

Robert Hingtgen
Planner 3
County of San Diego
Re: PDS2018-MUP-18-023
PDS2018-RP-18-001
PDS2018-ER-18-19-007

Dear Mr. Hingtgen;

This letter is to provide commentary for the Notice of Preparation and to express my opposition to the open pit sand mining operations in the Sweetwater River at the Cottonwood Golf Course.

Additional points which have not been properly or adequately addressed in the Developer's presentation to date and need to be addressed are as follows:

1- Use of grading equipment in the open-pit mine will need to cross the Sweetwater River channel to excavate the sand. In fact, based on the NOB this open-pit mine is excavating a deeper river channel leaving the pollutants that their machinery emit or leak in the river channel. These actions will cause harm to the river channel and put pollution into the river from Cottonwood Golf Course (GWGC) down to the Sweetwater Reservoir and all points in between such as the Federal Wildlife Refuge.

2- Having one water truck to handle dust control on the property is inadequate for an open-pit mine. This would be most evident when the area is subject to a Santa Ana wind condition. In a Santa Ana wind event sand and dust from this open-pit mine will blow throughout the adjoining communities of Jamul, El Cajon, Rancho San Diego, Spring Valley and La Mesa. One of the nicest attributes of the Valley is the gentle coastal breeze that flows up the Sweetwater River Valley cooling the Rancho San Diego community because of the breeze fugitive dust pollution from the open pit mining operations will blanket homes, schools and streets causing more dirt to go into the storm drain system and increasing respiratory illnesses for all residents within a mile or more of the mine. Currently the grass on the golf course prevents dust from blowing into surrounding neighborhoods.

3- There is no provision for street sweeping on Willow Glen Rd. or any of the surrounding streets for the fugitive dust and dirt that falls off the transport vehicles when leaving the open pit mine property or blows outside the limits of the mine. This dirt and dust will be washed into the storm drain system and foul the coastal sea water.

4- Staging of semi-truck sized dirt hauling vehicles at the CWGC parking lot entrance and exit creates a dangerous traffic condition. When leaving CWGC, the semis will be pulling out onto Willow Glen Rd. which to the immediate right of the CWGC has a small rise in the road blocking the view of drivers who are coming out of the CWGC exit. The oncoming traffic, which is traveling at 45+ miles an hour cannot see or be seen due to the rise in the road. The drivers will be confronted by a semi-truck pulling its load across the road blocking the whole width of the road as the semi-truck head west on Willow Glen Rd. to deliver its load of sand. This will leave the driver with little time to react and no place to steer to avoid a broadside crash into the semi-truck or its trailer(s). I can speak from personal experience because I have tried to exit the Cottonwood Golf Course from that exit point in a passenger car and find it at best difficult and somewhat nerve-wracking to exit safely.

5- Likewise when pulling off Willow Glen Road trucks will be slowing down to take a right turn into the CWGC truck staging area creating backups. It is likely to have several trucks slowing and stopping at the entrance to the open-pit mine as they try to stage for their next pick up creating a dangerous unexpected traffic backup on Willow Glen Rd. when heading east on Willow Glen.

6-Biking lanes and running trails are immediately adjacent to the proposed open-pit mine on both sides of Willow Glen Rd. The runners and the bikers will be put at health risk and physical risk by the substantial semi-truck traffic that will occur should this open-pit mining operation be approved. This will destroy two of the great recreational activities of the residents of the surrounding communities that utilize these bike lanes and running trails daily.

7- Another issue is that service vehicles for all of the equipment and trucks will be doing maintenance on-site outside the proposed operating hours. This will cause unnecessary noise and continued disruption to the surrounding residences and habitats. The Developer cannot service its equipment when they are using the equipment during the business hours allowed under the

proposed MUP. The result will be that the service companies have to work on the mining equipment and trucks outside the proposed hours of operation expanding the disruptions to the homes in the surrounding communities.

8- Currently there are several mature cottonwood trees on the course in the areas of the proposed excavation. Those trees have been there for decades. The proposed reclamation only puts in small potted trees requiring further decades of growth to get back to the size that they are currently leaving the excavated land basically looking barren of mature trees.

9- This proposed open pit mine is immediately adjacent to and abuts the Jamul/ Dulzura Planning area. Yet the Jamul/Dulzura Planning area has not been asked to assess and offer its observations regarding the impacts of this proposed open-pit mine to the residents in its communities. Request is made that this application for an MUP be sent to and officially reviewed by the Jamul/Dulzura Planning Group with public meetings so their recommendation can also be shared with the SD County Planning Dept. and the SD County Planning Commission

10- It is essential that the agencies identified in the County's Scoping Letter of May 31, 2019, as well as any other affected agencies, be included in the EIR notification process as well as the required approvals for the project. This should be regardless of any planned reduction in project scope by the applicant since the Scoping Letter was issued. At minimum, those agencies include: U.S. Fish & Wildlife Service, Army Corps of Engineers, California Department of Fish and Wildlife, California Department of Transportation, California State Water Resources Control Board – Division of Drinking Water, California Department of Water Resources – Division of Safety of Dams, California Regional Water Quality Control Board – San Diego Region, U.S. Bureau of Reclamation – Southern California Area Office, San Diego County Water Authority – Water Resources Department, Sweetwater Authority, Otay Water District, San Miguel Consolidated Fire Protection District, Grossmont-Cuyamaca Community College District, Grossmont Union High School District, Cajon Valley Union School District, Jamul-Dulzura Union School District, and Local Native American Tribes.

11- Impacts to the horse and the equestrian trails immediately adjustment to CWGC need to be investigated and assessed regarding sound, access and health issues from disruption from the sand materials during the mining of sand, such as Valley Fever.

12-The Developer Fails To Adequately Analyze and Describe Mitigation for Noise and Light Impacts to Wildlife.

Although the Developer attempts to propose some parochial actions to minimize the impact of noise from Projects to humans, it makes virtually no attempt to measure or mitigate the impacts of noise to any of the wildlife species known to be on and in proximity to the site, both noise impacts during construction and for the life of the Project. It completely omits this despite the fact that the impacts of both noise and artificial lighting are known to negatively impact wildlife across all taxa, including birds, mammals, reptiles, amphibians, and invertebrates. This is also surprising in light of the fact that it is standard operating protocol for developments to use sound barriers and other means to reduce impacts of anthropogenic sounds (technophony) to threatened and endangered species including the California Gnatcatcher and the Least Bell Vireo; in fact any construction that averages/exceeds 60dB over the course of an hour at a time must be mitigated for development that occurs in proximity to California Gnatcatcher breeding territory. This huge omission needs to be addressed to begin to propose how they intended to reduce the impacts of noise on all wildlife not just humans and the Gnatcatcher. As such the appropriate measurements and analysis of noise impacts- including measurements of not only loudness but also duration, frequency, cumulative noise levels, and actual degree of attenuation of sounds that will be made by the construction vehicles and devices onsite must be conducted before any further analysis of impact mitigation can be accurately considered and analyzed.

13-CWGC is an area with high biological value in which conservation will be encouraged.

The Applicant is seeking to incorporate an almost 200+ acre pit mining development, with all of its associated pollutants, disturbances, and habitat destruction over a minimum of 10 years. The Developer repeatedly bases its entire argument of successful mitigation upon a pie-in-the-sky presumption of completely successful restoration and reclamation of the Project- at an undetermined date a minimum of 12 years in the future- upon at which time the site will meet such 'high value' requirements of biodiversity, species richness, and undisturbed habitat quality. In other words, the Developer is basing the claim that all significant impacts will be reduced to less than significant based upon a theoretical plan, not an on-the-ground reality in the form of viable habitat.

Additionally, the Developer's proposals have not guaranteed to use alternatives in case onsite restoration failures despite the demonstrated infamous track record of many sand and gravel mining operations locally and throughout California. A review of the status of many aggregate mine reveals they partly to completely fail not only at restoration but also baseline reclamation (see more on this discussion, below). The Developer offers zero guarantee of habitat mitigation where they could and should.

14-The restoration plan sets zero performance standards or criteria for what will be joined to the MUP.

As if this weren't poor enough strategy offered, the "mitigation" measures also include taking what they generically describe as "overburden" and dumping it back on the site to "improve habitat". First, if merely dumping some form unwanted mining by-product improves habitat, then this should be a primary component of the restoration plans for the Project site. It is not, perhaps because it is not founded in any scientific conclusions whatsoever.

Increased traffic by heavy trucks and other heavy equipment, new roads, access driveways, and parking areas are an inevitable part of mining development sites. This increases the risk of direct disturbance of all species current on the site by fragmentation.

The Developer's biological resource mitigation is fatally flawed because it relies solely on reclamation and restoration (habitat revegetation) as the only form of compensatory mitigation for destruction and other impacts to each and every habitat on and adjacent to the project site, along with the protected species that use the CWGC as a corridor or live on CWGC. It does not offer appropriate mitigation in the form of in-kind, replacement or any other form of established, undisturbed parcel to compensate for all of the habitat that negatively impacted by the Project. This reality is on top of the fact that the Project will not only cause impacts during the grading and construction phase; but the associated air, water, noise, congestion and impacts to surrounding native habitats will be ongoing for the life of the project. The following describes the many flaws associated with this reliance on restoration as the only compensatory mitigation strategy and should be required before this plan is considered for approval.

A) The success of future restoration as the only compensatory mitigation relies on many variables and parasitic insect invasion, soil stability, quality, and availability, instability and

competition in the sand market, lack of reliability of the Applicant's financial integrity for costs 12 to 20 years in the future- to name only a few. In short, the Developer's entire premise of impacts to habitats being mitigated exclusively via restoration amounts to a theoretical premise that cannot be guaranteed to any extent, and indeed is not supported by much of the available evidence regarding short term success, or more correctly lack thereof, of similar proposed restoration projects for sand and other aggregate mines, especially in respect to riparian habitat restoration.

B) Restoration is at best an imperfect science and the restoration plan do not appear to be adequately familiar with that complex science. There are a host of pitfalls and challenges associated with even the most advantageous restoration scenario, which this proposal and site is not for any reasons. As former SDSU professor and one of the foremost experts in restoration ecology, Dr. Joy Zedler describes "success" in restoration is an extremely elusive benchmark, where merely defining success itself is a challenge, not to mention actually achieving it. For some key evidence supporting why the Developer's restoration plan is poised to fail to a large extent as presented.

C) The Developer suggests that all habitat restoration will tidily succeed two (2) years after each section of the sand mining operation ends and after ten (10) years of mining, on schedule, as part of a two (2) year restoration effort per segment, or restoration effort. And yet the realities about the sand mining market in San Diego do not match the claims in the Developer's restoration plan. Even a cursory review of the sand market in San Diego County, and California, defy the assumptions that underlie the proposed sand mine project's viability, namely that sand is an extremely rare commodity not readily available locally, and that mining of sand is a predictable, unquestionably lucrative, and static market.

D) The Developer claims that sand is a regionally scarce commodity and an invaluable resource is not accurate. As proof one need only review the data available on the regional sand mine market to appreciate that the Developer's assumptions of local sand scarcity, and the resultant success of the relatively very short-lived mine (10 years) is deeply flawed. San Diego County's Guidelines for Determining Significance and Report Format and Content Requirements for Mineral Resource provide a list of all locations within the county where "extensive" sampling has indicated the presence of a significant mineral deposit in the form of sand or similar

aggregate. Locations where such is deemed still extractable and may be of regional or statewide significance amount to a total of 62,410 acres. This hardly paints a picture of extreme scarcity.

As important for consideration is the track record of sand and gravel mines, their closure, and subsequent reclamation. The assumption that this mine will provide an invaluable resource but will be willingly shut down after a mere ten (10) years having extracted its (extremely optimistic) projected amounts of product, is not supported by history. According to the data from the California Department of Conservation Division of Mine Reclamation, as of 2017 there are 1,141 sand and gravel mines on record in the state (the DEC acknowledges they are still compiling their database and it is not totally complete), 72% of these are over twelve (12) years old, and 40% of them have officially been deemed 'reclamation not started'. Of these sand and gravel mines deemed "reclamation not started", 45% are no longer active and yet have failed to even commence reclamation. Many of these mining operations modified their original reclamation plans as set down in their original environmental review prior to acquiring a MUP, and applied for extensions of their MUP; a very realistic scenario for many mines, the proposed open pit sand mine included.

According to this same Department, reclamation under SMARA is further defined as follows: "The process of reclamation includes maintaining water and air quality, minimizing flooding, erosion and damage to wildlife and aquatic habitats caused by surface mining. The final step in this process is often topsoil replacement and revegetation with suitable plant species."

In light of this evidence, and the poor track record of even baseline, results for reclamation for sand mines even after they have closed, the assumptions about their timeline and success of their compensatory mitigation's successful creation are not well supported because of the complex ecology of native habitats with all of the many interconnected variables involved.

E) All Water Wells in the Surrounding Communities Will Suffer the Effects of Reduced Ground Cover. Mining sand and gravel, without replacement in kind, will reduce the distance from the soil surface to the groundwater. This action has the following effects:

- i. Reduction in Groundwater Storage. Groundwater infiltrates into the ground from river flow, rain, ect. Not all water can infiltrate the aquifer-proper, but is held in the sand until a pressure reduction allows it to enter the aquifer-proper. The aquifer pressure is reduced when

groundwater is pumped, or as the water flows underground. Removal of the “holding” material (i.e. sand and gravel) can result in less water being positioned to enter the aquifer.

ii. Increased Evaporation. Solar heat rays penetrate the soil surface, and travel to a depth commensurate with the soil type and existing heat load. From a practical point of view, the less soil above the groundwater available to absorb heat, the higher the resulting groundwater temperature and potential for evaporation. The reduction of ground cover from thirty-five to forty-one (35-41) feet to about zero (0) feet has the effect described above. Increased evaporative losses would reduce the amount of groundwater available.

iii. Declination of Water Quality. Water entering the soil, is “cleaned” as it infiltrated. A reduction in the volume of soil above the aquifer is also a reduction in the naturally-attenuative, filtering properties of the soil. With less of this natural filtration, lower water quality is allowed to enter the aquifer and the groundwater quality is reduced.

F) The proposed open pit mine may create discontinuities in several of the aquifer’s natural properties, some of which may disrupt use of the groundwater basin; groundwater basin users must ensure sustainable use of the groundwater basin.

i. Drop Structure May Impede Natural Flow of Water. A proposed element of the Project is the construction of a drop structure at the east end of the project. This large structure will block the natural flow of both surface and ground waters and create a bifurcation point where one did not exist previously. This is concerning for a few reasons:

a. The effects of surface water flow will need to be analyzed.

b. Possible effects, including lowering of the groundwater table, will need to be analyzed. Nearby well users, would need to expend additional money to access the modified water table elevation. Other possible effects may be: wells may run dry and need to be drilled deeper, vegetation growth patterns may change, ect.

i. Water Quality Concerns. The reduction in soil surface, as described above, will induce several effects on the aquifer which are counter to its sustainable use. In addition, the Developer needs to provide an evaluation of current groundwater quality conditions but does not provide an

assessment of potential impacts to groundwater quality based on operations of the proposed project.

- a. Accumulation of debris within the reclaimed pit may degrade ponded water quality. Upon infiltration, aquifer water quality will decline. Further, no analysis has done to compare pre- and post-mine operation infiltration rates.
- b. Water quality may also become compromised when exposed minerals and elements (e.g. uranium, asbestos, salts, ect.) are washed down during dust control operations and infiltrate the ground.
- c. Hazardous Material Storage. The Developer needs to address description of handling and storage of hazardous materials is curt. The Developer needs to address the DWR restrictions regarding hazardous material storage near wells. The Developer needs to elaborate on plans to protect groundwater.

The Developer needs to study, in particular:

- i. Reconstruction of the water budget per comment above and development of a groundwater model of the entire basin.
- ii. The Developer is to develop a comprehensive site-specific study regarding the impact of mining operations on nearby bodies of water. It is important to understand possible adverse effects created by mining operations and the impact these may have on the natural flow of surface and ground waters in the Sweet Water River Valley groundwater basin.
- iii. Perform additional aquifer testing that provides actual aquifer properties and connections between wells in the alluvium and as assessment of the hydraulic conductivity with the underlying bedrock.

CONCLUSION

Based on the issues described in this letter, the Developer's presentation does not meet the obligations of CEQA and that the Project would result in significant and unmitigated to several sensitive biological resources. The application for the MUP must disclose, adequately analyze,

and mitigate the significant impacts identified in this letter. If the impacts cannot be reduced to less than significant then the application should be denied.

Respectfully submitted,

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