

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



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June 22, 2007

Mr. Lee Cover
Hanson Aggregates West Region
Hanson Permanente Cement, Inc.
3000 Busch Road
Pleasanton, CA 94566-8403

Subject: SLIC Case RO0002941 and Geotracker Global ID SLT19719376, Hanson Aggregates Radium Plant, 3000 Busch Road, Pleasanton, CA 94566

Dear Mr. Cover:

Alameda County Environmental Health (ACEH) staff has reviewed the Spills, Leaks, Investigations, and Cleanups (SLIC) case file for the above referenced site including the recently submitted reports entitled, "Work Plan for Additional Site Characterization at the Hanson Aggregates Radium Facility," dated May 16, 2007 (prepared by LFR), and "Second Additional Soil and Groundwater Investigation Report," dated April 2007 (prepared by ENV America). The Work Plan presents a summary of site history and conditions and proposes a scope of work to further characterize the extent of soil and groundwater contamination. A total of nine Areas of Concern were identified for further evaluation or recommended actions. Maps of each AOC were prepared to facilitate presentation of site features, analytical results, and proposed sampling locations. The presentation of data in the Work Plan and in particular the use of tables and figures was significantly improved from previous reports. ACEH appreciates the improved presentation in the Work Plan as it facilitates a more thorough and efficient review of the site conditions.

The Work Plan proposes an additional investigation consisting of soil borings and monitoring wells. The proposed scope of work may be implemented provided that the technical comments below are addressed and incorporated during the proposed field investigation. Several additional soil borings, monitoring wells, and laboratory analyses are requested in the technical comments below. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan and technical comments below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

Review of the Work Plan as well as additional issues related to future development of the site were discussed during a meeting on June 20, 2007 between Jerry Wickham of ACEH, Donna Drogos of ACEH, Lee Cover of Hanson Aggregates, Katrin Schliewen of LFR, Steve Dunn of Legacy Partners, Brian Myers of Nuquest, Voytck Bajsarowicz of ENV America, Al Atkinson of ENV America, Dave Saduff of AIG, and Andrew Wickoff of AIG.

TECHNICAL COMMENTS

- 1. Separate Case for Former Asphalt Plant Area.** During the meeting held on June 20, 2007, the opening of separate cases for the former asphalt plant area, area of boring SS123, and remainder of the Hanson Radum Facility was proposed by Hanson Aggregates and Legacy Partners. In concept, ACEH has no objection to opening a separate case for the former asphalt plant area since the area has been identified as a distinct source of contamination requiring remediation. However, we note that the extent of viscous free product visually identified in soil between depths of 30 and 40 feet bgs is at least partially beneath the former spray rack area and extends eastward beyond the former spray rack area. In separate correspondence from the Site Investigation Report requested below, please submit a map showing the current parcel boundaries for the former asphalt plant area, spray rack area, and the proposed case boundaries. Please indicate whether the area of viscous free product will be entirely within one parcel (case) or whether the free product crosses parcel boundaries. Upon receipt of this information, ACEH will make a determination regarding opening a separate case. The source and extent of contamination around boring SS-123 is currently unknown. Therefore, there is not sufficient information to consider opening a separate case for the area of boring SS-123 at this time.
- 2. TPH as Diesel in Southern Portion of Former Asphalt Plant.** Elevated concentrations of TPH as diesel have been detected in soil samples collected in the southern portion of the former asphalt plant. Although several borings have been advanced in the southern portion of the former asphalt, no soil samples have been collected below a depth of 20 feet bgs and no groundwater samples have been collected to assess whether groundwater has been impacted. Therefore, we request that you advance one soil boring to a depth of 60 feet bgs in the area of boring B-4 to define the vertical extent of TPH as diesel in soil and to collect a grab groundwater sample. We also request that you advance one soil boring to a depth of 60 feet bgs approximately 100 feet east northeast of boring B-4 to help assess whether the TPH as diesel and TPH as motor oil detected in boring EB-29 is originating from the southern portion of the asphalt plant. The soil borings are to be visually logged continuously in the field for soil type, color, moisture content, odor, and other observed features and screened with a photoionization detector. Soil samples are to be collected for laboratory analysis at any interval where visible staining, odor, or elevated PID readings are observed. If visible staining, odor, or elevated PID readings are observed, a sufficient number of soil samples must be collected to characterize the vertical interval over which the contamination occurs. If no visible soil staining, odor, or elevated PID readings are observed in the soil boring, we request that soil samples be collected at a minimum of five foot intervals to a depth of 30 feet bgs and at 10-foot intervals from 30 to 60 feet bgs. The soil samples are to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M and TPH as gasoline, BTEX, MTBE, 1,2-DCA, and EDB using EPA Method 8260B. The grab groundwater samples are to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B. Please present boring logs, screening results, and analytical data for soil samples in the Site Investigation Report requested below.
- 3. TPH as Diesel and TPH as Motor Oil West of Former Asphalt Plant.** Elevated concentrations of TPH as diesel and TPH as motor oil have been detected in soil samples

collected west of the former asphalt plant near the western property boundary. We concur with the proposed soil boring near former boring B-5. However, we request two additional soil borings to further define the lateral and vertical extent of contamination. We request that one soil boring be advanced approximately 50 feet south of boring B5 and one boring be advanced approximately 50 feet north of boring B6. Advancing the soil borings to a depth of 25 feet bgs is acceptable; however, we request that the boring be extended in depth if contamination is observed at the total depth of the boring. The soil borings are to be visually logged continuously in the field for soil type, color, moisture content, odor, and other observed features and screened with a photoionization detector. Soil samples are to be collected for laboratory analysis at any interval where visible staining, odor, or elevated PID readings are observed. If visible staining, odor, or elevated PID readings are observed, a sufficient number of soil samples must be collected to characterize the vertical interval over which the contamination occurs. If no visible soil staining, odor, or elevated PID readings are observed in the soil boring, we request that soil samples be collected at a minimum of five-foot intervals to the total proposed depth of the boring, 25 feet bgs. Please present boring logs, screening results, and analytical data for soil and groundwater samples in the Site Investigation Report requested below.

4. **Monitoring Well Installation.** Installation of five monitoring wells surrounding the former asphalt plant area is proposed in the Work Plan. These monitoring wells are generally outside the areas of suspected contamination. The two wells that are proposed east and northeast of the former asphalt plant, are more than 500 feet from the former asphalt plant. These wells will provide information to estimate the local hydraulic gradient and help to define the direction of contaminant migration but are likely to provide only limited data on the extent of groundwater contamination originating from the asphalt plant. We do not have an objection to the proposed locations of the wells to help assess hydraulic gradient and overall water quality for the facility. However, additional monitoring wells will be required following an assessment of the local hydraulic gradient. We request one additional monitoring well at this time to evaluate conditions within the area of viscous free product and one additional monitoring well in the southern portion of the facility (Please see technical comment 14 regarding the requested well in the southern portion of the facility). We request that you advance one monitoring well south of EB-14 to monitor groundwater quality below the viscous product in this area. The drilling and well installation must be conducted using methods that prevent migration of contamination from the viscous product layer to deeper zones and the water table. We request that groundwater samples from the monitoring wells be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015 and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B. Please present boring logs, screening results, and analytical data for soil samples in the Site Investigation Report requested below.
5. **Deep Soil Contamination.** A viscous free-phase petroleum product was described in the subsurface between depths of approximately 32 and 40 feet bgs over a large area beneath and east of the former asphalt plant. The source of this free-phase product is unknown but the product may have been emplaced during former mining operations or may have been discharged at the surface and migrated from the asphalt plant. The Work Plan proposes advancing two soil borings within and east of the area of the viscous product to collect soil samples above, within, and below the viscous free-phase product layer. The Work Plan

proposes that soil samples be collected for laboratory analyses at five-foot intervals between depths of approximately 20 and 50 feet bgs. The soil samples are to be analyzed for TPH as diesel and TPH as motor oil with one soil sample selected for fingerprinting analysis of the petroleum product. Due to the unknown source and nature of the contamination, we request that in addition to the proposed analyses for TPH as diesel and TPH as motor oil, the soil samples also be analyzed for TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B, pesticides and PCBs by EPA Method 8082, SVOCs using EPA Method 8270, and metals using EPA Method 6010B. We also request that you conduct a Synthetic Precipitation Leaching Procedure (SPLP) on any soil sample collected from the viscous product layer. The SPLP leachate is to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M and CAM 17 metals using EPA Method 6010B. In addition to the proposed analyses for TPH as diesel and TPH as motor oil, the grab groundwater samples collected from each of the three proposed borings are to be analyzed for TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B, pesticides and PCBs by EPA Method 8082, SVOCs using EPA Method 8270, and CAM 17 metals using EPA Method 6010B. Please present boring logs, screening results, and analytical data for soil and groundwater samples in the Site Investigation Report requested below.

6. **Soil Cleanup in Former Hot Mix Asphalt Plant Area.** As discussed in Table 1 of the Work Plan, removal of TPH-impacted soil is planned in several areas of the former asphalt plant and spray rack area as part of the final demolition of the remaining structures. Further definition of the extent of TPH-impacted soils and confirmation soil sampling is to be conducted during soil removal in these areas requiring cleanup. We note that soil cleanup goals have not been established for the site and the depth of contamination in several areas extends below a depth of 8 feet bgs. Therefore, future excavation for soil removal may be greater than approximately 8 feet bgs.
7. **AOC 2 – Soil Boring EB-31 Area.** The Work Plan proposes three soil borings surrounding boring EB-31. We have no objection to the proposed boring locations or number of borings. The depth of the borings is proposed as 10 feet bgs in the text of the Work Plan and 20 feet bgs in Table 1. We request that two of the soil borings be extended to a depth of 20 feet bgs as proposed in Table 1. We request that the third boring be extended to a depth of 60 feet bgs in order to collect a grab groundwater sample. The groundwater sample is to be analyzed for TPH as diesel using EPA Method 8015 and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B. Please present boring logs, screening results, and analytical data for soil and groundwater samples in the Site Investigation Report requested below.
8. **AOC 3 – Soil Boring Adjacent to Boring B-1.** We request that the proposed soil boring in the area of the Lube Shed and Heavy Maintenance Shop be extended to a depth of 60 feet bgs in order to collect a grab groundwater sample. The groundwater sample is to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015 and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B. In addition to the proposed

analyses for TPH as diesel and TPH as motor oil, we request that the shallow soil samples collected from the proposed boring be analyzed for PCBs using EPA Method 8082, SVOCs using EPA method 8270, and metals using EPA Method 6010B. Additional soil sampling will be required in this area when the ASTs, wash rack, sump, and piping are decommissioned. Please present these results in the Site Investigation Report requested below.

9. **AOC 6 – Stormwater Retention Pond.** Elevated concentrations of The Work Plan proposed the collection of two sediment samples in the vicinity of a sediment sample previously collected by Brown and Caldwell on May 8, 2006 and collection of one surface water sample from the pond. We request that you collect a minimum of four additional sediment samples along a transect extending from the Brown and Caldwell sediment sampling location toward the center of the pond. Please analyze the sediment samples for TPH as diesel and TPH as motor oil using EPA Method 8015 and CAM 17 metals using EPA Method 6010B. We concur with the collection of one surface water sample from the pond. We request that the water sample be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015 and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B, and metals using EPA Method 6010B. Please present these results in the Site Investigation Report requested below.

10. **AOC 7 – Soil Boring SS-31 Area.** Elevated concentrations of TPH as Diesel and TPH as motor oil were detected at depths of 2 and 40 feet bgs in boring SS-31. The source of contamination at this location is unknown. The Work Plan proposes four soil borings extending to groundwater surrounding boring SS-31. The proposed scope of work is acceptable. The soil borings are to be visually logged continuously in the field for soil type, color, moisture content, odor, and other observed features and screened with a photoionization detector. Soil samples are to be collected for laboratory analysis at any interval where visible staining, odor, or elevated PID readings are observed. If visible staining, odor, or elevated PID readings are observed, a sufficient number of soil samples must be collected to characterize the vertical interval over which the contamination occurs. If no visible soil staining, odor, or elevated PID readings are observed in the soil boring, we request that soil samples be collected at a minimum of five foot intervals to a depth of 30 feet bgs and at 10-foot intervals from 30 to 60 feet bgs. The soil samples are to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M and TPH as gasoline, BTEX, fuel oxygenates, 1,2-DCA, and EDB using EPA Method 8260B. Soil samples collected within the upper 10 feet are also to be analyzed for pesticides and PCBs using EPA Method 8082, SVOCs using EPA Method 8270, and CAM 17 metals using EPA Method 6010B. The grab groundwater sample is to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B. Please present these results in the Site Investigation Report requested below.

11. **Boring SS-123.** The "Second Additional Soil and Groundwater Investigation Report," dated April 2007 and prepared by ENV America presents results from four step-out soil borings in the vicinity of boring SS-123. Elevated concentrations of TPH as diesel and TPH as motor oil were detected in soil at various depths in each of the step-out soil borings.

TPH as diesel, TPH as motor oil, and metals were also detected in soil and groundwater samples collected at 30 feet bgs. Based on our June 20, 2007 meeting, we understand that ENV America on behalf of Legacy Partners, will be conducting additional investigation of this area. As discussed during the June 20, 2007 meeting, we recommend that you collect sufficient information to assess both the extent and source of the contamination. This area will be further evaluated upon completion of the proposed investigation.

12. **On-site Water Well TW-5.** We concur with the proposed scope of work for locating and sampling well TW5. In addition to the proposed analyses, we request that you analyze a groundwater sample from well TW5 for full scan VOCs using EPA Method 8260B. Please present these results in the Site Investigation Report requested below.
13. **Septic Tanks.** A liquid sample (SAN-1) collected from one of the on-site septic tanks contained elevated concentrations of TPH as gasoline, TPH as diesel, and TPH as motor oil. The second liquid sample (SAN-2) contained relatively low concentrations of TPH as diesel and VOCs. In the Site Investigation Report requested below, please provide additional information on the size and construction of the septic tanks and the areas of the facility that were served by each septic tank. In addition, please include information on any other septic tanks or leach fields that serviced the facility.
14. **Excavation on Kewit Property.** ACEH appreciates inclusion in the Work Plan of the "Self-Directed Remediation of Diesel Contaminated Soil," report dated January 2004 and correspondence from the San Francisco Regional Water Quality Control Board dated March 31, 2004. In order to assess water quality in the area of the former excavation related to contamination extending from the Kewit property to the southern portion of the Hanson property, we request that you install one groundwater monitoring well in the area of the soil confirmation sample H-18F-B (see Figure 3 of the report entitled, "Self-Directed Remediation of Diesel Contaminated Soil," dated January 2004 by TRC). We request that the well boring be visually logged continuously in the field for soil type, color, moisture content, odor, and other observed features and screened with a photoionization detector. Soil samples are to be collected for laboratory analysis at any interval where visible staining, odor, or elevated PID readings are observed. If visible staining, odor, or elevated PID readings are observed, a sufficient number of soil samples must be collected to characterize the vertical interval over which the contamination occurs. If no visible soil staining, odor, or elevated PID readings are observed in the soil boring, we request that soil samples be collected at a minimum of five foot intervals to a depth of 30 feet bgs and at 10-foot intervals from 30 to 60 feet bgs. The soil samples are to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M. Groundwater samples are to be analyzed for TPH as diesel and TPH as motor oil using EPA Method 8015M and TPH as gasoline, full scan target list for VOCs, BTEX, MTBE, and lead scavengers (ethylene dibromide and 1,2-dichloroethane) using EPA Method 8260B. Please present these results in the Site Investigation Report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **October 26, 2007 – Site Investigation Report**

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature,

Mr. Lee Cover
RO0002941
June 22, 2007
Page 8

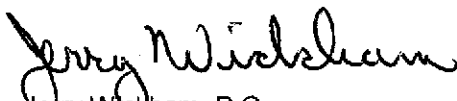
and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

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