

February 5, 2001  
SHD # 4241

**WORK PLAN FOR INTRODUCTION OF 7% SOLUTION HYDROGEN PEROXIDE  
INTO EXISTING WELLS**

Mr. Barney M. Chan  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Re: Former Fiesta Beverage, 966 89<sup>th</sup> Avenue, Oakland, CA 94621**

Dear Mr. Chan:

ALLCAL Environmental (ALLCAL) is pleased to submit this letter work plan on behalf of Mr. Ted Walbey (owner) for the above referenced property. This work plan is written at the request of your January 29, 2001, letter (attached) and proposes the introduction of a hydrogen peroxide solution into three on-site groundwater monitoring wells (MW-1, MW-2, and MW-3) having dissolved gasoline chemicals. On the last sampling event of January 18, 2001, wells MW-1, MW-2, and MW-3 had detectable total petroleum hydrocarbons as gasoline (TPHG) at concentrations of 11,000 ug/L, 300 ug/l, and 1,800 ug/L, respectively.

ALLCAL proposes the following scope of work as an attempt to remediate the groundwater to a "low risk" site in the area of the three monitoring wells:

- Prepare a solution of about 40-50 gallons of about 7% concentration hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>).
- Measure the depth to water in each well and place about 2/3rds of the solution into the casing of well MW-1 and the remainder, about equally divided, into the casings of wells MW-2 and MW-3. It is anticipated that the introduction of the H<sub>2</sub>O<sub>2</sub> can be completed as one event on a given day. Each casing will be filled to its top-of-casing, if possible, and time will be allowed for the column of H<sub>2</sub>O<sub>2</sub> to fall and reach the approximate depth to groundwater initially measured in each well. This process will continue until all H<sub>2</sub>O<sub>2</sub> is used. If the wells' uptakes of H<sub>2</sub>O<sub>2</sub> is slow, the

209-586-6464

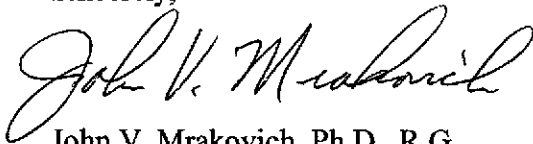
introduction of H2O2 may proceed over one or more days. The amount of H2O2 introduced into each well and the time required will be recorded for reporting purposes.

- After about two weeks of the introduction of the H2O2 into the wells, ALLCAL will purge and sample the wells to evaluate the effectiveness of the H2O2 remediation. Based on the results, ALLCAL may propose another three quarters of groundwater monitoring to document the long term effectiveness of the treatment or may propose another event of H2O2 remediation followed by three quarters of groundwater monitoring.
- When the site becomes considered eligible for "low risk" closure, ALLCAL will conduct a conduit/sensitive receptor survey.
- After completing the above work, ALLCAL will write a report documenting work performed and results of chemical analyses.

The above work and report writing will be conducted under the supervision of a California Registered Geologist or a Professional Civil Engineer. All work will be conducted under the attached SITE HEALTH AND SAFETY PLAN.

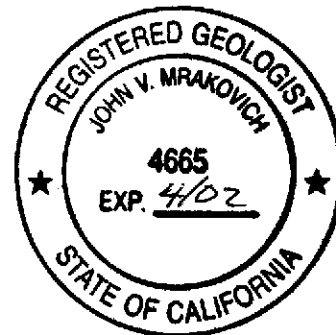
Please call if you have any questions.

Sincerely,



John V. Mrakovich, Ph.D., R.G.

cc: Mr. Ted Walbey  
7402 Hillview Court  
Pleasanton, CA 94588



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

January 29, 2001  
StID # 4241

Mr. Ted Walbey  
7402 Hillview Ct.  
Pleasanton, CA 94588

**Re: Subsurface Investigation at 966 89<sup>th</sup> Ave., Oakland CA 94621**

Dear Mr. Walbey:

I have received and reviewed copies of preliminary results from the 1/18/01 groundwater monitoring event performed at the above referenced site by Mr. John Mrakovich of AllCal Environmental. I have discussed these results with Mr. Mrakovich and at this time, it is my recommendation that the previously proposed off-site well not be installed. Rather, some type of remediation within the area of the existing wells is recommended. We discussed a number of viable options to initiate remediation ie chemical addition, oxygen releasing compound addition and groundwater extraction. We feel that this remediation, in combination with on-going groundwater monitoring may allow the site to be considered for closure as a "low risk" site. I also mentioned that a conduit/sensitive receptor survey would also be required.

Please submit a brief work plan to initiate groundwater remediation.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Barney M. Chan".

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

✓ Mr. J. Mrakovich, AllCal Environmental, 27973 High Country Dr., Hayward CA 94542-2530  
Ms. S. Knieriem, SWRCB Cleanup Fund, 1001 I St., 17<sup>th</sup> Floor, Sacramento CA 95814-2828

Wprq966 89th

## SITE HEALTH AND SAFETY PLAN

Site: **Former Fiesta Beverage**  
**966 89<sup>th</sup> Avenue**  
**Oakland, CA 94621**

Plan Prepared by: **ALLCAL Environmental**

Date: **02/05/01**

### 1.0 KEY PERSONNEL AND RESPONSIBILITIES

Project Manager:	<b>John Mrakovich</b>	<b>(510) 582-2320</b>
Site Safety Manager:	<b>John Mrakovich</b>	
Alternate Site Safety Manager:	<b>N/A</b>	
Field Team Members:	<b>N/A</b>	

Agency Reps: **Alameda County Environmental Health Services (510) 567-6700**

### 2.0 JOB HAZARD ANALYSIS

#### 2.1 OVERALL HAZARD EVALUATION

Hazard Level: High ( ) Moderate ( ) Low (X) Unknown ( )  
 Hazard Type: Liquid (X) Solid ( ) Sludge ( ) Vapor/Gas (X)

Known or suspected hazardous materials present on site:

**Hydrogen Peroxide - 7% Solution.**

Characteristics of hazardous materials included above (complete for each chemical presents):

Corrosive (X) Ignitable ( ) Toxic (X) Reactive (X) Volatile (X) Radioactive ( )  
 Biological Agent ( )

Exposure Routes: Inhalation (X) Ingestion (X) Contact (X)

#### 2.2 JOB-SPECIFIC HAZARDS

For each labor category specify the possible hazards based on information available (eg., Task-driller, Hazards-trauma from drill rig accidents, etc.). For each hazard, indicate steps to be taken to minimize the hazard.

**Geologist-Skin and eye contact - wear protective clothing, chemical resistant gloves, and eye protection. Keep solution from contact with combustible materials.**

The following additional hazards are expected on site (i.e., snake infested area, extreme heat, etc.):

**Automobile and pedestrian traffic**

Measures to minimize the effects of the additional hazards are:

**Protect work area with barricades, caution tape, and/or traffic cones when unattended.**

3.0 MONITORING PLAN

3.1 (a) Air Monitoring Plan

Action levels for implementation of air monitoring. Action levels should be based on published data available on contaminants of concern. Action levels should be set by persons experienced in industrial hygiene.

Level (i.e., 1 ppm)	Action Taken (i.e., commence perimeter monitoring)
<b>1 ppm</b>	<b>Stop work and monitor until air level drops below 1 ppm.</b>

(b) Air Monitoring Equipment

Outline the specific equipment to be used, calibration method, frequency of monitoring, locations to be monitored, and analysis of samples (if applicable).

If air monitoring is not to be implemented for this site, explain why:

**Air monitoring will not be conducted because the hydrogen peroxide will be enclosed in containers and excessive vapors are not expected. If vapors are detected by smell, work will stop and workers will leave the work area until the vapors are dissipated by the ambient air.**

3.2 Personnel Monitoring (Include hierarchy of responsibilities decision making on the site)

N/A

#### 4.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Equipment used by employees for the site tasks and operations being conducted. Be Specific (eg., hard hat, impact resistance goggles, other protective gloves, etc.).

**Wear level D protective clothing. Wear chemical resistant gloves, impact resistant goggles, and steel-toed boots.**

#### 5.0 SITE CONTROL AND SECURITY MEASURES

The following general work zone security guidelines should be implemented:

- . Work zone shall be delineated with traffic cones, caution tape, and/or barricades.
- . Visitors will not be allowed to enter the work zone.

#### 6.0 DECONTAMINATION PROCEDURE

List the procedures and specific steps to be taken to decontaminate equipment and PPE.

**Wash equipment with a trisodium phosphate or Alconox solution and rinse with clean potable water.**

#### 7.0 TRAINING REQUIREMENTS

Prior to mobilization at the job site, employees will attend a safety briefing. The briefing will include the nature of the wastes and the site, donning personal protection equipment, decontamination procedures and emergency procedures. All contractors will have appropriate and current OSHA training.

#### 8.0 MEDICAL SURVEILLANCE REQUIREMENTS

If any task requires a very high personnel protection level (OSHA Level A or B), personnel shall provide assurances that they have received a physical examination and they are fit to do the task. Also personnel will be instructed to look for any symptom of heat stress, heat stroke, heat exhaustion or any other unusual symptom. If there is any report of that kind it will be immediately followed through, and appropriate action will be taken.

#### 9.0 STANDARD OPERATION PROCEDURES

ALLCAL Environmental (ALLCAL) is responsible for the safety of its employees on

site. Each contractor shall provide all the equipment necessary to meet safe operation practices and procedures for their personnel on site and be responsible for their safety.

A "Three Warning" system is utilized to enforce compliance with Health and Safety procedures practices which will be implemented at the site for worker safety:

- . Eating, drinking, chewing gum or tobacco, and smoking will be allowed only in designated areas.
- . Wash facilities will be utilized by workers in the work areas before eating, drinking, or use of the toilet facilities.
- . Containers will be labeled identifying them as waste, debris, or contaminated clothing.
- . All site personnel will be required to wear hard hats and advised to take adequate measures for self protection.
- . Any other action which is determined to be unsafe by the site safety officer will be taken.

#### 10.0 CONFINED SPACE ENTRY PROCEDURES

No one is allowed to enter any confined space operation without proper safety measures. Specifically in case of an excavated tank pit no one should enter at any time.

#### 11.0 EMERGENCY RESPONSE PLAN

Relevant phone numbers:

<u>Person</u>	<u>Title/Phone No.</u>
Ted Walbey	Owner (510) 748-0595
John Mrakovich	Project Manager (510) 581-2320
Fire	911
Police	911
Ambulance	911

**HEALTH AND SAFETY COMPLIANCE STATEMENT**

I have received and read a copy of the project Health and Safety Plan.

I understand that I am required to have read the aforementioned document and have received proper training under the Occupational Safety and Health Act (29 CFR, Part 1910.120) prior to conducting site activities at the site.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date