee a worst-case scenario water supply? Recent drought, low reservoir levels, and sales of water to Lincoln have all stretched supply.

4.9 Noise
4.9.1. Setting

Noise Principles and Descriptors (pg 4.9-1)
"The typical human ear is not equally sensitive to all frequencies . . ."
?Details are provided for tolerances for human hearing, but not for insects or animals. As they are a part of our environment, why are they not considered? If it's supposed to be in biological resources section, it is inadequately mentioned there as well.

Table 4.9-7 (pg 4.9-20)
?How can the Noise level of a Jack Hammer be the same as the noise level of a dump truck? Is the Jack Hammer simply idling? There's no way this data is accurate if the Jack Hammer is hitting rock.
?The source of data for the table is 30+ years old. Is it accurate for modern machinery?

Impact 4.9-2 (pg 4.9-23)
?Do projected Noise Levels for the Idaho-Maryland site account for compounded dBA levels due to multiple trucks/equipment operating simultaneously? If so, how many trucks/pieces of equipment were considered for the projections? The assumptions in the BBA Noise Study appear to be low or even to ignore the probability that more than 5 trucks per hour will be operating. More detail is needed to present a realistic simulation of noise from this site.

Table 4.9-10 (pg 4.9-26)
The data labeled NA for Centennial, b/t East Bennett Rd and Whispering Pines is inadequate.
?Why is this data not available? To be complete this data needs to be included in the DEIR.
?Is the FHWA Traffic Noise Prediction Model from 1978 still accurate for today's assessments. 30 years seems out of date.
?How, in Roadway Segments 4-7, can there be no increase in Noise level with added traffic from the proposed project? Again, this presentation seems counter-intuitive. A small increase may be believable, but none at all? This information isn't easy enough to discern and needs better explanation.

4.12 Recreation
This may be more of a CEQA issue, but the DEIR addresses impacts on recreation facilities, NOT on the recreationists that use those facilities.
?Have any studies been conducted to project the anticipated impact on people, rather than simple the facilities?
?This overlaps other impacts, but it would be a safe assumption that with the Significant and Unavoidable impacts to Air Quality, that degradation of local air Quality will result in reduced use of pools, tennis courts, basketball courts, and any other activity with aerobic intensity Though not in the CEQA guidelines, this aspect of impacting recreation should be addressed. As presented, impacts to facilities only are mentioned. This is inadequate.

4.13 Transportation and Traffic
?Due to the questionable status of the ceramics operation, much data for projected traffic impacts is flawed. What are the projected destinations for truck traffic from the mine?
?Why were no maps with graphic representation of traffic provided in the DEIR? The maps provided in the appendices are poor representations.
The on/off plan for trucks entering SR20/49SB at East Main St./Idaho-Maryland, then exiting at SR 49 & Bennett Street ramp, through town, then re-entering SR 49 at South Auburn St. Ramp will be a Significant traffic nightmare. The impacts of this routing alone make traffic impacts Significant and Unavoidable. Until impacts are more properly assessed as Significant, such as this one, the DEIR is inadequate. (See definition of 'significant.)

4.14 Utilities and Service Systems
Impact 4.14-1 (pg 4.14-7)
?With drought conditions, low reserves, and large sale of water to Lincoln, can NID assure water supplies for the projected lifetime of this proposed project?
?There are no significant details for IMMC's reused process water. Why are no details provided for how dewatering water will be used throughout the facilities?
"the proposed project would not require new or expanded water supply resources . . ."
?This seems to contradict the need for infrastructure to be in place for impacted wells prior to commencement of dewatering. The assumptions for this impact are erroneous, therefore so is the conclusion that no mitigation is required.

Chapter 5.0 Comparison of Alternatives

5.2 Evaluation of Project Alternatives (pg 5-2)
Paragraph 2 - "PM10 would remain potentially significant during the years 2009, 2011, 2012, and 2015" contradicts 4.2.3 **Construction,** Paragraph 6, which states that during all years of construction, 2009-2015, PM10 will remain potentially significant.

Table 5-1 (pg 5-3)
The table omits the No Project Alternative. By omitting this alternative, it shows a bias towards any and all other alternatives. As such it is inadequate presentation of data and needs to be included for the DEIR to objectively inform the public of all alternatives.

5.2.1 Electrification of Mine Operations (pg 5-4)
Question re: Biological Resources. If the 'area of impact would increase due to the new hoist and header," then how can there be "no additional impacts to biological resources?" Just because the site is already disturbed doesn't lessen an increased area of impact. To be considered adequate this sectio0n must be re-written

5.2.1 Question re Hazards and Hazmat (pg 5-5)
?Why would an electric conveyance system at the 1600 foot level negate the need for proposed decline tunnel to be developed deeper than 1600 feet?
? Would explosives usage under Whispering Pines Business Park truly be "eliminated?" Or would their usage be reduced?

5.2.1 Energy (pg 5-7)
Paragraph 1- I doubt the veracity of not being able to "determine specifically" which diesel equipment could be replaced with electrical equipment.
? Why is the second sentence "the proposed project would create a product with... market value." inserted here? It has no bearing, except as sales pitch/plea for legitimacy.
? Of course the use of electrical equipment would reduce use of diesel, but has 'net' Energy usage decreased?
"would therefore not result in the inefficient use of energy."
? Sounds good, but is it true or accurate? Who makes this distinction?

5.2.2 Reduced Ceramics Plant Production
Biological Resources (pg 5-8)
?In principle, how would the addition of a 'small' crushing and screening plant not result in additional biological impacts? Additional soil disturbance must cause additional impacts. It's above ground, therefore it must impact Air Quality also.

Noise (pg 5-10)
?re: attenuation of noise impacts. I suspect that the 'standard engineering controls' would be inadequate to reach 'acceptable' levels. Berms, and plants might help, but how much? Is there any quantifiable data on how effective these methods are, i.e. reducing dBAs?

Population and Housing (pg 5-10)
?With a 50% reduction in operations, how could the number of employees for the ceramics plant also not be reduced? It is implied that the number of employees would remain the same.

Transportation/traffic (pg 5-11)
?"same number of trucks(for either ceramics or aggregate)." How can this assumption be

accurately made? Intuitively, aggregate transport would seem destined for less distance than tiles.

5.2.3 Electrification & Reduced Ceramics (pg 5-11)
Since this is hybridization of first two alternatives, the same questions as above remain.

Noise (pg 5—14)
?Ambiguity. "noise impacts at the nearest residence "could" exceed....standards." In 5.2.2 it was stated that noise "would" exceed standards. Which is it, 'could' or 'would?'

5.2.4 No Project (pg 5-15)
?Is it legitimate to project about future development? If so, how accurate are these projections?
Isn't development going to happen after proposed project closes? If so, wouldn't impacts be somewhat compounded by both endeavors?

Of the 14 categories the No Project impacts vs. proposed project:
Less/fewer impacts - 7
Similar or less Impacts - 4
Split aspects(partially greater impacts/partially less) - 2(Bio, Transportation - is also a "could/if" projection)
"Could be Greater" - 1 (Cultural Resources, "could be...IF...)

General
?Why is there no alternative that examines No Ceramics Plant operation? Since ceramics is the primary emitter of ozone precursors, it would seem logical to look at the gold mining without ceramics operation. Obviously, this alternative would dramatically change many other impacts, but why isn't this a viable alternative?

5.4.2 Summary Of the Environmentally Superior Alternative and its Impacts (pg 5-26)
"however, they (impacts) would be substantially reduced from those associated with the proposed project."
This type of framing language is typical throughout the DEIR; "however," "could," etc. The message would be dramatically different if the DEIR stated "Despite substantial reduction, impacts related to Air Quality would still remain significant unmitigable." Is there any way to have language made more objective here and throughout?

Chapter 8.0 Mitigation Monitoring, Reporting and Compliance Program

General comments/questions.
Throughout table 8-1 under "Monitoring/Reporting Requirements, the DEIR states that "City mitigation monitor to monitor compliance at least once a week." Since the propose project is to operate 24/7 365 days per year, is this adequate? The proposed project would operate 3.7 times as much as a 40 hour per week operation; shouldn't monitoring and reporting be proportional to the extensive planned operating schedule?
?While the City is ultimately responsible, I believe that the monitor should be a third party independent of corporate or governmental influence so that the public would receive as unbiased reportage as is possible.
?There is no mention of Governmental Agency monitoring; what schedule for monitoring would those Agencies have? Is their monitoring independent of IMMC and City?
?Will IMMC have to pay the City of Grass Valley for the salary of the mitigation monitor(s)?

Air Quality Cumulative Impact 4.2-5 (pg 8-12)
The timing for this mitigation is "Prior to 2020." How can this be adequate?
The "verification of attainment" to be submitted to the City should be submitted well before 2020. Why is so much time allowed? It seems with movement towards a greener economy that this projected "Timing" is much too long

Biological Resources Impact 4.3.1 (pg 8-12-14)
There is no specific mention of the 4.9 acres of permanently impacted wetlands. This omission demonstrates bias towards marginalizing a permanent impact by not listing it. To be adequate, the DEIR must include this impact as part of the table.

Biological Resources Impact 4.3-3 (pg 8-22)
?#4. If construction results in abandonment of a nest, then it would be inactive, and therefore work would proceed uninterrupted. Compliance should be more often than once per week to seriously try to mitigate abandonment of nests.
?#6. Is the standard protection parameter of 60 inches for horizontal separation truly adequate for a 54-inch bird? This only provides 3 inches on average on each side of raptor. Is there any data to support that this is adequate clearance?

Biological Resources Impact 4.3-5 (pg 8-24)
b. Planting "off-site" as a mitigation measure must be required to occur in City of Grass Valley. The option for replanting "on other property in the applicant's ownership or control" would effectively subsidize the applicant with trees for cutting down City trees. That option is inadequate for mitigating local impacts. The quoted option needs to be removed from the DEIR for it to be considered adequate.
c. "Payment in Lieu of Planting" is inadequate because this measure does nothing to ensure care and stewardship of the applicant for the environment. Some guarantee should be emplaced that ensures no net loss of trees locally. To be adequate, this part of the mitigation measure needs to be removed.

In Conclusion
This proposed project is an extractive enterprise, which will use massive amounts of energy and water to extract a non-vital, non-renewable resource. The project creates a demand for toxic chemicals, which in turn have their own environmental impacts, both in their synthesis and then after their industrial use.

The impacts foreseen will have Significant and Unavoidable impacts on the quality of life in our community. The known degradation to the environment – the environment as a whole, i.e. more than just humans and economies, far outweighs any potential benefits in economic benefits. Given the unknown status of the ceramics operation, and the import of its success in the overall project, there are just too many unnecessary risks.

I urge the City of Grass Valley, as the Lead Agency of a project with impacts that will reach far beyond City limits to carefully consider the DEIR and the Project as a whole. Thank you for the chance to have a voice in this process.

Respectfully,

Peter Barry
North San Juan, Ca. 95960