ALAMEDA COUNTY

HEALTH CARE SERVICES







DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda. CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

March 16, 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 Radum 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 documents entitled, "Final Phase I Environmental Site Assessment," dated June 2006 (prepared by Brown and Caldwell), "Summary of Limited Subsurface Investigation Activities at the Hanson Aggregates West Radum Facility in Pleasanton, California," dated August 2, 2006 (prepared by Brown and Caldwell), "Phase II Environmental Site Assessment," dated November 2006 (prepared by ENV America), "Summary Report of Additional Phase II ESA Investigation at the Former Asphalt Plant Area," dated December 5, 2006 (prepared by LFR), and "Additional Soil and Groundwater Investigation Report," dated February 2007 (prepared by ENV America). We also reviewed the report entitled "Results of Soil and Groundwater Investigation," dated February 15, 2007 (prepared by Brown and Caldwell), which was prepared for a leaking fuel case at the site. The "Final Phase I Environmental Site Assessment," dated June 2006 report describes environmental concerns at several areas of the Hanson Aggregates Radum Plant based on historic document review and site inspections. The remaining reports present the results of soil and groundwater sampling conducted in several areas throughout the facility. The findings of these reports were also discussed during a meeting on March 2, 2007 between Jerry Wickham of ACEH, Lee Cover and Marvin Howell of Hanson Aggregates, and Katrin Schliewen and J. Scott Seyfried of LFR.

The above referenced reports were prepared for Hanson Aggregates West or Legacy Partners Commercial, LLC and the investigations were conducted prior to regulatory oversight by ACEH. As discussed in the technical comments below, several elements of the site investigations were significantly less detailed than would be required if a work plan were submitted for regulatory oversight. Although a significant number of soil borings have been advanced during the various site investigation activities, characterization of the site geology and hydrogeology is quite limited. As an example, several borings (EB-23 through EB-26) were apparently drilled at the site but no soil samples appear to have been analyzed and the observed conditions are only briefly described in the text of the report. In addition, graphical presentation of the results is largely limited to analytical data tables and a sampling location map. No cross sections or maps showing spatial distribution of results are included in the reports. Due to the limited geologic and hydrogeologic data collected during the soil and groundwater sampling and the limited data presentation, the ability to interpret the results is also limited. As discussed in the technical

comments below, we request that you improve the presentation of data and propose future actions for each area of the site in a Work Plan.

Based upon our review of the above referenced reports, we request that you address the following technical comments, perform the proposed work, and send us the reports described below.

TECHNICAL COMMENTS

- Geologic and Hydrogeologic Data. The lithologic logging information presented in the 1. existing reports for the site is limited. Only two of the five reports reviewed for this case include boring logs. The December 5, 2006 LFR report, includes hand drawn boring logs; however, the sampling intervals for the borings were generally 5 feet or greater, which means that much less than half of the soil column was logged and screened. The February 2007 ENV America report included formatted and checked boring logs; however, the sampling interval was 10 feet, which means that less than 15 percent of the soil column was logged and screened. Significant geologic features such as preferential pathways or fine-grained layers that retard vertical migration may have been missed due to the widely spaced sampling intervals. The November 2006 ENV America report includes a two page summary of the type of soils encountered in the test pits and soil borings advanced; no boring logs are presented and the sampling interval is unknown. The June 2006 Brown and Caldwell report also does not include boring logs. Collection of data on the geology and hydrogeology of the site is a basic component of site characterization. At a minimum, improved characterization of site geology and hydrogeology using continuous logging or CPT data is required in the areas of the site where there is evidence of a release which includes the former asphalt plant and spray rack area, wash rack, lube shed, boring SS31, boring SS123, and boring EB-35. Please present these plans in the Work Plan requested below.
- 2. Presentation of Sampling Locations and Analytical Data. Sampling locations are shown on two base maps with scales of one inch equals 1,200 feet or one inch equals 100 feet, respectively. Laboratory analytical results are presented on tables. No maps that spatially depict analytical results, maps showing detailed site features, or cross sections are presented in the reports. Given the scale of the sampling location maps, it is not possible to view the distance between the borings and site features and assess the proximity of the sampling locations to potential releases. Therefore, we request that you prepare maps for each area at an appropriate scale to depict site features, sampling locations, and the area of any proposed investigation or demolition activities. We also request that you present analytical results on the site maps for each area to allow interpretation of the spatial distribution of the data and the adequacy of the data to characterize the potential sources in each area.
- 3. Soil Cleanup in Asphalt Plant and Spray Rack Area. Based on the observed impacts and analytical results from shallow soil in the area of the former asphalt plant and spray rack, soil remediation will be required. However, the volume of soil requiring remediation is uncertain. We request that you present plans for additional investigation or cleanup of shallow soils in the former asphalt plant and spray rack area. As discussed in technical

comment 2 above, more detailed maps are to include site features, observations of impacted soil, analytical results, and proposed areas and depths for soil removal or cleanup. In addition, please describe the proposed soil cleanup goals (see technical comment 4 below) and plans for confirmation sampling. Please present these plans in the Work Plan requested below.

- 4. Proposed Soil Cleanup Goals and Future Land Use. The proposed cleanup goals may be based on the current and planned future use of the property. However, an environmental restriction will be required for the property if cleanup goals are proposed for land use that is less conservative than residential use. In addition, the feasibility of restoring the site to unrestricted future use must be considered. Therefore, if a soil cleanup based on cleanup goals for a less conservative land use than residential is proposed, the extent of additional soil cleanup to restore the site to unrestricted future use must be estimated to assess the feasibility of site restoration to unrestricted future use.
- 5. Viscous Free-Phase Petroleum Product. A viscous free-phase petroleum product was described in the subsurface between depths of approximately 32 and 40 feet bgs over a large area 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 November 2006 ENV America report indicates that the petroleum product in the subsurface is similar to petroleum product observed at the surface in the former asphalt plant scale. In order to evaluate both the extent of the petroleum product and the potential for future migration, further investigation is necessary in the area of the former asphalt plant to define whether the viscous free-phase product originated from the former asphalt plant or was emplaced during former mining operations when the area was exposed to depths of approximately 30 to 40 feet bgs. Please present plans for this additional investigation, which may include hydrocarbon fingerprinting, in the Work Plan requested below.
- 6. "Other Site Locations." The November 2006 ENV America report identifies known or suspected environmental conditions at several locations throughout the facility in addition to the former asphalt plant and spray rack area. We appreciate the listed summary of these conditions and request that the information presented for each location be expanded. Please identify the specific sources of contamination in each area, investigation conducted to date, and plans for future investigation or remediation in each area. As discussed in technical comment 2, please include a map of each area at an appropriate scale to depict site features, sampling locations, and the area of any proposed investigation or demolition activities. For locations with a significant amount of sampling data, please prepare maps that depict the analytical results. In the Work Plan requested below, please include these maps, a discussion of site conditions and data collected, summary of results, and recommendations for additional actions for each of the locations.
- 7. Statistical Sampling. The February 2007 ENV America report presents analytical results from 17 soil borings that were apparently advanced at random locations in Parcels B through G. The report indicates that the 95% upper confidence interval (UCI) of the analytes is less than their respective ESLs. The 95% UCI for a mass of soil covering an area of more than 250 acres and extending to 40 feet bgs is not a useful parameter for comparison to ESLs. For the random sampling locations where contamination was

detected, we request that you attempt to identify the potential source of the contamination and propose additional investigation to characterize the extent. Please present plans for the additional investigation in the Work Plan requested below.

- 8. **Kewit Property.** As discussed during the meeting on March 2, 2007, we request that you provide all technical reports regarding the soil removal conducted on the adjacent Kewit property. If technical reports were not prepared, please provide all available information on the soil removal.
- 9. Groundwater Flow Direction. The groundwater flow direction beneath the site is currently not known. An easterly groundwater flow direction has been inferred based on regional information. The absence of site data on hydraulic gradient and limited information on site geology and hydrogeology as discussed in technical comment 1, makes evaluation of future contaminant migration problematic. We request that you install monitoring wells to monitor water quality and estimate the local hydraulic gradient. At a minimum, please include plans to install monitoring wells within and downgradient of the former asphalt plant and viscous free-phase product in the subsurface.
- 10. Grab Groundwater Samples. The grab groundwater sample data collected by ENV America were collected inside hollow stem augers using a disposable bailer. These results are considered semi-quantitative due to the sampling method.
- 11. Extent of Groundwater Contamination. Further investigation of the potential horizontal and vertical extent of groundwater contamination is required in the area of the former asphalt plant area and viscous free-phase product. No groundwater samples have been collected between the former asphalt plant and boring B-22, which is approximately 400 feet northeast of the former asphalt plant. Please present plans in the Work Plan requested below to characterize the extent of groundwater contamination using grab groundwater samples and/or monitoring wells as requested in technical comment 9 above.
- 12. On-site Water Wells. Please provide well construction details for the both the active and abandoned wells within 2,000 feet of the site shown on the Zone 7 Water Agency Well Location Map (Exhibit B of the November 2006 ENV America report). Please include the method for decommissioning the abandoned wells. The February 2007 ENV America report presents analytical results for a groundwater sample collected from the on-site production well. The November 2006 ENV America report indicated that an approximately 100-foot deep monitoring well on site will be abandoned. We request that the monitoring well be sampled prior to well decommissioning. Please confirm that no other wells are present on the site and present plans to sample the 100-foot deep on-site monitoring well in the Work Plan requested below.
- 13. 1990 UST Tank Removal. One 10,000-gallon gasoline UST and two 12,000-gallon diesel USTs were removed from the eastern side of the truck shop in November 1990. Soil and groundwater samples collected during the tank removal and during subsequent site investigations of releases from the USTs do not appear to have been analyzed for MTBE. Section 252099.37.1 of the California Health and Safety Code requires that both soil and groundwater be sampled for MTBE at all groundwater impacted sites or soil-impacted sites that may threaten groundwater. Five soil borings appear to have been advanced in 2006 in

the area of the former truck shop and grab groundwater samples appear to have been collected from two of the borings. As discussed in technical comment 2, the boring locations are shown on a map with a scale of one inch equals 1,200 feet. Please provide a more detailed map of the former truck shop that shows the boring locations and former UST locations. Please also indicate whether the soil and groundwater samples collected in the area of the former truck shop in 2006 and presented in the ENV America November 2006 report were analyzed for MTBE. We are aware of the analytical results for MTBE from the investigation of former USTs that were removed in 2004 from an area north of the former truck shop. This information is to be presented in the Work Plan requested below.

- 14. Low-Risk Criteria and Conclusions Regarding Regulatory Approach. We do not concur with several of the statements and conclusions in the Regulatory Approach and Conclusions sections of the December 5, 2006 LFR report regarding designation of the site and the need for active remediation. Since these issues are generally addressed in the remaining technical comments, we will not repeat discussion of these issues.
- 15. Geotracker EDF Submittals. Pursuant to CCR Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Additionally, beginning January 1, 2002, all permanent monitoring points utilized to collected groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website. Beginning July 1, 2005, electronic submittal of a complete copy of all reports (LUFT or SLIC) is required in Geotracker (in PDF format). In order to remain in regulatory compliance, please upload all SLIC analytical data and copies of reports post July 1, 2005, to the SWRCB's Geotracker database website in accordance with the above-cited regulation.

TECHNICAL REPORT REQUEST

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

- May 16, 2007 Work Plan
- 120 Days following ACEH approval of Work Plan Corrective Action Plan

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, 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,

erry Wickham, P.G.

Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Katrin Schliewen LFR 1900 Powell Street, 12th Floor Emeryville, CA 94608-1827

> James Scott Seyfried LFR 1900 Powell Street, 12th Floor Emeryville, CA 94608-1827

Donna Drogos, ACEH Jerry Wickham, ACEH File