

January 19, 2009

To: Tom Last, Grass Valley Planning Director

Re: Idaho-Maryland Mine Project official Draft-EIR comments

From: Tom Grundy, Nevada City CA 95959

Please process the official DEIR comments below, addressing the following DEIR sections:

4.2 - Air Quality;
4.6 - Hazards and Hazardous Materials;
4.7 - Hydrology and Water Quality;
4.14 - Utilities and Service Systems;
4.15 - Energy; and
Chapter 8 - Mitigation Monitoring, Reporting and Compliance Program.

Thank you for your consideration.

4.2 Air Quality

[Impact 4.2-1] The DEIR does not account for the fact that the proposed haul truck routes are adjacent to sensitive receptors at Dow Alexander Park (Bennet Street at the northbound / inbound frontage road), and Hennessey School (South Auburn Street at the northbound / inbound frontage road). This is critically exacerbated by the fact that all inbound and outbound trucks will be stopping and accelerating from a dead stop in the immediate vicinity of these receptors, four times inbound and three times outbound at a minimum. The EIR must properly account for the excessive health impacts on these adjacent sensitive receptors.

[Impact 4.2-1] The DEIR does not review the possible impacts on local air quality along haul routes if the content of the haul trucks is anything other than finished ceramics products. Therefore, the DEIR becomes legally invalid if the ceramics plant does not perform as expected. The DEIR must be rewritten and recirculated to address possibilities of airborne asbestos, arsenic, heavy metals, etc, along the haul routes in the event that the trucks are hauling development rock, waste rock, or tailings instead of finished ceramics products. In addition, mitigation measure 4.2-100 [arbitrarily numbered for these DEIR comments, as a placeholder] must be enforced:

[New mitigation measure 4.2-100] The ceramics plant throughput at the start of each project phase must be equal to the tonnages specified for the end of the previous phase in the latest project description submitted by the applicant. In addition, since this is the first commercial operation of the previously commercially unproven Ceramext process, and since the entire project description is contingent on ceramics plant operation at the described levels, some assurance must be provided that the process will work locally. All of the following must be enforced: - Golden Bear Ceramics must have a plant operating elsewhere, using 200 tons per day of feedstock geologically similar to what would be extracted from the ground in this project, using the Ceramext process, and operating at a profit for at

least three months (one quarter), before any construction is allowed to begin locally. [This plan was already stated publicly and repeatedly by the applicant] - On-site Ceramext ceramics production must be underway, using a two-week average of 600 tons per day of feedstock extracted from the Idaho-Maryland mine, and operating at a profit, before any work or construction is allowed to begin for Phase II of the project as described. - On-site Ceramext ceramics production must be underway, using a two-week average of 1200 tons per day of feedstock extracted from the Idaho-Maryland mine, and operating at a profit, before any work or construction is allowed to begin for Phase III of the project as described.

4.6 Hazards and Hazardous Materials [Impact 4.6-5] The DEIR does not review the possible impacts on hazardous materials in the local air along haul routes if the content of the haul trucks is anything other than finished ceramics products. Therefore, the DEIR becomes legally invalid if the ceramics plant does not perform as expected. The DEIR must be rewritten and recirculated, to address possibilities of airborne asbestos, arsenic, heavy metals, and any other Toxic Air Contaminants (TACs) along the haul routes in the event that the trucks are hauling development rock, waste rock, or tailings instead of finished ceramics products. In addition, mitigation measure 4.2-100 [arbitrarily numbered for these DEIR comments, as a placeholder] must be enforced.

4.7 Hydrology and Water Quality [Impact 4.7-7] The DEIR does not review the possible impacts on water quality and the potential for toxic leaching in the event that massive amounts of planned ceramics feedstock (up to 1200 additional tons per day) must be used as backfill instead, due to ceramics plant under- or non-performance. Therefore, the DEIR becomes legally invalid if the ceramics plant does not perform as expected. The DEIR must be rewritten and recirculated, to address possibilities of massively increased backfill amounts. In addition, mitigation measure 4.2-100 [arbitrarily numbered for these DEIR comments, as a placeholder] must be enforced.

4.14 Utilities and Service Systems

The DEIR must address how rain and snow events will affect the outflow water quality and the settling pond containment ability.

[Impact 4.14-1] The DEIR concludes that the added NID water supply requirements of this project constitute a less-than-significant impact. This fails to account for added NID hookups required to replace the supply to any dewatered wells in the region, including the possible NID pipeline that would have to be built along Bennett Street. This impact must be recategorized as "Less Than Significant With Mitigation (Class II)", and all mitigations regarding financial bonding into water supply programs due to possible well dewatering or contamination must be enforced for this impact also.

[Impact 4.14-3] The DEIR states that the applicant must submit a plan for reducing the construction waste stream by at least 50%, and must incorporate on-site recycling collection and storage areas into the project design. Until these plans are submitted by the applicant, added into the project permit applications, and approved by an independent third party, impact 4.14-3 remains significant. The above steps must be listed as a required mitigation measure.

[Impact 4.14-3] The discussion of this impact does not include discussion of solid waste generated by construction workers. The planned number of construction workers, and the duration of construction (8 years), is significant relative to the number of operational workers. The EIR must include discussion of the solid waste generated by construction workers.

[Impact 4.14-3] The DEIR does not address landfill or other disposal impacts of any waste rock or tailings not able to be used as ceramics plant feedstock, backfill, or aggregate. The assumption that all of the rock brought to the surface will ultimately be used on-site is not realistic. The DEIR must be rewritten and recirculated to discuss the offsite disposal options completely. To ensure that the off-site disposal can be reliably reviewed, proposed mitigation measure 4.2-100 [arbitrarily numbered for these DEIR comments, as a placeholder] must be enforced.

[Impact 4.14-4] The DEIR does not describe the content of the sludge. If the sludge has toxic components, it must be analyzed in the Hazards section of the DEIR and treated accordingly throughout the report, including appropriate mitigation for this impact. At a minimum, the EIR must include discussion of presence or absence of any toxic materials in the sludge.

[Impact 4.14-5] The EIR must list which underground public utilities are within twenty feet of the planned digging / excavation / extraction areas for construction and operations of the project.

4.15 Energy

[Section 4.15.1] Natural gas consumed by the ceramics plant (1,100M cu.ft./yr; about 3M cu.ft./day) would be more than 10% of California's projected average annual demand increase for all uses combined between 2006 and 2025, and also 10% of PGE's projected average annual demand increase for all uses combined, for the same period. However, both PG&E and state-wide projections are for decline or 'virtually no growth' in the industrial sector (CA industrial sector consumption is projected to decrease by 8.6% from 2006 to 2025) (DEIR p4.15-3,4 and 2006 California Gas Report p.11). Therefore, the ceramics plant gas demand is a significant and unexpected impact on utility-wide and state-wide natural gas projections, markets, and ultimately, price; the DEIR incorrectly asserts that this project would not be a significant impact on regional and state gas supply and demand projections. This price vulnerability was not taken into account in the DEIR, in that it affects the likelihood of the continued ceramics plant operation, which has unreviewed environmental implications on most sections of the document.

[Section 4.15.3] CEQA Guidelines, Appendix F, section G, "Irreversible Commitment of Resources", states that the DEIR should address possible preemption of existing energy sources on the site. The recent EPA assessment of renewable energy potential at contaminated mine sites (<http://www.epa.gov/renewableenergyland>) lists the IMM site as having "Very Good" potential for solar, and "Outstanding" potential for biomass energy and also for a biomass power generation facility and/or biorefinery. Due to the large scale and implications of these EPA assessments, the EIR must address how much solar and biomass potential would be lost if the project is approved, and must also consider the EPA assessments in the possible mitigation strategies and the project alternative sections.

Solar panels and biomass power plants are known to work; the Ceramext process is still commercially unproven.

[Section 4.15.3] The first significance criterion is written in a manner that all possible impacts can easily be externalized and rationalized as negligible: since all 'electricity, natural gas, gasoline, diesel, or other non-renewable energy types' are currently available for import from other counties, states, or countries, then, based on this criterion, no project will ever result in 'constrained energy resources'. The nebulous wording of this criterion is not inline with CEQA Guidelines, Appendix F (for example, section C.2. which addresses local supplies and capacities), and must be reworded in a more logical manner such that it becomes a serious criterion instead of a predetermination and a foregone conclusion. Since this criterion factors strongly in the discussions and conclusions of Impacts 4.15-1, 4.15-2, 4.15-3, and 4.15-4, those impact discussions and conclusions must be rewritten accordingly.

[Section 4.15.3] Impact 4.1-5 is mislabeled as Class II - should be Class III

[Section 4.15.3] Impact 4.13-11 is incorrectly worded as 'Mitigation Measure 4.13-11'

[Section 4.15.3] Impact 4.13-11 assessment name and class number do not match; should be class II (2)

[Impact 4.15-2] The '26 percent increase' statement is incorrect in the common statistical usage of the term; the 'increase' is commonly defined as the marginal amount (172,000) divided by the previous total (495,270), which is simply the 35 percent listed earlier in the same sentence of the DEIR; '26 percent' appears to be the result of the marginal amount divided by the new total (172,000 / (495,270 + 172,000)) which is neither appropriate nor useful, and is definitely misleading. This is also shown incorrectly in the executive summary on page ES-23.

[Impacts 4.15-2,3,4] The conclusion of 'Less than significant' after mitigation for each of these listed Impacts is in direct conflict with the last listing under 'Significance Criteria' on DEIR p.4.15-9. Even with the proposed mitigation, every one of these listed Impacts will undeniably "Cause a cumulatively considerable increase in energy consumption and associated environmental impacts." Therefore the conclusions for impacts 4.15-2, 4.15-3, and 4.15-4 must be changed to "Significant and Unavoidable Impact after mitigation (Class I)."

[Impacts 4.15-2,3,4] The only tangible and measurable part of mitigation measure 4.15-2 is the requirement to exceed Title 24 standards by 14%. The project applicant is tasked with developing and showing compliance with their own energy conservation plan; the EIR must show this plan in its entirety for review by the public as well as the Planning Commission and City Hall. Some of the specific items listed in the bullet points of mitigation 4.15-2, or a minimum number of them, must be required in addition to LEED Green Building status; LEED Green Building status and nothing else does not constitute a sufficient mitigation for the energy impacts of this project. "Micro-scale hydroelectric generation on the dewatering outflow" should be added to the list of possible Plan elements. Also, LEED standards are being revised in 2009; to account for any LEED changes between now and the time that building permits are granted, the mitigation must be written in terms of LEED compliance levels, instead of being written in terms of Title 24 exceedance levels.

[Impact 4.15-3] The '54 percent increase' statement is incorrect in the common statistical usage of the term; the 'increase' is commonly defined as the marginal amount (1,100) divided by the previous total (918), equal to a 120 percent increase; '54 percent' appears to be the result of the marginal amount divided by the new total ($1,100 / (918 + 1,100)$) which is neither appropriate nor useful, and is definitely misleading. Put into words, this calculation error leads to the incorrect assertion that the county's natural gas consumption would increase by about half, when in fact it would be more than doubled, which is stated correctly at the end of the same paragraph. This is also shown incorrectly in the executive summary on page ES-23.

[Impact 4.15-4] Table 4.15-5 (DEIR p.4.15-16) contains a fundamental error: the column labeled 'miles per gallon (mpg) per day' should instead be labeled 'gallons per day', in which case it should be miles-per-day divided by miles-per-gallon, instead of multiplied-by. The remaining columns' values are errors propagated from that invalid equation. The entire table must be recalculated.

[Impact 4.15-5] The discussion of this impact appears to contain an important contradiction: p.4.15-17: "PG&E has indicated that the existing natural gas line running from SR 49 to the Idaho-Maryland site (the location of the ceramics plant) may need to be upgraded, as the existing gas system can only accommodate a gas load of up to 150 mcf per hour."; compare this to p.4.15-7: "Currently, there is no natural gas distribution to the project sites, including the existing Hap Warnke Mill. However, existing natural gas service lines are located within the project area, and natural gas could be provided to the site via extension from mains within SR 49." This contradiction must be explained and rectified. Is there currently an unused natural gas line connecting the SR49 main line to the ceramics plant location, such that no further construction would be needed to enable the flow of gas to the ceramics plant? If the consultant feels there is no contradiction, then a full explanation of that assertion must be made in the EIR in order to resolve any ambiguity. Also, the stated number "150 mcf" does not make sense: the ceramics plant is planned to use 1,100 million cubic feet per year; if the 'mcf' above indicates 'million cubic feet' then the amount of gas flowing through this line is only about 0.125 mcf per hour, so the assertion that the 150 mcf per hour line may need upgrading does not make sense.

[Impact 4.15-5] The discussion of this impact does not state whether the gas line along SR49 would need an upgrade to handle the increased gas flow. A discussion of this question is merited by the fact that the natural gas consumption at the proposed project would more than double the county's consumption. Even if this upgrade / replacement, if any is required, would spawn its own CEQA process, it would affect the project schedule, economic outlook, and cumulative environmental impacts in several categories, and therefore must be given full analysis and discussion in this EIR, including these specific questions at a bare minimum: How long would the upgrade project take? Will it be able to scale back down to current consumption and service levels if/when the ceramics plant closes, such that no further infrastructure work would be needed at that point? Would natural gas supply to Grass Valley and Nevada City be affected during the upgrade? What would be the physical area undergoing upgrade work (replacement of pipeline all the way to Auburn, or to Marysville)?

[Impact 4.15-5] The discussion states "the project applicant would pay its fair share to PG&E for providing necessary installation of infrastructure to serve the proposed project". That amount must be

quantified. What assurances are in place that none of this infrastructure cost will be passed along to the city or county? A mitigation measure must be in place requiring the applicant and the City to sign an agreement stating that the applicant will pay 100 percent of budget overruns or any other unforeseen costs incurred by the City or County due to energy infrastructure projects required for the project.

[Impact 4.15-5] The discussion states that PG&E will be subject to the mitigations described in this EIR during electric infrastructure construction, and that any natural gas infrastructure construction would trigger its own CEQA review process. The EIR must indicate the law, regulation, or wording that guarantees these protections, and must also state whether any of these projects have been scheduled and/or if any related CEQA process has been started.

[Section 4.15.4] Every energy consumer cumulatively increases the vulnerability of the area's tax base, work force, entire economy, and livelihood to fluctuations in future energy price and availability changes. This project specifically, accounting for such high energy consumption numbers relative to the rest of the area, dramatically increases the mentioned vulnerability, disproportionately to the number of jobs and income level it proposes: this merits a discussion in the EIR of local energy consumption per dollar of tax revenue generated and per job generated in this proposed project as compared to various other jobs and projects in the area.

Chapter 8 - MMRC

The city of Grass Valley currently has no operating gold mines or ceramics plants, or any other projects of this magnitude. Therefore, the city has no mitigation monitors capable of monitoring this project, and does not have the financial ability to hire the required mitigation monitoring team that would be required for the scale of this project. Therefore, the applicant must pay all salary / wages for the city's choice of mitigation monitors.