ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
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

RO0002550

June 7, 2004

Massood Habibian
MOA's Service Center
486 A Street
Hayward, CA 94541-5040

RE: SWI Work Plan for MOA's Service Center, 486 A Street, Hayward

Dear Mr. Habibian:

We are in receipt and have completed review of the Aqua Science Engineers, Inc. (ASE) work plan dated November 18, 2003 and entitled, *"Workplan for Additional Soil and Groundwater Assessment"*. The current ASE plan provides the technical framework for completion of a series of cone penetrometer (CPT) soil borings. However, the ASE work plan does not present the number and locations of CPT borings we feel are suitable to this phase of the investigation.

Please submit a work plan addendum that proposes a transect of CPT borings along A Street and Flagg Avenue, as well as a suitable number of borings in/near the source area(s), i.e., underground tank cluster, dispenser area, product piping runs. Boring spacing should reflect the current uncertainties of the underlying stratigraphy, and the goals of identifying potential geogenic preferential flow pathways and the location of product mass close to the site and source area(s).

These reports and work plans are being requested pursuant to the Regional Board's authority under Section 13267(b) of the California Water Code. Please be reminded that all reports and work plans are to be submitted under cover, signed under penalty of perjury, by the Responsible Party(ies) who have taken a lead role in compliance with corrective action directives.

If you have any questions, I can be reached at (510) 567-6783.

Sincerely,

Scott O. Seery, R.G., CHMM
Senior Hazardous Materials Specialist

c: Betty Graham, RWQCB
Dave Charter, SWRCB UST Fund
Danilo Galang, Hayward Fire Department
Robert Kitay, Aqua Science Engineers Inc., 208 W. El Pintado, Danville, CA 94526
D. Drogos

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RO0002550

September 30, 2003

Massood Habibian
MOA's Service Center
486 A Street
Hayward, CA 94541-5040

RE: SWI, SCM and CAP for MOA's Service Center, 486 A Street, Hayward

Dear Mr. Habibian:

This letter follows a review of the fuel leak case file for the above referenced site, and my 25 September 2003 meeting with your consultant, Mr. Robert Kitay of Aqua Science Engineers (ASE). This office is concerned with the presence of elevated concentrations of gasoline constituents, particularly the fuel oxygenates methyl tert-butyl ether (MtBE), tert-amyl methyl ether (TAME), and tert-butyl alcohol (TBA), and that the extent of the contamination has not been adequately determined.

This letter presents a request to complete a Soil and Water Investigation (SWI), Site Conceptual Model (SCM), and prepare a Corrective Action Plan (CAP) for the subject site in accordance with California Code of Regulations (CCR), Title 23, Division 3, Chapter 16, Article 11, "Corrective Action Requirements"; State Water Resources Control Board Resolution 9249, "Policies and Procedure for Investigation, Cleanup and Abatement of Discharges Under Water Code Section 13304"; and the Regional Water Quality Control Board (Regional Board) Water Quality Control Plan for the basin.

The following technical comments address investigation and related performance objectives that shall be considered as part of the required SWI, SCM and CAP. **We request that you prepare and submit a work plan for the SWI that addresses the following comments.**

TECHNICAL COMMENTS

1. Preferential Pathway Study

   A conduit / preferential pathway survey shall be prepared for the site that identifies the potential migration pathways and conduits (utilities, storms drains, etc.) that may be present in the vicinity of the site. This survey will include, among other components, the submittal of map(s) showing the location and depth of all utility lines and trenches identified in the study, and a professional interpretation of how such conduits may or may not affect plume dispersal from the site.

   Using the results of the conduit / preferential pathway study, tank operational histories and records, wells surveys, and data from previous investigations at the site, you are requested to revise the Site Conceptual Model (SCM) that was previously published in the 18 June 2003 ASE report. You are to use this revised SCM to determine the appropriate configuration for samplings points in the SWI phase of work at this site. Discuss your analysis and interpretation of the results of the conduit study and explain your rationale for the configuration of sampling points in the pending SWI work plan.

2. Site Conceptual Model

Starting with a critical review of the conduit study and data from previous investigations and tank operational records for this site, you are to develop the initial *three-dimensional* SCM of site conditions. As you may be aware, an SCM is a set of working hypotheses pertaining to all aspects of the contaminant release, including site geology, hydrogeology, release history, residual and dissolved contamination, attenuation mechanisms, pathways to nearby receptors, and likely impacts to receptors. The SCM is used to identify data gaps that are subsequently filled as the investigation proceeds. As the data gaps are filled, the working hypotheses are modified, and the overall SCM is refined and strengthened. Subsurface investigations continue until the SCM no longer changes as new data are collected. At this point the SCM is considered "validated". The validated SCM forms the foundation for developing the most cost-effective final Corrective Action Plan (CAP).

Your attention is directed to *"Strategies for Characterizing Subsurface Releases of Gasoline Containing MtBE"*, American Petroleum Institute Publication No. 4699 dated February 2000 as a resource for development of the SCM. Your attention is also directed to the State Water Resources Control Board (SWRCB) *"Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, Final Draft"*, dated March 27, 2000, as well as the June 2002 ChevronTexaco Energy Research and Technology Company technical bulletin entitled *"Mass Flux Estimates to Assist Decision-Making"* to help in development and strategies for refinement of the SCM, among other related tasks. I can provide copies of any of these documents if you need them. A copy of the cited API document was provided to your consultant during the meeting of September 25th.

You are requested to use this revised SCM and referenced guidance documents to help you determine the appropriate configuration for samplings points in the pending SWI phase of work at this site. Please discuss in the SWI workplan your analysis and interpretation of the results of the conduit study and SCM, and explain your rationale for the configuration of proposed sampling points.

3. Contaminant Plume Definition – Soil and Groundwater

The purpose of contaminant plume definition is to determine the *three-dimensional* extent of contamination in soil and groundwater, including a determination of 3-D extent of impacts in the source area(s) and released contaminant mass, and a demarcation of potential geogenic and anthropomorphic flow pathways. Up to 22,000 parts per billion (ppb) MtBE, 4400 ppb TBA and 330 ppb TAME were detected in water sampled from well MW-2 as recently as August 2003. Well MW-2 is located near the Flagg Avenue property boundary. MW-2 appears to be the most down gradient well in the current well network.

A recent investigation, as discussed in the 18 June 2003 ASE report, involved the installation of four GeoProbe™ samplers to first encountered groundwater. These borings are designated BH-D through BH-G. Water was collected from each boring for eventual laboratory analysis. Soil samples were only collected from the 15.5 - 16.0' depths in the two on-site borings (BH-D and -E), while none were collected from the two off-site borings (DH-F and -G). The cited ASE report failed to present boring logs for either of the off-site borings, while logs for the two on-site borings failed to present lithologic descriptions beyond the 16.0' depth, although both were advanced to 50' below grade (bg). The cited report does not indicate to what depth borings BH-F and -G were advanced. ASE reports that groundwater was encountered in each boring at a depth of 44' bg.

Further assessment is necessary to better understand site geology and hydrogeology, and to refine the SCM. We therefore request a three-dimensional investigation. The vertical and horizontal distribution of impacts is to be determined, in both soil and groundwater. Mass-balance calculations are to be completed for the source area. The SWI workplan should present your plan to accomplish these tasks.

Conventional investigation techniques and monitoring well networks currently used at fuel leak sites, including this one, are generally insufficient to adequately characterize modern fuel impacts, including those caused by MtBE and other oxygenates. It is recommended that your investigation initially incorporate expedited site assessment techniques and borings emplaced along one or more transects arranged both normal and parallel to the expected groundwater flow axis(es). The borings are to be continuously cored and logged, to total depth explored, with close attention paid to changes in lithologies that might facilitate solute transport (e.g., silty/sandy stringers in otherwise fine grained sediments).

Soil samples should be collected for laboratory analysis at 5-foot intervals, areas of obvious contamination, the soil/groundwater interface, and at each lithologic change noted during boring advancement, at a minimum. Water samples are to be collected at several discrete depths to total depth explored. Detailed cross-sections, fence diagrams, structural contours and isopachs, and rose diagrams for groundwater flow should be subsequently incorporated into the *Interim* and *Final* SWI reports, as appropriate. Cross-sections should be scaled to clearly illustrate subsurface lithologies, including the locations of stringers and other zones of relatively higher permeability, particularly in those areas where such zones may be intercepted by buried utilities.

Final well locations and screen depths will be substantially based on the results of the SWI and refined SCM. The monitoring of multiple discrete water-bearing zones with short screened intervals is a possibility, and fully dependent upon what is found during the SWI. Generally, these screened intervals should not be greater than 3' in length. We will expect that the Interim SWI Report will propose the locations of such wells, the anticipated well screen depths, their configurations (e.g., single well, well cluster or multi-level, as appropriate), and the reasoning behind the location and configuration of each.

Discuss your proposal for performing this work outlined, above, in the SWI work plan. The results of the conduit study, and the initial SCM, are to be presented and discussed in the SWI work plan to justify your proposed scope of work.

Expedited site assessment tools and methods are a scientifically valid and cost-effective approach to fully define the three-dimensional extent of the plume. Technical protocol for expedited site assessments are provide in the US EPA *"Expedited Site Assessment Tools for Underground Storage Tank Sites: A guide for Regulators"* (EPA 510-B-97-001), dated March 1997.

4. Corrective Action Plan

The purpose of the CAP is to use the information obtained during investigation activities to propose cost-effective **final cleanup objectives and remedial alternatives for both soil and groundwater impacts, including those caused by MtBE and other fuel oxygenates,** that will adequately protect human health and safety, the environment, eliminate nuisance conditions, and protect water resources.

A final CAP for the soil and groundwater impacts caused by an unauthorized release at the site will be requested upon completion of the SWI in accordance with the schedule specified below. The CAP shall address at least two technically and economically feasible methods to restore and protect beneficial uses of water and to meet the cleanup objectives for each contaminant established in the CAP. The CAP must propose verification monitoring to confirm completion of corrective actions and evaluate CAP implementation effectiveness.

TECHINCAL REPORT REQUEST

Please submit technical reports according to, or otherwise comply with, the following schedule:

November 30, 2003- Work plan for Soil and Water Investigation (which includes the results of the Preferential Pathway Study)

November 30, 2003 – Site Conceptual Model (may be incorporated into the SWI work plan)

60 Days from SWI Work Plan Approval – Interim Soil and Water Investigation Report (which contains the results of the initial SWI assessment work, and a proposal for the installation of new monitoring wells)

90 Days from Completion of Soil and Water Investigation – Soil and Water Investigation Completion Report (which incorporates all data generated during completion of SWI, including the installation of the new monitoring wells)

90 Days after Submittal of Soil and Water Investigation Completion Report - Corrective Action Plan

January 15, 2004 – Quarterly Report for the Fourth Quarter 2003

April 15, 2004 – Quarterly Report for the First Quarter 2004

July 15, 2004 – Quarterly Report for Second Quarter 2004

October 15, 2003 – Quarterly Report for Third Quarter 2004

These reports and work plans are being requested pursuant to the Regional Board's authority under Section 13267(b) of the California Water Code. **Each technical report shall include conclusions and recommendations for the next phases of work required at the site should more appear necessary to refine the SCM.** We request that all required work be performed in a prompt and timely manner, as suggested by the noted schedule, above. Revisions to this schedule shall be requested in writing with appropriate justification for anticipated delays.

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that all work plans and technical reports containing professional geologic or engineering evaluations and/or judgments be completed under the direction of an appropriately registered or certified professional. This registered or certified professional shall sign and wet stamp all such reports and work plans.

All reports and work plans are to be submitted under cover, signed under penalty of perjury, by the Responsible Party(ies) who have taken a lead role in compliance with corrective action directives.

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 Alameda County District Attorney, for possible enforcement follow up. Enforcement follow up may include administrative action or monetary penalties of up to $10,000 per day for each day of violation of the California Health and Safety Code, Division 20, Chapter 6.76.

If you have any questions, I can be reached at (510) 567-6783.

Sincerely,

Scott O. Seery, R.G., CHMM
Hazardous Materials Specialist

c: Betty Graham, RWQCB
Dave Charter, SWRCB UST Fund
Danilo Galang, Hayward Fire Department
Robert Kitay, Aqua Science Engineers Inc., 208 W. El Pintado, Danville, CA 94526
D. Drogos

ALAMEDA COUNTY
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R02550

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

September 19, 1990

Moa Habibian
Moa's Mobil
486 A St.
Hayward,CA 94541

Re: **Waste Minimization Assessment**

Dear Moa Habibian:

Your business has been selected to receive a hazardous waste minimization assessment. As you are probably aware, hazardous waste reduction has become a statewide, if not a national, issue. To address this issue at a county level, Alameda County is establishing its own Hazardous Waste Minimization Program and is planning to conduct waste minimization assessments for all hazardous waste generating facilities in the County.

We have chosen businesses in the auto repair industry to receive the first round of waste minimization assessments. It is our hope that these assessments will assist participating businesses in minimizing their hazardous wastes - and will give us further information on the best way to structure our minimization program.

One of our Hazardous Materials Specialists will be contacting you during the week of September 24 to arrange a meeting with you for an assessment of your business. During this meeting and assessment, the Specialist will work with you in examining your business's hazardous waste generating practices. The Specialist will then provide you with materials on waste reduction technology and assist you in setting up appropriate hazardous waste minimization practices.

We look forward to working with you in reducing the amount of hazardous waste your business generates. Of course, your comments and suggestions are encouraged; we need your input in order to best serve you! Please direct any comments and questions to Katherine Chesick at 415/271-4320.

Sincerely,

Edgar B. Howell

Edgar B. Howell, Chief,
Alameda County Hazardous Materials Division

EBH:kac

cc: Fire Department
Files

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R02550

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

(4)

April 2, 1990

Janet Burggraf
Applied Geosystems
43255 Mission Boulevard
Fremont CA 94539

Re: Site Search Request for Hayward properties

Dear Ms. Burggraf:

My staff has completed a site search of the Hayward properties as you requested in your March 19 correspondence. You requested the following types of information regarding underground tanks and site investigations for hazardous materials at or in the vicinity of specified streets within the city of Hayward:

1. Addresses at which underground storage tanks have been used
2. The dates of use of the USTs
3. Contents of USTs
4. Whether soil or groundwater samples had been taken and results
5. Status of sites at which investigations have taken place

Below is a summary of the information available from our files on sites at which underground storage tanks have been or are being used.

Site Address:	Dates used:	Contents:	Sampling?	Investigation?
352 West A St.	No info	waste oil	No	No
(R02454) 82 A St.	No info	waste oil	No	No
100 A St.	Removed 6/86	waste oil	Yes	Yes
			See enclosure	
		Awaiting remediation plans		
207 A St.	No info	gasoline	No	No
(R02550) 486 A St.	No info	gasoline + waste oil	No	No
(R01167) 22383 Meekland	Until 1985	gasoline	No	No
(R01073) 310 Bartlett Av.	Removed 4/89	gasoline	Yes	Yes
			See enclosure	
		Site remediation in progress		

This statement is limited to information available to this department. Other information may be available from other agencies or businesses involved with this property. The underground storage tank laws and hazardous material storage laws are regulated by the City of Hayward, Hazardous Materials Division.

A billing form is being submitted to cover the costs of this review. Please contact Pamela Evans, Hazardous Materials Specialist, at 272-4320, with any questions you may have.

Sincerely,

Edgar B. Howell III, Chief
Hazardous Materials Division

EBH:PJE

c: Hugh Murphy, City of Hayward