

## Alameda County CUPA Program

### Contaminated Site Case Transfer Form

**Referral To:**

<b>Date</b>	January 28, 2010
<b>Agency</b>	Alameda County Environmental Health, 1131 Harbor Bay Parkway, Alameda, CA 94502
<b>Attention</b>	Donna L. Drogos, LOP/SLIC Program Manager

**Site Information:**

<b>Site Responsible Party(s)</b>	<b>Placeworks, LLC</b>
Site Name	Lane Splitters Pizza
Site Address	3645 San Pablo Avenue, Emeryville, CA
Site Phone	NA
Site Contact	Stuart Rickard, 510 499-9400, Placeworks, LLC, Principal
Site DBA	

**Site Conditions:**

Date of incident	December 23, 2009	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Contents (circle): gasoline diesel waste oil heating oil solvents kerosene stoddard solvent other (specify) numerous chemicals		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Observations of system (holes, leaks)? UST closed in place, soil sample under UST		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Observed contamination: Soil sampling activity, elevated PID readings		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Detectable concentrations of soil and/or groundwater contamination? <input checked="" type="checkbox"/> Highest Concentration Detected in soil sample: Contaminant (specify) TPH Gasoline- 980 mg/kg; TPH Diesel-870 mg/kg <input type="checkbox"/> Highest Concentration Detected in Water Contaminant (specify) N/A		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Unauthorized Release Form filed? (URF form emailed)		Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
<b>NON-UST</b>					
Former industrial use?		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Detectable concentrations of soil and/or groundwater contamination? o Highest Concentration Detected in Soil Contaminant (specify) _____ Concentration _____ ppm o Highest Concentration Detected in Water Contaminant (specify) _____ Concentration _____ ppb		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Future intended use if known? Specify: <u>Restaurant</u>		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
<b><i>If available, attach pertinent reports: photos previously submitted</i></b>					

Transferred as: LOP  SLIC

Level of Update requested:  distribution list  all meetings  all site visits  closure sign off  all the above

Transfer requested by Inspector: Robert Weston Date: January 28, 2010

Transfer accepted by (ACEH):  Date: 01/28/10

## Weston, Robert, Env. Health

---

**From:** Weston, Robert, Env. Health  
**Sent:** Thursday, December 24, 2009 12:03 PM  
**To:** 'stuart@placeworks.com'  
**Cc:** Hugo, Susan, Env. Health; Chan, Barney, Env. Health  
**Subject:** Request for report on soil disposal

Mr. Rickard,  
During our field activities at 3645 San Pablo Ave., Emeryville on December 23, 2009 we learned that soil from the site had been removed and transported to a disposal site in Buttonwillow. I have viewed one uniform hazardous waste manifest documenting the disposal of 21.24 tons of lead contaminated soil back in July 2009.

We are requesting all reports and data regarding the site remediation. Please submit the reports to me at the following address:

Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda CA 94502

Sincerely,

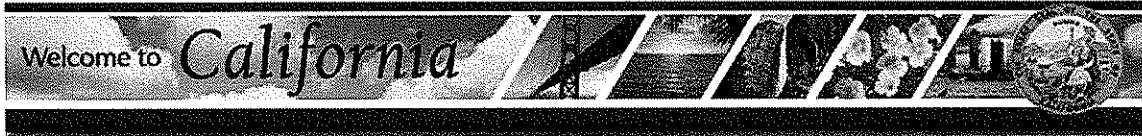
Robert Weston  
Sr. Hazardous Materials Specialist  
ICC 5238670-UI  
Alameda County Department of Environmental Health  
510 567-6781

CONFIDENTIALITY NOTICE: This electronic mail transmission may contain privileged information and/or confidential information only for the use by the intended recipients. Any usage, distribution, copying or disclosure by any other person, other than the intended recipient is strictly prohibited and may be subject to civil action and/or criminal penalties. If you have received this e-mail transmission in error, please notify the sender by e-mail or by telephone and delete the transmission.

Placeworks LLC

Stuart Rickard  
Principal

1501 Pacific Avenue  
Alameda, CA 94501  
ph: (510) 499-9400  
fax: (510) 217-9560  
stuart@placeworks.com  
www.placeworks.com



- [Home](#)
- [Information Resources](#)
- [My Community](#)
- [Get Involved](#)
- [Public Notices](#)
- [Calendar](#)
- [Cleaning Up Sites](#)
- [Managing Waste](#)
- [Assessing Risk](#)
- [Preventing Pollution](#)
- [Evaluating Technology](#)
- [Laws, Regs & Policies](#)
- [Press Room](#)
- [Publications & Forms](#)
- [Employment](#)
- [Contact Us](#)
- [Site Map](#)

## Department of Toxic Substances Control

search

My CA This Site  
Search Tips

DTSC: HWTS Reports

HWTS EPA ID Profile

- [HWTS Home](#)
- [Log Out](#)
- [Reports](#)
- [Change Password](#)
- [Frequently Asked Questions](#)

Help

**EPA ID:** CAC002644636 **Name:** PLACEWORKS LLC  
**Status:** ACTIVE **Inactive Date:** **Contact:** STUART RICKARD  
**County:** ALAMEDA **SIC:** **Record Entered:** 2009-07-22 **Last updated:** 2009-12-21

	Name	Address	City	State	ZIP	Phone
<b>Location</b>	PLACEWORKS LLC	3645 SAN PABLO AVE	EMERYVILLE	CA	946083901	
<b>Mailing</b>		1501 PACIFIC AVE	ALAMEDA	CA	94501	
<b>Owner</b>	PLACEWORKS LLC	1501 PACIFIC AVE	ALAMEDA	CA	94501	5104999400
<b>Oper/Contact</b>	STUART RICKARD	1501 PACIFIC AVE	ALAMEDA	CA	94501	5104999400

Based ONLY upon EPA ID: CAC002644636:

Calif. Manifests?	Out-of-State Manifests?	Transporter Registration?	Toxic Release Inventory Data?	Calsites Data?
YES	NO	NO	NO	NO

Calif. Manifest Counts and Total Tonnage					
m = Manifest Count t=Total Tonnage					
Ship Year	Generator	Trans. 1	Trans. 2	TSDF	Alt. TSDF
2009	1 (m) 21.24000 (t)	0 (m) 0.00000 (t)	0 (m) 0.00000 (t)	0 (m) 0.00000 (t)	0 (m) 0.00000 (t)

Waste Code By Year Matrix Report					
Calif.	Generator	Trans. 1	Trans. 2	TSDF	Alt. TSDF
RCRA	Generator	Trans. 1	Trans. 2	TSDF	Alt. TSDF

End of Report

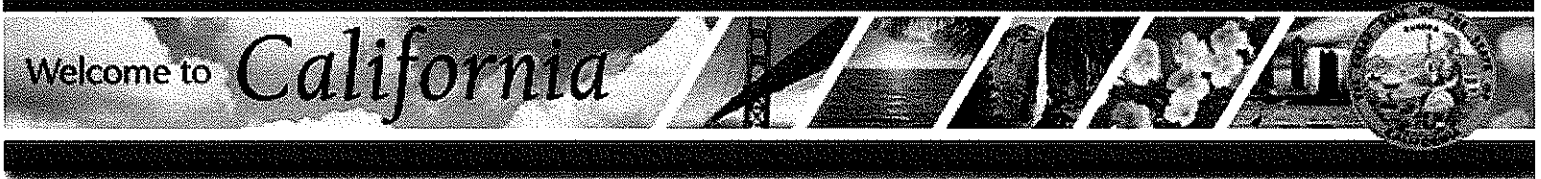


[Cal/EPA](#) | [Air Resources Board](#) | [California Integrated Waste Management Board](#) | [Department of Pesticide Regulation](#)  
[Office of Environmental Health Hazard Assessment](#) | [State Water Resources Control Board](#)

[Conditions of Use](#) | [Privacy Policy](#) | [E-mail Webmaster](#)

The content found herein may not necessarily represent the views and opinions of the Schwarzenegger Administration.

© 2003 State of California.



- [Home](#)
- [Information Resources](#)
- [My Community](#)
- [Get Involved](#)
- [Public Notices](#)
- [Calendar](#)
- [Cleaning Up Sites](#)
- [Managing Waste](#)
- [Assessing Risk](#)
- [Preventing Pollution](#)
- [Evaluating Technology](#)
- [Laws, Regs & Policies](#)
- [Press Room](#)
- [Publications & Forms](#)
- [Employment](#)
- [Contact Us](#)
- [Site Map](#)

## Department of Toxic Substances Control

search

My CA
  This Site  
[Search Tips](#)

DTSC: HWTS Reports

HWTS Manifest Tonnage

**EPA ID: CAC002644636 - Name: PLACEWORKS LLC**  
**As a Generator For Ship Year: 2009**

- [HWTS Home](#)
- [Log Out](#)
- [Reports](#)
- [Change Password](#)
- [Frequently Asked Questions](#)

Help

### Calif. Waste Code Summary

Code	Description	Tons	% of Total
611	CONTAMINATED SOILS FROM SITE CLEAN-UP	21.24000	100.00
<b>Total Tons:</b>		<b>21.24000</b>	<b>100.00</b>

### RCRA Waste Code Summary

Code	Description	Tons	% of Total
	**UNKNOWN**	21.24000	100.00
<b>Total Tons:</b>		<b>21.24000</b>	<b>100.00</b>

**End of Report**



**TOP**



[Cal/EPA](#) | [Air Resources Board](#) | [California Integrated Waste Management Board](#) | [Department of Pesticide Regulation](#)  
[Office of Environmental Health Hazard Assessment](#) | [State Water Resources Control Board](#)

[Conditions of Use](#) | [Privacy Policy](#) | [E-mail Webmaster](#)

The content found herein may not necessarily represent the views and opinions of the Schwarzenegger Administration.

© 2003 State of California.

# COUNTY OF ALAMEDA UNDERGROUND TANK SYSTEM CLOSURE INSPECTION REPORT

*For Use By the County of Alameda, Environmental Health*

SR 0016150

Facility Name: \_\_\_\_\_ Contractor's name: \_\_\_\_\_  
Address: 3645 SAN PABLO AVENUE City: EMERYVILLE Zip: \_\_\_\_\_

Project Contact: \_\_\_\_\_ Phone No.: \_\_\_\_\_

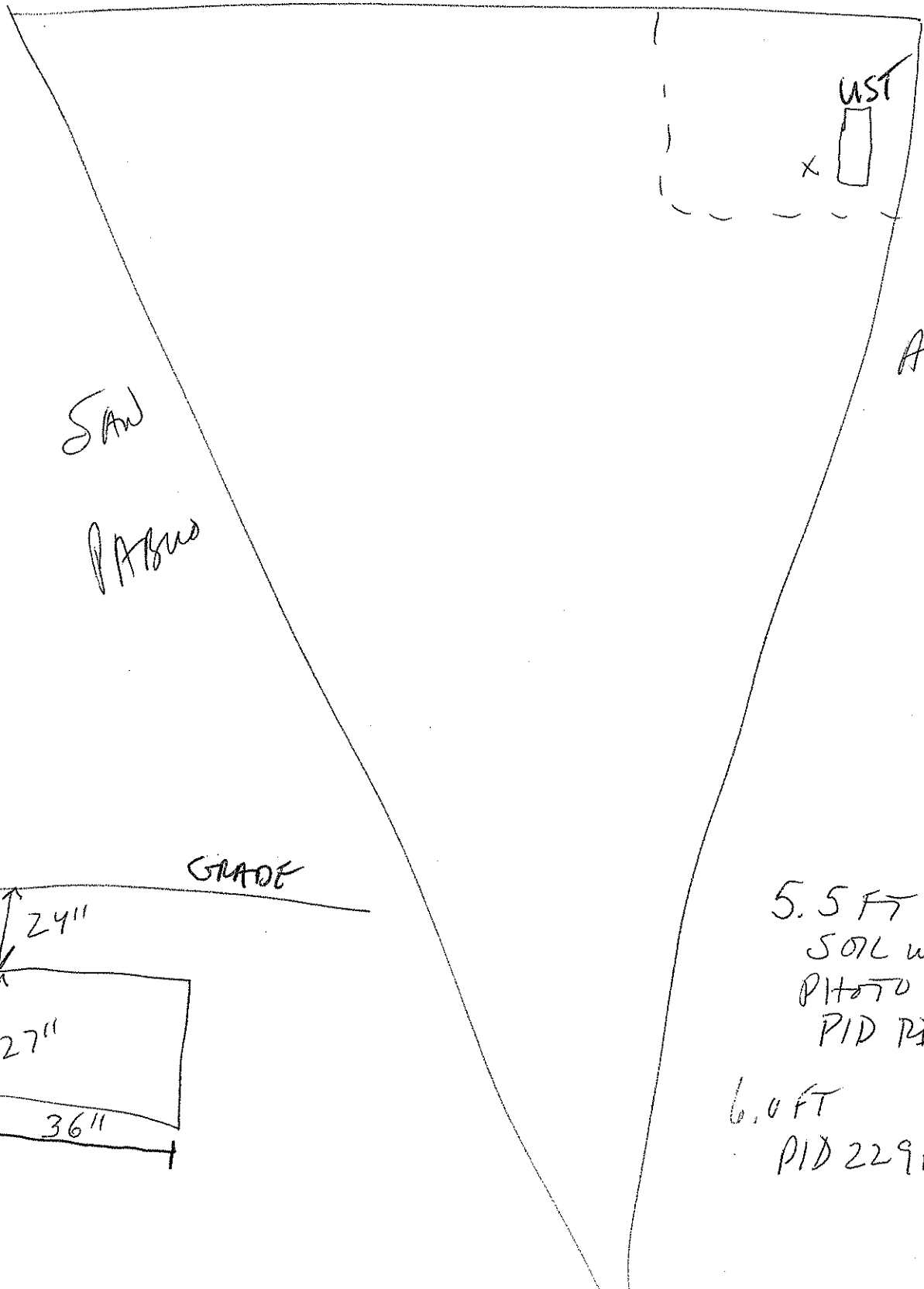
<b>Tank ID No.</b>						
<b>Size</b>	GALLONS					
<b>Construction Material</b>	STEEL					
<b>Single/Double Wall</b>	SW					
<b>Backfill Type</b>	UNKNOWN					
<b>Oxygen &lt;10%</b>	/					
<b>LEL &lt;20%</b>	/					
<b>Tank Condition</b>	CRACKS IN PLATE					
<b>Soil/Groundwater Condition</b>						
<b>Soil Sample Depth</b>						
<b>Number and Description of Soil/Groundwater Samples (Indicate Sample Locations on Site Plan.)</b>						

**Disposition of Tank Contents:** \_\_\_\_\_ **Piping:**  Rinsed/Tested/Capped. **Rinsate:**  Shipped on Manifest.  
**Tank & Piping Transport:**  Shipped on Manifest;  Transporter Name Same as on Application.  
**Sampling:**  Evidence Tape;  Chain of Custody;  Samples Refrigerated; Pipeline Samples Taken  Yes,  No (If no, explain why in Comments.)  
**Soil:**  Soil Stored on Bermed Plastic & Covered;  Soil Returned to Excavation. **Site Plan:**  Attached.

**Comments/Special Conditions:** PREVIOUS SOIL REMOVAL FROM THE SITE, WORKMAN STATED 6-18YD DUMPS TO ATTACHMENT

Inspector: \_\_\_\_\_ Agency: \_\_\_\_\_ Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Stop Time: \_\_\_\_\_

Signature of Contractor/Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_



Saw  
Pits

WST

ADU Tank

GRADE

24"

27"

36"

5.5 FT  
SOIL WITNESS  
PHOTO  
PID RD 115 PPM

6.0 FT  
PID 229 PPM

\*  
SAMPLE  
DEPTH  
6"

12-23-2009 RW



▼ Search

Fly To Find Businesses Directions

Fly to e.g., 94043  
3645 Adeline, Emeryville, CA

- 3545 San Pablo, Emeryville, CA
- 3545 San Pablo Ave, Oakland, CA

▼ Places Add Content

- My Places
  - Sightseeing
    - Select this folder and click on the 'Play' button below, to start the tour:
  - Howard Fault Map&Tour7.kmz
    - Updates approx. 20 traces to include information from 2007 Northern
  - Native American Indian Sites in th...
  - Temporary Places

▼ Layers

- Primary Database
- Geographic Web
- Roads
- 3D Buildings
- Street View
- Borders and Labels
- Traffic
- Weather
- Gallery
- Ocean
- Global Awareness
- Places of Interest
- More
- Terrain

3645  
SAN PABLO  
EMERYVILLE

3645 Adeline St, Emeryville, CA 94608

3545 San P

© 2009 Google

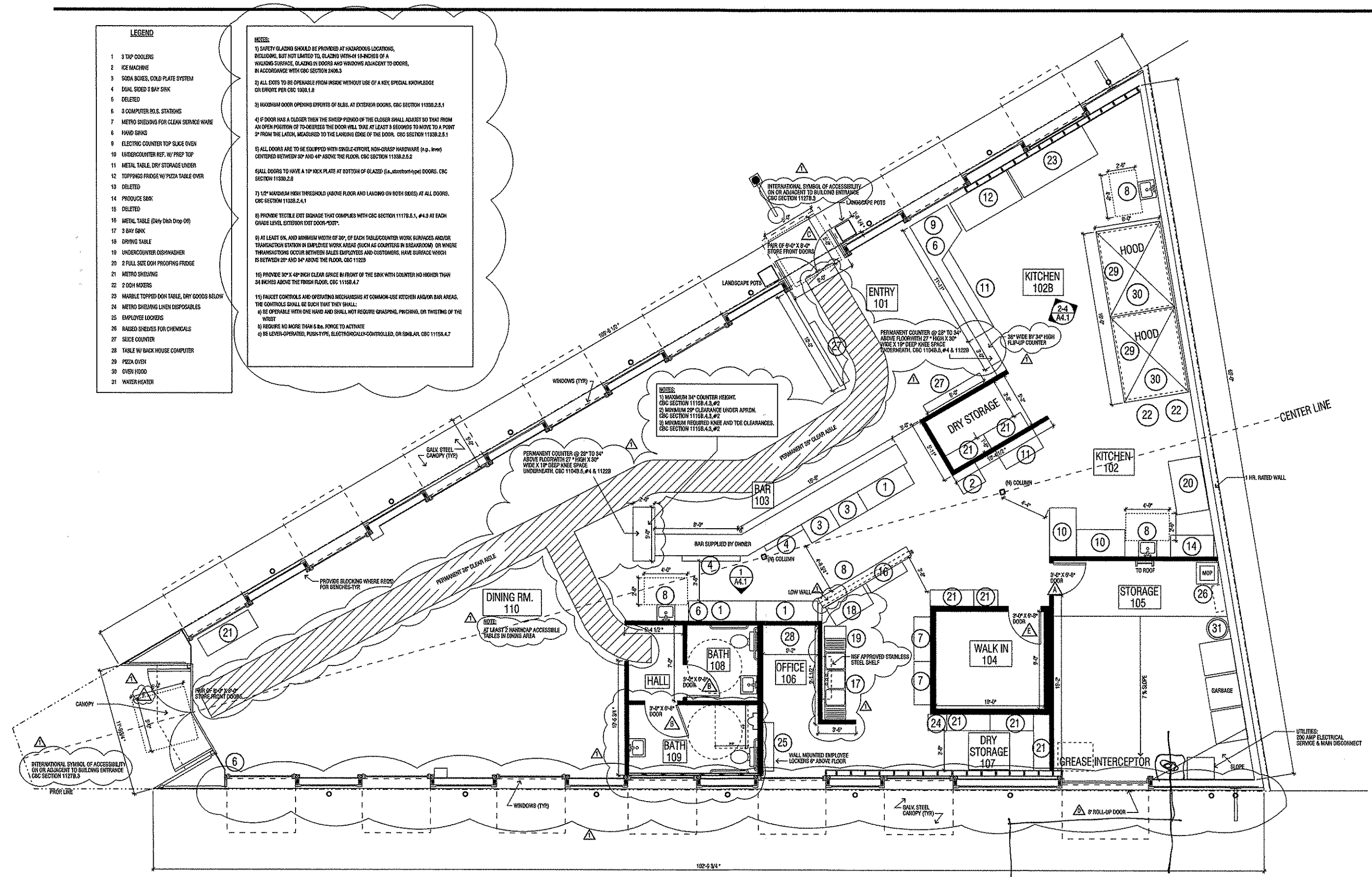
Google

- LEGEND**
- 1 3 TAP COOLERS
  - 2 ICE MACHINE
  - 3 SODA BIKES, COLD PLATE SYSTEM
  - 4 DUAL SIDED 3 BAY SINK
  - 5 DELETED
  - 6 3 COMPUTER B.O.S. STATIONS
  - 7 METRO SHELVING FOR CLEAN SERVICE WARE
  - 8 HAND SINKS
  - 9 ELECTRIC COUNTER TOP SLICE OVEN
  - 10 UNDERCOUNTER REF. W/ PREP TOP
  - 11 METAL TABLE, DRY STORAGE UNDER
  - 12 TOPPING FRIDGE W/ PIZZA TABLE OVER
  - 13 DELETED
  - 14 PRODUCE SINK
  - 15 DELETED
  - 16 METAL TABLE (Dirty Dish Drop Off)
  - 17 3 BAY SINK
  - 18 DRYING TABLE
  - 19 UNDERCOUNTER DISHWASHER
  - 20 2 FULL SIZE OOH PROOFING FRIDGE
  - 21 METRO SHELVING
  - 22 2 DSH MIXERS
  - 23 MARBLE TOPPED DIN TABLE, DRY GOODS BELOW
  - 24 METRO SHELVING LINEN DISPOSABLES
  - 25 EMPLOYEE LOCKERS
  - 26 RAISED SHELVES FOR CHEMICALS
  - 27 SLICE COUNTER
  - 28 TABLE W/ BACK HOUSE COMPUTER
  - 29 PIZZA OVEN
  - 30 OVEN HOOD
  - 31 WATER HEATER

- NOTES:**
- 1) SAFETY GLAZING SHOULD BE PROVIDED AT HAZARDOUS LOCATIONS, INCLUDING, BUT NOT LIMITED TO, GLAZING WITHIN 18-INCHES OF A WALKING SURFACE, GLAZING IN DOORS AND WINDOWS ADJACENT TO DOORS, IN ACCORDANCE WITH CBC SECTION 2408.3
  - 2) ALL DOORS TO BE OPENABLE FROM INSIDE WITHOUT USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT PER CBC 1908.1.2
  - 3) MAXIMUM DOOR OPENING EFFORTS OF 6 LBS. AT EXTERIOR DOORS, CBC SECTION 11030.2.5.1
  - 4) IF DOOR HAS A CLOSER THEN THE SWEEP PERIOD OF THE CLOSER SHALL ADJUST SO THAT FROM AN OPEN POSITION OF 70-DEGREES THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LANDING EDGE OF THE DOOR, CBC SECTION 11030.2.5.1
  - 5) ALL DOORS ARE TO BE EQUIPPED WITH SINGLE-EFFORT, NON-CRASP HARDWARE (e.g., lever) CENTERED BETWEEN 30" AND 44" ABOVE THE FLOOR, CBC SECTION 11030.2.5.2
  - 6) ALL DOORS TO HAVE A 10" KICK PLATE AT BOTTOM OF GLAZED (i.e., storefront-type) DOORS, CBC SECTION 11030.2.8
  - 7) 1/2" MAXIMUM HIGH THRESHOLD (ABOVE FLOOR AND LANDING ON BOTH SIDES) AT ALL DOORS, CBC SECTION 11030.2.6.1
  - 8) PROVIDE TEXTILE EXIT DISMANT THAT COMPLIES WITH CBC SECTION 11178.5.1, #4.3 AT EACH GRADE LEVEL EXTERIOR EXIT DOOR-ENTRY.
  - 9) AT LEAST 6% AND MINIMUM WIDTH OF 36", OF EACH TABLE/COUNTER WORK SURFACES AND/OR TRANSPORTATION IN EMPLOYEE WORK AREAS (SUCH AS COUNTERTOPS IN BREAKROOM) OR WHERE TRANSACTIONS OCCUR BETWEEN SALES EMPLOYEES AND CUSTOMERS, HAVE SURFACE WHICH IS BETWEEN 28" AND 34" ABOVE THE FLOOR, CBC 11229
  - 10) PROVIDE 80" X 48" INCH CLEAR SPACE IN FRONT OF THE SINK WITH COUNTER NO HIGHER THAN 34 INCHES ABOVE THE FINISH FLOOR, CBC 11158.A.7
  - 11) FAUCET CONTROLS AND OPERATING MECHANISMS AT COMMON-USE KITCHEN AND/OR BAR AREAS, THE CONTROLS SHALL BE SUCH THAT THEY SHALL:
    - a) BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE GRASPING, PUNCHING, OR TWISTING OF THE WRIST
    - b) REQUIRE NO MORE THAN 5 LBS. FORCE TO ACTIVATE
    - c) BE LEVER-OPERATED, PUSH-TYPE, ELECTRONICALLY-CONTROLLED, OR SIMILAR, CBC 11158.A.7

- NOTES:**
- 1) MAXIMUM 34" COUNTER HEIGHT, CBC SECTION 11158.A.3.#2
  - 2) MINIMUM 29" CLEARANCE UNDER APRON, CBC SECTION 11158.A.3.#2
  - 3) MINIMUM REBUSED KNEE AND TOE CLEARANCES, CBC SECTION 11158.A.3.#2

**DINING RM. 110**  
 NOTE:  
 AT LEAST 2 HANDICAP ACCESSIBLE TABLES IN DINING AREA



Rev #	Description	Date:
1	COMMENT REVISION	12-8-08

**1 Proposed Floor Plan**  
 Scale: 1/4" = 1'-0"


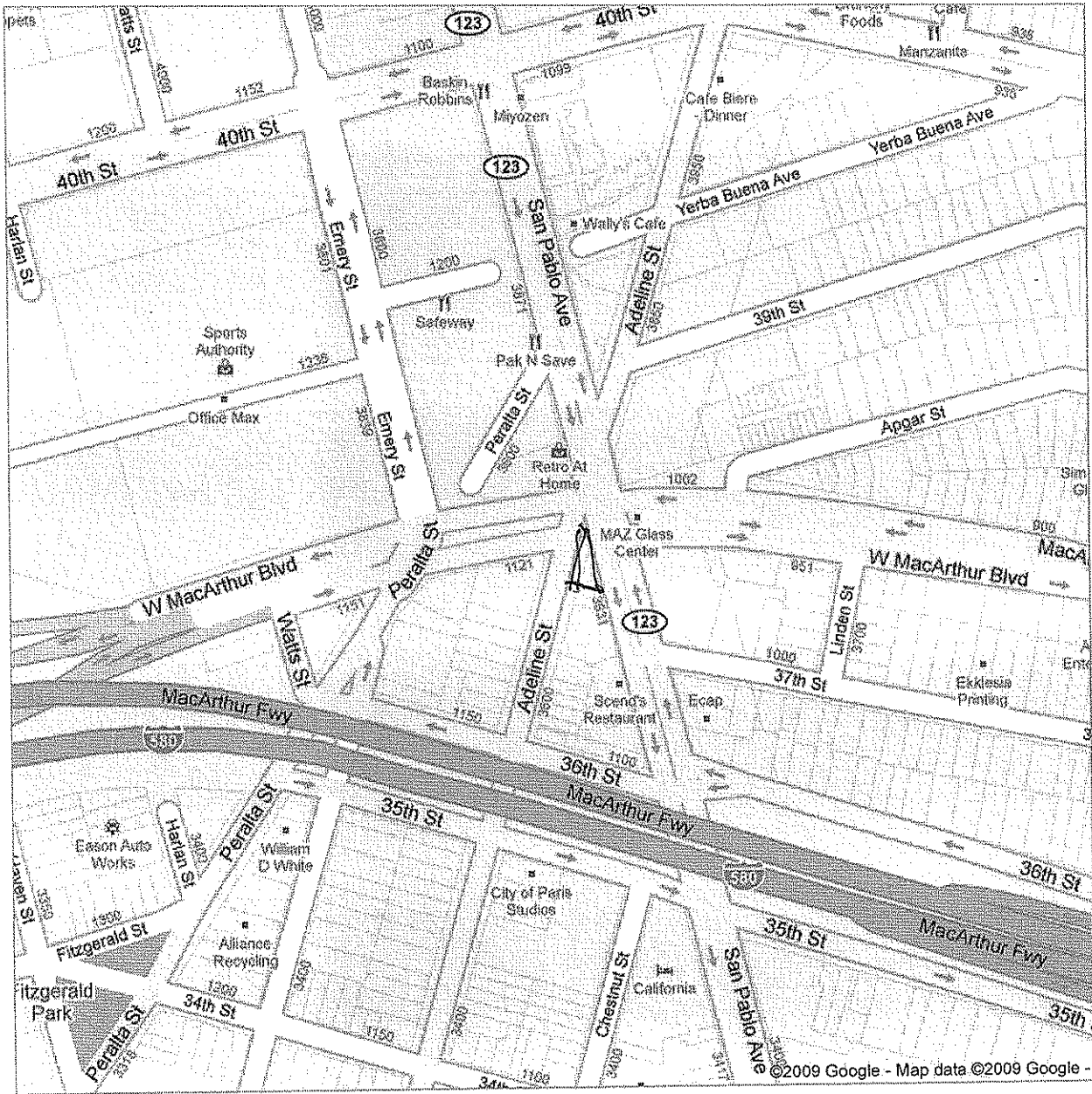
**TENANT IMPROVEMENTS  
 FLOOR PLAN**

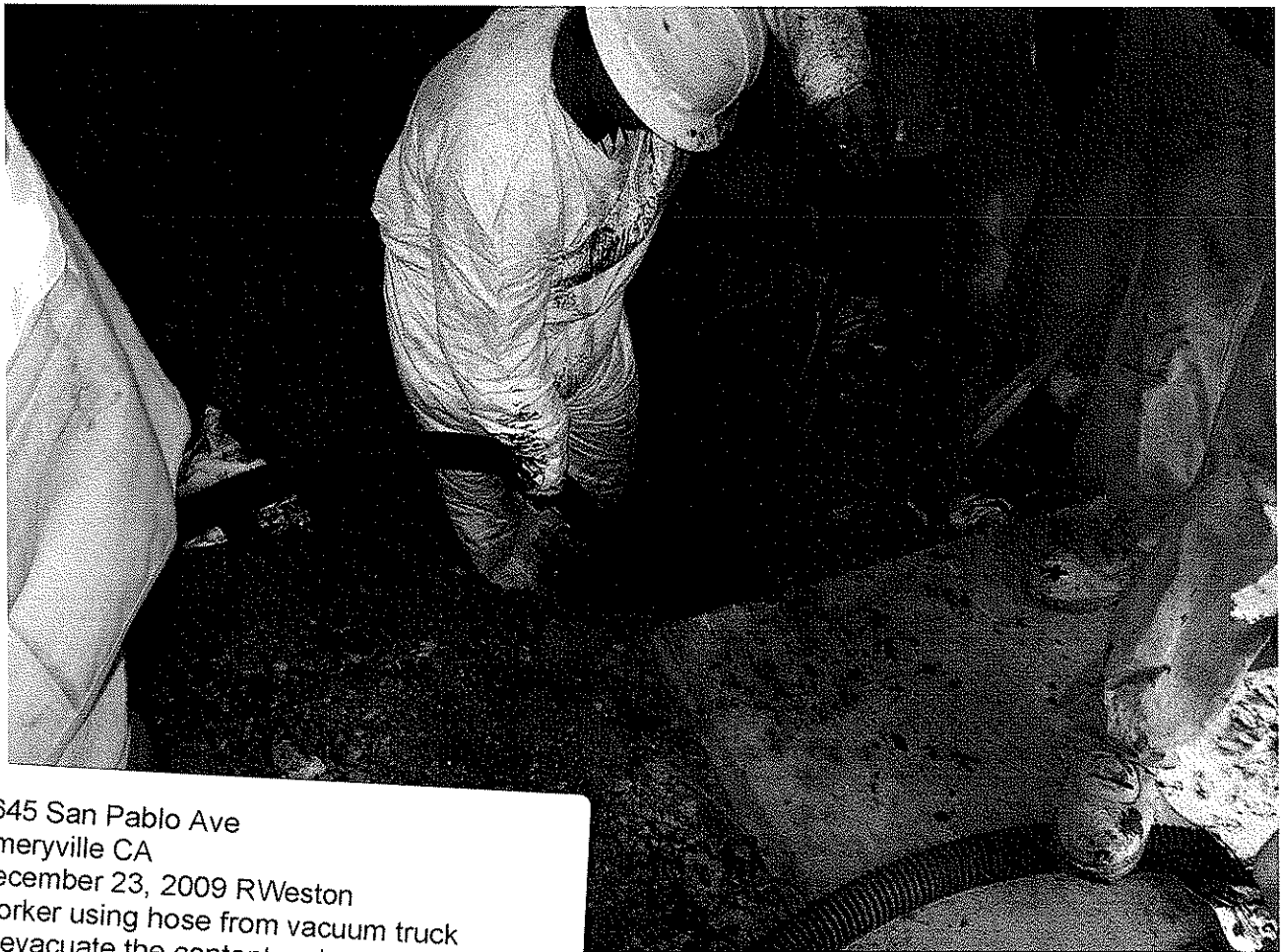
Date:	10-27-08
Scale:	AS NOTED
Drawn:	BB
Job:	
Sheet:	



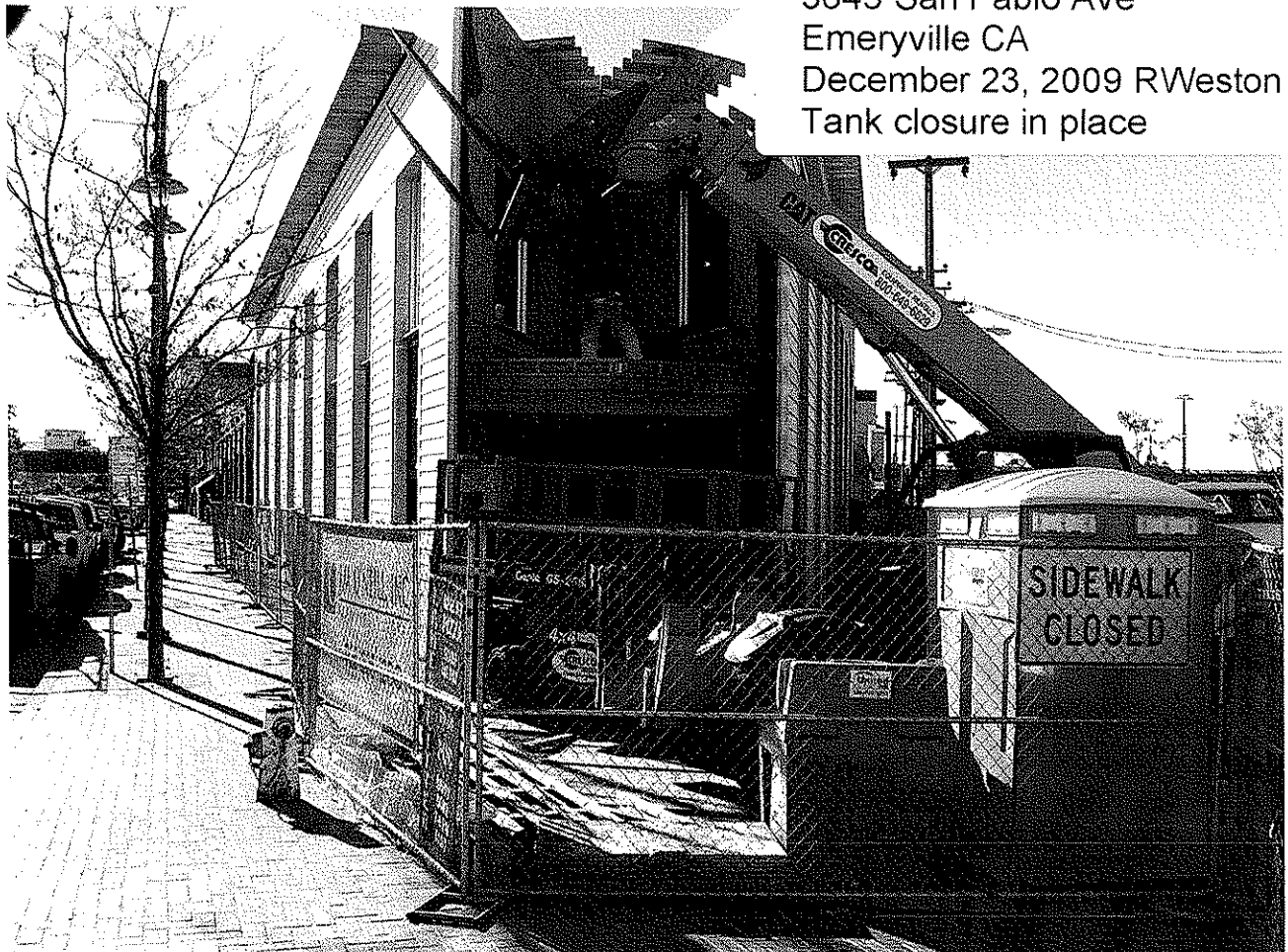
Google maps Address Emeryville, CA

Get Google Maps on your phone  
 Text the word "GMAPS" to 466453



3645 San Pablo Ave  
Emeryville CA  
December 23, 2009 RWeston  
Worker using hose from vacuum truck  
to evacuate the contents prior to grouting



3645 San Pablo Ave  
Emeryville CA  
December 23, 2009 RWeston  
Tank closure in place



3645 San Pablo Ave  
Emeryville CA  
December 23, 2009 RWeston  
Tank closure in place, utilities

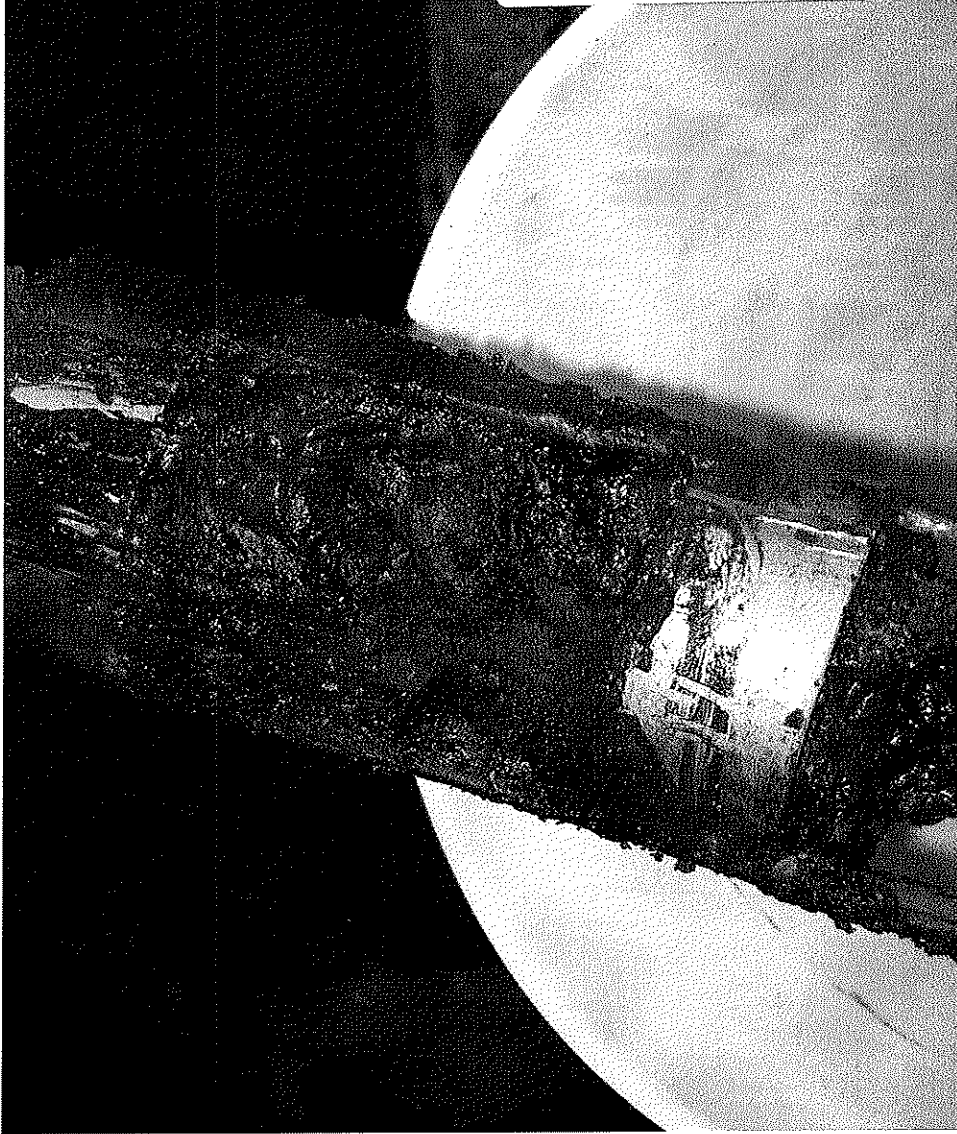




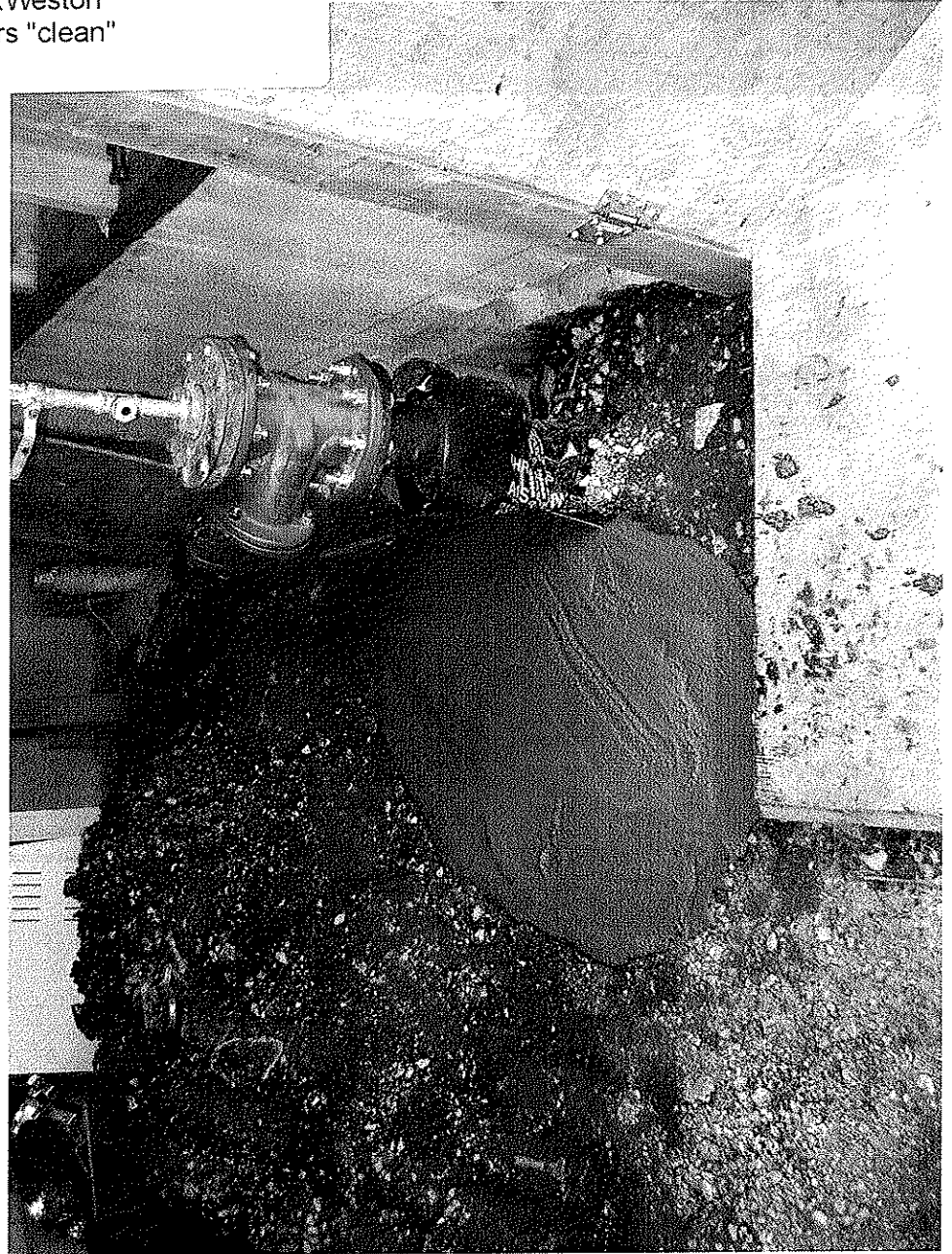
3645 San Pablo Ave  
Emeryville CA  
December 23, 2009 RWeston  
Tank cleaning and evacuation



3645 San Pablo Ave  
Emeryville CA  
December 23, 2009 RWeston  
soil to be used as the sample



3645 San Pablo Ave  
Emeryville CA  
December 23, 2009 RWeston  
Interior of tank appears "clean"  
grout filled the tank





ALAMEDA COUNTY  
 DEPARTMENT OF ENVIRONMENTAL HEALTH  
 1131 HARBOR BAY PARKWAY  
 ALAMEDA, CA 94502-6577  
 PHONE (510) 567-6700

DEC 22 2009

ACCEPTED

Underground Storage Tank Closure Permit Application  
 Alameda County Division of Hazardous Materials  
 1131 Harbor Bay Parkway, Suite 250  
 Alameda, CA 94502-6577

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction/destruction.

One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.

Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspections Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 72 hours prior to the following required inspections:

- Removal of Tank(s) and Piping
- Sampling
- Final Inspection

Issuance of a) permit to operate, b) permanent site closure, is dependent on compliance with accepted plans and all applicable laws and regulations.

\*THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:

Contact Specialist

Robert Weston  
 510 567-6781

Tank to be closed in place

Sampling to be conducted using hand auger  
 Contents unknown

UNDERGROUND STORAGE TANK CLOSURE PLAN

\*\*\* Complete closure plan according to instructions \*\*\*

1. Name of Business PLACEWORKS, LLC  
 Business Owner or Contact Person (PRINT) STUART RICKARD
2. Site Address 3645 SAN PABLO AVE.  
 City, State EMERYVILLE, CA Zip 94608 Phone (510) 499-9400
3. Mailing Address 1501 PACIFIC AVE.  
 City, State ALAMEDA, CA Zip 94501 Phone (510) 499-9400
4. Property Owner PLACEWORKS, LLC  
 Business Name (if applicable) PLACEWORKS, LLC  
 Address 1501 PACIFIC AVE.  
 City, State ALAMEDA Zip 94501 Phone (510) 499-9400
5. Generator name under which tank will be manifested  
PLACEWORK, LLC  
 EPA I.D. No. under which tank(s) will be manifested C AC 0 02644636

6. Contractor CORNERSTONE ENVIRONMENTAL CONTRACTORS, INC.  
Address 3527 MT. NABLO BLVD., # 290  
City, State LAFAYETTE, CA Zip 94549 Phone (925) 299-9225  
License Type A/HAZ ID# 722253

7. Consultant (if applicable) Northgate Environmental Management, Inc. (Dennis Laduzinski)  
Address 300 FRANK H. OGAWA PLAZA, SUITE 510  
City, State OAKLAND, CA Zip 94612 Phone 510 839-0688 x202

8. Main Contact Person for Investigation (if applicable)  
Name STUART RICKARD Title PRINCIPAL  
Company PLACEWORKS LLC  
Phone 510 499-9400

9. Number of underground tanks being closed with this plan 1  
Length of piping being removed under this plan 0  
Total number underground tanks at this facility (\*\*confirmed with owner or operator) 1

10. State Registered Hazardous Waste Transporters/Facilities (See Instructions).

a) Product/Residual Sludge/Rinsate Transporter

Name ASBURY ENVIRONMENTAL EPA I.D. No. CAD028297036  
Hauler License No. 36459 License Exp. Date 2-28-11  
Address 7300 CHEVRON WAY  
City, State DIXON, CA Zip 95620

b) Product/Residual Sludge/Rinsate Disposal Site

OIL: Name D/R DIXON EPA I.D. No. CAT080012602  
(TRANSFER FACILITY AND ULTIMATELY GOES TO DISPOSAL SITE LISTED FOR RINSEATE)  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_

RINSEATE: DEMENNO/KERDOON EPA I.D. No. CAT080013352  
ADDRESS 2100 N. ALAMEDA  
CITY, STATE COMPTON, CA ZIP 90222



c) Tank and Piping Transporter

Name N/A EPA I.D. No. \_\_\_\_\_  
Hauler License No. \_\_\_\_\_ License Exp. Date \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_

d) Tank and Piping Disposal Site

Name N/A EPA I.D. No. \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_

11. Sample Collector

Name PENNIS LADUZINSKY  
Company NORTHGATE ENVIRONMENTAL MANAGEMENT, INC.  
Address 300 FRANK H. OAKWA PLAZA, SUITE 510  
City, State OAKLAND, CA Zip 94612 Phone 510 839 0688 x202

12. Laboratory

Name MIKE PEARL  
Company CURTIS & TOMPKINS, LTD.  
Address 2323 FIFTH ST  
City, State BERKELEY, CA Zip 94710  
State Certification No. 01107CA

13. Have tank(s) or piping leaked in the past? Yes [ ] No [ ] Unknown

If yes, describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Describe method(s) to be used for rendering tank(s) inert:

REMOVE EXISTING PRODUCT, TRIPLE RINSE WITH  
WATER & SIMPLE GREEN, REMOVE RINSEATE  
AND MONITOR TANK. COMBUSTIBLE  
GAS INDICATOR WILL BE USED TO ENSURE TANK  
IS INERTED. FILL TANK WITH CONCRETE SLURRY.  
(2 SACK CONCRETE)

Before tank(s) are pumped out and inerted, all associated piping must be flushed back into the tank(s). All accessible piping must then be removed. Inaccessible piping must be permanently plugged using grout.

The Bay Area Air Quality Management District, (415) 771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to have a functional combustible gas indicator on-site to verify that the tank(s) is inerted.

15. Tank History and Sampling Information **\*\*\* (See Instructions) \*\*\***

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Sample(s)
Capacity (gallons)	Use History include date last used (estimated)		
500 - 1000 (est.)	1950?	SOIL	UNDER TANK. APX. 7' BELOW SIDEWALK

One soil sample must be collected for every 20 linear feet of underground piping that is removed. A groundwater sample must be collected if any groundwater is present in the excavation.

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (estimated) $\emptyset$ (in-place)	Sampling Plan

**Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.**

Will the excavated soil be returned to the excavation immediately after tank removal?  yes  no  unknown

If yes, explain reasoning \_\_\_\_\_  
 \_\_\_\_\_

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without prior approval from this office. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling activities.

16. Chemical methods and associated detection limits to be used for analyzing sample(s):

**The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits shall be followed.**

See Table 2, Recommended Minimum Verification Analyses for Underground Tank Leaks.

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
AS PER CIRCLED ITEMS ON TABLE #2.			

17. Submit Site Health and Safety Plan (See Instructions)
18. Submit Worker's Compensation Certificate copy  
 Name of Insurer STATE FUND
19. Submit Plot Plan **\*\*\*(See Instructions)\*\*\***
20. Enclose Deposit (See Instructions)
21. **Report all leaks or contamination to this office within 5 days of discovery.**  
 The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (URL) form.
22. **Submit a closure report to this office within 60 days of the tank removal. The closure report must contain all information listed in item 22 of the instructions.**
23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one-B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner).

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan has been approved.

I understand that any changes in design, materials, or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

CONTRACTOR INFORMATION

Name of Business CORNERSTONE ENVIRONMENTAL CONTRACTORS, INC.

Name of Individual RANDY L. FOWLER

Signature *Randy L. Fowler* Date 12-14-09

PROPERTY OWNER OR [ ] MOST RECENT TANK OPERATOR (Check one)

Name of Business PLACEWORKS, LLC

Name of Individual STUART RICKARD

Signature *SR* Date 12/18/09



## UPCF UST Operating Permit Application – Facility Information Page Instructions (Formerly SWRCB UST Permit Application Form A and UPCF Form hwfwr-a)

Complete this form for all new permits, permit changes, or facility information changes. This form must be submitted within 30 days of permit or facility information changes, unless your local agency requires approval prior to making the changes. For changes, submit only that form that contains the change.

Submit one UST Operating Permit Application – Facility Information form per facility, regardless of the number of USTs located at the facility. If not already on file with the local agency, the tank owner must submit with this form, a current UST Operating Permit Application – Tank Information form for each UST; a UST Monitoring Plan and a UST Response Plan pursuant to 23 CCR §2632, 2634 and 2641; and, for USTs containing petroleum, a Certification of Financial Responsibility pursuant to 23 CCR §2807.

The following documents, at a minimum, are also required, if applicable (check with your local agency to see if they require submittal or if there are other forms/information needed):

- Written agreement between UST Owner and UST Operator per Health and Safety Code §25284(a)(3);
- Letter from the Chief Financial Officer (if using State Cleanup Fund, financial test of self-insurance, guarantee, local government financial test, or Local Government Fund as a financial responsibility mechanism).

Please number all pages of your submittal. (Note: Numbering of these instructions matches the data element numbers on the form.)

400. TYPE OF ACTION – Check the reason this form is being submitted. CHECK ONE ITEM ONLY.
404. TOTAL NUMBER OF USTs AT SITE – Indicate the number of tanks that will remain on the site after the requested action.
1. FACILITY ID NUMBER – This space is for agency use only.
3. BUSINESS NAME – Enter the complete Business Name. (Same as FACILITY NAME or DBA (Doing Business As)).
103. BUSINESS SITE ADDRESS – Enter the street address of the facility, including building number, if applicable. This address must be the physical location of the facility. Post office box numbers are not acceptable.
104. CITY – Enter the city or unincorporated area in which the facility is located.
403. FACILITY TYPE – Indicate the type of facility.
405. INDIAN RESERVATION OR TRUST LANDS – Check whether the facility is located on an Indian reservation or other trust lands.
407. PROPERTY OWNER NAME – Complete items 407 - 412 for the property owner. Include the area code and any extension number.
408. PROPERTY OWNER PHONE –
409. PROPERTY OWNER MAILING ADDRESS –
410. PROPERTY OWNER CITY –
411. PROPERTY OWNER STATE –
412. PROPERTY OWNER ZIP CODE –
- 428-1. TANK OPERATOR NAME – Complete items 428-1 to 428-6 for the UST operator.
- 428-2. TANK OPERATOR PHONE – Include the area code and any extension number.
- 428-3. TANK OPERATOR MAILING ADDRESS –
- 428-4. TANK OPERATOR CITY –
- 428-5. TANK OPERATOR STATE –
- 428-6. TANK OPERATOR ZIP CODE –
414. TANK OWNER NAME – Complete items 414 - 419 for the UST owner.
415. TANK OWNER PHONE – Include the area code and any extension number.
416. TANK OWNER MAILING ADDRESS –
417. TANK OWNER CITY –
418. TANK OWNER STATE –
419. TANK OWNER ZIP CODE –
420. TANK OWNER TYPE – Check the type of tank ownership.
421. BOE NUMBER – Enter your State Board of Equalization (BOE) UST storage fee account number. This fee applies to regulated USTs storing petroleum products and is required before your permit application will be processed. If you do not have an account number with the BOE, or if you have any questions regarding the fee or exemptions, contact the BOE at (916) 322-9669 or by mail at: Board of Equalization, Fuel Taxes Division, PO Box 942879, Sacramento, CA. 94279-0030.
423. PERMIT HOLDER INFORMATION – Indicate the party to whom the UST operating permit is to be issued and legal notifications and mailings should be sent.
406. SUPERVISOR OF DIVISION SECTION OR OFFICE SUPERVISOR – If the facility owner is a public agency, enter the name of the supervisor of the division section or office that operates the UST. This person must have access to the UST records.
- APPLICANT SIGNATURE – The application form must be signed, in the space provided, by:
- The UST owner or operator, facility owner or operator, or a duly authorized representative of the owner; or
  - If the UST(s) is/are owned by a corporation, partnership, or public agency:
    - 1.) A principal executive officer at the level of vice-president or by an authorized representative responsible for the overall operation of the facility where the UST(s) is/are located; or
    - 2.) A general partner or proprietor; or
    - 3.) A principal executive officer, ranking elected official, or authorized representative of a public agency.
424. DATE – Enter the date the form was signed.
425. PHONE – Enter the phone number of the applicant (i.e., person signing the form). Include the area code and any extension number.
426. APPLICANT NAME – Print or type the full name of the person signing the form.
427. APPLICANT TITLE – Enter the title of the person signing the form.

TABLE #2  
REVISED 21 NOVEMBER 2003

RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR  
UNDERGROUND TANK LEAKS

<u>HYDROCARBON LEAK</u>	<u>SOIL ANALYSIS</u> (SW-846 METHOD)		<u>WATER ANALYSIS</u> (Water/Waste Water Method)	
Gasoline (Leaded and Unleaded)	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
	TOTAL LEAD	AA	TOTAL LEAD	AA
		--Optional--		
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT
Unknown Fuel	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
	TOTAL LEAD	AA	TOTAL LEAD	AA
	--Optional--			
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT
Diesel, Jet Fuel, Kerosene, and Fuel/Heating Oil	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
Chlorinated Solvents	CL HC	8260	CL HC	524.2/624 (8260)
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or 502.2/602 (8021)
	1,4-Dioxane	8270M	1,4-Dioxane	8270M
Non-chlorinated Solvents	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or 502.2/602 (8021)
* Waste, Used, or Unknown Oil	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	O&G	9070	O&G	418.1
	BTEX	8260	BTEX	524.2/624 (8260)
	CL HC	8260	CL HC	524.2/624 (8260)
	1,4-Dioxane	8270M	1,4-Dioxane	8270M
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
	METALS (Cd, Cr, Pb, Ni, Zn) by ICAP or AA for soil water			
	PCB*, PCP*, PNA, CREOSOTE by 8270 for soil and 524/625 (8270) for water			
If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)				

NOTES:

1. 8021 replaces old methods 8020 and 8010
2. 8260 replaces old method 8240
3. Reference: Table B-1 in Appendix B of "Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators" (EPA 510-B-97-001).





## UPCF UST Operating Permit Application – Tank Information Instructions (Formerly SWRCB Permit Application Form B and UPCF Form hwhfwr-c)

Complete a separate Tank Information form for each UST for all new permits, permit changes, and any UST system information changes. This form must be submitted within 30 days of permit or UST system information changes, unless your local agency requires approval prior to making changes. For tanks that are part of a compartmentalized unit, each compartment is considered a separate tank and requires completion of a separate Tank Information form. For a UST closure or removal, complete only TYPE OF ACTION and Sections I, II, III, IV, and IX. (Note: Numbering of these instructions matches the UPCF data element numbers on the form.)

430. TYPE OF ACTION – Check the appropriate box to indicate why this form is being submitted.
- 430a. DATE UST PERMANENTLY CLOSED – For reporting closure only; enter the date the UST was removed or closed on site.
- 430b. DATE EXISTING UST DISCOVERED – Enter the date this UST was discovered. Leave blank if installation date is known.
1. FACILITY ID NUMBER – This space is for agency use only.
3. BUSINESS NAME – Enter the complete facility name.
103. BUSINESS SITE ADDRESS – Enter the street address of the facility, including building number, if applicable. This address must be the physical location of the facility. Post office box numbers are not acceptable.
104. BUSINESS SITE CITY – Enter the city or unincorporated area in which the facility is located.
432. TANK ID # – Enter a unique number used to identify the tank. This number may be assigned by the UST owner/operator or the Unified Program Agency.
433. TANK MANUFACTURER – Enter the name of the company that manufactured the tank.
434. NUMBER OF TANK UNITS. Check the appropriate box to indicate if the tank is a stand-alone tank or one of two or more compartments in a tank system. A separate UST Operating Permit Application – Tank Information form must be submitted for each compartment.
435. DATE UST SYSTEM INSTALLED – Enter the date the local agency signed-off on installation of the UST system. This is the date of initial tank system installation, and does not include upgrades or retrofits which may have been performed later. If this is for a new installation, leave blank.
436. TANK CAPACITY IN GALLONS: Enter the tank capacity. For compartmentalized tanks, enter data for the compartment covered by this tank form only.
437. NUMBER OF TANK COMPARTMENTS: If the tank is a compartment, enter the total number of compartments in the UST.
439. TANK USE – Check the type of tank usage.
- 439a. If you checked "OTHER" specify the type of tank usage in the space provided.
440. TANK CONTENTS – Check the specific petroleum or non-petroleum substance stored.
- 440a. If you checked "OTHER PETROLEUM" specify the common name of the substance in the space provided [i.e., the name used in the facility's Hazardous Materials Business Plan (HMBP) inventory].
- 440b. If you checked "OTHER" under Non-petroleum, specify the common name of substance in the space provided (i.e., the name used in the HMBP inventory).
443. TYPE OF TANK – Check the box that identifies the type of tank.
444. TANK PRIMARY CONTAINMENT – Check the construction material of the primary containment (i.e., inner tank wall nearest the hazardous substance stored). If the tank material is not listed, check "Other" and specify the material in the space provided.
- 444a. If you checked "OTHER" specify the type of primary containment in the space provided.
445. TANK SECONDARY CONTAINMENT – Check the construction material of the secondary containment that provides containment external to, and separate from, the primary containment described above. If the tank is a single-wall tank, check "None." If the material is not listed, check "OTHER" and specify the material in the space provided (e.g., HDPE).
- 445a. If you checked "OTHER" specify the type of secondary containment in the space provided.
452. OVERFILL PREVENTION – Check the box(es) to describe the type(s) of overfill protection equipment installed.
458. PIPING SYSTEM TYPE – Check the type of product/waste piping installed in this tank system. "SAFE SUCTION" refers to piping systems meeting all requirements of 23 CCR §2636(a)(3) (also known as "European Suction" systems) (i.e., sloped suction piping systems with no valves or pumps below grade and only one check valve, located below and as close as practical to the suction pump). Title 23, California Code of Regulations is available online at [www.calregs.com](http://www.calregs.com).
464. PIPING PRIMARY CONTAINMENT – Check the material(s) used to construct the primary (i.e., inner) underground product/waste piping.
- 464a. If you checked "OTHER" specify the type of primary containment in the space provided.
- 464b. PIPING SECONDARY CONTAINMENT – Check the material(s) used to construct the secondary containment system(s) (i.e., secondary piping, trench) provided for the product/waste piping. For single-wall piping systems, check "NONE."
- 464c. If you checked "OTHER" specify the type of secondary containment in the space provided.
- 464d. PIPING/TURBINE CONTAINMENT SUMP TYPE – Indicate the type of piping/turbine containment sump(s). Check "NONE" if not present.
- 464e-f. VENT PRIMARY CONTAINMENT – Check the material(s) used to construct the primary (i.e., inner) vent piping. (Note: Address venting of the tank primary containment only.) Specify OTHER type of containment in the space provided.
- 464f-g. VENT SECONDARY CONTAINMENT – Check the material(s) used to construct the secondary containment system(s) (e.g., secondary piping) provided for the vent piping. For single-wall piping systems, check "None." (Note: Address venting of the tank primary containment only.) Specify OTHER type of containment in the space provided.
- 464g-g1. VR PRIMARY CONTAINMENT – Check the material(s) used to construct the primary (i.e., inner) vapor recovery piping. For tanks without vapor recovery piping (e.g., Diesel tanks), check "None." Specify OTHER type of containment in the space provided.
- 464h-h1. VR SECONDARY CONTAINMENT – Check the material(s) used to construct the secondary containment system(s) (e.g., secondary piping) provided for the vapor recovery piping. For single-wall piping systems, check "None." Specify OTHER type of containment in the space provided.
- 464i. VENT PIPING TRANSITION SUMP TYPE – Indicate type of transition sump(s). Check "NONE" if not present.
- 464j-j1. RISER PRIMARY CONTAINMENT – Check the material(s) used to construct the primary (i.e., inner) piping for all risers (not drop tubes) other than annular space risers (i.e., risers for filling or gauging of the primary tank). Specify OTHER type of containment in the space provided.
- 464k-k1. RISER SECONDARY CONTAINMENT – Check the material(s) used to construct secondary containment system(s) (i.e., secondary piping, sumps) provided for the riser piping. For risers without secondary containment, check "None." Specify OTHER type of containment in the space provided.
- 451a-c. FILL COMPONENTS INSTALLED – Check the appropriate boxes to show that spill containment, tank bottom protection, and fill containment sumps (if applicable) are installed.
- 469a. UDC CONSTRUCTION TYPE – Check the box to describe the type of dispenser containment system(s) (i.e., dispenser sumps or pans). If the system has no dispensers (e.g., standby generator tank system), check "No Dispensers." If the system has a dispenser, but no UDC, check "NONE."
- 469b. UDC CONSTRUCTION MATERIAL – Check the box to describe the materials used to construct the UDC.
- 469c. If you checked "OTHER" specify the type of UDC construction material in the space provided.
448. STEEL COMPONENT PROTECTION – All systems contain some steel components. Check the appropriate box(es) to describe all corrosion protection methods used. "Isolation" means electrical isolation from soil, backfill, and groundwater. Examples include fiberglass cladding, non-metallic secondary containment systems which isolate steel components from the sub-surface environment, and insulating bushings.
- APPLICANT SIGNATURE – The same person who signs the UST Operating Permit Application – Facility Form shall sign in the space provided. This signature certifies that the signer believes that all information submitted is true and accurate, and that the UST system is compatible with the substance stored.
470. DATE – Enter the date the form was signed.
471. APPLICANT NAME – Print or type the name of the person signing the form.
472. APPLICANT TITLE – Enter the title of the person signing the form.

HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

Page    of   

I. FACILITY IDENTIFICATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) <sup>733</sup> FACILITY ID# <sup>734</sup>

PLACEWORKS, LLC

3645 SAN PABLO AVE., EMERYVILLE, CA <sup>730</sup>

TANK OWNER NAME

PLACEWORKS, LLC

TANK OWNER ADDRESS <sup>731</sup>

1501 PACIFIC AVE.

TANK OWNER CITY <sup>742</sup>

ALAMEDA

STATE <sup>743</sup>

CA

ZIP CODE <sup>744</sup>

94501

II. TANK CLOSURE INFORMATION

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor			Concentration of Oxygen		
		Top	Center	Bottom	Top	Center	Bottom
1	745	746a	746b	746c	747a	747b	747c
2	748	749a	749b	749c	750a	750b	750c
3	751	752a	752b	752c	753a	753b	753c

III. CERTIFICATION

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER

STATUS OR AFFILIATION OF CERTIFYING PERSON

NAME OF CERTIFIER (Print) <sup>754</sup>

Certifier is a representative of the CUPA, authorized agency, or LIA: <sup>760</sup>

Yes  No

TITLE OF CERTIFIER <sup>755</sup>

Name of CUPA, authorized agency, or LIA: <sup>761</sup>

ADDRESS <sup>756</sup>

If certifier is other than CUPA / LIA check appropriate box below: <sup>762</sup>

CITY <sup>757</sup>

a. Certified Industrial Hygienist (CIH)

b. Certified Safety Professional (CSP)

c. Certified Marine Chemist (CMC)

d. Registered Environmental Health Specialist (REHS)

PHONE <sup>758</sup>

e. Professional Engineer (PE)

f. Class II Registered Environmental Assessor

DATE <sup>759</sup>

CERTIFICATION TIME

g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS <sup>763</sup>

(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.)

Yes  No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC: <sup>764</sup>

A copy of this certificate shall accompany the tank to the recycling / disposal facility and be provided to the CUPA. If there is no CUPA, copies shall be submitted to the LIA and authorized agency, owner / operator of the tank system, removal contractor, and the recycling / disposal facility.

## Hazardous Waste Tank Closure Certification

Complete and submit this page prior to initiating any cleaning, cutting, dismantling, or excavation of a tank system that meets the conditions below:

- Any tank system that previously held a hazardous material or a hazardous waste, that is identified as a hazardous waste, and that is destined to be disposed, reclaimed or closed in place.
- This does not apply to tank systems regulated under a hazardous waste facility permit, other than permit by rule (PBR), or to tank systems regulated under a grant of interim status, nor to a tank system or any portion thereof, that meets the definition of scrap metal in 22 CCR §66260.10 and is excluded from regulation pursuant to 22 CCR §66261.6(a)(3)(B).

Refer to 22 CCR §67383.3 and 23 CCR §2672 for disposal requirements for tank systems.

(Note: the numbering of the instructions follows the data element numbers that are on the UPCF pages. These data element numbers are used for electronic submission and are the same as the numbering used in 27 CCR, Appendix C, the Business Section of the Unified Program Data Dictionary.)

Please number all pages of your submittal. This helps your CUPA or local agency identify whether the submittal is complete and if any pages are separated.

1. FACILITY ID NUMBER - Leave this blank. This number is assigned by the CUPA. This is the unique number which identifies your facility.
3. BUSINESS NAME - Enter the full legal name of the business.

740. TANK OWNER NAME - Complete items 740-744, unless all items are the same as the Business Owner information (items 11-116) on the Business Owner/Operator Identification page (OES Form 2730). If the same, write "SAME AS SITE" across this section.  
741. TANK OWNER ADDRESS  
742. TANK OWNER CITY  
743. TANK OWNER STATE  
744. TANK OWNER ZIP CODE

745. TANK ID NUMBER 1-3 - Enter up to three owner's tank ID numbers. This is a unique number used by the owner to identify the tank. If more than three tanks are being closed, complete additional copies of this page. (Enter additional tank numbers in 748 and 751.)

746. CONCENTRATION OF FLAMMABLE VAPOR 1-3 - Enter three interior flammable vapor levels for each tank being closed, taken at the top, center, and bottom of the tank. (For more than one tank, enter additional tank readings in 749 and 752.)

747. CONCENTRATION OF OXYGEN 1-3 - Enter three interior oxygen levels for each tank being closed, taken at the top, center, and bottom of the tank. (For more than one tank, enter additional tank readings in 750 and 753).

SIGNATURE - The business owner or officer of the company who is authorized to make decisions for the facility and who has operational control, shall sign in the space provided.

754. CERTIFIER NAME - Enter the full printed name of the person signing the page.

755. CERTIFIER TITLE - Enter the title of the person signing the page.

756. CERTIFIER ADDRESS - Enter the address of the person signing the page.

757. CERTIFIER CITY - Enter the city for the signer's address.

758. CERTIFIER PHONE - Enter the phone number for the person signing the page.

759. DATE CERTIFIED - Enter the date that the document was signed. Enter the time that the readings were taken.

760. CERTIFIER REPRESENTS LOCAL AGENCY - Check "Yes" if the person certifying the tank is a representative of the CUPA, authorized agency, or LIA, check "No" if not.

761. NAME OF LOCAL AGENCY - Enter the name of the local agency represented by the person certifying the tank.

762. AFFILIATION OF CERTIFYING PERSON - Check the certification, license, or organization which the certifier holds or to which the certifying person belongs, if not a CUPA/ LIA.

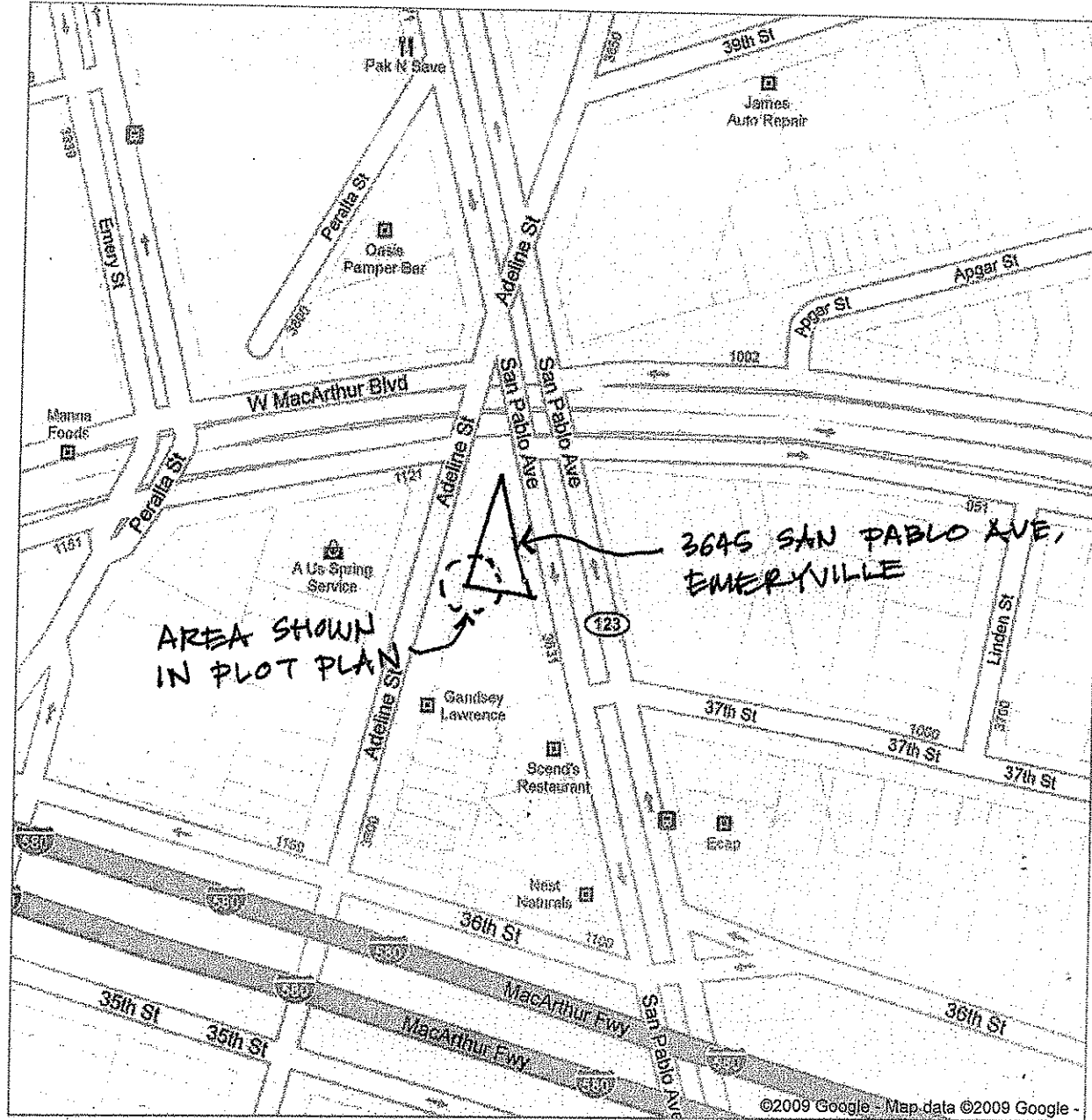
763. TANK HELD FLAMMABLE OR COMBUSTIBLE MATERIALS - Check "Yes" if the tank held flammable or combustible materials, check "No" if not.

764. MANAGEMENT INSTRUCTIONS - Provide tank management instructions to the scrap dealer, disposal facility, etc., in this space.

# LOCATION PLAN - 3645 SAN PABLO AVE, EMERYVILLE

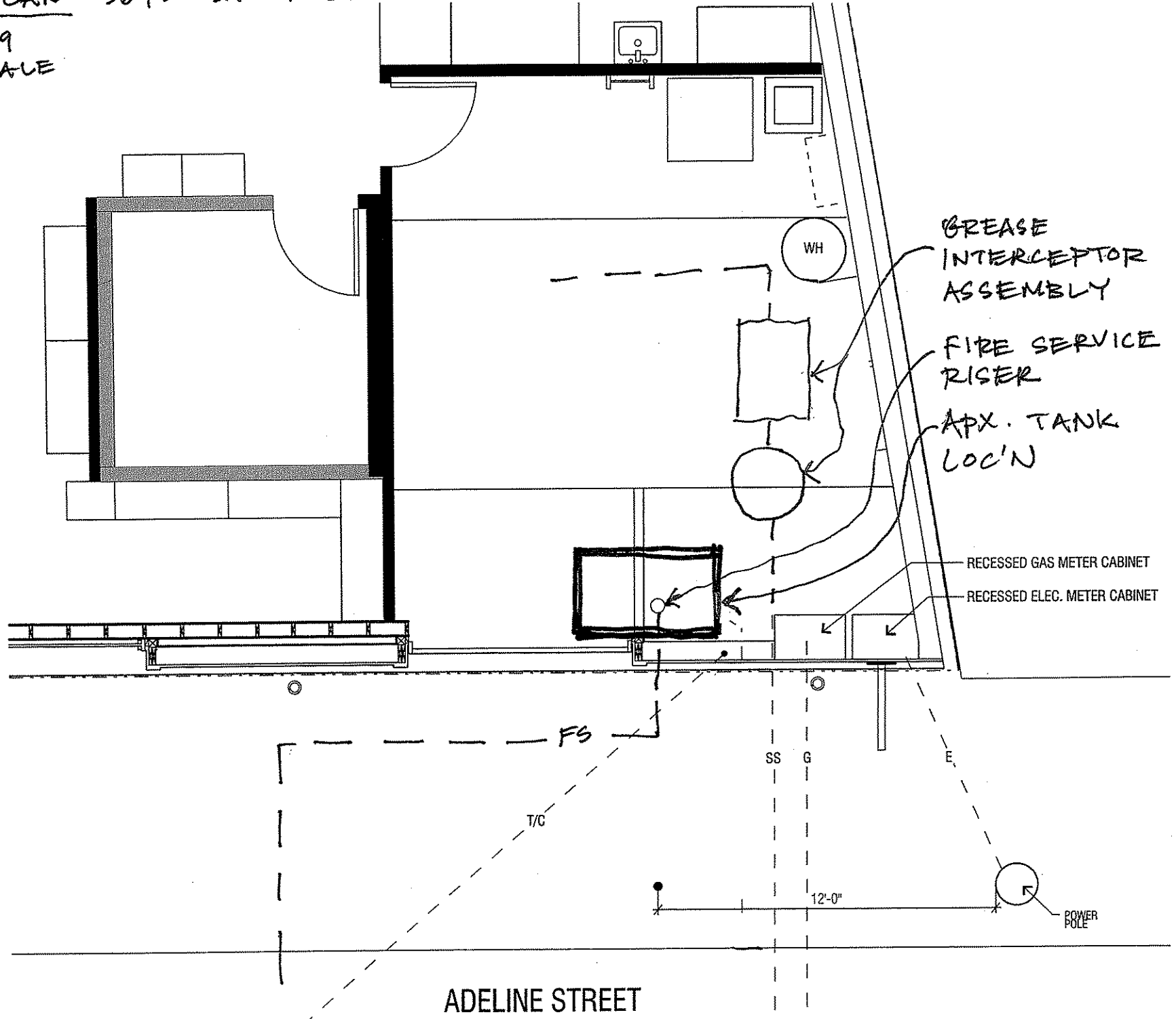
12/21/09

NO SCALE



PLOT PLAN - 3645 SAN PABLO AVE, EMERYVILLE

12/21/09  
NO SCALE





State Of California  
**CONTRACTORS STATE LICENSE BOARD**  
**ACTIVE LICENSE**



License Number **722253**

Entity **CORP**

Business Name **CORNERSTONE ENVIRONMENTAL  
CONTRACTORS INC**

Classification(s) **A HAZ**

Expiration Date **05/31/2010**



State of California  
Contractors State License Board

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code  
and the Rules and Regulations of the Contractors State License Board,  
the Registrar of Contractors does hereby issue this license to:

CORNERSTONE ENVIRONMENTAL CONTRACTORS INC



to engage in the business or act in the capacity of a contractor  
in the following classification(s):

A - GENERAL ENGINEERING CONTRACTOR  
HAZ - HAZARDOUS SUBSTANCES REMOVAL



Witness my hand and seal this day,

December 10, 1996

Issued May 2, 1996

CERTIFIED COPY

This license is the property of the Registrar of Contractors, is not  
transferrable, and shall be returned to the Registrar upon demand  
when suspended, revoked, or invalidated for any reason. It becomes  
void if not renewed.

*Randy L. Fowles*  
Signature of Licensee

*Randy L. Fowles*  
Signature of License Qualifier

*Paul W. Johnson*  
Registrar of Contractors

722253

License Number



STATE OF CALIFORNIA  
STATE AND CONSUMER SERVICES AGENCY CONTRACTORS STATE LICENSE BOARD



*Building Quality*



## HAZARDOUS SUBSTANCES REMOVAL AND REMEDIAL ACTIONS CERTIFICATION

Pursuant to the provisions of Section 7058.7 of the Business and Professions Code, the Registrar of Contractors does hereby certify that the following qualifying person has successfully completed the hazardous substances removal and remedial actions examination.



Qualifier: RANDY LEWIS FOWLER

License No.: 722253

Business Name: CORNERSTONE ENVIRONMENTAL CONTRACTORS INC

WITNESS my hand and official seal this  
day of AUGUST 19, 1996

Registrar of Contractors

13L-30 (4/96)

This certification is the property of the Registrar of Contractors, is not transferable, and shall be returned to the Registrar upon demand when suspended, revoked, or invalidated for any reason.

A- 7046



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/31/2009

PRODUCER Phone: 213-787-1100 Fax: 213-787-1164  
 Frenkel & Co., Inc.  
 725 S. Figueroa St., Ste. 2200  
 Los Angeles CA 90017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

**INSURERS AFFORDING COVERAGE**

NAIC #

INSURED  
 Cornerstone Environmental Contractors, Inc.  
 3527 Mt. Diablo Boulevard, Suite 290  
 Lafayette CA 94549-3815

INSURER A: American Safety Ind Co

INSURER B: Arch Insurance Company

INSURER C: State Compensation Ins Fund

INSURER D:

INSURER E:

**COVERAGES**

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR	INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
A	X	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contr. Poll. Liab. Occurrence Form GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	ENV012771-09-04	3/29/2009	3/29/2010	EACH OCCURRENCE	\$ 2,000,000
						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 50,000
						MED EXP (Any one person)	\$ 5,000
						PERSONAL & ADV INJURY	\$ 2,000,000
						GENERAL AGGREGATE	\$ 2,000,000
						PRODUCTS - COMP/OP AGG	\$ 2,000,000
B		AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	FBCAT0103500	3/29/2009	3/29/2010	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
						BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
		GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT	\$
						OTHER THAN AUTO ONLY: EA ACC	\$
						AGG	\$
A		EXCESS / UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$10,000	ENU005433-09-07	3/29/2009	3/29/2010	EACH OCCURRENCE	\$ 8,000,000
						AGGREGATE	\$ 8,000,000
							\$
							\$
C		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under SPECIAL PROVISIONS below	1443607-2009	1/1/2009	1/1/2010	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER	
						E.L. EACH ACCIDENT	\$ 1,000,000
						E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
A		OTHER Professional Liability Claims Made Form	ENV012771-09-04	3/29/2009	3/29/2010	Each Claim	\$ 2,000,000
						General Aggregate	\$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS  
 General Information Certificate.

**CERTIFICATE HOLDER****CANCELLATION**

General Information Certificate for  
 Cornerstone Environmental Contractors, Inc.  
 3527 Mt. Diablo Blvd., Ste. 290  
 Lafayette CA 94549-3815

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE (10-DAY NOTICE FOR NON-PAYMENT OF PREMIUM) TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

## **IMPORTANT**

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

## **DISCLAIMER**

This Certificate of Insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

TABLE 1  
Hazardous Property Information

Check if Expected	Material	Water Solubility*	Specific Gravity	Vapor Density	Flash Point °F	Vapor Pressure*	LEL UEL	LD <sub>50</sub> mg/kg	TLV-TWA†	IDLH Level	Odor Threshold or Warning Concentration (ppm)	Hazard† Property	Dermal‡ Toxicity	Acute⁴ Exposure Symptoms
	Diesel Fuel	Insoluble	0.81-0.90	--	130	--	0.6-1.1 6-7.5		None established	None specified	0.08	BC	ABC	IN
	Gasoline	Insoluble	0.72-0.76	3-4	-45	Variable	1.4% 7.6%		300 ppm	None specified	0.005-10 x0.25	CD	AB	IN
	Kerosene / FUEL OIL	Insoluble	0.83-1.0	--	100-165	5	0.7% 5.0%		None established	None specified	1.0	BCD	AB	IN

SITE SPECIFIC SUBSTANCES

(Add hazardous property information on any substances that are of concern at the site but are not listed above.)

SEE ALSO ATTACHED MSDS FOR FUEL OIL

EXPLANATIONS AND FOOTNOTES

Water solubility is expressed in different terms in different references. Many references use the term "insoluble" for materials that will not readily mix with water, such as gasoline. However, most of these materials are water soluble at the part per million or part per billion level. Gasoline, for example, is insoluble in the gross sense, and will be found as a discrete layer on top of the ground water. But certain gasoline constituents, such as benzene, toluene, and xylene, will also be found in solution in the ground water at the part per million or part per billion level.

\* Water solubility expressed as 0.2 g means 0.2 grams per 100 grams water at 20°C.

TABLE I  
Hazardous Property Information

Check if Expected	Material	Water Solubility*	Specific Gravity	Vapor Density	Flash Point °F	Vapor Pressure*	LEL UEL	LD <sub>50</sub> mg/kg	TLV-TWA <sup>1</sup>	IDLH Level	Odor Threshold or Warning Concentration (ppm)	Hazard <sup>1</sup> Property	Dermal <sup>1</sup> Toxicity	Acute <sup>1</sup> Exposure Symptoms
	<p>Dermal Toxicity data is summarized in the following three categories:</p> <p><b>Skin Penetration</b></p> <ul style="list-style-type: none"> <li>- A - negligible penetration (solid-polar)</li> <li>+ B - slight penetration (solid-nonpolar)</li> <li>++ C - moderate penetration (liquid/solid-nonpolar)</li> <li>+++ D - high penetration (gas/liquid-nonpolar)</li> </ul> <p><b>Systemic Potency</b></p> <ul style="list-style-type: none"> <li>E - slight hazard - LD<sub>50</sub> = 500-15,000 mg/kg lethal dose for 70 kg man = 1 pint-1 quart</li> <li>F - moderate hazard - LD<sub>50</sub> = 50-500 mg/kg lethal dose for 70 kg man = 1 ounce-1 pint</li> <li>G - extreme hazard - LD<sub>50</sub> = 10-50 mg/kg lethal dose for 70 kg man = drops to 20 ml</li> </ul> <p><b>Local Potency</b></p> <ul style="list-style-type: none"> <li>H - slight - reddening of skin</li> <li>I - moderate - irritation/inflammation of skin</li> <li>J - extreme - tissue destruction/necrosis</li> </ul>													
	Solubility of metals depends on the compound in which they are present.													
	Several chlorinated hydrocarbons exhibit no flash point in a conventional sense, but will burn in the presence of high energy ignition source or will form explosive mixtures at temperatures above 200°F.													
	Practically non-flammable under standard conditions.													
	Expressed as mm Hg under standard conditions.													
	Explosive concentrations of airborne dust can occur in confined areas.													
	Values for Threshold Limit Value-Time Weighted Average (TLV-TWA) are OSHA Permissible Exposure Limits (PELs) except where noted in h and i.													
	TLV-TWA adopted by the American Conference of Governmental Industrial Hygienists (ACGIH), which is lower than the OSHA PEL.													
	TLV-TWA recommended by the National Institute for Occupational Safety and Health (NIOSH). A TLV or PEL has not been adopted by ACGIH or OSHA.													
	<ul style="list-style-type: none"> <li>A - corrosive</li> <li>B - flammable</li> <li>C - toxic</li> <li>D - volatile</li> <li>E - reactive</li> <li>F - radioactive</li> <li>G - carcinogen</li> <li>H - infections</li> </ul>				<p>Acute Exposure Symptoms</p> <ul style="list-style-type: none"> <li>A - abdominal pain</li> <li>B - central nervous system depression</li> <li>C - coma/coma</li> <li>D - convulsions</li> <li>E - confusion</li> <li>F - dizziness</li> <li>G - diarrhea</li> <li>H - dryness</li> <li>I - eye irritation</li> </ul>						<ul style="list-style-type: none"> <li>J - fever</li> <li>K - headache</li> <li>L - nausea</li> <li>M - respiratory system irritation</li> <li>N - skin irritation</li> <li>O - tremors</li> <li>P - unconsciousness</li> <li>Q - vomiting</li> <li>R - weakness</li> </ul>			



# CITGO No. 2 Fuel Oil, All Grades

## Material Safety Data Sheet

CITGO Petroleum Corporation  
P.O. Box 4689  
Houston, TX 77210


MSDS No. AG2FO  
Revision Date 5/31/2006

Hazard Rankings		
	HMIS	NFPA
Health Hazard	* 2	0
Fire Hazard	2	2
Reactivity	0	0

\* = Chronic Health Hazard

**IMPORTANT:** This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

Emergency Overview			
Physical State	Liquid.		
Color	Red.	Odor	Characteristic, Kerosene-like.
<b>WARNING!</b>			
Combustible liquid and vapor. - Can cause flash fire.			
Harmful or fatal if swallowed - can enter lungs and cause damage.			
Can cause eye, skin or respiratory tract irritation.			
May be harmful if inhaled or absorbed through the skin.			
Overexposure can cause central nervous system (CNS) depression and/or other target organ effects.			
Possible Cancer Hazard (See Section 3)			
Harmful to aquatic organisms.			

Protective Equipment
Minimum Recommended See Section 8 for Details


### SECTION 1. PRODUCT IDENTIFICATION

Trade Name	CITGO No. 2 Fuel Oil, All Grades	Technical Contact	(832) 486-5940 or (918) 495-5939
Product Number	Various	Medical Emergency	(832) 486-4700
CAS Number	68476-30-2	CHEMTREC Emergency (United States Only)	(800) 424-9300
Product Family	Fuels.		
Synonyms	Heating Oil; Home Heating Oil; Furnace Oil; Burner Fuel; Fuel Oil No. 2; No. 2 Heating Oil; K-2 Fuel Oil; Grade 2 Distillate Fuel; High Sulfur Fuel Oil; C9-C25 Petroleum Hydrocarbons		

### SECTION 2. COMPOSITION

This product may be composed, in whole or in part, of any of the following refinery streams:

- Fuel Oil, No. 2 [CAS No.: 68476-30-2]
- Hydrodesulfurized Middle Distillate (petroleum) [CAS No.: 64742-80-9]
- Straight-run middle distillate (petroleum) [CAS No.: 64741-44-2]
- Hydrodesulfurized Light Catalytic Cracked Distillate (Petroleum) [CAS No.: 68333-25-5]
- Kerosene [CAS No.: 8008-20-6]
- Hydrodesulfurized Kerosine (Petroleum) [CAS No.: 64742-81-0]
- Light catalytic cracked distillate (petroleum) [CAS No.: 64741-59-9]

This product contains the following chemical components:

Component Name(s)	CAS Registry No.	Concentration (%)
-------------------	------------------	-------------------

## CITGO No. 2 Fuel Oil, All Grades

Nonane, all isomers	Mixture	1 - 10
Trimethylbenzenes, all isomers	25551-13-7	0 - 2
Naphthalene	91-20-3	0 - 2
Biphenyl (Diphenyl)	92-52-4	0 - 2
Cumene	98-82-8	0 - 1
Ethylbenzene	100-41-4	0 - 1

### SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

**Major Route(s) of Entry** Skin contact. Inhalation.

#### Signs and Symptoms of Acute Exposure

- Inhalation** Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness.
- Eye Contact** This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. Further, it can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.
- Skin Contact** This material can cause skin irritation. Symptoms include redness, itching, and burning of the skin. This material can be absorbed by the skin and produce central nervous system depression (headache, nausea, fatigue and/or other symptoms including unconsciousness). If the skin is damaged, absorption increases. Prolonged and/or repeated contact may cause severe dermatitis and/or more serious skin disorders. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and/or severe tissue damage.
- Ingestion** If swallowed, this material may irritate the mouth, throat, and esophagus. It can be absorbed into the blood stream through the stomach and intestinal tract. Symptoms may include a burning sensation of the mouth and esophagus, nausea and vomiting. In addition, it can cause central nervous system effects characterized by dizziness, staggering, drowsiness, delirium and/or loss of consciousness.

Because of the low viscosity, this material can enter the lungs directly by aspiration during swallowing or subsequent vomiting. Aspiration of a small amount of liquid can cause severe lung damage and/or death.

**Chronic Health Effects Summary** Secondary effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

This product contains petroleum middle distillates similar to those shown to produce skin tumors on laboratory rodents following repeated application. All tumors appeared during the latter portion of the typical 2-year lifespan of the animals. Certain studies have shown that washing the exposed skin of the test animal with soap and water between treatments greatly reduces the potential tumorigenic effects. These data suggest that good personal hygiene is effective in reducing the risk of this potential adverse health effect.

This material and/or its components have been associated with developmental toxicity, reproductive toxicity, genotoxicity, immunotoxicity, and/or carcinogenicity. Refer to Section 11 of this MSDS for additional health-related information.

**Conditions Aggravated by Exposure** Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS)

**Target Organs** May cause damage to the following organs: kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

#### Carcinogenic Potential

## CITGO No. 2 Fuel Oil, All Grades

This material may contain ethylbenzene and naphthalene at concentrations above 0.1%. IARC has identified ethylbenzene and naphthalene as possibly carcinogenic to humans (Group 2B) based on laboratory animal studies. The NTP has determined that naphthalene is *reasonably anticipated to be a human carcinogen* based on sufficient evidence from studies in experimental animals. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification		OSHA Physical Hazard Classification							
Irritant	<input checked="" type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input checked="" type="checkbox"/>	Explosive	<input type="checkbox"/>	Pyrophoric	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>	Water-reactive	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>	Unstable	<input type="checkbox"/>

### SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

- Inhalation** Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.
- Eye Contact** Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water for at least 15 minutes while occasionally lifting and lowering eyelids. Do not use eye ointment unless directed to by a physician. Seek medical attention if excessive tearing, irritation, or pain persists.
- Skin Contact** Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.
- Ingestion** Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.
- Notes to Physician** INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.
- INGESTION: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.



## CITGO No. 2 Fuel Oil, All Grades

### SECTION 5. FIRE FIGHTING MEASURES

---

<b>NFPA Flammability Classification</b>	NFPA Class-II combustible liquid.		
<b>Flash Point</b>	Closed cup: AP 52°C (AP 125°F). (Pensky-Martens.)		
<b>Lower Flammable Limit</b>	AP 0.6 %	<b>Upper Flammable Limit</b>	AP 7.5 %
<b>Autoignition Temperature</b>	>254°C (>489°F)		
<b>Hazardous Combustion Products</b>	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and nitrogen.		
<b>Special Properties</b>	Combustible Liquid! This material releases vapors when heated above ambient temperatures. Vapors can cause a flash fire. Vapors can travel to a source of ignition and flashback. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. Use only with adequate ventilation. If container is not properly cooled, it can rupture in the heat of a fire.		
<b>Extinguishing Media</b>	SMALL FIRE: Use dry chemicals, carbon dioxide, foam, water fog, or inert gas (nitrogen). LARGE FIRE: Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.		
<b>Protection of Fire Fighters</b>	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways.		

### SECTION 6. ACCIDENTAL RELEASE MEASURES

---

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Combustible Liquid! Release can result in a fire hazard. Evacuate all non-essential personnel from release area. Establish a regulated zone with site control and security. Eliminate all ignition sources. Stop the leak if it can be done without risk. A vapor-suppressing foam may be used to reduce vapors. Properly bond or ground all equipment used when handling this material. Avoid skin contact. Do not walk through spilled material. Verify that responders are properly trained and wearing appropriate personnel protective equipment. Dike far ahead of a liquid spill. Do not allow released material to enter waterways, sewers, basements, or confined areas. This material will float on water. Absorb or cover with dry earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material. Place spent sorbent materials, free liquids and other clean-up debris into proper waste containers for appropriate disposal. Certain releases must be reported to the National Response Center (800/424-8802) and state or regulatory authorities. Comply with all laws and regulations.

## CITGO No. 2 Fuel Oil, All Grades

### SECTION 7. HANDLING AND STORAGE

---

#### Handling

##### Combustible Liquid!

A static electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather conditions. Always bond receiving containers to the fill pipe before and during loading. Always keep nozzle in contact with the container throughout the loading process. Do not fill any portable container in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e., loading this material in tanks or shipping compartments that previously containing gasoline or similar low flash point products).

Fire hazard increases as product temperature approaches its flash point. Keep container closed and drum bungs in place. Remove spillage immediately from walking areas. Do not handle or store near heat, sparks or other potential ignition sources. Do not handle or store with oxidizing agents. Avoid breathing mist or vapor. Never siphon by mouth. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure levels. Avoid water contamination. Wash thoroughly after handling. Prevent contact with food or tobacco products.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons from hazard area. Eliminate heat, flame and other potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Do not use this material as fuel for equipment, such as portable heaters, in enclosed areas. Hazardous combustion products can cause death.

Protect the environment from releases of this material. Prevent discharges to surface waters and groundwater. Maintain handling, transfer and storage equipment in proper working order.

Misuse of empty containers can be dangerous. Empty containers may contain material residues which can ignite with explosive force. **Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues** Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.

#### Storage

Store in a cool, dry, well-ventilated place. Keep containers tightly closed. Do not store this product near heat, flame or other potential ignition sources. Do not store with oxidizers. Do not store this product in unlabeled containers. Do not puncture or incinerate containers. Ground all equipment containing this material. All electrical equipment in areas where this material is stored or handled must meet all applicable requirements of the NFPA's National Electrical Code (NEC). Store and transport in accordance with all applicable laws.

### SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

---

#### Engineering Controls

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electric Code. An emergency eye wash station and safety shower should be located near the work-station.

#### Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

## CITGO No. 2 Fuel Oil, All Grades



- Eye Protection** Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.
- Hand Protection** Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
- Body Protection** Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discarded contaminated leather goods.
- Respiratory Protection** Airborne concentration will determine the level of respiratory protection required. Respiratory protection is normally not required unless the product is heated or misted. For known or anticipated vapor or mist concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).
- General Comments** Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

### Occupational Exposure Guidelines

Substance	Applicable Workplace Exposure Levels
Nonane, all isomers	<b>ACGIH (United States).</b> TWA: 200 ppm 8 hour(s).
Ethylmethylbenzene, all isomers	Not available.
Diesel exhaust particulate	Not available.
Trimethylbenzenes, all isomers	<b>ACGIH (United States).</b> TWA: 25 ppm 8 hour(s).
Naphthalene	<b>ACGIH (United States). Skin</b> TWA: 10 ppm 8 hour(s). STEL: 15 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 10 ppm 8 hour(s).
Biphenyl (Diphenyl)	<b>ACGIH TLV (United States).</b> TWA: 0.2 ppm 8 hour(s). <b>OSHA PEL Z2 (United States).</b> TWA: 0.2 ppm 8 hour(s).
1, 2, 4 Trimethylbenzene	Not available.
Cumene	<b>ACGIH (United States).</b> TWA: 50 ppm 8 hour(s). <b>OSHA (United States). Skin</b> TWA: 50 ppm 8 hour(s).
Ethylbenzene	<b>ACGIH (United States).</b> TWA: 100 ppm 8 hour(s). STEL: 125 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 100 ppm 8 hour(s).
Xylene, all isomers	<b>ACGIH (United States).</b> TWA: 100 ppm 8 hour(s).

## CITGO No. 2 Fuel Oil, All Grades

Sulfur	STEL: 150 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 100 ppm 8 hour(s). <b>ACGIH (United States, 1996).</b> TWA: 2 ppm STEL: 5 ppm <b>OSHA (United States).</b> TWA: 5 ppm <b>NIOSH</b> TWA: 2 ppm STEL: 5 ppm
Benzene	<b>ACGIH (United States). Skin</b> TWA: 0.5 ppm 8 hour(s). STEL: 2.5 ppm 15 minute(s). <b>OSHA (United States). Skin Notes: See Table Z-2 for exclusions in 20 CFR 1910.1028 to the PEL.</b> TWA: 1 ppm 8 hour(s). STEL: 5 ppm 15 minute(s).
Toluene	<b>ACGIH (United States). Skin</b> TWA: 50 ppm 8 hour(s). <b>OSHA (United States).</b> TWA: 200 ppm 8 hour(s). CEIL: 300 ppm PEAK: 500 ppm
Middle distillates, petroleum	<b>ACGIH TLV (United States).</b> TWA: 100 ppm 8 hour(s).
Kerosene	<b>NIOSH REL (United States).</b> TWA: 100 mg/m <sup>3</sup> 8 hour(s).
Hydrodesulfurized Kerosine (Petroleum)	Not available.
Hydrodesulfurized middle distillate (petroleum)	Not available.
Straight-run middle distillate (petroleum)	<b>ACGIH (United States, 1998). Skin</b> TWA: 100 mg/m <sup>3</sup>
Fuel Oil, No. 2	Not available.
Distillates, petroleum, hydrodesulfurized light catalytic cracked	Not available.
Middle distillates, petroleum	Not available.
Distillates, petroleum, light catalytic cracked	Not available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>Physical State</b>	Liquid.	<b>Color</b>	Red.	<b>Odor</b>	Characteristic, Kerosene-like.
<b>Specific Gravity</b>	0.84 (AP Water = 1)	<b>pH</b>	Not Applicable.	<b>Vapor Density</b>	AP 5 (Air = 1)
<b>Boiling Range</b>	AP 154°C (AP 309°F) to AP 371° C (AP 700° F)	<b>Melting/Freezing Point</b>			Not available.
<b>Vapor Pressure</b>	<0.3 kPa (<2 mm Hg) (at 20°C)	<b>Volatility</b>			AP 840 g/l VOC (W%) (ASTM D2369) =
<b>Solubility in Water</b>	Very slightly soluble in cold water.	<b>Viscosity (cSt @ 40°C)</b>			AP 3
<b>Flash Point</b>	Closed cup: AP 52°C (AP 125°F). (Pensky-Martens.)				
<b>Additional Properties</b>	Density = AP 7.0 lbs/gal.; Viscosity (ASTM D2161) = 30 - 40 SUS @ 100° F.				

## CITGO No. 2 Fuel Oil, All Grades

### SECTION 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.	<b>Hazardous Polymerization</b>	Not expected to occur.
<b>Conditions to Avoid</b>	Keep away from heat, flame and other potential ignition sources. Keep away from strong oxidizing conditions and agents.		
<b>Materials Incompatibility</b>	Strong acids, alkalis, and oxidizers such as liquid chlorine, other halogens, hydrogen peroxide and oxygen.		
<b>Hazardous Decomposition Products</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		

### SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the **Emergency Overview on Page 1** and the **Hazards Identification in Section 3** of this MSDS.

#### Toxicity Data

##### **Diesel exhaust particulate**

Lung tumor and lymphomas were identified in rats and mice exposed to unfiltered diesel fuel exhaust in chronic inhalation studies. Further, epidemiological studies have identified increase incidences of lung cancer in US railroad workers and bladder cancer in bus and truck drivers possibly associated with exposure to diesel engine exhaust. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen. In addition, NIOSH has identified complete diesel exhaust as a potential carcinogen.

##### **Trimethylbenzenes, all isomers**

###### Studies of Workers:

Levels of total hydrocarbon vapors present in the breathing atmosphere of these workers ranged from 10 to 60 ppm. The TClO for humans is 10 ppm, with somnolence and respiratory tract irritation noted.

###### Studies in Laboratory Animals:

In inhalation studies with rats, four of ten animals died after exposures of 2400 ppm for 24 hours. An oral dose of 5 mL/kg resulted in death in one of ten rats. Minimum lethal intraperitoneal doses were 1.5 to 2.0 mL/kg in rats and 1.13 to 12 mL/kg in guinea pigs. Mesitylene (1, 3, 5 Trimethylbenzene) inhalation at concentrations of 1.5, 3.0, and 6.0 mg/L for six hours was associated with dose-related changes in white blood cell counts in rats. No significant effects on the complete blood count were noted with six hours per day exposure for five weeks, but elevations of alkaline phosphatase and SGOT were observed. Central nervous system depression and ataxia were noted in rats exposed to 5,100 to 9,180 ppm for two hours.

##### **Naphthalene**

###### Studies in Humans Overexposed to Naphthalene:

Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from over-exposure to naphthalene. Persons with Glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have also been reported from over-exposure to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect.

###### Studies in Laboratory Animals:

Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial

## CITGO No. 2 Fuel Oil, All Grades

and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) *in vitro*.

### **Biphenyl (Diphenyl)**

Studies in Humans Overexposed to Biphenyl:

Evidence of adverse effects on the liver and the nervous system have been described in studies of workers exposed to high levels for prolonged periods.

Studies in Laboratory Animals:

Evidence of adverse effects on the kidney and liver, and changes in whole blood (reduced hematocrit and hemoglobin levels) have been observed in laboratory rodents following subchronic exposure to biphenyl.

Genotoxicity & Carcinogenicity:

Biphenyl tested negative in bacteriological systems but some evidence of positive responses have been reported in mammalian cell systems in the presence of metabolic activation. The EPA has determined human and animal data are inadequate to classify the carcinogenic potential of biphenyl.

### **Ethylbenzene**

Effects from Acute Exposure:

ORAL (LD50), Acute: 3,500 mg/kg [Rat].

DERMAL (LD50), Acute: 17,800 uL/kg [Rabbit].

INTRAPERITONEAL (LD50), Acute: 2,624 mg/kg [Rat].

Effects from Prolonged or Repeated Exposure:

Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). Also, the incidence of tumors was elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as "possibly carcinogenic to humans" (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

### **Middle distillates, petroleum**

The products represented by this MSDS contain a mixture of petroleum hydrocarbons commonly referred to as "middle distillates." Laboratory data have associated some middle distillates with skin cancer when the material is applied repeatedly over the lifetime of the test animal. Middle distillates similar to the products represented by this MSDS have been associated with liver and kidney damage in subchronic (90-day) inhalation studies of male rats. The relevance of these findings to human health is unclear.

### **Hydrodesulfurized middle distillate (petroleum)**

INHALATION LC50, Acute: 4.6 to 7.64 mg/L for four hours [Rat] - Dyspnea, nasal discharge, alopecia and excessive salivation.

ORAL LD50, Acute >500 g/kg [Rat Screening Level] Diarrhea, hyperactivity, ptosis and somnolence.

DERMAL LD50, Acute: >2,000 mg/kg [Rabbit Screening Level]

BUEHLER DERMAL, Acute: Non-sensitizing [Guinea Pig].

14-Day DERMAL, Subchronic: 0.05 ml/kg applied 3 times per week [Mouse, Human skin grafted to Athymic nude Mice] - Irritation and epidermal hyperplasia.

62-Week DERMAL, Chronic: 0.05 ml/kg applied 3 times per week [Mouse] - Extreme skin irritation; moderate increase in contact-point skin tumors.

### **Straight-run middle distillate (petroleum)**

INHALATION, LC50, Acute: 1.72 mg/L for four hours [Male Rat].

INHALATION, LC50, Acute: 1.82 mg/L for 4 hours [Female Rat].

## CITGO No. 2 Fuel Oil, All Grades

ORAL, LD50, Acute: >5,000 mg/kg [Rat screening level] - Diarrhea, hypoaactivity and somnolence.

DERMAL, LD50, Acute: >2,000 mg/kg [Rabbit screen].

BUEHLER DERMAL, Acute: Non-sensitizing [Guinea Pig].

28-Day DERMAL, Subchronic: Moderate irritation at 200 to 2,000 mg/kg with no other treatment-related clinical effects observed.

### Fuel Oil, No. 2

ORAL LD50, Acute: 12,000 to 17,500 mg/kg or 9.0 ml/kg [Rat]

DERMAL LD50, Acute: >5.0 ml/kg [Rabbit screen level].

DRAIZE EYE, Acute: Mild irritant [Rabbit]

DRAIZE DERMAL, Acute: Severe skin irritant [Rabbit].

BUEHLER DERMAL, Acute: Non-sensitizing [Guinea Pig]

14-Day DERMAL, Sub-chronic: 0% and 67% mortality at 4.0 and 8.0 ml/kg [Rabbit]

62-Week DERMAL, Chronic: 0.05 ml/kg 3x/week [Mouse] - Extreme skin irritation.

97-Week DERMAL, Chronic: 243 g/kg applied 3x/week [Mouse] - Extreme skin irritation.

Moderate increase in contact-point skin tumors.

### MUTAGENICITY:

Modified Ames Assay: Negative. [Salmonella typhimurium]

In-vitro SCE Ovary Assay: Negative. [Chinese Hamster]

In-vitro Lymphoma Assay: Negative. [Mouse]

In-vivo Dominant Lethal Assay: Negative. [Mouse]

In-vivo Bone Marrow Assay: Clastogenic at 2.0 ml/kg and 6.0 ml/kg [Rat]

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Freshwater Toxicity:

Concentration: 2400 ppm Exposure: 48 hrs. Species: Juven. Am. Shad (*Squalius cephalus*) Effect: TLM

Concentration: >127 ppm Exposure: 96 hrs. Species: Bluegill (*Lepomis macrochirus*) Effect: LC50

#### Saltwater Toxicity

Concentration: 10 ppm Exposure: 96 hrs. Species: Menhaden (*Brevoortia patronus*) Effect: LC50

Concentration: 10 ppm Exposure: 96 hrs. Species: Grass Shrimp Effect: LC50

### Environmental Fate

If spilled, this material will normally evaporate. Hydrocarbon components may contribute to atmospheric smog. If released to the subsoils, petroleum middle distillate fuels will strongly adsorb to soils. Groundwater should be considered as an exposure pathway. Liquid and vapor can migrate through the subsurface and preferential pathways (such as utility line backfill) to downgradient receptors.

Middle distillates are potentially toxic to freshwater and saltwater ecosystems. Distillate fuels will normally float on water. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this oil layer can limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway can cause a fish kill or create an anaerobic environment. Also, this coating action can also kill plankton, algae, and water birds.

## SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.




## CITGO No. 2 Fuel Oil, All Grades

Maximize material recovery for reuse or recycling. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). Contact your regional US EPA office for guidance concerning case specific disposal issues. State and/or local regulations might be even more restrictive.

### SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

<b>US DOT Status</b>	A U.S. Department of Transportation (DOT) regulated material. The following U. S. DOT hazardous materials shipping description applies to bulk packaged material that is transported by highway or rail. Alternate shipping descriptions may be required for product transported by marine vessel, air or other method and for non-bulk packaged material.		
<b>Proper Shipping Name</b>	Fuel Oil No. 2, Combustible liquid, NA1993, PG III		
<b>Hazard Class</b>	DOT Class: Combustible liquid with a flash point greater than 37.8°C (100°F).	<b>Packing Group(s)</b>	III
		<b>UN/NA Number</b>	NA 1993
<b>Reportable Quantity</b>	A Reportable Quantity (RQ) has not been established for this material.		
<b>Placard(s)</b>		<b>Emergency Response Guide No.</b>	128
		<b>MARPOL III Status</b>	Not a DOT "Marine Pollutant" per 49 CFR 171.8.

### SECTION 15. REGULATORY INFORMATION

<b>TSCA Inventory</b>	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
<b>SARA 302/304 Emergency Planning and Notification</b>	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
<b>SARA 311/312 Hazard Identification</b>	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard
<b>SARA 313 Toxic Chemical Notification and Release Reporting</b>	This product contains the following components in concentrations above <i>de minimis</i> levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: Naphthalene [CAS No.: 91-20-3] Concentration: 2% Biphenyl (Diphenyl) [CAS No.: 92-52-4] Concentration: 2% Ethylbenzene [CAS No.: 100-41-4] Concentration: 0.9%

## CITGO No. 2 Fuel Oil, All Grades

### CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:

Naphthalene [CAS No.: 91-20-3] RQ = 100 lbs. (45.36 kg) Concentration: 2%

Cumene [CAS No.: 98-82-8] RQ = 5000 lbs. (2268 kg) Concentration: 0.9%

Ethylbenzene [CAS No.: 100-41-4] RQ = 1000 lbs. (453.6 kg) Concentration: 0.9%

Xylene, all isomers [CAS No.: 1330-20-7] RQ = 100 lbs. (45.36 kg) Concentration: 0.9%

Benzene [CAS No.: 71-43-2] RQ = 10 lbs. (4.536 kg) Concentration: 0.045%

### Clean Water Act (CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

### California Proposition 65

This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Diesel exhaust particulate

Naphthalene: 1.98%

Ethylbenzene: 0.9%

Benzene: 0.045%

Toluene: 0.045%

### New Jersey Right-to-Know Label

Fuel Oil

### Additional Remarks

Federal Hazardous Substances Act, related statutes, and Consumer Product Safety Commission regulations, as defined by 16 CFR 1500.14(b)(3) and 1500.83(a)(13): This product contains "Petroleum Distillates" which may require special labeling if distributed in a manner intended or packaged in a form suitable for use in the household or by children. Precautionary label dialogue should display the following: **DANGER: Contains Petroleum Distillates! Harmful or fatal if swallowed! Call Physician Immediately. KEEP OUT OF REACH OF CHILDREN!**

## SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

### REVISION INFORMATION

Version Number 3.0

Revision Date 5/31/2006

Print Date Printed on 5/31/2006.

### ABBREVIATIONS

AP: Approximately	EQ: Equal	>: Greater Than	<: Less Than	NA: Not Applicable	ND: No Data	NE: Not Established
ACGIH: American Conference of Governmental Industrial Hygienists				AIHA: American Industrial Hygiene Association		
IARC: International Agency for Research on Cancer				NTP: National Toxicology Program		
NIOSH: National Institute of Occupational Safety and Health				OSHA: Occupational Safety and Health Administration		
NPCA: National Paint and Coating Manufacturers Association				HMIS: Hazardous Materials Information System		
NFPA: National Fire Protection Association				EPA: US Environmental Protection Agency		

### DISCLAIMER OF LIABILITY

## CITGO No. 2 Fuel Oil, All Grades

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

---

\*\*\*\*\* END OF MSDS \*\*\*\*\*

# Department of Consumer Affairs Contractors State License Board



## Contractor's License Detail - License # 722253

**⚠️ DISCLAIMER:** A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

- CSLB complaint disclosure is restricted by law (B&P 7124.6). If this entity is subject to public complaint disclosure, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.
- Per B&P 7071.17, only construction related civil judgments reported to the CSLB are disclosed.
- Arbitrations are not listed unless the contractor fails to comply with the terms of the arbitration.
- Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

<b>License Number:</b>	722253	<b>Extract Date:</b> 12/21/2009
CORNERSTONE ENVIRONMENTAL CONTRACTORS INC		
<b>Business Information:</b>	3527 MT DIABLO BLVD #290 LAFAYETTE, CA 94549-3815	
	Business Phone Number: (925) 299-9225	
<b>Entity:</b>	Corporation	
<b>Issue Date:</b>	05/02/1996	
<b>Expire Date:</b>	05/31/2010	
<b>License Status:</b>	This license is current and active. <b>All information below should be reviewed.</b>	
<b>Classifications:</b>	CLASS	DESCRIPTION
	A	<u>GENERAL ENGINEERING CONTRACTOR</u>
<b>Certifications:</b>	CERT	DESCRIPTION
	HAZ	<u>HAZARDOUS SUBSTANCES REMOVAL</u>
<b>Bonding:</b>	CONTRACTOR'S BOND	
	This license filed Contractor's Bond number <b>SC6300342</b> in the amount of <b>\$12,500</b> with the bonding company <u>AMERICAN CONTRACTORS INDEMNITY COMPANY.</u>	
	<b>Effective Date:</b> 03/02/2009	
	<u>Contractor's Bonding History</u>	
	BOND OF QUALIFYING INDIVIDUAL	
	1. The Responsible Managing Officer (RMO) RANDY LEWIS FOWLER certified that he/she owns 10 percent or more of the voting stock/equity of the corporation. A bond of qualifying individual is <b>not</b> required.	
	<b>Effective Date:</b> 07/02/1996	
<b>Workers' Compensation:</b>	This license has workers compensation insurance with the <u>STATE COMPENSATION INSURANCE FUND</u>	
	<b>Policy Number:</b> 1443607	
	<b>Effective Date:</b> 01/01/2003	
	<b>Expire Date:</b> 01/01/2011	
	<u>Workers' Compensation History</u>	

Personnel listed on this license (current or disassociated) are listed on other licenses.



[Conditions of Use](#) | [Privacy Policy](#)  
Copyright © 2009 State of California

PLACEWORKS LLC  
1501 PACIFIC AVE  
ALAMEDA, CA 94501 1237  
510-491-9400

1257

Date: 12/21/09

11-35-1210  
21

Pay to the Order of Alameda County Environ Health \$ 1,581.-

Fifteen hundred eighty-one Dollars

Bank of America



Customer Since  
1984

San Francisco, Calif.  
145 Montgomery St  
San Francisco, CA  
95615-4218

For TAMR SR0016150

*[Signature]*

⑆ 2 10003581 257 00333 37234 ⑆

ALAMEDA COUNTY OFFICE



**HEALTH AND SAFETY**

SFTM

for

**PLACEWORKS LLC**  
Emeryville, CA

**December 2009**

---

Prepared for:

Placeworks LLC  
Stuart Rickard  
1501 Pacific Ave.  
Alameda, CA

Prepared by:

Cornerstone Environmental Contractors, Inc.  
2746 Penasco  
San Clemente, CA 92673  
(949) 369-8220



**CORNERSTONE ENVIRONMENTAL CONTRACTORS, INC.  
HEALTH AND SAFETY PLAN**

**TABLE OF CONTENTS**

<u>Section</u>		<u>Page</u>
1.0	Purpose	3
1.1	HSP Amendments and Agenda	4
1.2	Interpretation of Regulations	4
2.0	Scope of Work/Site Profile	5
2.1	Site Location	5
2.1	Site Background	5
2.3	Anticipated Field Activities	5
	2.3.1 Scheduled Start and Completion Date	5
	2.3.2 Scope of Work	5
3.0	Project Team Personnel	6
3.1	Organizational Structure and Responsibilities	6
	3.1.1 Site Safety Officer	6
	3.1.2 Project Manager	7
	3.1.4 Other Field Personnel	7
3.2	Project Team Personnel	7
4.0	Safe Work Practices and General Hazards	8
	4.1 Purpose	8
	4.2 Scope and Applicability	8
	4.3 Enforcement	8
	4.4 Manager/Supervisor Responsibility	9
	4.5 Employee Responsibility	9
	4.6 Interpretation of SWP" s	9
	4.7 Safe Work Practices	9
	4.7.1 Personnel Training	9
	4.7.1.2 Site Safety Meetings	9
	4.7.2 Site Access	10
	4.7.3 Employee Personal Conduct	11
	4.7.4 Hazard Reporting	14
	4.7.5 Inspections	14
	4.7.6 Medical Surveillance	15
4.8	General Chemical and Physical Hazards	15

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
4.8.1 Chemical Hazards	15
4.8.2 List of Suspected Materials	15
4.8.3 Spill Prevention	15
4.9 Physical Hazards	15
4.9.1 On-Site Hazard Evaluation	15
4.9.1.1 Initial On-Site Evaluation	15
4.9.2 General Safety and Physical Hazards	19
4.9.3 Construction Hazards	23
4.9.4 Levels of Protection	24
4.9.4.1 Level D Protection	24
4.9.4.2 Level C Protection	24
4.9.4.3 Additional Safety Eqp. & Matls.	25
4.10 Crane Safety	25
4.11 Decontamination	25
4.11.1 Personnel	25
4.11.2 Equipment	25
4.11.3 Wastewater Disposal	25
5.0 Emergency Response	26
5.1 Site Emergency Contacts	26
5.2 Project Team Phone Numbers	26
5.3 Emergency Procedures	27
5.3.1 Follow-Up for Emergency Response	27
6.0 Record Keeping	28
7.0 Weapons Prohibition Policy	29

### LIST OF FIGURES

Figure 1	Site Map	Appendix D
Figure 2	Hospital Route Map & Directions	Appendix D

### LIST OF TABLES

Table 1, Hazardous Properties Information		Appendix B
Table 4.1, Atmospheric Hazard Guidelines/Action Levels		18
Job Safety Hazard Analysis (JSA's)		Appendix D

Appendix A	Forms
Appendix B	Hazardous Properties Information
Appendix C	Job Safety Analysis (JSA)
Appendix D	Exhibits/Maps

## **1.0 PURPOSE**

These safety guidelines are intended to outline pertinent precautionary measures that shall be taken to protect all Cornerstone Environmental Contractors, Inc.(CEC) project team members and its subcontractors from exposure to anticipated physical as well as chemical hazards associated with the planned field activities at the Placeworks site. Such measures have been established, based on information available at this time. These guidelines are subject to revision or amendment as the project progresses and/or as additional pertinent data is obtained.

All CEC personnel and subcontractors shall review the Site Specific Health and Safety Plan (HSP) and sign the HSP Review Acknowledgment Form (Appendix A of the HSP) stating that they understand and shall comply with the conditions of the HSP prior to starting work. This HSP has been developed for implementation of CEC personnel and their subcontractors who will be on-site prior to and during field activities. The entire HSP applies to CEC Project Team personnel and their sub-contractors who are performing work on the project site or who wish to obtain access to the site.

The HSP document addresses:

- CEC Injury and Illness Prevention Program
- Health and Safety policies and procedures for CEC project team field activities
- Minimum protection practices to be implemented during site activities
- Standard operating procedures
- Emergency response procedures

The HSP has been developed in consideration of applicable Federal, State and local regulations, industry guidelines, personnel monitoring data available from the site and professional standards of industrial hygiene and safety practices.

Copies of the HSP, including amendments and addenda, shall be maintained at the following locations:

- On-site in the CEC SSO or alternate field vehicle or Project field office
- Corporate offices of the CEC Project Team Members

Additional parties (i.e. non-CEC contractors and government agencies) may be on-site conducting activities which are not within the CEC Scope of Work. These parties shall operate under separate health and safety plans. Contractors should check in with the Site Safety Officer (SSO) when first entering the site or when returning after an absence of 48 hours or more.

## **1.1 HSP AMENDMENTS AND ADDENDA**

The HSP may be modified, as appropriate, in light of actual site conditions. Revisions or amendments to the HSP shall be written and distributed to all affected parties. All modifications or changes must be recorded on the "Changes to HASP" form located in Appendix A. HSP amendments must be approved by the SSO. Temporary changes shall be recorded in the SSO's site safety log, and written notice shall be conveyed to all affected personnel at tailgate safety meetings.

## **1.2 INTERPRETATION OF REGULATIONS**

The policies and procedures in the HSP shall be strictly interpreted to bring about maximum protection and compliance and shall take precedence over any conflicting safety instructions given elsewhere. However, if lawful and applicable governmental regulations are contrary to these policies and procedures, then such governmental regulations shall take precedence.

## 2.0 SCOPE OF WORK/ SITE PROFILE

### 2.1 SITE LOCATION

The site is located at 3645 San Pablo Ave., Emeryville, California. A site plan is illustrated as Exhibit 1, Appendix D of this HSP.

### 2.2 SITE BACKGROUND

Site Name: Placeworks

The site contains a former fuel oil tank that is no longer in service. A 4" port is available to access the tank cavity and extract and clean the tank.

### 2.3 ANTICIPATED FIELD ACTIVITIES

#### 2.3.1 TENTATIVE START AND COMPLETION DATES

Start date: TBD

Completion date: 1 day after start

#### 2.3.2 SCOPE OF WORK

The scope of work for this site includes:

- pump all product & liquids from the tank
- triple rinse the tank and vacuum out all liquids
- inert the tank using dry ice
- fill the tank with cement slurry mix & grout vent & access port

A detailed Job Safety Analysis for each task described above that includes fire, explosion, chemical and physical hazards has been included in Appendix C.

Health and safety procedures shall be implemented by CEC personnel during the performance of all construction activities.

## **3.0 PROJECT TEAM PERSONNEL**

### **3.1 ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES**

The Site Safety Officer, (SSO) or his alternate will be present whenever the CEC project Scope of Work is in progress, coordinate all site safety activities for CEC personnel and subcontractors, and interface with client staff involved in this project, and will observe that all CEC work is performed by CEC personnel and is safely conducted in accordance with this HSP.

The SSO will assess the adequacy of this plan during the course of the project and request modifications from the Project Manager (PM) when warranted. The SSO will provide consultation on new site developments and how they impact this plan. The SSO has the responsibility to document health and safety measures taken at the site including: compliance with the plan, enforcing levels of protection, environmental monitoring, accident reporting and record keeping. The SSO has the authority to temporarily suspend CEC field activities if personnel are endangered and to suspend an individual from field activities for infractions of this plan.

The following sections briefly describe the health and safety personnel responsibilities for the proposed field activities at the site.

#### **3.1.1 SITE SAFETY OFFICER**

The Site Safety Officer (SSO) is responsible for implementing the HSP. The SSO's specific health and safety duties include the following:

- Manage the development and implementation of the site-specific HSP;
- Conduct safety briefings and site-specific training for on-site personnel; **MAKE SAFETY MEETINGS SPECIFIC TO THE PROJECT, NOT CANNED PRESENTATIONS**
- Modify and/or develop new procedures whenever site or environmental conditions change as a result of either natural causes or site operations;
- Investigate any accidents and incidents that occur at the site;
- Stop work if it is determined that an imminent safety hazard or potentially dangerous situation exists. Implement evacuation procedures, including shutting down appropriate equipment, removing equipment from downwind areas, and coordinating necessary emergency services on-site;
- Assure that all necessary personal protective equipment (PPE) and other safety equipment are available on-site.

### **3.1.2 PROJECT MANAGER/SITE SUPERINTENDENT**

The Project Manager/Site Superintendent (PM) is responsible for overall operations during on-site field work. The PM is directly responsible for the implementation of the HSP and for the protection of surrounding facilities. The PM may also serve as the SSO.

The PM's specific health and safety duties include the following:

- Verify that all personnel assigned to the project have received the necessary medical clearance and health and safety training.
- Arrange for on-site first-aid facilities and offsite emergency medical care, as described by the HSP.
- Assign key safety duties and responsibilities to team members.
- Monitor and initiate revisions to the site HSP, as necessary, by coordinating with the SSO;
- Report any accidents or exposures to the SSO, as required.
- Coordination of all construction related safety activities;
- Perform periodic on-site inspections to ensure that the HSP is being followed;
- Oversee the correct maintenance of the heavy equipment;
- Provide for the proper decontamination of personnel and equipment.

### **3.1.4 OTHER FIELD PERSONNEL**

All other project field personnel will be responsible for understanding and complying with all health and safety requirements and will have been trained for the hazards and protection involved on this particular project.

### **3.2 PROJECT TEAM PERSONNEL**

Cornerstone PM/ SSO: Carl Davis

Consultant/Client PM: Stuart Rickard

## **4.0 SAFE WORK PRACTICES AND GENERAL HAZARDS**



#### **4.1 PURPOSE**

The purpose of this HSP and the following Safe Work Practices (SWP's) set forth herein is to prevent injury and illness to persons and prevent damage to property for all CEC activities. The SWP's are integral to this HSP.

#### **4.2 SCOPE AND APPLICABILITY**

This HSP and following SWP's shall be effective as of the date of issuance. All members of the CEC staff shall comply with these SWP's and the HSP under all circumstances where they are applicable.

Employees acting in a supervisory capacity, either regularly or temporarily, shall require all employees, contractors, or subcontractors to comply with all applicable safety instructions and SWP's. If a difference of opinion arises in the application or interpretation of the SWP's, the decision of the SSO will be followed

#### **4.3 ENFORCEMENT**

All CEC Project Team personnel (including subcontractors) are required to conduct themselves in a professional manner at all times. This conduct includes compliance with work rules established for the safety of the employees and others. Violation of established SWP's shall result at a minimum in the following progressive disciplinary actions:

- First offense: A written warning shall be issued to the individual. A copy of the written reprimand shall be placed in both the individuals and the SSO's project files. Serious violations may result in a two-day temporary suspension without pay.
- Second Offense: A second offense shall be considered an indication of continued disregard for health and safety requirements and shall result in immediate termination.

Any infraction which causes an immediate threat of serious harm or death to site personnel, in the opinion of the PM or SSO, may result in immediate termination, thus bypassing the progressive discipline procedure.

The CEC Project Team personnel shall be provided with a copy of the HSP for review which includes the requirements set forth in the Safe Work Practices. This will provide project personnel with adequate notice of the standards to which they are being held. Each employee is required to discuss questions as to the applicability of a particular regulation with his immediate supervisor or the SSO.

#### **4.4 MANAGER/SUPERVISOR RESPONSIBILITY**

Each manager or supervisor is responsible that all employees, contractors, or subcontractors under his or her jurisdiction are familiar with this HSP , attached SWP's and their application.

#### **4.5 EMPLOYEE RESPONSIBILITY**

Each employee is required to know and understand this HSP and each of the SWP's which apply to the work they are performing during CEC operations. Any questions regarding health and safety should be directed to the SSO and/or the immediate supervisor.

#### **4.6 INTERPRETATION OF SWP'S**

These policies, procedures and SWP's of the HSP shall be interpreted as detailed in the CEC Injury and Illness Prevention Program.

#### **4.7 SAFE WORK PRACTICES**

##### **4.7.1 PERSONNEL TRAINING**

All site personnel must be trained in accordance with the standards set forth in Title 29 or the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120), enforced by the Occupational Safety and Health Administration (OSHA). In addition, each employee will be familiar with the requirements of this HSP and will participate in site activity and safety briefings. The SSO will have completed the 8-hour Site Supervisor course, have current training in first aid and CPR, and any additional training appropriate to the level of site hazards. Subcontractor personnel who will work in areas which have been monitored and fully characterized indicating that exposures are under permissible exposure limits and published exposure limits where respirators are not necessary, and the characterization indicates that there are no health hazards or the possibility of an emergency developing, shall receive a minimum of 24 hours of instruction off the site, and the minimum of one day actual field experience under the direct supervision of a trained, experienced supervisor.

##### **4.7.1.2 SITE SAFETY MEETINGS**

Daily site safety orientation/training meetings will be conducted by the SSO (1) before field personnel begin work at the site, (2) when modifications are made to the HSP, and (3) when additional personnel begin work. The meetings will be attended by all personnel involved in field activities. The meeting agenda will include, but not necessarily be limited to the following:

- Description of the assigned tasks and associated potential hazards.
- Coordination of site activities

- Identification of methods and precautions to prevent injuries
- Emergency planning.
- Modification of the HSP.
- Input from field personnel on health and safety issues pertaining to site activities.
- Collection of each attendee's signatures, acknowledging receipt and understanding of the HSP and agreement to comply.

#### 4.7.2 SITE ACCESS

Personnel requesting entry to the CEC work zones to observe activities or tasks are required to receive a site safety orientation. Visitors are required to check in with the SSO to obtain health and safety updates regarding site activities. Personnel wishing to enter the work area must announce their presence to the SSO or alternate, state their intentions to the SSO and log in and out.

#### SITE ENTRY PROCEDURES

The on-site field activities may attract third parties such as observers, visitors, or auditors. In order to protect the safety of third parties, the SSO will mark a restricted area using barriers and highly visible tape. Only persons who meet the safety training requirements of this HSP and who are in possession of the required PPE will be allowed in the restricted area.

In addition, all field personnel must sign the HSP acknowledgment form at the beginning of this document; their signatures certify that they have read and understand the HSP requirements. All site personnel will be given site-specific health and safety training before working at the site. The following procedures will be followed at the start of field activities:

- Complete the necessary notifications (e.g., fire department and utilities) before site entry.
- Designate an emergency vehicle and confirm the locations of the fire extinguisher, first-aid kit, telephone, drinking water, rest rooms, and rest areas.
- Check the weather report and determine the wind direction. Set up the support zone and decontamination line, and locate the upwind access point.
- Assess present site conditions and conduct initial site monitoring to delineate the hot zone and level of protection required. Initiate site monitoring in Level D PPE with frequent

monitoring and follow action levels for upgrade.

- Assemble work group and discuss zone delineation, present conditions, levels of protection, responsibilities, access points, decontamination procedures, and emergency site egress point(s).

## WORK ZONES

The operational history of the site indicates a low potential for elevated PID readings; therefore, Level D PPE will likely be appropriate during field activities. Two zones will be established; an exclusion zone (work area) and the surrounding support zone. If air monitoring results indicate that an upgrade to Level C is necessary, a decontamination zone will be established. The buddy system will also be used at all times.

Flagging and barricades will be placed to prohibit the entry of all unauthorized personnel to the exclusion zone. The specified level of protection will be worn in the exclusion zone at all times, and decontamination will be completed before exiting the zone.

### 4.7.3 EMPLOYEE PERSONAL CONDUCT

CEC operations personnel shall conduct themselves in a professional manner and abide by the following rules:

- All personnel entering the site must be adequately trained and thoroughly briefed on anticipated hazards, equipment to be worn, safety practices to be followed, emergency communications and procedures, and this HSP. Adequate initial training is considered to be training as described in the CEC Injury and Illness Prevention Program.
- NO ILLICIT DRUGS OR ALCOHOL ARE ALLOWED ON SITE AT ANY TIME. Employees and subcontractors shall review the CEC Substance Abuse policy prior to starting work.
- Employees shall immediately report all injuries and/or illnesses to their supervisor and the SSO. This includes minor or slight injuries.
- CEC project team personnel will notify the SSO of any unforeseen hazard or condition which becomes evident during work.
- Horseplay shall not be tolerated. Horseplay encompasses any frivolous behavior that increases the probability of an accident.
- Eating, drinking, smoking, applying cosmetics or lip balm, and chewing gum or tobacco shall not be allowed in the limited access and decon zones. The only exception will be consumption of liquids in designated areas and in containers for heat stress control.

- Changes in work practices or work rules shall be implemented only after approval by the SSO.
- Workers shall follow emergency procedures in accordance with the emergency response plan outlined in this plan.
- Employees shall abide by the provisions of this HSP , and all specific health and safety policies and procedures developed for the project.
- Safety guards, chains, and other equipment shall be in place prior to commencing operation of equipment.
- Employees shall clean up at the end of their shift before leaving the site. This includes pickup and proper storage of tools and PPE. Employees are required to shower when necessary.
- Personnel who work six (6) or more feet above the ground without guard rails are required to wear safety harnesses to prevent falls, unless working on a ladder.
- Tanks that employees may be required to ascend in order to operate valves or access man ways have been equipped with a 3/8 inch steel cable to be used as rigging allowing horizontal movement around the top of the tank. Lanyards shall be attached to the rigging when working on top of these tanks.
- Full protection lanyard length shall not exceed four (4) feet.
- Employees shall attach lanyard to anchor or rigging prior to leaving access ladders.
- Toe boards shall be installed for all elevated work surfaces in excess of seven (7) feet, where operations are conducted below. Where toe boards are clearly impractical such as on top of tanks, employees shall secure tools to the work surface with SSO approved tie-offs.
- Personnel shall obey all warning signs and safety tags.
- Personnel shall not take shortcuts and shall only use provided ladders, ramps, stairways and walkways.
- Personnel shall never cross through a flagged or barricaded area (exclusion zone, active maintenance area, etc.).
- Personnel shall not use compressed air or oxygen to blow dust or dirt from clothing, skin, or work surfaces. This practice could cause serious injury or create a fire hazard.

- Jewelry (rings, bracelets, neck chains, etc.) can cause accidents or increase the severity of accidents. It is recommended that jewelry not to be worn on the job.
- Electric cords, hoses and leads shall be protected or elevated. They shall be kept clear of walkways and other locations where they may be exposed to damage or create tripping hazards.
- Driving regulations and rules of the road shall be observed within the site. These regulations include maintaining speeds within posted limits and wearing seat belts while the vehicle is in motion. Refer to the Driving JSA.
- Assure illumination is adequate for the task. Be aware of glare or contrast conditions during operations. Outside illumination may be inadequate for detailed tasks between dusk and dawn.
- Employees shall immediately report all unusual odors to their supervisor.
- Personnel shall not perform excavations or work in trenches without prior approval from the SSO. Personnel shall not enter excavations greater than four (4) feet in depth unless the excavation is shored, sloped, or benched.
- Adequate means of egress or access shall be provided in all excavations and trenches. Access shall be placed at twenty-five (25) foot intervals in trenches.
- Wooden ladders shall not be painted, as this interferes with proper observation of flaws.
- The base ladder shall be one fourth (1/4) of the ladder length from the vertical plane of the top support. The extended ladder side rails shall be at least three (3) feet above the top landing.
- Prior to welding, cutting, or operations involving an open flame or ignition source, hazardous work permits (Appendix A) shall be obtained from the SSO.
- All maintenance activities shall utilize lock-out/tag-out procedures prior to commencement. Lock-out/tag-out procedures shall be coordinated by the SSO.
- In addition to lock-out/tag-out, equipment shall be brought to a zero mechanical state by neutralizing energy sources.
- Medicines and alcohol can potentiate the effects from exposure to hazardous substances. Prescribed drugs should not be taken by personnel involved in site activities where the potential for absorption, inhalation or ingestion of hazardous substances exists unless specifically approved by a qualified physician.

- All personnel doing hazardous work on-site shall adhere to the provisions of the Hazardous Work Permit using the form shown in Appendix A of the HSP. Hazardous work shall include any activities that have the potential for producing flames or sparks.

#### 4.7.4 HAZARD REPORTING

Every employee shall be alert for possible hazards that could result in accidents, and act promptly to eliminate the hazard. If the hazard cannot be corrected immediately, report the problem to your immediate supervisor and to the SSO.

Report all accidents (injury or non-injury) to the immediate supervisor and to the SSO. When you have been involved in an accident, the cause of the accident and how to avoid future incidents shall be shared with other on-site personnel during daily safety meetings. A "Near Miss" or "Injury Report" form shall be issued in the event of an accident or near miss. The forms are located in the appendix of the HSP. The Near Miss form is to be used to report observed hazards that could cause or contribute to a possible accident.

Properly reported hazards shall be effectively investigated and corrected. Supervisors and the SSO will promptly investigate all reported hazards and accidents. Hazards that could cause or contribute to accidents will be immediately corrected. After correction, a follow-up inspection will be scheduled to verify that corrections remain effective. A copy of each incident and accident report shall be referred to the SSO.

#### 4.7.5 INSPECTIONS

The SSO will perform inspections on a daily basis in the following areas:

<u>Description</u>	<u>Frequency</u>
First Aid Kits	Daily
Fire Extinguishers	Daily
Road Conditions	Daily
Barricades/Fences	Daily
Emergency Eye Washes	Daily
Work Area - Housekeeping	Daily
Supply Area - Housekeeping	Daily
Site Safety Plan Location	Daily
Forms, Telephone Numbers	
List, Hospital Maps	Daily

Perform inspections in accordance with the Daily Safety Checklist in Appendix A.



The subcontractors will inspect their equipment on a daily basis and document the findings on the daily field report. Any equipment that does not function correctly will be reported to the SSO immediately and removed from service.

#### **4.7.6 MEDICAL SURVEILLANCE REQUIREMENTS**

Medical surveillance is conducted as a routine program for CEC field staff in accordance with the requirements of 29 CFR 1910.120(f). There will not be any special medical tests or examinations required for staff involved in this project.

#### **4.8 GENERAL CHEMICAL AND PHYSICAL HAZARDS**

##### **4.8.1 CHEMICAL HAZARDS**

Based on known conditions and available information, the following suspected materials or chemical constituents could be encountered during field activities at the subject site.

-petroleum hydrocarbons from fuel oil

Hazards associated with this include:

- Skin contact with potentially contaminated soil, water, sediment:
- Inhalation of contaminated dust
- Inhalation of chemical vapors

##### **4.8.2 LIST OF SUSPECTED MATERIALS**

See Table 1, Hazardous Property Information, Appendix B

##### **4.8.3 SPILL PREVENTION**

Identify all potential sources that might cause a spill or release. Stage work as to avoid potential sources as much as physically possible. Install containment mechanisms as necessary to ensure containment of any releases. Have a spill kit or other spill absorbing materials on site prior to the start of work.

In the event of a release, contact Mr. Randy Fowler, CEC General Manager immediately. Mr. Fowler will coordinate contact with all other necessary persons and agencies.

#### **4.9 PHYSICAL HAZARDS**

The SSO shall conduct operations for anticipated hazards in accordance with the procedures in this HSP. Due to the planned field activities and anticipated site conditions, certain potential physical hazards have been identified.

Detail of Hazards and recommended controls are identified in Job Safety Analysis found in Appendix C.

#### 4.9.1 ON-SITE HAZARD EVALUATION

##### 4.9.1.1 INITIAL ON-SITE EVALUATION

An initial on-site survey will be conducted to evaluate on a preliminary basis, hazardous or potentially hazardous conditions before any work is conducted in the exclusion area. The baseline survey will evaluate dangers from fire, explosion, airborne contaminants (organic vapors or gases) and oxygen deficient atmospheres using a Combustible Gas Indicator (CGI) and Photo ionization Detector (PID) as described below.

**Organic Vapors and Gases:** Organic vapor or gas screening will be conducted with the use of a PID that is properly calibrated. The PID indicates total airborne concentrations to which the instrument is responding. Very high readings with these instruments may also indicate the presence of an oxygen deficient or explosive atmosphere.

**Inorganic Vapors and Gases:** The number of direct reading instruments with the capability to detect and quantify inorganic vapors and gases is extremely limited. Most PID have limited capability. Colorimetric tubes may be used if determined necessary by the SSO..

**Combustible Gases and Vapors:** Combustible gas or vapor concentrations at or above 10% of the lower explosive limit (LEL) requires that work be stopped and indicates that extreme caution should be exercised by the survey team. The team should withdraw from the area immediately and the SSO must be consulted prior to continuing the investigation.

Prioritizing the entry monitoring program is often dependent upon the condition of the site, ambient weather conditions and previously obtained information. In general, poorly ventilated and confined spaces should be monitored for hazardous substances, combustible gases and oxygen deficient atmospheres.

Project teams should approach the site from the upwind side as much as possible.

The hazard evaluation and control strategies discussed in this plan are intended to control the accident and injury risks associated with this project in order to ensure that all work can be conducted in a safe and healthful manner. CEC will make available its health and safety staff to support our activities at the site and institute other control measures that may become appropriate as work progresses.

### **Monitoring of Active Work Areas**

During the period of active work in any exclusion zone, real time monitoring and indirect monitoring will be performed by or under the direction of the SSO (or designated representative) in each active work area as deemed necessary. Real-time measurements will be made as near as feasible to the breathing zone of the worker with the greatest exposure potential in each active work area, (i.e. working in contaminated soil). Any concentration above the action levels will be reported to the SSO and action taken. As a minimum real time measurements will be taken every fifteen minutes, or when task or exposure conditions change (whichever frequency is less). Real time measurements will cease being taken when enough historical data is generated to warrant its cessation.

### **Calibration of Monitoring Equipment**

It is essential that each piece of Site monitoring equipment be calibrated on a routine basis. This assures that a given monitoring instrument is both working and working with a reasonable degree of accuracy. The manufacturers' instruction manual should always be available for specific calibration procedures and other information.

Table 4.1 represents the recommended guidelines and action levels for conducting the site air monitoring survey. These are provided for reference only as no monitoring is anticipated since no earthwork will be performed.

**TABLE 4.1**

**ATMOSPHERIC HAZARD GUIDELINES/ACTION LEVELS**

<u>EQUIPMENT</u>	<u>HAZARD</u>	<u>FREQ.</u>	<u>CONCEN.</u>	<u>ACTION</u>
Photo ionization Detector (PID)	Organics & Inorganics (Toxic)	Continuous*	>5 PPM	Withdraw to a Clean zone. Contact SSO.
Combustible Gas Indicator (CGI)	Comb. Gas Explosion	Periodic**	≥ 10%	Withdraw to a Clean zone. Contact SSO
Oxygen Meter	Oxygen	Periodic**	<19.5%, >22%	Withdraw to a clean zone. Contact SSO.

Note:

1. The SSO will determine hazards based upon monitoring and appropriate response action.

Footnotes:

1. \* Sustained for over 1 minute in the breathing zone. Monitoring shall be continuous during trenching activities where VOC's are suspected
2. \*\* Periodic; based on site hazards as determined by SSO

**REFERENCE ONLY, NOT ANTICIPATED AS NO EARTH WORK IS TO BE PERFORMED**

#### 4.9.2 GENERAL SAFETY AND PHYSICAL HAZARDS

*Appendix C contains the Job Safety Hazard Analysis Form which outlines potential hazards and safeguards for the work to be performed for each specific job. This form is to be reviewed at the start of each new project.*

##### **Sunburn**

Working outdoors with the skin unprotected for extended periods of time can cause sunburn to the skin. Excessive exposure to sunlight is associated with the development of skin cancer. Field staff should take precautions to prevent sunburn by using sunscreen lotion and/or wearing hats and long-sleeved garments.

*Heat stress, heat exhaustion and heat stroke are all potential hazards when working in warm weather. Shade and water will be provided at the job to be utilized during breaks at a minimum to meet OSHA Title 8 requirements. A thorough discussion of each follows:*

##### **Heat Stress**

The potential for heat stress is a concern when field activities are performed on warm, sunny days and is accentuated when chemical protective clothing is worn. Heat stress prevention measures and monitoring will be implemented if site temperatures are above 70 degrees Fahrenheit (F).

Precautions to prevent heat stress will include work/rest cycles so that rest periods are taken before excessive fatigue occurs and regular intake of water to replace water lost from sweating. Work/rest cycles will be based on results of monitoring the heart rate (pulse) of each individual worker. Rest breaks will be long enough to reduce the heart rate (HR) to levels below those calculated according to the following method:

1. The worker will initially determine his or her resting HR before starting work activities.
2. At the start of the first rest period, the worker will determine his or her HR. This initial HR should not exceed the individual's age-adjusted maximum HR, which equals  $[(0.7)(220 - \text{age in years})]$ . At 1 minute into the rest period, the recovery HR will be determined. The recovery HR should not exceed 100 beats per minute.
3. If the initial HR exceeds the age-adjusted maximum HR, or the 1-minute recovery HR is greater than 110 beats per minute, then the next work period will be decreased by 10 minutes.

Heat stress due to water loss can be prevented. To prevent dehydration, water intake must approximate sweat loss. Water intake guidelines are as follows:

1. The sense of thirst is not an adequate regulator of water replacement needs during heat exposure. Therefore, water must be replaced at prescribed intervals.
  - a. Before work begins, drink two 8-ounce glasses of water.
  - b. During each rest period, drink at least two 8-ounce glasses of water.
2. Plain water, served cool, is excellent. An adequate supply of potable water and drinking cups will be readily available, such as in a support vehicle, to provide water during rest periods.
3. Adding salt to water is not recommended. Acceptable alternatives to water include dilute fruit juices and electrolyte replacement drinks diluted 3:1 with water. Do not use salt tablets!

An initial work/rest cycle of 1 hour work and 15 minutes rest is recommended for protection of staff when the heat stress hazard is high. The recommended cycle will be adjusted up or down on the basis of worker monitoring data, environmental conditions, and the judgment of the SSO. If at any time field team members recognize the signs or symptoms of heat stress before a scheduled rest period, they will notify the SSO immediately in order that a rest period can be called.

Heat stress, if not prevented, results in heat stress illnesses. Two critical illnesses, if not recognized and treated immediately, can become life-threatening. These are heat exhaustion and heat stroke. Heat exhaustion will result if the prevention measures described above are not implemented. Ignoring the signs and symptoms of heat exhaustion will lead to the development of heat stroke.

Heat stroke is an immediate, life-threatening condition that results because the body's heat-regulating mechanisms shut down and the body cannot cool itself sufficiently. As heat is excessively stored in the body, brain damage can result, causing permanent disability or death.

### ***Heat Exhaustion***

The signs and symptoms of heat exhaustion are headache, dizziness, nausea, weakness, fainting, profuse sweating, loss of appetite, approximately normal body temperature, dilated pupils, weak and rapid pulse, shallow and rapid breathing, possible cramps in abdomen and extremities, possible vomiting, difficulty walking, and/or skin that is cool and sweaty to the touch and pale to ashen-gray coloring.

First aid for heat exhaustion is as follows:

1. Immediately remove victim to the support area, or if you are the victim, proceed to the support area.

2. Decontaminate, if practical, before entering support area.
3. Start cooling, but be careful not to cause a chill (i.e., rest in shade and apply wet towel to forehead; open up and/or remove clothing to the extent practical, especially chemical-resistant clothing).
4. Have victim drink cool water slowly, but only if conscious and not in shock.
5. If the victim is vomiting and/or other signs and symptoms are not lessening within an hour, call for emergency help and/or transport the victim to the emergency room.

It is likely that a heat exhaustion victim will be unable to work for the remainder of the day.

### ***Heat Stroke (a.k.a. Sun Stroke)***

The signs and symptoms of heat stroke are skin that is hot and dry to the touch; flushing of the skin; body temperature > 105 degrees F; absence of sweating; mental confusion; deep, rapid breathing that sounds like snoring progressing to shallow, weak breathing; headache; dizziness; nausea; vomiting; weakness; dry mouth; convulsions, muscular twitching, sudden collapse; possible unconsciousness.

First aid for heat stroke is as follows:

1. Immediately remove the victim to the support area (before entering the support area, remove and dispose of the victim's chemical-resistant clothing).
2. Cool the victim rapidly using whatever means are available, including placing the victim in the shade, opening up and/or removing clothing, soaking clothing/skin with water and fanning, and placing the victim in vehicle using air conditioning on maximum.
3. Do not give drinking water to victim.
4. Treat for shock, if needed.
5. Transport the victim to the emergency room or call for emergency help; no exceptions for heat stroke victim.

### **Explosion/Fire**

Due to the nature of operations and products at the project site, the potential exists for the generation of explosive atmospheres or fires under certain situations. Although controls exist at the site the potential for fire or explosion shall be evaluated by the SSO.

Vehicles and heavy equipment shall be equipped with Type A-B-C rated fire extinguishers. Extinguishers shall be located at fixed locations and employees shall be instructed in their

proper location and use. On-site water trucks can be utilized in the event of an on-site structure or vegetation fire.

### Fire Prevention

The Fire Department has the primary responsibility for fighting fires. However, all personnel are responsible for being alert to possible fire hazards. In the time period between reporting and arrival of the fire equipment, the employee may be required to participate in incipient fire-fighting activities. Therefore, the following actions shall be taken:

- All personnel shall be adequately trained in fire prevention, fire-fighting techniques and essential precautions to prevent injury.
- All personnel shall be adequately trained in the use of fire extinguishers.
- All fire extinguisher apparatus shall be kept in a ready condition and accessible at all times.
- Charged fire extinguishers shall not be placed on the open ground or on floors. This is a universal indication of a discharged fire-extinguisher.
- All CEC fire extinguishers are rated A-B-C. Fire extinguishing substances that are conductors of electricity (e.g. water) shall not be used for electrical fires.
- Only the minimum required supply of paints, solvents, or other flammables shall be removed from storage. At no time shall the quantity removed exceed one days working supply.
- Combustible products of rubbish, waste or other residues shall not be allowed to accumulate. Oil soaked rags and material subject to spontaneous combustion shall only be stored in non-combustible containers with self-closing lids.
- All gasoline, flammable solvents, and liquids shall not be stored inside a building unless the structure has been approved for flammable storage containers. Only SSO approved storage cabinets shall be used for all flammable liquids, paints or solvents.
- Flammable liquids shall be stored in locations that will not interfere with evacuation of the area in case of a fire.
- Smoking, striking of matches, or other sources of ignition are only permitted within designated SMOKING areas.
- Cigarette butts, matches or other similar materials shall only be discarded in approved non-combustible containers in designated smoking areas.



- If it is necessary to evacuate the building, do not stop to get anything -- JUST GET OUT -- and assemble in the predetermined evacuation assembly points.

#### 4.9.3 CONSTRUCTION HAZARDS

##### Excavation Hazards

A danger exists during excavation activities from ground movement. The hazards include falls, engulfment, and movement of heavy equipment during soil shifting. Personnel shall not enter excavations greater than four (4) feet in depth and shall observe excavation walls at all times for signs of sloughing and cracking. Personnel not spotting the operator, or entering the trench, shall not stand at the edge of excavations and shall maintain a minimum distance of three (3) feet from the edges of all excavations. Barricades, caution tape or other measures shall be used to prevent accidental entry by the public or personnel.

##### Buried and Overhead Utilities

Buried electrical and telephone transmission lines may be present at the site. If possible, underground utility locations shall be identified prior to excavation operations. The excavation must be cleared by Underground Service Alert, the utility company, or utility owner before any excavation activities are initiated. Excavation areas will be adjusted as necessary to avoid underground obstructions. Danger of electrocution exists from equipment such as drilling towers and backhoe arms contacting overhead power lines. All equipment shall maintain a minimum distance of ten (10) feet from overhead lines.

##### Noise

CEC Project Team personnel may be exposed to noise levels in excess of eighty-five (85)dB(A) during some site activities. These activities may include construction, excavation and drilling operations.

CEC Project Team personnel shall receive site-specific training regarding noise exposure, at least annually, during a weekly safety meeting. The SSO shall advise all personnel about those site activities for which there is the potential for exposure to high noise levels.

Hearing protection, such as ear plugs or ear muffs, shall be available at the site for use by personnel who must work in high noise areas. This protection shall be mandatory for all personnel who are exposed to levels in excess of eighty-five (85) decibels, A-weighted, during site activities. The SSO shall designate appropriate hearing protection, based on noise levels and length of exposure.

##### Communication

If verbal communication is impeded by heavy equipment noise or the use of PPE, and

signals to be used between personnel within the exclusion zone will be reviewed during the site safety meeting conducted before the start of site work.

#### 4.9.4 LEVELS OF PROTECTION

For the described activities, Level D PPE will be utilized. All changes in the level of protection will be documented in the field log, along with the names of the personnel affected.

Personnel protection for Levels D and C are described in the following sections.

##### 4.9.4.1 LEVEL D PROTECTION

Level D protection requires the following:

- Long pants and long-sleeved shirt, or cotton overalls.
- High visibility vest, (Class II Safety Vest at a minimum)
- Gloves
- Boots, leather or chemical-resistant, steel toe.
- Hard hat.
- Hearing (when appropriate) and eye protection/safety glasses.
- Long sleeve shirts (as necessary for specific client requirements)

Level D protection is primarily a work uniform. It may be worn initially at the site because exposure to levels above the permissible exposure limits for airborne contaminants, splashes, and immersion are not likely to occur.

##### 4.9.4.2 LEVEL C PROTECTION

Level C will be worn if airborne contaminants exceed the action level. Level C protection requires the following:

- Full-face or half-face, air purifying, cartridge-equipped respirator with HEPA/organic chemical cartridges.
- Long pants and long-sleeved shirt, or cotton coveralls.
- Coated Tyvek.
- Nitrile gloves.
- Boots, leather or chemical-resistant, steel toe and shank.
- Hard hat.
- Hearing and eye protection (when appropriate).

The main selection criteria for Level C is that the conditions warrant wearing air-purifying

devices. The breathing zone air must be monitored thoroughly when personnel are wearing air-purifying respirators. Frequent surveillance using direct-reading instruments must be conducted to detect changes in air quality necessitating a higher level of respiratory protection.

#### 4.9.4.3 ADDITIONAL SAFETY EQUIPMENT AND MATERIALS

Additional safety equipment and materials will include the following:

- First-aid kit.
- Eyewash kit (must meet OSHA/ANSI specifications)
- Class A, B, C twenty (20) pound fire extinguisher.
- Telephone (Cellular or fixed station)

#### 4.10 **CRANE SAFETY**

Cranes are not expected to be used for this project. If conditions change and a crane is required the HSP must be modified to include crane safety and an appropriate JSA developed or modified.

#### 4.11 **DECONTAMINATION**

The Site Superintendent must make sure that all personnel and equipment are properly decontaminated before leaving the site. Equipment decontamination will be documented in the field log and will become part of the permanent project file.

##### 4.11.1 PERSONNEL

Boots and gloves will be washed in non-phosphate detergent and water. Tyveks (if worn) will be removed and bagged. If cotton coveralls are used, they will be bagged and washed before reuse. Respirators (if worn) will be removed, washed in non-phosphate detergent and water, and then rinsed. Nitrile gloves will be removed and disposed of in a plastic trash bag. Field personnel will wash their hands and faces on-site and will take a shower and wash their hair as soon as possible after leaving the site.

##### 4.11.2 EQUIPMENT

Equipment will be decontaminated as necessary. At a minimum, equipment which came in contact with impacted soil or other materials will be washed, or wiped clean.

##### 4.11.3 WASTEWATER DISPOSAL

Wastewater generated by the decontamination activities will be contained in fifty-five (55) gallon drums. This waste water will be disposed after receipt of the laboratory analysis.

#### **5.0 EMERGENCY RESPONSE PROCEDURES**

This section presents procedures for emergency response.

## 5.1 EMERGENCY CONTACTS\*\*

### OFF-SITE EMERGENCY TELEPHONE NUMBERS

Police Department	911
Fire Department	911
Ambulance	911
Poison Control (California)	800.777.6476
Chemtrec (Chemical Spill or Exposure Emergencies)	800.424.9300
Office of Emergency Services	800.852.7550
National Response Center	800.424.8802
Emergency Hospital: Alta Bates Summit Medical Center (directions & map located in appendix)	510.204.1303

## 5.2 PROJECT TEAM PHONE NUMBERS

### CORNERSTONE PERSONNEL

PM / SSO	Carl Davis	cell	925.324.0564
Project Director	Randy Fowler	office	925.478.4102
		cell	925.324.0560

### CONSULTANT/ CLIENT PERSONNEL

Project Manager	Stuart Rickard	office	510.499.9400
-----------------	----------------	--------	--------------

**\*\* The nearest land line phone is to be located upon arrival to the site and identified as to be used to contact 911 in case of emergency\*\***

## 5.3 EMERGENCY PROCEDURES

The following standard emergency procedures will be used by on-site personnel. The SSO will be notified of any on-site emergencies and will be responsible for ensuring that appropriate procedures and reporting are followed. Check with appropriate parties to determine what, if any, local emergency notification or procedures might be applicable for near by facilities.

Personnel Injury: If an injury occurs on-site, stabilize the injured person, follow the decontamination procedures as practical, and notify the SSO. The SSO will assess the nature of the injury. If the cause of the injury or the loss of the injured person does not affect the performance of site personnel, operations may continue, with the appropriate on-site field personnel initiating the appropriate first-aid and necessary follow-up. If emergency medical attention is required, call 911 immediately. Do not drive the injured person to the hospital.

Personal Protective Equipment / Other Equipment Failure: If any PPE or other equipment on-site fails to operate properly, the SSO will be notified and will determine the effect of this failure on continuing site operations. If the failure affects the safety or personnel or prevents the completion of the work plan tasks, all personnel will leave the exclusion zone until the situation is evaluated and appropriate action is taken.

Emergency Evacuation: On notification of a fire or explosion or other emergency that would require evacuation of the site, all site personnel will assemble in the pre-determined Emergency Evacuation gathering place. An emergency notification alarm system, such as an air horn or three (3) blasts of a vehicle horn will be decided upon during the daily tailgate meeting. In the event of a fire or explosion, all ignition sources will be shut off. The fire department or appropriate emergency response team will be alerted as necessary.

### 5.3.1 FOLLOW-UP FOR EMERGENCY RESPONSE

The SSO will submit a Near Miss or Accident Investigation/Injury Report to the Project Director documenting any circumstances necessitating emergency response or causing an accident/incident. Reports are contained in Appendix A of the HASP.

## 6.0 RECORD KEEPING

## **6.1 TRAINING RECORDS**

Pertinent personnel training records are maintained in the Field Notebook kept in each CEC vehicle. These records include:

- 40 HAZWOPER Training
- 8 Hour Refresher Training
- Respirator Fit Test
- CPR/ First Aid
- Medical Surveillance/Annual Physical
- Supervisor Training
- Specialized Training

Complete health and safety records are maintained on file at the Lafayette office.

## **6.2 ILLNESS AND INJURY REPORT**

All emergencies, accidents, and injuries shall be recorded and maintained in the, Lafayette, California office. This form shall be filled out and submitted to the corporate office within twenty-four (24) hours of an incident. All injuries or accidents, no matter how minor, shall be reported to the CHSO in order to assure the paperwork is completed in a timely manner. An Injury report form is included in Appendix A

## **6.3 TAILGATE SAFETY MEETING**

Tailgate safety meetings shall be recorded on the Daily Safety Meeting form. This form shall be kept as part of the corporate project file at the Lafayette, California office. A Daily Safety Meeting form is included in Appendix A.

## **6.4 INCIDENT INVESTIGATION REPORTS**

Investigations for accidents or incidents shall be recorded by the CHSO and maintained in the Lafayette, California office. Incident reports are found in Appendix A.

## **6.5 WORK PERMITS**

Confined space, hot work as well as other hazardous/special activities require a permit before performance. Necessary permits are found in Appendix A of the HSP. Permits must be reviewed and signed by the PM / SSO.

All project permits (Ground Disturbance, Hot Work, Authorization to Work, Confined

Space, etc.) shall be recorded and maintained on site until completion of the project.

## **6.17 ADDITIONAL REPORTING FORMS**

In addition to those forms detailed in the above sections; CEC HSP contains several other reporting forms in Appendix A. A complete list of these forms is below:

- Health and Safety Plan Acknowledgement
- Daily Safety Meeting
- Job Safety Analysis Form
- Equipment Checklist
- Hazardous Work Permit
- Near Miss Reporting Form
- Injury Report
- Daily Log
- Visitor Log
- Fall Protection
- Pre-work Property Damage Assessment Form

## **7.0 WEAPONS PROHIBITION POLICY**

No weapons of any type will be allowed at any Cornerstone work site. This restriction applies to all items that are generally understood to be weapons including, but not limited to: guns, knives and explosives. This prohibition includes both persons and their vehicles. Any violation of this policy will result in immediate removal from the work site and employment suspension.

Proper tools should be used for each specific field task as to avoid the need to carry any items such as knives, which may be deemed to have a dual purpose as a weapon. Safety knives that do not have open blades are allowed. Consult the Site Safety Officer for any questions regarding definitions of weapons.

## **APPENDIX A**

### **FORMS**

- **Health and Safety Plan Acknowledgement**
- **Daily Safety Meeting**
- **Equipment Checklist**
- **Hazardous Work Permits (confined space; hot work)**
- **Near Miss Reporting Form**
- **Incident Report**
- **Daily Log**
- **Visitor Log**
- **Pre-work Property Damage Assessment Form**
- **Fall Protection**
- **Changes to HASP form**



## **APPENDIX B**

### **Table 1 Hazardous Property Information**

## **APPENDIX C**

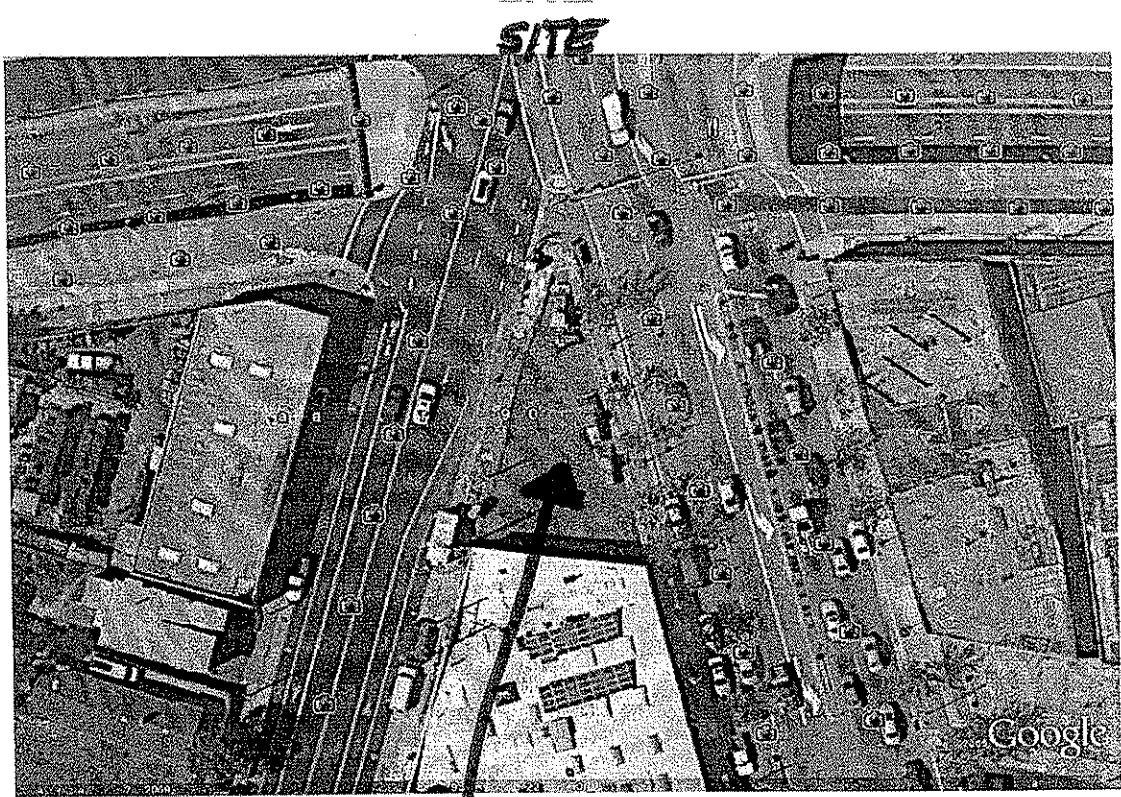
### **Job Safety Analysis Form(s)**

Attached as separate documents

## **APPENDIX D**

### **Exhibits / Maps**

- **Site Plan**
- **Hospital Route Map and Directions**



PLACEWORKS  
3645 SAN PABLO AVE  
EMERYVILLE CA









# HOSPITAL ROUTE MAP AND DIRECTIONS

Alta Bates Summit Medical Center  
2450 Ashby Ave., Berkeley, CA 94705

Ph: 510.204.1303

Total Time: 8 minutes Total Distance: 3.52 miles

A: 3645 San Pablo Ave, Emeryville, CA 94608-3901

-  1: Start out going SOUTH on SAN PABLO AVE toward 37TH ST. 0.1 mi
-  2: Turn SLIGHT LEFT onto 35TH ST. 0.2 mi
-  3: Merge onto CA-24 E via the ramp on the LEFT toward WALNUT CREEK. 1.5 mi
-  4: Take the CLAREMONT AVENUE exit. 0.2 mi
-  5: Turn LEFT onto CLAREMONT AVE. 0.7 mi
-  6: Turn SLIGHT LEFT onto COLLEGE AVE. 0.5 mi
-  7: Turn LEFT onto ASHBY AVE/CA-13. 0.3 mi
-  8: 2450 ASHBY AVE is on the LEFT.

