

January 14, 2009

Robert Bogart  
Nevada City, CA

Mr. Tom Last, Planning Director  
City of Grass Valley  
125 E Main St.  
Grass Valley, CA. 95945  
(also sent via email)

Re: Idaho-Maryland Mine Project DEIR

Dear Mr. Last:

I am writing to express my concerns about the inadequacies of the IMM Draft EIR (DEIR). While I am not a CEQA expert, I am an experienced design engineer, with both a BS and a MS in engineering. During my career I have worked on equipment which was flown in US Navy and US Air Force fighter planes, the NASA space shuttle, NASA satellites, and critical medical equipment including CT scanners, MRI scanners, and laser surgery equipment. Thus I feel highly qualified to comment upon design approaches and analyses especially when it comes to "mission critical" situations.

Unfortunately, throughout the DEIR there is no analysis of the mission critical equipment required to protect our community. There is nothing that explains what would happen should a piece of gear fail, such as within the water treatment plant or the air filtration equipment in the ceramics factory. The DEIR is a best case analysis --- everything will work perfectly all of the time. Anyone with any experience in the real world understands that nothing works 100% of the time. Everything fails at some point. Thus the DEIR is wholly inadequate since it does not have any contingency for errors or equipment failures.

Another key example of the inadequacy of the DEIR revolves around the dewatering proposal. No provision is made to protect homeowners outside of a very limited area close to the mine and with a limit of 200 days into the dewatering process. A thorough review of this situation indicates that it is impossible to predict exactly what will happen during the 20 + year dewatering process (refer to the BMHA response regarding dewatering affects.) Wells far from the 700 foot radius could be affected. Yet no provision is made for this possibility. This does not show any critical thinking nor allowance for any contingency other than the most simplistic.

Another example is the ceramics plant. There are numerous concerns about the viability of the process, the ability of the applicant to commercialize the process, the financial capability of the applicant to develop the plant, and the economics and marketing of the tiles. Given these widespread and frequently mentioned concerns, no provision is made in the DEIR for waste rock should the ceramics plant not be built or not be profitable. In and of itself this is a fatal flaw in the DEIR. Since the ceramics process is used to mitigate mine waste rock, the applicant must conclusively demonstrate the technical and economic viability of the ceramics process. After this demonstration, the DEIR may be resubmitted for consideration with the ceramics plant used as a mitigation. Absent this demonstration, the DEIR must be revised with the ceramics plant removed so that the community can understand what the applicant proposes to do with the waste rock without a ceramics plant as part of the project. After revision, the DEIR must be recirculated for public review.

If the DEIR is to truly explain the environmental impact on our community, then it must make provision for failures of critical systems, accidents, and errors. It must look at contingencies for circumstances that the applicant might consider improbable but which cannot be ruled out as impossible.

The Draft EIR fails to fully analyze the impacts from all past, present, and reasonably foreseeable activities in the area. This includes impacts from past, current and future mining, logging, grazing, residential and commercial development. The DEIR must be revised to include these analyses and then recirculated for public comment.

The Draft EIR does not ensure that the Project complies with all requirements of the California mining regulatory statutes and regulations (including SMARA) for environmental resource analysis and protection. The DEIR must be revised to include these analyses and then recirculated for public comment.

Many of the mitigations defer plans and analyses into the future. This is unacceptable under CEQA. The DEIR cannot postpone the submission or analysis of any mitigation plan, including an analysis of the effectiveness of those plans and ancillary impacts from any plan. Thus, the revised Draft EIR must include these mitigation plans so that the public can fully review and comment during the Draft EIR CEQA process. Further, for every aspect of the Project, all plans and proposals must be submitted for public review at this time so that the public can review and comment on the revised Draft EIR. The DEIR must be revised to include this information and then recirculated for public comment.

In addition to inadequate analysis of all potential air emissions (including PM10 and other hazardous and criteria pollutants), the DEIR fails to fully analyze PM2.5 emissions from the Project. There is no assurance that the Project will comply with federal and/or state PM2.5 standards. Absent assurance that all air quality (and water quality) standards will be met at all times, the Project cannot be approved.

The Project's groundwater dewatering will improperly interfere with the attainment and protection of beneficial uses of local surface waters such as the protection of aquatic life. Groundwater dewatering must not cause any degradation of these beneficial uses which may be caused by the lowering of the water table or other impacts to surface and ground waters. Under California law, these beneficial uses must be protected. Further, any disturbances to the hydrologic balance must be absolutely minimized. The Project's dewatering fails to meet these requirements.

After it has been revised to include the above and below referenced information, then the DEIR must be recirculated for another round of public review to ensure that the revisions have been adequately and completely incorporated and that the project has been fully and properly described.

I also have concerns about specific sections within the DEIR which I explain in the following paragraphs.

### **3.2.2**

1) The CEQA Guidelines regarding the definition of “feasibility” require the consideration of social and environmental factors.

- a. After the initial mention, social factors are not mentioned again in this section. Where are they considered?
- b. How are environmental factors considered for lands not specifically protected by a law or regulation?
- c. Where are health factors/impacts considered?

2) If CEQA requires consideration of alternatives even if they may “impede to some degree the attainment of project objectives or would be more costly,” how is it determined that the cost of an alternative is not “economically feasible”?

### **3.2.3**

1) Who defines these terms, and by what criteria?

- a. “substantially” lessen
- b. “significant” effects
- c. “less than significant”
- d. “proper” implementation

2) At what stage IS it possible/required to evaluate all of the impacts of an alternative, if not the screening stage?

3) How does the “Night Time Operations Limitation” alternative NOT meet CEQA Guidelines Section 15126.6(f) parameters?

It is understood that initial investments in infrastructure would remain the same while daily production is decreased. However, what are the figures that show that this poses such a financial challenge to IMMC that it is not an economically viable option, if the life of the project is doubled?

### **3.4.2**

A decrease in ceramics plant production, while addressing the emissions issue, results in an increase in “residual rock.” The proposal is that this rock be used as backfill, transported off-site, or crushed for aggregate.

- a. Is this “residual rock” mine tailings?
- b. What will be done with this rock to decontaminate it from the mining process for safe use as backfill or aggregate, or for transport off-site?
- c. If it is transported off-site, how will that impact air quality?
- d. If it is crushed for aggregate, what will be done to keep chemicals and dust out of the air while it is being crushed?
- e. Where will the crushed rock be stored?
- f. What is the market demand for this aggregate?

### **3.6**

Table 3-2 and Figure 3-1 list and graphically depict hundreds of planned residential units and commercial ventures within less than 2 miles of the IMM sites. However, I do not see in this section any “summary of expected environmental effects” of the IMMC project on them or options for their mitigation, and this analysis is not mentioned again after the initial listing of the CEQA requirements for this section. Why?

### **Comments on Section 4.13.**

1. No analysis is performed of traffic relocation due to congestion caused by the mine project. Local traffic will flow to streets not impacted by mine traffic. Impacts shown do not take this into account e.g. instead of using Idaho Maryland Rd to access Brunswick Road, where the intersection with Sutton is already horrible, traffic from Banner Mountain and Cascade Shores will divert to Banner Lava Cap (BLC) Rd and either Gracie or continue down BLC to NC Highway or Old Tunnel Rd. The DEIR must incorporate an analysis of traffic relocation and impacts to other locations.
2. No analysis or impact is identified for businesses along main mine traffic routes who will suffer as patrons move to other non impacted locations. Many customers have choices for which business they patronize. If traffic is causing them to have difficulty accessing a business, customers will seek an alternate business that is away from major traffic conditions. This impact could affect GV sales tax revenue as customers move to business locations outside GV with no traffic. It must be factored into the DEIR economic analysis.
3. No analysis or impact is identified for traffic congestion in Auburn due to mine haul truck traffic. During the post 9am and post 6pm time periods the release of held trucks will bunch up along Highway 49 and through Auburn.
4. No analysis is presented of safety problems caused by haul trucks using the access lane on the freeway between the IM / E Main entrance and the Bennett off ramp. These trucks will be traveling very slowly. Traffic coming down the hill at a high rate of speed will have to stop short when exiting at Bennett. This could lead to major stoppages of traffic on 49 on the downhill portion. Some drivers will be tempted to cut in front of the haul trucks potentially causing serious accidents. This danger must be mitigated in some fashion.

### **Ch. 8 MMRC**

I suggest that the following general mitigation be incorporated into the project.

**Mitigation enforcement / ombudsman.** The Lead Agency must employ a full time independent ombudsman for the entire duration of the project. The ombudsman will be charged with interfacing between local citizens, whether located in Grass Valley or Nevada County, and IMMC and / or the Lead Agency for any and all mitigation issues. The ombudsman shall have the power to assess fines for mitigation violations and shall further have the power to halt all IMM operations immediately if mitigation measures are not being observed by IMM or the Lead Agency. The selection of the Ombudsman shall be subject to review and approval of an independent citizens group. The selected ombudsman shall be available to citizens on all normal working days between 0900 and 1700 hours. This is an entirely feasible mitigation. If the applicant or the Lead Agency feels this is not a feasible mitigation then I would like an explanation of why it is not feasible.

**page 8-5, Public access to records.** Change this section to require the city to post online all records and reports within 5 days of receipt. This will truly allow public access to the information.

Impact 4.1-4, page 8-6, Aesthetics. The size of the pile(s) of mine rock, waste, and tailings are not defined in the DEIR. An explicit limit must be specified on the size of these piles. There must also be a provision to hide the pile(s) from view along Idaho Maryland Road and along Highway 49.

#### **Page 8-3, Section 8.2.1**

*“The City may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The City will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.”*

This does not provide adequate explanation of how monitoring will be done. The city must commit to a mitigation monitoring plan that can be reviewed by the public, not say we may do it or we may hire a

consultant that we will say is competent. The city does not have anyone on staff that is qualified to monitor this project at this time. Therefore the city shall identify a monitor, enter into an agreement with the monitor and describe who will do the monitoring. The amount of monitoring that is required shall be calculated and it shall be shown how many full time monitors are required. The city shall include the cost for monitoring in the overall cost analysis for the project. It is not there now. The DEIR must be recirculated with this information.

**Impact 4.2-1 Air Quality.** A feasible mitigation that is not mentioned is to require use of LNG or CNG haul trucks and operations equipment. Therefore, I propose the following mitigation.

*IMM shall use only CNG or LNG heavy duty haul trucks and operations vehicles. No diesel vehicles, haul trucks, or operations equipment will be used.*

This technology is now available and provides significant reductions in pollution and GHG emissions over comparable diesel engines. Use of LNG and CNG vehicles also reduces our dependence on foreign oil. If this mitigation is considered not to be feasible then please explain why it is not feasible. Cost shall not be the overriding concern. The health of the community shall be the overriding concern. If the IMM makes a little less profit in order to protect the health of the community then that is an entirely feasible mitigation.

See the following information. More is available at [http://www.afdc.energy.gov/afdc/vehicles/natural\\_gas\\_emissions.html](http://www.afdc.energy.gov/afdc/vehicles/natural_gas_emissions.html)

In a study of CNG vs. diesel United Parcel Service (UPS) delivery trucks, CNG trucks produced 75% lower carbon monoxide emissions, 49% lower nitrogen oxides emissions, and 95% lower particulate matter emissions than diesel trucks of similar age.

City of Los Angeles Bureau of Sanitation LNG Heavy-Duty Trucks record a 23% reduction in nitrogen oxides emissions from dual-fuel LNG refuse trucks compared with diesel trucks. In an evaluation of freight trucks, CNG trucks produced 24%-45% lower nitrogen oxides emissions and more than 90% lower particulate matter emissions compared with diesel trucks.

The U.S. Environmental Protection Agency calculated the potential benefits of LNG versus diesel based on the inherently cleaner-burning characteristics of natural gas.

- Produce half the particulate matter of average diesel vehicles
- Significantly reduce carbon monoxide emissions
- Reduce nitrogen oxide and volatile organic hydrocarbon emissions by 50% or more
- Potentially reduce carbon dioxide emissions 25% depending on the source of the natural gas
- Drastically reduce toxic and carcinogenic pollutants
- Increase methane emissions (not a benefit)

The following is quoted from a Kenworth product brochure:

*“A typical Class 8 LNG truck may reduce nitrogen oxide (NOx) and greenhouse gas emissions by up to 33 percent and 20 percent, respectively, compared to a diesel-fueled truck. The cleaner burning LNG fuel typically costs about \$1 per gallon less than the diesel equivalent fuel.”*

#### **MM4.2-1a Dust Control.**

*“Paved streets adjacent to the project shall be swept or washed at least once per day, or more frequently if necessary to remove excessive or visibly raised accumulations of silt and/or mud from activities at the project sites.”* Where will the potentially contaminated material be washed into? Wolf Creek? Will this material be tested to determine if the creek will be further contaminated by washing it into the watershed? Sweeping the street does little good as it simply raises more dust. There must be

a mitigation that does not wash more polluted material into the creek and which does not raise more dust in the area nor simply redistribute the dust to the curb. The method for street sweeping including the equipment and documentation proving that material will not be simply pushed around or reintroduced into the atmosphere. The EIR is inadequate until this information is provided.

**Mitigation Measure 4.2-1e: Offsite Mitigation.** *“Prior to beginning any construction activities, the applicant shall coordinate with the City and the NSAQMD to develop an Offsite Air Emission Reduction Plan which shall identify non-project related air emission reduction measures to be implemented and/or funded by the applicant, and the schedule over which such offsite measures shall be implemented. The goal of the Plan shall be to achieve offsite emission reductions of NOx, ROG, and PM10 equal to a minimum of 10 percent of the project-related emissions remaining after implementation of Mitigation Measures 4.2-1a through 4.2-1d. Such additional measures may include, but are not limited to, the following:*

- *Wood stove / fireplace replacement or retrofits with EPA-certified units.*
- *Diesel bus retrofits or replacement with LNG/CNG or hybrid-electric buses.*
- *Replacement of diesel-fueled agricultural pumps with electric pumps.* “

This is inadequate. A plan shall be devised and made available for public review in the DEIR, not after approval of the DEIR. Further a goal of a 10% offset is inadequate. The goal should be at least 50% if not 100%. How will the amount of pollution remaining be determined? This must be specified for review and public comment. The overall plan must be developed and included in a revised DEIR and the DEIR recirculated for review with the plan.

This section further states that: *“IMMC to submit verification of attainment of reduction goal to NSAQMD and City. Prior to reclamation activities.”* This means that the results of this mitigation will not be known until the project has been completed. This is inadequate. This mitigation must be monitored at least quarterly using the same monitoring procedures required for all other mitigations. There are no penalties for non attainment that can be applied to the applicant once the project has been completed. This is inadequate.

**Page 8-10. Measure 4.2-1d.** *“Minimize idling time to 5 minutes for all off road equipment and on road trucks.”* There are several inadequacies with this mitigation. Haul trucks are “held” for 2 hours in the AM and 2 hours in the PM. Where are the drivers going to go during winter and summer? There is no provision for a drivers lounge with proper heating and cooling in any of the project descriptions. Drivers will not sit in their trucks without heat or air conditioning for 2 hour periods day in and day out. This mitigation is inadequate as it is totally impractical. The amount of air pollution emitted must be revised to account for hours of idling time or else an accommodation for drivers must be included in the project and the DEIR. The DEIR is inadequate and must be revised and recirculated. Furthermore, monitoring of idling time to once per week is inadequate. Idling of diesel engines is a significant source of pollution and monitoring should be performed several times a week at varying intervals and this program should be specified in the DEIR.

**Page 8-10. Measure 4.2-1d.** The footnotes quoted below:

*“1. ....Assumed to reduce DPM emissions by 85% and CO emissions by 60%.*

*2 Ultra-low sulfur fuel is assumed to reduce DPM and SO2 emissions by 15%.”*

are inadequate. The type of particulate filters that are required should be specified and it should be known how much DPM emissions will be reduced. It should not be an assumption. It should be real data supported by real world testing.

**Mitigation Measure 4.7-2:** *“The applicant shall design and construct its wastewater treatment system to effectively treat the liquid waste associated with the gold mill process, including residual sodium cyanide, flotation reagents, by-products from the gold mill process, and residual sodium chemicals present from the neutralization of sodium cyanide sludge material. The treatment process can either be designed as an integral component of the overall wastewater treatment system or be designed as a separate, in-line pre-treatment process. The applicant shall demonstrate to the RWQCB and the RWBogart IMM DEIR comments* Page 6 of 8

*City of Grass Valley that the proposed treatment system effectively treats mine discharge water, storm water, and gold mill process water to applicable water quality standards and discharge requirements. 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. Changes to the applicant-proposed treatment system that result from this mitigation measure shall become part of the project and the applicant shall provide the City of Grass Valley and the RWQCB with detailed plans and narratives describing the wastewater treatment system and the required upgrades to the currently or design changes. “*

There are several inadequacies with this mitigation. There is no water treatment design that can be reviewed as the design has not yet been done. In order to properly comment on the DEIR there must be something to comment upon. The design is slated to be completed 2 months before dewatering commences. No more information will be available between now and then so the design should be completed and incorporated in the DEIR to allow public review and comment before implementation. That is the purpose of a CEQA DEIR. This DEIR basically says, the applicant will design it and you should trust us and a couple of overworked and understaffed public agencies to review and approve the design with no further public review. That is clearly inadequate. The design process should be explained in the EIR. What are the concentration levels of various pollutants that are expected? What volume of water is to be treated daily? What similar treatment plants exist, what pollution concentrations and water volumes are being treated? What is the proven reliability? What is the quality of the water that is output from these treatment plants? How is the output water quality monitored? Can the system be shut down immediately upon detection of a failure to meet water quality standards?

The mitigation states that *“The applicant shall demonstrate to the RWQCB and the City of Grass Valley that the proposed treatment system effectively treats mine discharge water, storm water, and gold mill process water to applicable water quality standards and discharge requirements.”* How will this be demonstrated? Since there will not be any gold mill process water to test, it is impossible to demonstrate that the system will work except on paper. The method of demonstration must be provided in the DEIR. Without this information the DEIR is inadequate.

**Mitigation Measure 4.7-5** This mitigation states that IMM will stop discharge into Wolf Creek during storms when the water level reaches a 75% capacity mark on any one of 4 culverts. Who monitors these marks during storms? How often are they monitored? How long can IMM cease pumping operations during mine operation? Days, a week? Will dewatering continue and water be stored? Or will dewatering cease completely? If water is to be stored, how much water can be stored? If water is stored, how will it subsequently be released, over what period of time? The DEIR is inadequate until these questions are answered.

**Impact 4.9-3 Blasting mitigation.** I propose the following entirely feasible mitigation. *If any homeowner within a 5 mile radius of IMM finds that their sleep or enjoyment of their property is affected by IMM blasting activities then IMM shall immediately cease all blasting activities. If IMM cannot develop a method for blasting that resolves the concerns of the affected homeowner, then IMM shall be limited to 1 blasting event per 4 hour period from 0700 to 1900, with no blasting allowed on Saturdays, Sundays, or federal holidays and no blasting allowed from 1900 to 0700. The limited blasting events shall be scheduled in advance and the event shall take place within 5 minutes of the scheduled time. If this mitigation is deemed not to be feasible then an explanation shall be provided as to why it is determined that the quality of life of the community is not an overriding consideration.*

**Cyanide.** No mitigation is provided for cyanide usage. *I propose that use of cyanide be prohibited.* Some gold will not be recovered. This is an entirely feasible mitigation especially for an operation in the middle of a densely populated area in which an accident would be catastrophic. Again, IMMC will make a little less money in return for reducing the risk to the surrounding community. If this mitigation is deemed not to be feasible then an explanation shall be provided as to why it is determined that the safety of the community is not a tantamount consideration.

**Hazardous Material Transportation.** No mitigation is provided for transport of hazardous materials. I propose the following mitigation: *Transport of any hazardous material in any type of vehicle into and out of Nevada County will require pilot cars with warning beacons to precede and trail any vehicle hauling hazardous materials. One of the pilot vehicles will contain trained staff and a complete emergency response kit allowing any accident or spill to be immediately contained and cleaned up without waiting for "haz mat" teams to arrive.* This mitigation is entirely feasible. If the applicant contends that this mitigation is not feasible then I want an explanation of why it is not feasible.

Until the DEIR is modified and reissued with these revised mitigations, the DEIR is inadequate. Once the revised mitigations have been incorporated into the DEIR, the DEIR must be recirculated for public comment.

Sincerely,

Robert Bogart  
Nevada City, CA

cc: Nate Beason, District 1 Supervisor  
KVMR, KNCO, KXJZ, KQED  
The Union, Yubanet.com via email