ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
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July 13, 2009

Mr. Edward Kozel
20 Oak Knoll Drive
Healdsburg, Ca 95448-3108

Mr. Robert Kovalak
ICI Paints
16654 W. Sprague Rd.
Strongville, OH 44136

Ms. Deborah Castles
McGrath Properties
130 Webster Street, Suite 200
Oakland, CA 94607

Subject: Fuel Leak Case No. RO0000079 (Geotracker global ID #T0600101659), One National Engravers (ONE), 1001 42nd Street, Oakland, CA 94608

Dear Mr. Kozel, Mr. Kovalak and Ms. Castle:

Alameda County Environmental Health (ACEH) staff has reviewed the reports entitled "Site Conceptual Model (SCM)" dated November 25, 2008 and the "Work Plan for Corrective Action Plan (CAP) Implementation" dated January 31, 2008 prepared by Schutze Associates (Schutze) and the "Corrective Action Plan" dated June 29, 2007 prepared by ERM and the "Screening Level Risk Evaluation" dated June 5, 2007 prepared by Geomatrix. Although we concur with portions of the proposed work, we also have provided technical comments and request additional information.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities

TECHNICAL COMMENTS

1. **Site Conceptual Model**

1.1. Utility Corridors. The SCM identified utility trenches as a potential migration pathway for the dissolved phase contaminant plume (s), and proposed that the utility trenches be tested to determine if they are acting as a conduit for the dissolved phase contaminant plume(s). We request that you submit a work plan with your proposal to investigate the utility corridor by the date specified below.

1.2. Source Area Contamination. Schutze concluded that soil contamination is not believed to be a significant issue at the site. However, ERM estimated the volume of residual free product to be approximately 450 gallons and that only a portion of the residual free product is recoverable. Therefore, it appears that significant residual sorbed phase pollution is proposed to be left in place in multiple source areas and will likely continue to contribute mass to the dissolved phase plume beneath and downgradient of the site. Furthermore, the extent of separate phase TPHms detected in groundwater both onsite and offsite is not sufficiently supported by the data collected to date from the currently known sources, as the concentrations and distribution of dissolved phase TPHms does not appear to correlate with the concentrations of TPHms detected in soil. These data suggest that there may be other source(s) of contamination in the vicinity of BH-AA and BH-BB.

The known source areas where releases to the subsurface that have been identified include:

- Former UST #3 and Other Potential Sources. High concentrations of up to 1,100 mg/kg (soil) and 2,000,000 µg/L (groundwater) TPHms (boring BH-AA) and 320 mg/kg (soil) and 1,100,000 µg/L (groundwater) TPHms (boring BH-BB) were detected in the vicinity of former UST #3. Given the distance from former UST #3 to soil borings BH-AA and BH-BB, between 30 feet and 70 feet, respectively, it is possible that an unknown source may be present. Also, soil samples were not collected below 12 feet bgs, but a strong hydrocarbon odor was noted in soil borings BH-AA and BH-BB at 15 feet bgs, indicating that the vertical extent of contamination appears undefined.

- Sumps. Soil sampling conducted during the removal of two sumps in November 1995 detected 1,400 mg/kg TPHms in soil at 8 feet bgs and LNAPL has consistently been detected in groundwater samples collected from monitoring well BES-1, which is located adjacent to the former sumps. These data indicate that the sumps were associated with a release to the subsurface and that sorbed phase TPHms will likely continue to contribute to the dissolved contaminant plume(s) at this location.

- Former UST #2. Soil samples collected at 7 feet bgs, during the closure in place of UST #2, detected up to 1,700 mg/kg TPHms is soil, and LNAPL has consistently been detected in groundwater samples collected from MW-B1, which is located next to the former UST #2. These data indicate that residual sorbed phase TPHms contamination will continue to add mass to the dissolved phase contaminant plume(s).

We request that you prepare a Work Plan detailing your proposal to determine the vertical extent of contamination near borings BH-AA and BH-BB: and determine if additional source(s) are present. We also request that you evaluate the effects of residual pollution in soil at the source areas in continuing to add mass to the dissolved phase plume(s) beneath and downgradient of your site, as proposed remediation methods are anticipated to leave high concentrations of residual sorbed TPHms in place. Please submit the work plan by the date specified below.

1.3. Offsite Groundwater Contamination Data Gap. High levels of dissolved phase contamination were detected in grab groundwater samples collected in onsite soil borings BH-B, BH-W, BH-Y, BH-Z, BH-AA, BH-BB and monitoring wells BES-1 at concentrations up to 2,000,000 µg/L TPHms, and in offsite soil borings BH-H BH-J, BH-Q, BH-R and well MW-B1 (near adjacent residences) at concentrations up to 1,600,000 µg/L TPHms. The soil borings and monitoring well locations appear to correlate to a paleo-stream channel indicating that the dissolved contaminant plume(s) from your site appear to be moving offsite and commingling with the dissolved plume from the former Dunne Quality Paints site located at 1007 41nd Street, Oakland, and moving toward properties further downgradient.

Schutze identified the existence of buried stream channels beneath the site and confirmed that the paleo-channels correspond with the TPHms groundwater plume. Data therefore support that the paleo-channels appear to be acting as a preferential pathway for the offsite migration of the dissolved phase contaminant plume(s). Migration of dissolved phase contamination offsite is a data gap, as the SCM neglects the contribution of residual separate phase contamination from beneath your site contributing to the dissolved phase contaminant plume that appears to have migrated via the paleo-channels beneath the Ennis residential properties downgradient of your site. TPHms were detected in soil and groundwater beneath the Ennis properties at concentrations of up to 4,900 mg/kg and 49,000 µg/L, respectively. Please update the SCM and address this data gap and submit the revised SCM by the date specified below.

ACEH's directive letter dated October 12, 2006 requested that you coordinate with Dunne Quality Paints (ACEH Case ID #RO0000073) to submit a joint work plan for investigation and/or remediation of offsite affected properties including the contamination that appears to be migrating to the Ennis residential

properties located at 1069 41st Street, Emeryville and the Oak Walk property (ACEH case ID #RO0002733). Dunne Quality Paints and ONE submitted a joint work plan, which was conditionally approved by ACEH on April 30, 2007. To date we have not received the results of this work; consequently, the soil and groundwater investigation report is late. We request that you, and Dunne by copy of this letter, implement the previously approved work plan and submit the requested report by the date specified below.

2. **Corrective Action Plan and Pilot Test for Interim Remediation**. The CAP evaluated several remedial options, with vacuum enhanced free product skimmers selected as the preferred remedial option. We conditionally approve the proposed pilot test work plan. Prior to the implementation of the work plan we request that you address the following technical comments discussed below. Please present the results from the pilot test in the report requested below.

2.1. Proposed Remedial Action. It does not appear that free product skimmers will achieve water quality objectives when residual pollution in the source area(s) soils may continue to add mass to dissolved contaminant plume(s). Vacuum enhanced free product skimmers are a passive rather than an active remedial option that may be an effective interim measure to remove free product and as a plume migration control method; however, it is unclear if this remediation method will meet water quality objective in a reasonable timeframe. ERM suggests that vacuum enhanced free product skimmer may reach cleanup goals in approximately 2 years. Considering the potential size of the dissolved phase contaminant plume(s), it does not appear that water quality objectives can be achieved in this time frame. However, this method may be appropriate as an interim remedial measure and we concur with the proposal for a three month pilot test to evaluate the performance of vacuum enhanced free product skimmers. In addition, to evaluate the performance of the interim remedial action we request that additional wells for performance monitoring be installed onsite. Please submit a figure that shows the proposed monitoring well locations in the work plan requested below. Please present results from the pilot test in the report requested below.

2.2. Cleanup Levels and Cleanup Goals. ERM and Schutze propose remediation cleanup levels for soil of 5,000 mg/kg TPHms, because these cleanup levels were applied at the former Dunne Quality Paint site. However, Dunne developed site specific cleanup levels based on high density residential construction and sub grade parking, with the removal of over 13,000 yd^3 of contaminated soil and approximately 3,000,000 million gallons of contaminated groundwater prior to site redevelopment. No remedial action has been proposed to mitigate the residual TPHms contamination in soil beneath your site. We request that you recommend cleanup levels that are based on site specific soil and groundwater conditions beneath your site, and are consistent with the proposed land use. Please submit your updated cleanup levels in the revised CAP requested below.

The CAP submitted by ERM proposes cleanup goals for groundwater, "[t]o minimize the potential growth of the TPHms dissolved plume and accelerate natural attenuation, remove free-product to the extent practicable; and achieve site conditions such that soils are protective of groundwater quality and do not represent an on-going source of potential groundwater impacts." However, cleanup goals are typically water quality objectives anticipated to be achieved over a period of time. It is unlikely the proposed target cleanup levels for soil will achieve the cleanup goals of water quality objectives in a reasonable timeframe.

We request that you propose cleanup levels (active remediation) and cleanup goals (water quality objectives) and the time frame to reach them, in accordance with the San Francisco Regional Water Quality Control Board Basin Plan for the groundwater use designation in the Basin Plan (potential drinking water source). Please note that soil cleanup levels for active remediation should ultimately (within a reasonable timeframe) achieve water quality objectives (cleanup goals) for groundwater in accordance with San Francisco Regional Water Quality Control Board Basin Plan in 23 CCR Section 2725, 2726, and 2727. Once the pilot test has been completed and the source areas have been adequately characterized,

submittal of an amended draft CAP (with public participation) that addresses contamination in both soil and groundwater is required.

3. **Groundwater Contaminant Plume Monitoring**. Given the current location of groundwater monitoring wells both onsite and offsite, and the high levels of dissolved phase TPHms detected in on and off-site soil borings it appears that the extent of the dissolved plume downgradient of your site is undefined. Therefore, we request that you propose additional monitoring well locations for plume delineation both onsite and offsite in the work plan requested below. We concur with the proposal for quarterly groundwater monitoring and sampling to assess the effectiveness of the remedial action and evaluate groundwater quality beneath the site (frequency to be reduced after one year to a semi-annual basis). By copy of this letter Dunne is required to participate in joint groundwater monitoring with ONE. Please present results from the combined groundwater monitoring and sampling in the reports requested below.

4. **Screening Level Risk Evaluation**. The risk evaluation prepared by Geomatrix in June 2007 considered risk scenarios including commercial industrial workers and future residents. Conclusions of the risk evaluation are based upon subsurface soil vapor sampling completed in March 2007, and evaluated based upon the current configuration (including interior layout) of the site buildings and structures. It appears that if changes to the buildings occur, such as building alterations (either interior or exterior) or other modifications, a revised risk assessment would be necessary to evaluate the potential risk to residents or building occupants. Also, if the land use should change to a more conservative scenario such as residential land or other restrictive land use a new risk assessment will be required.

5. **GeoTracker Compliance.** A review of the State Water Resources Control Board's (SWRCB) GeoTracker website indicate that electronic copies of the November 2008, Site Conceptual Model; January 2008, Work Plan for CAP Implementation; June, 2007 Corrective Action Plan; June 2006, Limited Soil Gas Investigation Report (ERM) and March 2007 Soil Vapor Investigation Report have not been submitted to the GeoTracker database.

   Analytical data and groundwater elevation data from 2001 to the present have not been submitted to GeoTracker and your site is out of compliance with requirements pursuant to California Code of Regulations, Title 23, Division 3, Chapter 16, Article 12, 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 UST or LUST program, must be transmitted electronically to the SWRCB GeoTracker system via the internet. Also, beginning January 1, 2002, all permanent monitoring points utilized to collect 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 to sub-meter accuracy using NAD 83. A California licensed surveyor may be required to perform this work. Additionally, pursuant to California Code of Regulations, Title 23, Division 3, Chapter 30, Articles 1 and 2, Sections 3893, 3894, and 3895, beginning July 1, 2005, the successful submittal of electronic information (i.e. report in PDF format) shall replace the requirement for the submittal of a paper copy. Please complete the electronic submittal for of all analytical data (EDF), survey data (GEO_XY and GEO_Z), and PDF reports from July 1, 2005 to current to GeoTracker by the date specified below.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (attention: Steven Plunkett), according to the following schedule:

- **July 30, 2009** – GeoTracker Compliance
- **August 30, 2009** – Work Plan, Preferential Pathway Study and Revised SCM
- **60 days after work plan approval** – SWI
- **November 15, 2009** – Pilot Test Report

- **December 15, 2009** – Soil and Groundwater Investigation Report (Joint One and Dunne)
- **60 Days After Concurrence with SWI**– Revised Draft CAP
- **December 30, 2009** – Quarterly Groundwater Monitoring and Sampling Report
- **March 15, 2010** – Quarterly Groundwater Monitoring and Sampling Report
- **June 15, 2010** – Quarterly Groundwater Monitoring and Sampling Report
- **September 15, 2009** – Quarterly Groundwater Monitoring and Sampling 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

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.

LANDOWNER NOTIFICATION REQUIREMENTS

Pursuant to California Health & Safety Code Section 25297.15, the active or primary responsible party for a fuel leak case must inform all current property owners of the site of cleanup actions or requests for closure. Furthermore, ACEH may not consider any cleanup proposals or requests for case closure without assurance that this notification requirement has been met. Additionally, the active or primary responsible party is required to forward to ACEH a complete mailing list of all record fee title holders to the site.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please be aware that you may be eligible for reimbursement of the costs of investigation from the California Underground Storage Tank Cleanup Fund (Fund). In some cases, a deductible amount may apply. If you believe you meet the eligibility requirements, we strongly encourage you to call the Fund for an application.

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) 383-1767.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

cc: Jan Schutze, Schutze & Associates, 436 14th Street, Suite 1216, Oakland, CA 94612
John Cavanaugh, ERM, 1777 Botelho Drive, Suite 260, Walnut Creek, CA 94596
Cathrine Johnson, Wendel, Rosen, Black and Dean LLP, 1111 Broadway, 24th floor, Oakland, CA 94607-4036
Terry Turner, Dunne Quality Paints, 707 Glenside Circle, Lafayette, CA 94549
Martin Samuels, Green City Lofts, 3675 Delmont Avenue, Oakland, CA 94605
Leroy Griffin, Oakland Fire Prevention Bureau, 250 Frank Ogawa Plaza, Suite 3341, Oakland, CA 94612
John Rosso, Bureau Veritas, 6920 Knoll Center Parkway, Suite 216, Pleasanton, CA 94566
Ignacio Dayrit, City of Emeryville, 1333 Park Avenue, Emeryville, CA 94608
Dave Ennis, PO Box 10985, South Lake Tahoe, CA 96158-3985
Mr. Dai Watkins, The San Joaquin Co., 1120 Hollywood Avenue, Suite 3, Oakland, CA 94602
Mr. George Lockwood, State Water Resources Control Board. Division of Water Quality, 1001 I Street, Sacramento, CA 95814
Donna Drogos, Steven Plunkett, File