

Nowell, Keith, Env. Health

From: Nowell, Keith, Env. Health
Sent: Monday, July 14, 2014 4:12 PM
To: Ed.C.Ralston@p66.com
Cc: 'jppaul@skbcos.com'; Dennis Dettloff; Roe, Dilan, Env. Health
Subject: Fuel Leak Case RO356 - BP #11117, 7210 Bancroft, Oakland, CA

Dear Mr. Ralston:

Alameda County Environmental Health (ACEH) has reviewed the case file including the documents entitled *Work Plan – Work Plan –Interim Remediation* (Work Plan), dated June 9, 2014, prepared by Antea Group (Antea) and the Corrective Action Plan (FS/CAP), dated December 12, 2006 and prepared by Broadbent & Associates, Inc. (Broadbent). The CAP evaluated seven remediation technologies- excavation/soil vapor extraction/ bioventing, bioremediation, groundwater extraction and treatment, biosparging, in-situ oxidation, dual-phase extraction and treatment and no action/ monitored natural attenuation. The FS/CAP recommended dual phase extraction (DPE) as the proposed remediation technology as a pilot test conducted earlier in 2006 demonstrated DPE as a viable treatment technology. Subsequent to DPE, Plume Stoptm was injected into the subsurface in a 2011 pilot test to evaluate the effect of Plume Stoptm in partitioning out and stimulating biodegradation of the petroleum hydrocarbons. The also FS/CAP indicated excavation may be a viable alternative if the work could be performed to coincide with activities that would not disrupt station operation.

The recently submitted Work Plan proposes using large diameter auger (LDA) borings to remove residual contaminated soil to a depth of 35 feet below the ground surface (bgs) in the area to the southeast of, and including, the southeastern dispenser island. The proposed area of the augered excavation is approximately 20-feet by 30 feet. In addition, the Work Plan states that Antea will prepare a site-specific Air Monitoring Plan and a Traffic Control and Waste Transportation Plan.

The Work Plan identifies one area to be excavated using LDA. ACEH notes that there are other areas at the site that appear to contain significantly elevated residual petroleum hydrocarbon contamination at depth, as identified along Bancroft Avenue, by total petroleum hydrocarbons as gasoline (TPHg) concentrations of 2,300 milligrams per kilogram (mg/kg) at 35 feet bgs at location C-5, 2,200 mg/kg at 30 feet bgs at location DPE-2, and by grab groundwater sample A-2 of 510,000 micrograms per liter ($\mu\text{g/L}$) TPHg, and in the vicinity of location B of the former tank pit having 5,300 mg/kg TPHg at 15 feet bgs and the free phase hydrocarbons previously reported at former well MW-2. ACEH requests LDA be used to remediate these areas.

ACEH requests submittal of a Corrective Action Plan Addendum (CAP) to address the history and effectiveness of the remedial actions implemented at the site and the justification of the proposed work. Additionally, ACEH understands the Work Plan did not include placing oxygen release compounds (ORC) at the bottom of the LDA borings but will be performed during the remedial activities. The application of ORC should be addressed in the CAP. Include in the CAP a figure identifying the proposed LDA areas. As the fueling station will be demolished and paved over prior to the implementation of the CAP Addendum, areas in which remedial activities are to be performed should be tied to reference points outside of the station boundary so they can be accurately located.

Additionally, ACEH recommends that prior to equipment and trucks leaving the site, each vehicle should be inspected for loose soil accumulating on running boards, fenders and other flat surfaces. Steps should be taken to clear off these surfaces prior to the vehicle leaving the site.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please draft revised figure depicting areas to be remediated to ACEH (Attention: Keith Nowell). Upon review and approval, please upload to the figure to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **July 29, 2014– Draft Corrective Action Plan Addendum** (to be provided via email- Attention Keith Nowell)
- **August 19, 2014– Corrective Action Plan Addendum** (file name: RO0000356_CAP_ADDEND_R_yyyy-mm-dd)
- **August 29, 2014– Air Monitoring Plan** (file name: RO0000356_WP_R_yyyy-mm-dd)
- **August 29, 2014– Traffic Control and Waste Transportation Plan** (file name: RO0000356_WP_R_yyyy-mm-dd)

Thank you for your cooperation. ACEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org.

Sincerely,
Keith Nowell

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PDF copies of case files can be reviewed/downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>