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February 5, 2008

Mr. Warren Hughes
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REVIEW OF THE DRAFT FINAL PRELIMINARY ENDANGERMENT ASSESSMENT FOR THE FORMER SPRING HILL MINE PROPERTY IN GRASS VALLEY, CALIFORNIA, ASSESSOR'S PARCEL NUMBERS 35-260-62, 63, AND 64

Dear Mr. Hughes:

The Department of Toxic Substances Control (DTSC) entered into a Voluntary Cleanup Agreement (VCA) (Docket Number HSA-VCA 07/08-008) with Gallelli & Sons, LLC on July 17, 2007 for the former Spring Hill Mine property in Grass Valley, California (Site). As outlined in the VCA, DTSC agreed to review the Preliminary Endangerment Assessment Report (PEA). The purpose of reviewing this document was to evaluate the present condition of the property and determine whether additional investigation would be required before a removal action work plan to remediate the site was generated.

The Site consists of approximately 26 acres located south of Dorsey Drive and southeast of State Highway 49/20 in Grass Valley and is additionally identified by Assessor's Parcel Numbers (APNs) 35-260-62, 25-260-63, and 35-260-64. The Site is currently being evaluated for the development of a corporate business park.

Gallelli and Sons, LLC submitted the draft PEA dated August 17, 2007 for the subject property via their consultant, Holdrege & Kull. The submittal evaluated the property condition and documented the investigation of potentially hazardous substances resulting from waste associated with the former gold mine that historically operated on the Site. DTSC provided comments on the draft PEA via comment letter dated August 27, 2007. The revised Draft Final PEA dated January 11, 2008 was received by DTSC on January 18, 2008.

According to the information provided in the Draft Final PEA Report, the Spring Hill Mine was operated intermittently at the Site from the mid 1800's until the early 1940's. The site has remained vacant and unused since the closure of the mine in the early 40's.

Land use in the vicinity of the site is primarily a mixture of commercial, residential, and some vacant land areas. State Highway 49/20 runs along the Site's northwest border.

Summary of Sediment/Soils Investigations

The site was evaluated for potential human health risks associated with mining waste. A significant volume of waste rock/mine tailings was discharged to the site and soil investigations indicate that approximately 44,000 cubic yards of mine waste rock and 20,000 cubic yards of mine tailings are present on the site. Almost all of the tailings and waste rock are found in the central and western portions of the Site including those that were identified in a former mill area as well as two former tailing ponds. In addition, several building foundations used to support the former mining operations are still present at the site. Metals, primarily arsenic, lead, nickel and mercury were the primary constituents of concern during the investigations.

None of the soil samples collected at the site contained mercury or nickel at concentrations exceeding residential California Human Health Screening Levels (CHHSLs). Arsenic and lead were found in the majority of the samples collected at the site with concentrations ranging from non-detect (ND) to 579 mg/kg and 418 mg/kg respectively. These results are both above the residential CHHSLs and local background concentrations. The arsenic concentrations are also above industrial CHHSLs. The results also indicate that elevated arsenic and lead concentrations in the shallow soil appear to be strongly associated with the areas of mine waste discussed in the previous paragraph with the highest metal concentrations found in the former mill area. In general, the metals concentrations appear to attenuate with depth.

Summary of Surface and Groundwater Investigations

As part of the PEA equivalent process, an evaluation was conducted to determine if past land use has impacted the surface and/or groundwater at the Site. This evaluation included assessing potential impacts to water quality that might result from constituent concentrations present in the soil. Acid base accounting (ABA) testing was conducted for selected soil samples from representative areas of the mine waste on the site. The soils were found to be acid neutralizing with pH values ranging from 9.14 to 9.77. Eighteen soil samples were subsequently tested for soluble arsenic and lead with respect to the appropriate Waste Extraction Test (WET) in accordance with the Regional Water Quality Control Board's (RWQCB) Designated Level Methodology (DLM). In addition, the solubility of nickel and mercury in the soil was determined by evaluating 17 and 6 soil samples respectively under appropriate WET analysis. Based on a review of the data from this evaluation, the soils on site may impact the groundwater as they are above the soluble background and/or the current soluble designated level for arsenic and lead.

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However, both DTSC and the RWQCB agree that if the proposed removal of the most contaminated waste rock/tailings is completed and the remaining waste is deposited as per the on-site placement proposal, the beneficial uses of the groundwater and surface water at the site will be protected.

Please note that this letter does not relieve the proponent of any responsibilities mandated under the California Health and Safety Code and the California Water Code if existing, additional, or previously unidentified contamination at the site causes or threatens to cause pollution or nuisance or is found to pose a threat to public health, water quality, or the environment.

Review of Screening Level Risk Assessment

DTSC has reviewed the screening level human health risk assessment (HHRA) prepared for the Site to evaluate the potential impact on human health from potential exposure to constituents found on the site. In general, the screening level HHRA was prepared in accordance with DTSC and EPA guidance. The Site was divided into three assessment areas composed of the former mill area, the tailings and waste rock (excluding the former mill area), and background (as a baseline). Exposure scenarios were evaluated for three different receptors including the commercial indoor worker, the construction worker, and the residential receptor (unrestricted land use).

Results of the assessment indicate that the soils in the former mill area are not acceptable for any of the three exposure scenarios. The tailings and waste rock (excluding the former mill area) are also unacceptable under the residential scenario. However, the tailings and waste rock (excluding the former mill area) are below the total non-cancer hazard for both the commercial indoor worker and the construction worker at 0.1 and 0.7 respectively. These soils also show that the total cancer risk for the commercial indoor worker is 5.0×10^{-5} and for the construction worker the cancer risk is 1.0×10^{-5} . Both of these values fall between the upper and lower risk management decision benchmarks and are similar to the risks associated with background soils under an unrestricted land use scenario.

The results also show that the proposed cleanup at the Site will be protective of human health and the environment with respect to lead and arsenic under commercial use. Under the proposed remedy, concentrations of arsenic above 22 mg/kg (generally the former mill tailings area) will be removed from the Site and taken to an appropriate landfill. Remaining material with arsenic concentrations between background (17 mg/kg) and 21.9 mg/kg will be placed under buildings and parking lots during the future development to eliminate the possibility of the public coming into contact during site use. Sampling results for lead indicate that once the material in the former mill area is removed, the remaining lead concentrations on the Site will be below the California Human Health Screening Level

(CHHSL) of 150 mg/kg. In addition, lead risk assessments for an adult and a non-pica child were conducted on the soils that will remain on site and the results show they are below the benchmark blood lead concentration of 10 μ g/dL.

Approval of the Draft Final PEA and Preparation of a Draft RAW

In general, the Draft Final PEA report adequately identifies the concerns associated with the former Spring Hill Mine site. The comments provided by DTSC in the August 27, 2007 comment letter have been adequately addressed and DTSC hereby approves the Draft Final PEA. The PEA process is now complete. DTSC requests that the proponent prepare a draft RAW consistent with the requirements of the Health and Safety Code Section 25356.1 that describes the necessary soil removal/management that will be used to ensure the Site is safe for the proposed commercial use. The RAW should also propose the use of a deed restriction for the site. Please note that recordation of conservation easement(s) alone will not serve as an acceptable substitute for a deed restriction on the property since unrestricted (residential) use would be prohibited based on the risk assessment. Therefore, a deed restriction (land use covenant) approved by and enforceable by DTSC must be executed and recorded by the owner in Nevada County. Also, section 67391.1 of title 22, division 4.5, chapter 39 of the California Code of Regulations titled "Requirements for Land Use Covenants" (22 CCR § 67391.1) requires an implementation and enforcement plan to address the monitoring and maintenance requirements necessary to ensure that prohibited uses are not occurring on the deed restricted properties. The deed restriction will identify that these areas are not appropriate for unrestricted land use. In addition, a soil management plan describing how the site will be managed to preclude unacceptable construction and future exposures may need to be prepared. DTSC will work with Gallelli & Sons, LLC to ensure that an appropriate Land Use Covenant is produced and recorded and an adequate soil management plan is put in place in order to ensure both the short and long term protection of Human Health and the environment.

In accordance with 22 CCR § 67391.1, DTSC shall provide public notice of this response action decision document (i.e., deed restriction, soil management plan) in a manner that meets the requirements of Health and Safety Code section 25356.1(e)(2) which outlines the public noticing requirements. In general, it requires that you:

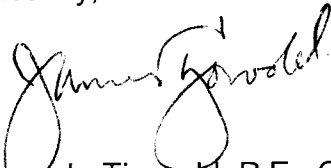
1. Notify affected local and state agencies of the deed restriction;
2. Publish a notice in a newspaper of general circulation in the area affected by deed restriction;
3. Post notices in the location where the deed restriction would be located; and
4. Notify, by direct mailing, the owners of property contiguous to the property, as shown in the latest equalized assessment roll.

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DTSC requires a legal survey of the property that will be subject to the deed restriction if the restriction does not apply to entire parcel(s). After recording, this deed restriction will be posted on DTSC's Internet Website because of the requirement to post all deed restrictions entered into by DTSC as specified in Health and Safety Code section 57012. Therefore, an exhibit that depicts the property's written legal description shall be provided in both hard copy and digital formats as a component of the enforcement and implementation measures taken to ensure notice and compliance regarding the deed restriction. The digital version of the exhibit shall delineate the boundary of the deed restricted property and include the digitizing method used (GPS, etc.) along with the datum and the projection used in producing the digital version of the exhibit that depicts the area subject to the deed restriction.

If you have any questions regarding this matter, please contact Mr. Dean Wright at (916) 255-6528.

Sincerely,



James L. Tjosvold, P.E., Chief
Northern California-Central Cleanup Operations Branch

cc: Mr. Chris Rossitto
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