



Stantec

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RECEIVED

10:39 am, Jul 08, 2008

Alameda County
Environmental Health

July 7, 2008

File. 77CP.01634.43.1009

Ms. Barbara Jakub
Alameda County Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Reference: Former 76 Service Station No. 7124
10151 International Boulevard
Oakland, California

Dear Ms. Jakub:

Please note that Stantec Consulting Corporation (Stantec) acquired SECOR International Incorporated (SECOR) on February 1, 2008. Consequently the SECOR corporate name will be changed to Stantec. Stantec will continue to manage the site reference above on behalf of ConocoPhillips Company, and there are no changes to the project team. If you have any questions or comments, please contact me at (916) 861-0400.

Sincerely,

Stantec Consulting Corporation

Ben Chevlen, P.G.
Associate Geologist
Tel: (916) 384-0745
Fax: (916) 861-0430
benjamin.chevlen@stantec.com



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3017 Kilgore Road Suite 100
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July 7, 2008

Ms. Barbara Jakub
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

(Sent Via Electronic Upload to Alameda ftp)

RE: Work Plan Addendum for Additional Site Assessment

Former 76 Service Station No. 7124
10151 International Boulevard
Oakland, California
SECOR Project # 77CP.01634.43.1009

Dear Ms. Jakub:

Stantec Consulting Corporation (Stantec), formerly SECOR International, is pleased to submit this *Work Plan Addendum for Additional Site Assessment*, for the above-referenced site (Figures 1 and 2). Stantec prepared this work plan addendum at the request of Alameda County Environmental Health Services (ACEHS) in a letter dated June 5, 2008 (Attachment 1). In that letter, the ACEHS requested an abbreviated work plan addendum proposing additional soil and groundwater delineation prior to the installation of additional monitoring wells. The scope of work Stantec proposes, is presented below.

SCOPE OF WORK FOR ADDITIONAL ASSESSEMENT

The proposed scope of work includes the advancement of two on-site soil borings (SB-1 and SB-2) and five off-site soil borings (SB-3 through SB-7), as shown on Figure 2.

Site Health and Safety Plan (HASP). As required by the Occupational Safety and Health Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR 1910.120), and by the California OSHA (Cal-OSHA) "Hazardous Waste Operations and Emergency Response" guidelines (CCR Title 8, Section 5192), Stantec will prepare a site-specific HASP prior to the commencement of fieldwork. The HASP will be reviewed by the field staff and contractors before beginning field operations at the site.

Permitting. Well Installation permits will be obtained from Alameda County Public Works Agency. Access agreements will be obtained from the adjacent property owners prior to the commencement of drilling activities.

Work Plan Addendum

June 11, 2008

Page 2

Underground Utility Location and Clearance. In advance of field activities, Stantec will mark the locations of the proposed soil borings in accordance with Underground Service Alert (USA) guidelines, and notify USA of upcoming subsurface activities so that existing underground utilities in the area of proposed work can be located and avoided. Stantec will contract a private utility locator to confirm the locations of underground utilities in the vicinity of the well locations. Prior to the onset of drilling, all borings will be air knifed or hand-augered to a minimum depth of 5 feet bgs.

Soil Borings. Seven soil borings (SB-1 through SB-7) will be advanced at the locations shown on Figure 2. The soil borings will be advanced using 8-inch diameter dual-tube direct push drilling equipment. Each boring will be continuously cored to a total depth of 30 feet bgs. Field and laboratory procedures are provided in Attachment 2.

Soil Sampling and Analysis. Soil samples for chemical analysis will be collected at 5 foot intervals to the total depth explored in each borehole. Samples submitted for chemical analysis will be sent under chain-of-custody documentation to a California state-certified laboratory. The soil samples will be analyzed for TPHg, BTEX, and fuel oxygenates using EPA Method 8260.

Groundwater Sampling and Analysis. Grab groundwater samples will be collected from first-encountered groundwater in each borehole (groundwater expected between 14 to 18 feet bgs). Groundwater samples will be collected and analyzed for the presence of TPHg, BTEX, and fuel oxygenates using EPA Method 8260. Field and laboratory procedures are included in Attachment 2.

Soil and Water Disposal. Soil cuttings and purge/rinseate water generated during soil boring activities will temporarily be stored in California DOT-approved 55-gallon steel drums on-site pending characterization and disposal. The drums containing soil and rinseate/purge water will be removed by Belshire Environmental Services Inc. and transported to their facility for proper disposal.

Reporting. Following the completion of well installation activities, Stantec will submit a report documenting the findings. The report will include boring logs, soil and groundwater analytical results, chain-of-custody documentation, conclusions, and recommendations for future assessment if needed. Additionally, as requested in the June 5, 2008 ACEHS letter, Stantec will include updated cross-sections, an in-depth discussion of the regional geologic and hydrogeologic setting, and a preferential pathway survey.

Stantec is prepared to initiate the site assessment activities upon approval of the work plan addendum by the ACEHS, and following the receipt of necessary permits and access agreements (to expedite the work, Stantec has already initiated the process of obtaining signed off-site access agreements). Stantec will complete a report within 60 days of completion of field activities documenting the findings and include recommendations for future work if needed.

In the ACEHS letter dated June 5, 2008, the ACEHS requested the inclusion of revised quarterly monitoring reports with correct north arrows. On March 17, 2008, Stantec uploaded revised quarterly monitoring reports for the second and fourth quarters 2007, and first quarter 2008 sampling events to the GeoTracker database. Additionally, on June 10, 2008, Stantec contacted TRC Solutions, the company responsible for performing quarterly monitoring and

sampling at the site, and requested that rose diagrams be placed on all future groundwater contour maps.

LIMITATIONS

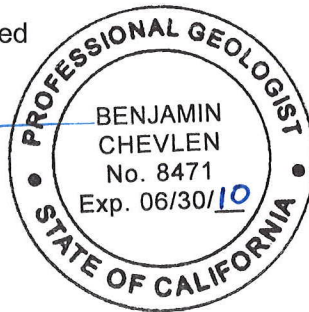
This report has been prepared for the exclusive use of ConocoPhillips Company and its representatives as it pertains to the property located at 10151 International Boulevard, Oakland, California. Evaluations of the geologic conditions at the site for the purposes of this investigation are inherently limited due to the number of observation points. There are no representations, warranties, or guarantees that the points selected for sampling are representative of the entire site. Data from this report reflects the conditions at specific locations at a specific point in time. No other interpretation, representations, warranties, guarantees, express or implied, are included or intended in the report findings. SECOR assumes no responsibility for exploratory borings or data provided or reported by other consultants or contractors.

If there are any questions or comments regarding the contents of this document, please contact me at (916) 861-0400 ext. 289

Sincerely,
SECOR International Incorporated



Ben Chevlen, P.G.
Associate Geologist



Attachments:

Figure 1 – Site Location Map

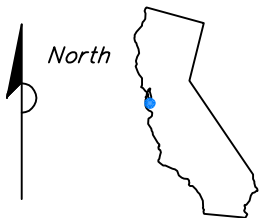
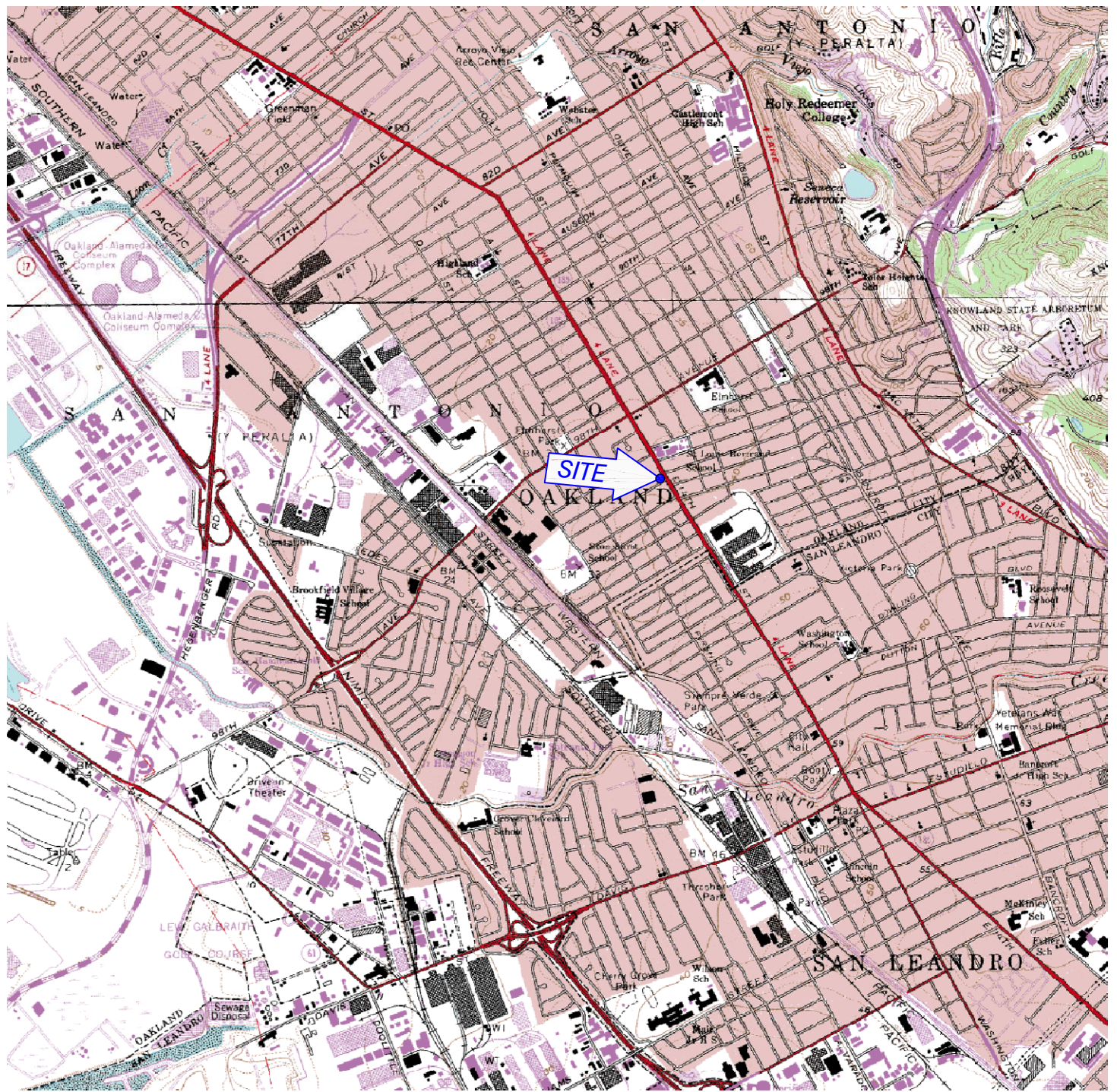
Figure 2 – Site Plan with Proposed Soil Boring and Well Locations

Attachment 1 – ACEHS Letter

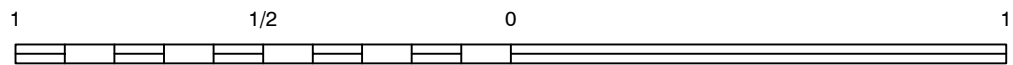
Attachment 2 – Field and Laboratory Procedures

cc: Mr. Bill Borgh, ConocoPhillips (via electronic upload to LiveLink only)

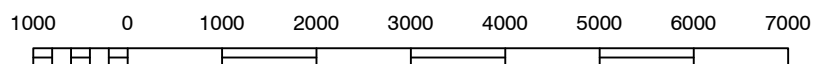
FIGURES



CALIFORNIA



SCALE (MILES)



SCALE (FEET)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE, OAKLAND, CALIFORNIA



Startec

FOR:
 FORMER 76
 STATION NO. 7124
 10151 INTERNATIONAL BLVD.
 OAKLAND, CALIFORNIA

SITE LOCATION

FIGURE:

1

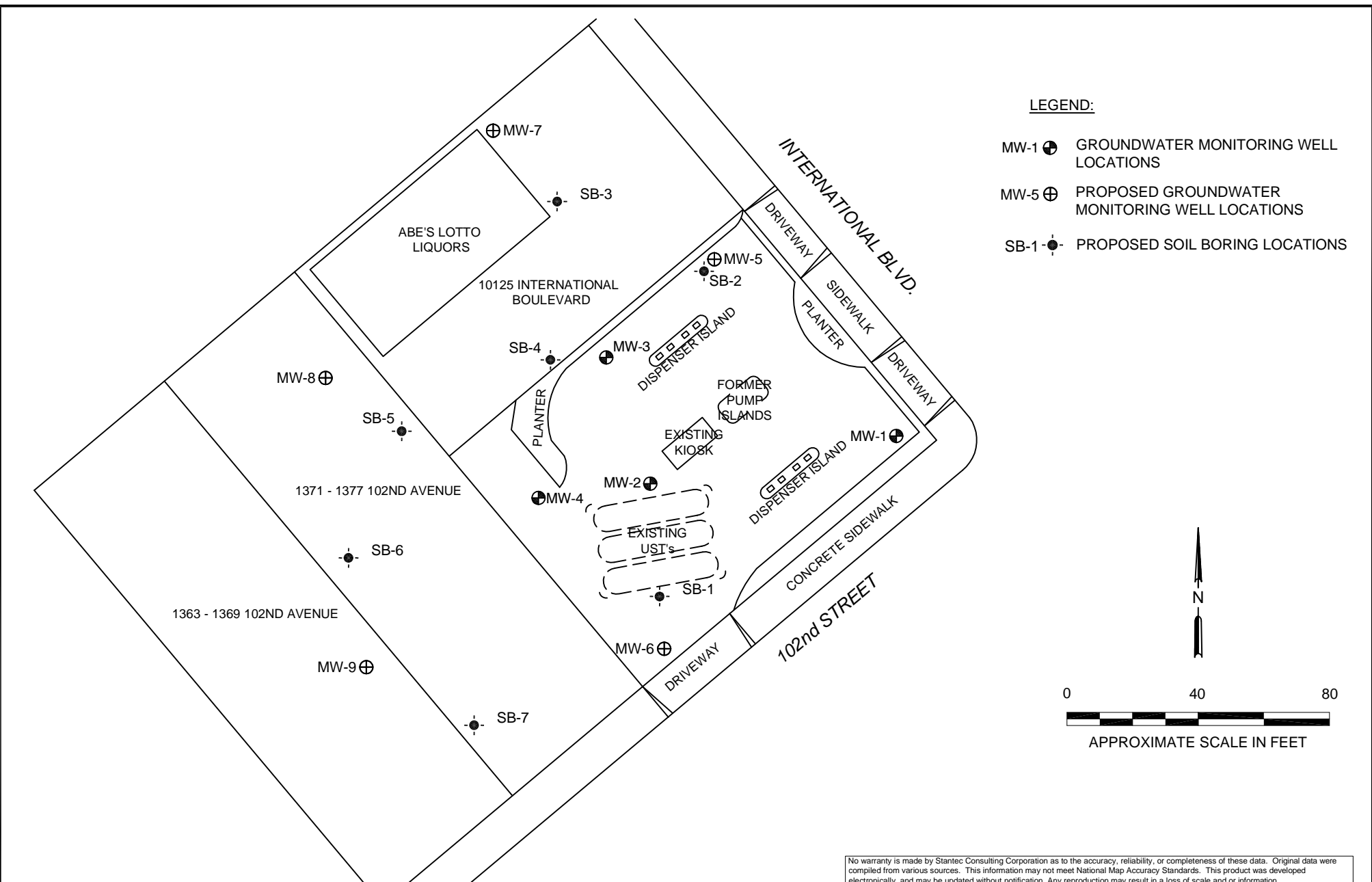
JOB NUMBER:
 77CP.01634.41

DRAWN BY:
 STA/DWR


CHECKED BY:
 BC

APPROVED BY:
 TP

DATE:
 05/19/08



No warranty is made by Stantec Consulting Corporation as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

	FORMER 76 STATION NO. 7124 10151 INTERNATIONAL BLVD. OAKLAND, CALIFORNIA		SITE PLAN WITH PROPOSED SOIL BORING AND WELL LOCATIONS		FIGURE: 2
	JOB NUMBER: 77CP.01634.41	DRAWN BY: DWR	CHECKED BY: BC	APPROVED BY: RB	DATE: 7/3/08

**ATTACHMENT 1
ACEHS LETTER**

Work Plan Addendum for Additional Site Assessment
76 Service Station No. 7124
10151 International Boulevard
Oakland, California



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

June 5, 2008

Mr. Bill Borgh (Sent via electronic mail)
76 Broadway
Sacramento, CA 95818

Mr. Tony Banh and Monument Gas & Market
10151 International Blvd.
Oakland, CA 94603

Subject: Fuel Leak Case No. RO0002444 and Geotracker Global ID T0600173591, Unocal 7124, 10151 International Boulevard, Oakland, CA

Dear Mr. Borgh:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the documents entitled, *Workplan for Additional Off-Site Well Installation*, dated October 14, 2005, *Addendum to Workplan for Additional Off-Site Monitoring Well Installation* dated July 22, 2005 and *Work Plan for Additional Site Assessment* dated May 21, 2008, which replaces the two former work plans. The newest work plan recommends installing five monitoring wells. We concur with the proposed locations presented in your new work plan. However, we recommend that you fully define the horizontal and vertical extent of the soil and groundwater plumes by performing depth discrete sampling before installing wells and advance one boring downgradient of the dispensers to define the vertical extent of petroleum hydrocarbons and oxygenates in soil and groundwater. Also, we recommend that you install a monitoring network that allows collection of depth discrete samples, as discussed below.

The proposed work scope may be implemented provided that the modifications requested in the technical comments below are addressed and incorporated. We request that you provide an abbreviated work plan addendum that addresses our technical comments below.

TECHNICAL COMMENTS

1. **Lateral Soil and Groundwater Characterization.** Before installing permanent monitoring points, we recommend that you assess the lateral extent of the soil and groundwater plumes by advancing exploratory borings in your proposed boring locations. We request that soil samples be collected and analyzed at areas of obvious contamination, the soil/groundwater interface, at each lithology change, or at a minimum of five-foot intervals. We recommend that you obtain at least two soil samples that are below the detection limits to define the vertical extent of contamination in soil. We request that this boring be continuously cored to obtain lithologic information to locate your screen intervals and to add and update your previously submitted cross-sections.

Should you determine that you need to install downgradient monitoring wells after the initial part of your investigation, ACEH requests that you install depth discrete wells with a sand pack interval no longer than 2 to 5 feet. This may require that you install multiple wells or multichamber wells. Installing these depth discrete wells can help to define the plume depth and indicate which areas need remediation. Upon completing the borings and obtaining the analytical results, your proposed well construction depths, details and locations should be sent to ACEH for review. This can be completed by either including a work plan in the soil and water investigation (SWI) report requested below or submitted earlier with preliminary results for ACEH review.

2. **Vertical Soil and Groundwater Characterization.** Based on the results from the samples collected at depth hydraulically downgradient of the dispensers, hydrocarbons and oxygenates are present in the deepest soil samples. To investigate the vertical extent of the soil and groundwater plumes in this area, we request that you install a boring downgradient of the source area. We recommend that you obtain two clean soil samples at the bottom of each boring. Should you be unable to collect depth discrete soil samples, collecting a depth discrete groundwater sample that is below the detection limit should suffice. This may be completed by using a depth discrete sampling method such as dual-tube geoprobe, CPT or MIP. Please refer to the documents entitled American Petroleum Institute Publication No. 4699 dated February 2000; 'Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators' (EPA 510-B-97-001), prepared by the U.S. Environmental Protection Agency (EPA), dated March 1997; and 'Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, Appendix C,' prepared by the State Water Resources Control Board, dated March 27, 2000 for recommended investigation methods. Please submit your site map showing the added boring location(s) and your proposal for the depth and method of your planned depth discrete sampling in the work plan addendum requested below.
3. **Regional Geologic and Hydrogeologic Setting.** The regional and local geologic and hydrogeologic setting must be understood in order to begin preparing a site conceptual model (SCM). Please include a concise narrative discussion of the regional geologic and hydrogeologic setting. Include a list of technical references you reviewed and update your geologic cross-sections. Ensure that one is parallel and the other, perpendicular to the plume axis. Include a concise discussion of the on-site geology, hydrogeology, release history, source zone, plume development and migration, attenuation mechanisms, preferential pathways, and potential threat to down-gradient and above-ground receptors (e.g. contaminant fate and transport). Please include the contaminant volatilization from the subsurface to indoor/outdoor air exposure route (i.e. vapor pathway) in the analysis in the SWI report requested below.
4. **Preferential Pathway Evaluation Survey.** The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of the NAPL and/or plume encountering preferential pathways and conduits that could spread contamination. We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for vertical and lateral migration that may be present in the vicinity of the site.

Discuss your analysis and interpretation of the results of the preferential pathway study (including the detailed well survey and utility survey requested below) and report your results in the Soil and Water Investigation (SWI) requested below. The results of your study shall contain all information required by California Code of Regulations, Title 23, Division 3, Chapter 16, §2654(b).

a. Utility Survey

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Please include maps and cross-sections illustrating the location and depth of all utility lines and trenches within and near the site and plume areas(s) as part of your study.

b. Well Survey

The preferential pathway study includes a detailed well survey of all wells (monitoring and production wells: active, inactive, standby, decommissioned (sealed with concrete), abandoned (improperly decommissioned or lost); and dewatering, drainage, and cathodic protection wells) within a ¼ mile radius of the subject site. Your groundwater monitoring reports refer to a well survey that was performed for the site. ACEH files do not contain this report. Please upload this report to the ACEH ftp site for our review.

5. **Quarterly Monitoring Report Figures.** Please update the quarterly monitoring reports that were denied in Geotracker, as per previous e-mail notification. The North arrow has shifted on the maps from the July 2007 quarterly reports to present. Please resubmit the documents that were denied with the corrected figures and text relating to the groundwater flow direction and submit updated maps for the remaining reports that were not rejected. Include rose diagrams for depicting groundwater gradients. Plot the rose diagram on the groundwater contour maps and update it in all future reports submitted for your site. Please ensure that the updated gradient directions are included on the rose diagram along with all historical gradients. The report figure shows the cross street as 102nd Street. In future reports please have these changed to 102nd Avenue.

TECHNICAL REPORT REQUEST

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

- **July 10, 2008** – Work plan addendum - Abbreviated work plan addendum with new proposed boring location map and a letter stating planned discrete sampling method, revised quarterly monitoring reports with correct north arrow and new maps of remaining quarterly monitoring reports with incorrect north arrow.

- **September 15, 2008** – Complete the field work.
- **October 31, 2008** – Submit SWI report and monitoring well installation work plan, if not previously submitted.

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

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to 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 Instructions." 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. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all 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 monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

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,

Bill Borgh
RO0002444
June 5, 2008
Page 5

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

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

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) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,

A handwritten signature in blue ink that reads "Barbara Jakub". The signature is written in a cursive style with a long horizontal stroke at the end.

Barbara Jakub, California P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Ben Chevlen, Secor International, Inc., 3017 Kilgore Rd., Rancho Cordova, CA 95670 (sent via electronic mail)

Leroy Griffin, sent via electronic mail lgriffin@oaklandnet.com

Donna Drogos, ACEH, via electronic e-mail
Barbara Jakub, ACEH
File

ATTACHMENT 2
FIELD AND LABORATORY PROCEDURES

Work Plan Addendum for Additional Site Assessment
76 Service Station No. 7124
10151 International Boulevard
Oakland, California

ATTACHMENT 2

FIELD AND LABORATORY PROCEDURES

EXPLORATORY DRILLING

Soil boring will be drilled to maximum depth of 30 feet bgs using dual-tube direct push drilling equipment (first groundwater is expected to be at approximately 14 to 18 feet bgs). The boring will be logged by Stantec field staff using the Unified Soil Classification System and standard geologic techniques under the direction of a California-licensed Professional Geologist. The soil borings will be continuously cored for logging, and sampled for laboratory analysis at five foot intervals. All soil samples for chemical analysis will be retained in the acetate liners, capped with Teflon squares and plastic end caps, and sealed in clean zip-lock bags. The samples will be placed on ice for transport to the laboratory accompanied by chain-of-custody documentation. All down-hole drilling and sampling equipment will be steam-cleaned following the completion of the soil boring. Down-hole sampling equipment will be steam-cleaned or washed in analconox/liquinnox solution between samples. The boreholes will be backfilled with cement grout.

ORGANIC VAPOR MONITORING PROCEDURES

Soil samples collected during drilling operations will be analyzed in the field for ionizable organic compounds using a photo-ionization detector (PID) with a 10.2 eV lamp or a flame ionization detector (FID). The test procedure will involve measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a sealed container (either a zip-lock bag or a mason jar). The container will be warmed for approximately 20 minutes (in the sun), then the head-space within will be tested for total organic vapor, measured in parts per million as benzene (ppm; volume/volume). The instrument will be calibrated prior to drilling using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 55, which relates the photo-ionization potential of benzene to that of isobutylene at 100 ppm. The results of the field-testing will be noted on the boring logs. PID and FID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate hydrocarbon levels with the confidence of laboratory analyses.

GROUNDWATER SAMPLING PROCEDURES

Once groundwater has been encountered in a borehole, Stantec staff will attempt to collect a grab groundwater sample prior to further advancement of the soil boring. 1-inch-diameter PVC piping equipped with a 5-foot section of slotted screen will be placed down the center of the drive casing. Decontaminated stainless steel or disposable plastic bailers will be lowered through the PVC casing to collect grab water samples. If sufficient groundwater can not be collected after 20 minutes, the borehole will be advanced another 4 feet, before sampling is re-attempted.

LABORATORY PROCEDURES

Selected soil and groundwater samples will be analyzed for TPHg, BTEX, and fuel oxygenates by EPA Method 8260.

SOIL CUTTINGS AND RINSATE/PURGE WATER

Soil cuttings generated during drilling operations will be temporarily stored on-site pending characterization and disposal. Soil cuttings will be removed by a licensed disposal contractor to an appropriate treatment or disposal facility. Water generated during equipment cleaning will be temporarily stored in DOT-approved 55-gallon drums pending transport by a licensed disposal contractor to an appropriate treatment or disposal facility. Drummed soil cuttings and rinsate water will be temporarily stored on-site for approximately 4 to 6 weeks.