

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



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

June 27, 2002

Jos. T. Ryerson & Son  
c/o Don Mammimi  
Ryerson Steel & Aluminum  
1465 – 65<sup>th</sup> St.  
Emeryville, CA 94608

JUL 17 2002

Dear Messrs. Ryerson:

Subject: Fuel Leak Site Case Closure, Ryerson Steel & Aluminum, 1465 – 65<sup>th</sup> St.,  
Emeryville, CA 94608, Case No. RO0000054

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

#### **SITE INVESTIGATION AND CLEANUP SUMMARY**

Please be advised that the following conditions exist at the site:

- Residual petroleum hydrocarbon contamination in soil and groundwater remains in place at this site.
- A Construction Risk Management Plan addressing soil and groundwater handling procedures to reduce worker and public exposure to residual pollution at the property during construction is to be prepared and implemented prior to construction activities at the site.
- The responsible party is to record a deed restriction that prohibits single-family residential use of the property. The responsible party is to provide a recorded copy of the deed restriction to ACEH within 6 months of the date of this closure document.

JUL 17 2002

If you have any questions, please call Don Hwang at (510) 567-6746. Thank you.

Sincerely,



Donna L. Drogos, P.E.  
LOP Program Manager  
Underground Storage Tank Local Oversight Program

Enclosures:

1. Case Closure Letter
2. Case Closure Summary

cc: Mr. Chuck Headlee (w/enc)  
Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Ms. Toro Okamoto (w/enc)  
Division of Clean Water Programs  
Underground Storage Tank Cleanup Fund  
State Water Resources Control Board  
P.O. Box 944212  
Sacramento, CA 94244-2120

Mr. Ignacio Dayrit (w/enc)  
City of Emeryville  
1333 Park Avenue  
Emeryville, CA 94608

Jon Wactor, Esq. (w/enc)  
Wactor & Wick LLP  
180 Grand Avenue, Suite 950  
Oakland, CA 94612

D. Drogos, D. Hwang (w/orig enc), File

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REMEDIAL ACTION COMPLETION CERTIFICATION

June 27, 2002

Jos. T. Ryerson & Son  
c/o Don Mammimi  
Ryerson Steel & Aluminum  
1465 - 65<sup>th</sup> St.  
Emeryville, CA 94608

JUL 17 2002

Dear Messrs. Ryerson:

Subject: Fuel Leak Site Case Closure, Ryerson Steel & Aluminum, 1465 - 65<sup>th</sup> St.,  
Emeryville, CA 94608, Case No. RO0000054

This letter confirms the completion of site investigation and remedial action for the one (1) 10,000 gallon diesel underground storage tank formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact Don Hwang at (510) 567-6746 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung  
Director, Alameda County Environmental Health

JUL 17 2002

**CASE CLOSURE SUMMARY  
UNDERGROUND FUEL STORAGE TANK LOCAL OVERSIGHT PROGRAM**

**I. AGENCY INFORMATION**

Date: June 27, 2002

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502	Phone: (510) 567-6746
Responsible Staff Person: Don Hwang	Title: Hazardous Materials Specialist

**II. CASE INFORMATION**

Site Facility Name: Ryerson Steel & Aluminum		
Site Facility Address: 1465 - 65 <sup>th</sup> St., Emeryville, CA 94608		
RB LUSTIS Case No.: ---	Local Case No.: 799	LOP Case No.: RO0000054
URF Filing Date: 5/10/93	SWEEPS No.: ---	APN: 49-1503-1
<b>Responsible Parties</b>	<b>Addresses</b>	<b>Phone Number</b>
Jos. T. Ryerson & Son, Inc. c/o Mr. Don Mammimi	1465 65th Street, Emeryville, CA 94608	

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
---	10,000	Diesel	Removed	3/11/93
Piping			Removed	3/11/93

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and Type of Release: Unknown, UST & piping appeared intact upon removal, with no visible holes.		
Site characterization complete? Yes	Date Approved By Oversight Agency ---	
Monitoring wells installed? Yes	Number 10	Proper screened interval? Yes
Highest GW Depth Below Ground Surface 2.41 ft	Lowest Depth 6.32 ft	Flow Direction Variable, West 02-02, North to North-Northwest 11-93
Most Sensitive Current Use Potential drinking water source		

Summary of Production Wells in Vicinity: No production wells identified within ¼-mile of the site.

Are drinking water wells affected? No

Aquifer Name: Central Basin

Is surface water affected? No

Nearest surface water Name: 1,250 ft. East of San Francisco Bay

Off-Site Beneficial Use Impacts (Addresses/Locations): None identified

Reports on file? Yes

Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	1 – 10,000 gallon steel	Disposal; Erickson, Inc., Richmond, CA	3/19/93
Piping	Not reported	Not reported, assumed disposed with UST's	3/19/93
Free Product	None reported	---	---
Soil	40 cubic yards	Not reported	---
Groundwater	None reported	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP  
(Please see Attachment 3-12 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	na	na	57	57	Benzene	<0.003	na	1.3	6.5 <sup>3</sup>
TPH (Diesel)	<10	<1	Free phase product	9,700	Toluene	<0.003	na	8	5.4 <sup>3</sup>
TPPH <sup>1</sup>	na	na	11,000	na	Ethyl Benzene	<0.003	na	2.7	2.7 <sup>3</sup>
TEPH <sup>2</sup>	na	na	97,000	na	Xylene	<0.009	na	1.4	17 <sup>3</sup>
TPH (Motor Oil)	na	na	5,000	5,000	MTBE (if not analyzed, explain below)	na	na	na	<5
Oil & Grease	na	na	na	na	Other (8240/8270) <sup>7</sup>	na	na	340 <sup>5</sup>	44 <sup>6</sup>
Heavy Metals	na	na	26 <sup>4</sup>	26 <sup>4</sup>	-----	---	---	---	---

na - not analyzed

<sup>1</sup> - Total Purgeable Petroleum Hydrocarbons

<sup>2</sup> - Total Extractable Petroleum Hydrocarbons

<sup>3</sup> - Grab Groundwater Sample

<sup>4</sup> - 26 ppb Zinc, 7 6 ppb Arsenic, <10 ppb Chromium, and <5 ppb Lead, <5 ppb Nickel

<sup>5</sup> - Detections of up to 11 ppb 1,1-Dichloroethane, 2 ppb 1,2- Dichloroethane ; 1 5 ppb 1,1-Dichloroethene; 60 ppb cis 1,2-Dichloroethene; 46 ppb trans 1,1-Dichloroethene, 57 ppb Trichloroethene, and 3 7 ppb Vinyl Chloride, and 340 ppb Bis(2-ethylhexyl) Phthalate

<sup>6</sup> - Detections of up to <1 ppb 1,1-Dichloroethane, 1 2 ppb 1,2- Dichloroethane , <1 ppb 1,1-Dichloroethene, 24 ppb cis 1,2-Dichloroethene, 18 ppb trans 1,1-Dichloroethene, 44 ppb Trichloroethene, and 2 2 ppb Vinyl Chloride

<sup>7</sup> - Solvents detected as part of adjacent SLIC Site No 5567 (64<sup>th</sup> Street Properties)

Site History and Description of Corrective Actions:

March 11, 1993 - One 10,000 gallon underground diesel storage tank was removed, associated piping and fuel dispenser were also removed. Soil in UST excavation appeared stained and the presence of sheen noted on groundwater. Excavation sidewall soil samples and a groundwater grab sample were collected for laboratory analysis. The samples were analyzed for Total Petroleum hydrocarbons as diesel (TPHD) and benzene, toluene, ethyl benzene, and total xylenes (BTEX). 850 parts per billion (ppb) of TPH(D) was detected in the groundwater sample.

August 6, 1993 - Monitoring wells MW-1, MW-2 and MW-3 (these wells later renamed RMW-1, RMW-2 and RMW-3, respectively) installed surrounding the former UST location. MW-3 contained between 0.01 and 0.04 feet of floating free-phase hydrocarbons during sampling of the wells from August 11, 1993 through November 24, 1993. Additional sample dates for these wells were March 24, 1995, December 19, 2001, and April 25, 2002 and free phase product was not present.

August 1993 to April 2002 - Intermittent groundwater monitoring performed.

March 6, 1995 - Monitoring wells MW-2, MW-3, and MW-4 installed on the site. Up to 71 ppb TPPH and 260 ppb TEPH were detected in these wells.

July 5, 1995 - Grab groundwater samples, P-1 and P-5, were collected. 4,100 ppb TEPH-D was detected.

December 17, 2001 - Grab groundwater samples, DP-1-GW, DP-8-GW, DP-9-GW, DP-12-GW, DP-11-GW, and DP-13-GW were collected. Up to 1,500 ppb TPH(D) and 3,700 ppb TPH(Motor Oil) were detected.

2002 - Currently, the subject facility consists of a large warehouse/office building with an asphalted yard used for truck and car parking and for storage.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health provided that the Site Management Requirements listed below are implemented.		
Site Management Requirements: A Construction Risk Management Plan addressing soil and groundwater handling procedures to reduce worker and public exposure to residual pollution at the property during construction is to be prepared and implemented prior to construction activities at the site. The responsible party is to record a deed restriction that prohibits single-family residential use of the property. The responsible party is to provide a recorded copy of the deed restriction to ACEH within 6 months of the date of this closure document.		
Should corrective action be reviewed if land use changes? Yes		
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 6
List Enforcement Actions Taken: none		
List Enforcement Actions Rescinded: none		

V. ADDITIONAL COMMENTS, DATA, ETC.

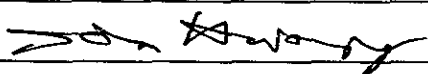
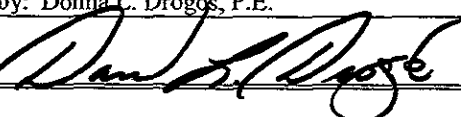
<p>Considerations and or Variances</p> <ul style="list-style-type: none"> <li>• Disposal destination of soil excavated during UST removal not reported</li> <li>• Overexcavation of contaminated soil not performed</li> <li>• Residual petroleum hydrocarbon contamination in soil and groundwater remains in place at this site</li> </ul>
--

**Conclusion:**

Residual groundwater contamination remains in place in the vicinity of the source area of the site. However, site perimeter wells in the current and historic downgradient directions detect low levels of petroleum hydrocarbons (up to 260 ppb TEPH) indicating the plume is stable and attenuating. The site, former UST location, and the area containing residual pollution is to be redeveloped as a paved parking lot.

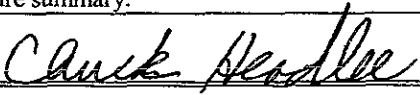
Based upon the information available in our files to date, Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment for the proposed land use (paved parking lot) provided that the Site Management Requirements specified above are implemented.

**VI. LOCAL AGENCY REPRESENTATIVE DATA**

Prepared by: Don Hwang	Title: Hazardous Materials Specialist
Signature: 	Date: 6/27/02
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 06/27/02

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

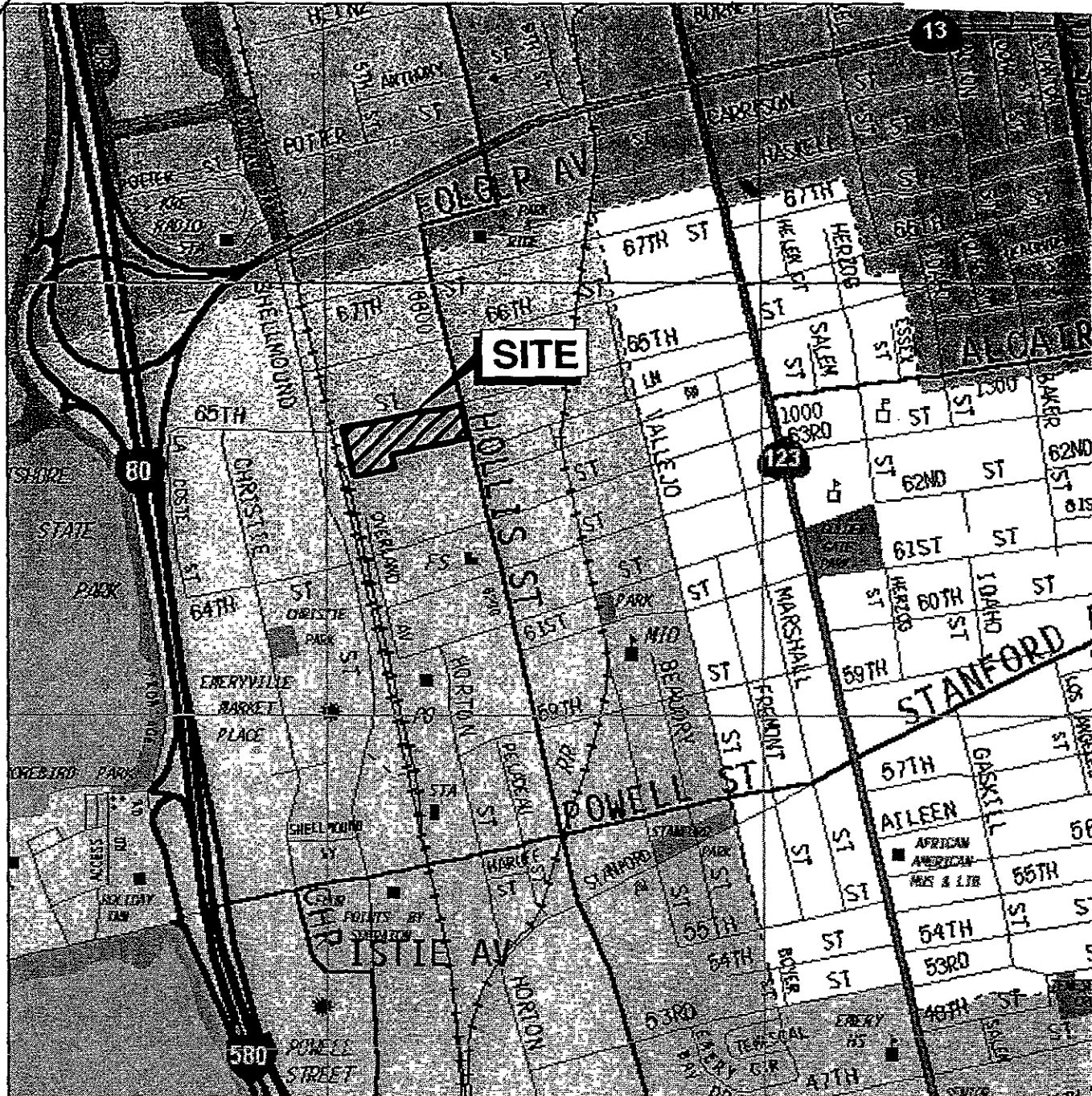
**VII. REGIONAL BOARD NOTIFICATION**

Regional Board Staff Name: Chuck Headlee	Title: Senior Engineering Geologist (acting)
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 6/29/02
Signature: 	Date: 6/29/02

**Attachments:**

1. Site Vicinity Map
2. Proposed Site Development Map
3. UST Removal Sample Location Map
4. UST Removal Soil and Groundwater Analytical Results
5. Monitoring Well Location Map
6. Monitoring Well and Direct Push Boring Location Map
7. Soil Analytical Data
8. Groundwater Elevation Table
9. Grab Groundwater Analytical Data Table
10. Groundwater Analytical Data Table
11. Groundwater Analytical Data Table
12. Groundwater Analytical Data Table
13. Monitoring Well Construction Data Table
14. Well Logs RMW-1, RMW-2, RMW-3 (3-pages)

This document and the related CASE CLOSURE REPORTER, shall be retained by the lead agency as part of the official site file



Base map: The Thomas Guide  
 Alameda County  
 2002



No scale

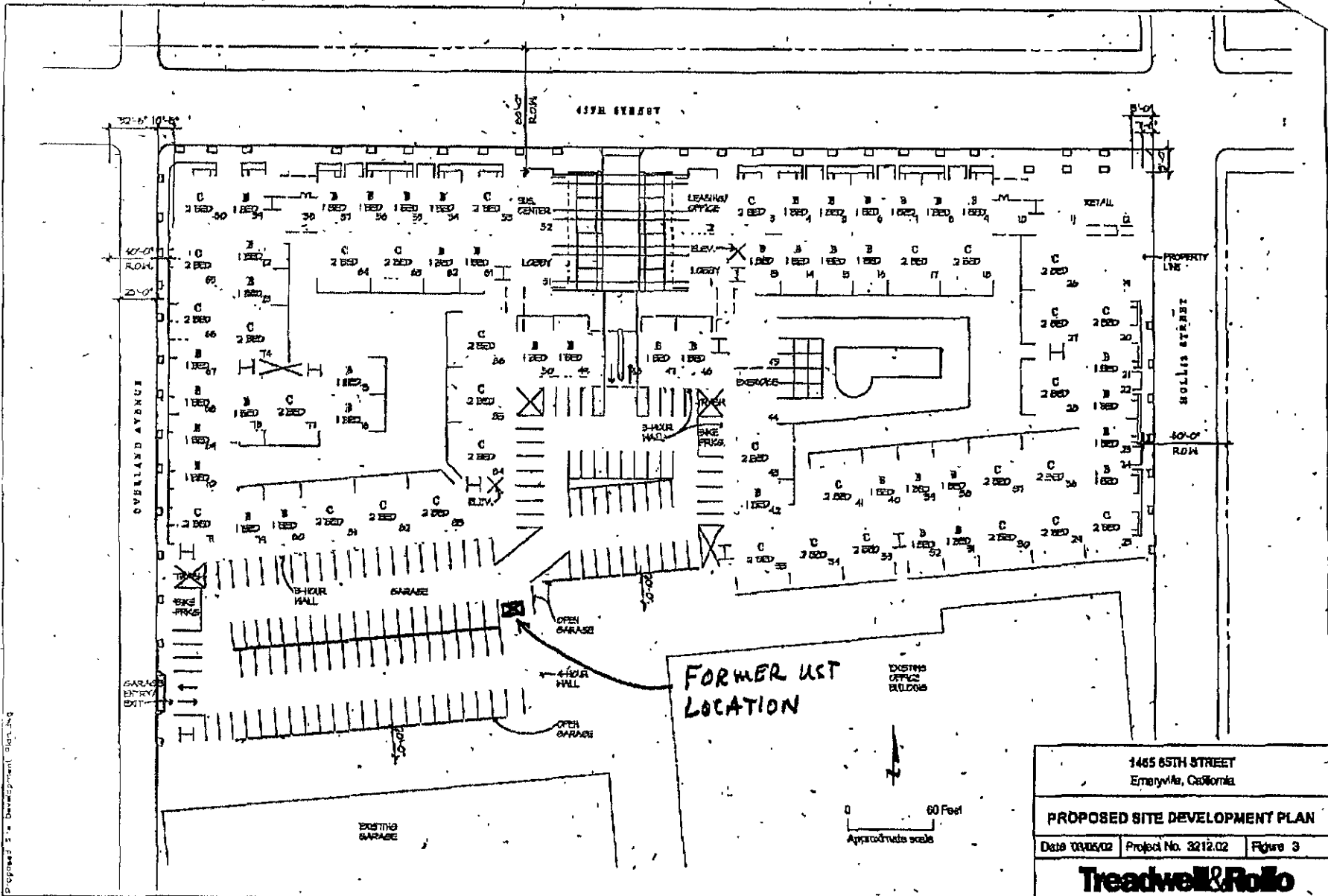
1465 65TH STREET  
 Emeryville, California

**SITE LOCATION MAP**

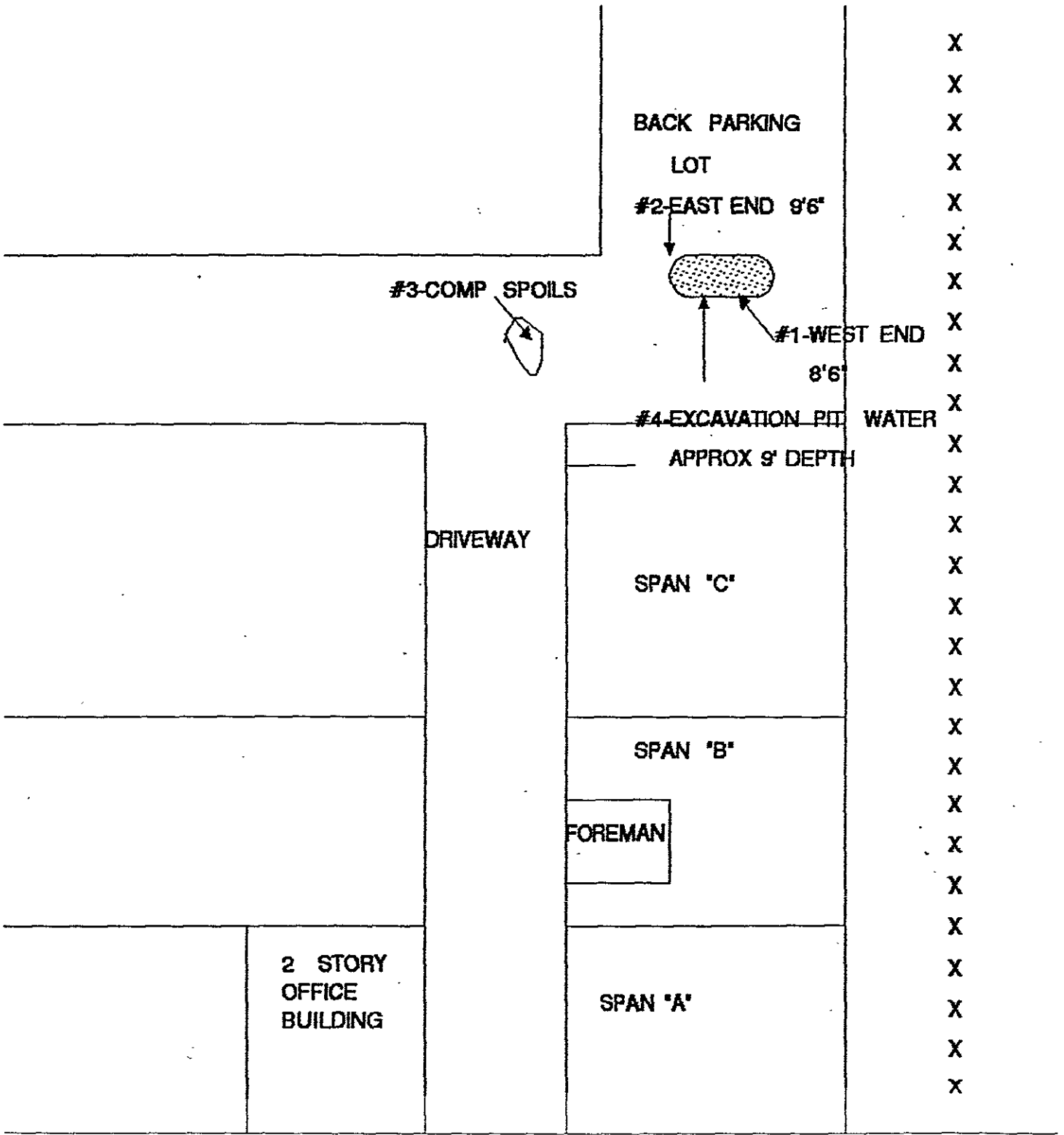
**Treadwell & Rollo**

Date 12/18/01 Project No. 3212.02 Figure 1





Proposed Site Development Plan.dwg



65TH STREET

**S E M C O**

1465 65TH STREET  
EMERYVILLE, CA

**Table 1**  
**Diesel Underground Storage Tank Removal**  
**Sample Results by Others**  
**1465 65th Street**  
**Emeryville, California**

Sample ID	Sample Date	Matrix	Results of Analysis					
			Benzene	Toulene	Ethybenzene	Xylenes	TPH as Diesel	STLC Ba
West End 8' 6"	3/11/93	Soil	<0.003	<0.003	<0.003	<0.009	<10	NA
East End 9' 6"	3/11/93	Soil	<0.003	<0.003	<0.003	<0.009	<10	NA
Comp Soils	3/11/93	Soil	<0.003	<b>0.007</b>	<0.003	<0.009	<b>26</b>	<b>0.5</b>
Excavation Pit Water	3/11/93	Water	<0.3	<0.3	<0.3	<0.9	<b>850</b>	NA

Notes

All soil results are reported in milligrams per kilogram (mg/kg)

All water results are reported in micrograms per Liter (ug/L)

<0.003 and ND = Not detected at or above the indicated laboratory reporting limit

**Bold indicates detection above laboratory reporting limit**

TPH = Total Petroleum Hydrocarbons

Comp Soils = Excavated Stockpiled Soil Sample

STLC Ba = Soluble Barium Based on the Waste Extraction Test

Source: Tank Removal Report, SEMCO, March 1993.

FOUNDRY AND OFFICE BUILDING

RAILROAD TRACKS

PARKING AND STORAGE YARD

EXTENT OF FORMER UST EXCAVATION

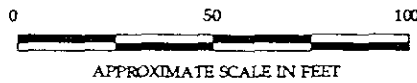
MW-1

MW-2

MW-3

BREUNERS BUILDING

APPROXIMATE PROPERTY LINE

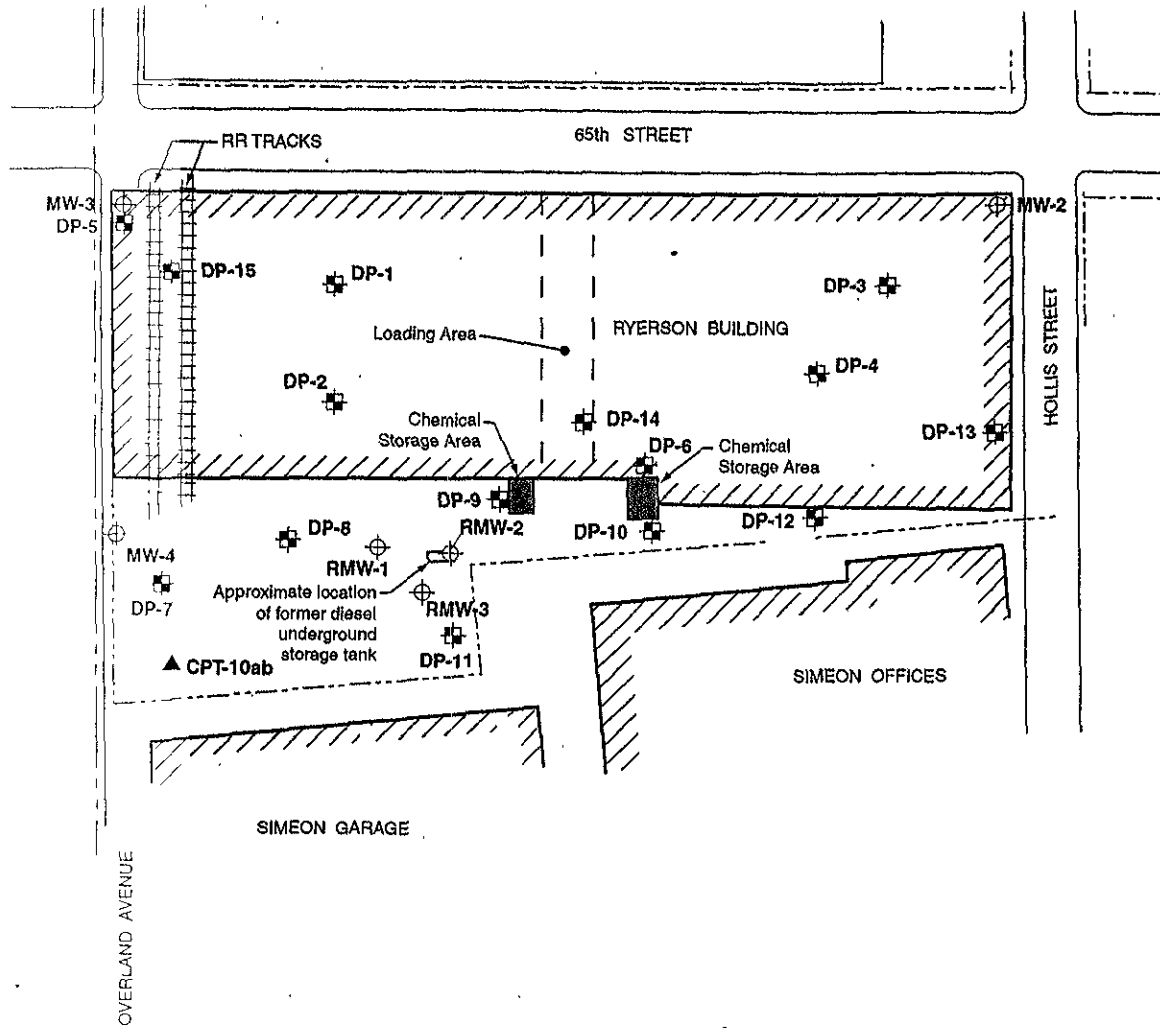


<b>EXPLANATION</b>	
⊕ MW-2	= MONITORING WELL





**HYDR**  **-**  
**ENVIR**  **NMENTAL**  
**TECHN**  **OLOGIES, INC.**

**SITE PLAN**  
 Ryerson Steel & Aluminum, Inc.  
 1465 65th Street  
 Emeryville, California 94608

Figure  
**2**  
 7-231 9/93



**EXPLANATION**

-  Existing Structures
-  CPT-10ab ▲ Environmental CPT location, December 13, 2001
-  DP-1 □ Environmental Direct Push Boring location, December 13 & 14, 2001
-  MW-2 ⊕ Groundwater monitoring well installed by others

0 100 Feet  
Approximate scale

1465 65th STREET Emeryville, California		
<b>TREADWELL &amp; ROLLO SAMPLING LOCATION PLAN</b>		
Date 01/04/02	Project No. 3212.02	Figure 2
<b>Treadwell &amp; Rollo</b>		

Reference First level Plan, 65th & Hollis, Emeryville, Ca, Thompson/Opus West, B.A.R. Architects, dated 5 September 2001.

Table 1

**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**  
Ryerson Steel and Aluminum, Inc.  
1465 65th Street  
Emeryville, CA 94608

Sample I.D. #	Sampling Date	TPHd (ppm)
MW-1 - 5.5'	8/6/93	<1.0
MW-2 - 5.5'	8/6/93	<1.0
MW-3 - 5'	8/6/93	<1.0

**Notes:**

TPHd: Total Petroleum Hydrocarbons as Diesel  
by EPA Method 8015 (DHS modified)  
ppm: Parts per Million

**Table 1**  
**Groundwater Elevation**  
**Groundwater Monitoring Wells**  
**1465 65th Street**  
**Emeryville, California**

Well ID	Date Measured	Top of Casing Elevation (Ft MSL)	Depth to Water (Ft BTOC)	Groundwater Elevation (Ft MSL)
MW-2	3/24/1995	19.45	3.03	16.42
	7/7/1995	19.45	4.20	15.25
	12/17/2001	19.45	3.49	15.96
	4/25/2002	19.45	3.98	15.47
MW-3	3/24/1995	15.24	2.72	12.52
	7/7/1995	15.24	6.22	9.02
	12/17/2001	15.24	3.26	11.98
	4/25/2002	15.24	6.32	8.92
MW-4	3/6/1995	14.02		
	3/24/1995	14.02	4.57	9.45
	7/7/1995	14.02	5.77	8.25
	12/17/2001	14.02	5.02	9.00
	4/25/2002	14.02	5.84	8.18
RMW-1	8/11/1993	14.38	4.87	9.51
	9/14/1993	14.38	4.94	9.44
	11/2/1993	14.38	5.13	9.25
	11/24/1993	14.38	5.07	9.31
	3/24/1995	14.38	3.61	10.77
	7/7/1995	14.38	4.18	10.20
	12/17/2001	14.38	4.0	10.38
	4/25/2002	14.38	4.51	9.87
RMW-2	8/11/1993	14.55	4.64	9.91
	9/14/1993	14.55	4.64	9.91
	11/2/1993	14.55	4.85	9.70
	11/24/1993	14.55	4.84	9.71
	3/24/1995	14.55	3.35	11.20
	7/7/1995	14.55	3.70	10.85
	12/17/2001	14.55	3.78	10.77
	4/25/2002	14.55	4.26	10.29
RMW-3	8/11/1993	14.15		
	9/14/1993	14.15	4.25*	9.90
	11/2/1993	14.15	4.53*	9.62
	11/24/1993	14.15	4.35*	9.80
	3/24/1995	14.15	2.95	11.20
	7/7/1995	14.15	3.70	10.45
	12/17/2001	14.15	3.34**	10.81
	4/25/2002	14.15	3.72**	10.43

Notes

Ft BTOC = feet below top of casing

Ft MSL = feet above mean sea level as referenced in the 1995 FKI report

NM = Not measured

Depth to water data for all dates except 12/17/01 and 4/25/02 by FKI and summarized in their 1995 report

\* = Corrected depth to water measurement made by HFI due to separate product phase on the water table

\*\* = Heavy Petroleum Hydrocarbon sheen observed on the groundwater purged from the well and/or on the laboratory sample

**Table 2**  
**Grab Groundwater Samples**  
**Metals and Hydrocarbons Analytical Results**  
**By Others and Treadwell Rollo**  
 1465 65th Street  
 Emeryville, California

Sample ID	Sample Date	Arsenic or 13 Priority Metals EPA 6000/7000 Series			TEPH as Diesel	TEPH as Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes
		Arsenic	Nickel	Zinc						
P-1	7/5/95	<5	--	--	--	--	<2	<2	<2	<2
P-5	7/5/95	<5	<5	26	4,100	--	<4	<4	<4	<4
DP-1-GW	12/17/01	--	--	--	120b	<250	<0.5	1.6	<0.5	0.61
DP-8-GW	12/14/01	--	--	--	580	3,700	<5.0	<5.0	<5.0	<5.0
DP-9-GW	12/17/01	--	--	--	310b	370	6.5	5.4	<5.0	<5.0
DP-12-GW	12/14/01	--	--	--	210	1,400	<0.5	3.3	1.0	5.2
DP-11-GW	12/17/01	--	--	--	1,500b,g	710	<0.5	3.1	1.5	6.6
DP-13-GW	12/17/01	--	--	--	460b,g	520	<0.5	3.4	2.7	17

Notes

All results are reported in micrograms per liter (ug/L)

Bold indicates detection above laboratory reporting limit

-- = Not Analyzed

TEPH = Total Extractable Petroleum Hydrocarbons

b = diesel range compounds are significant; no recognizable pattern

g = oil range compounds are significant

Priority metals include arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, tin, thalium, and zinc. Only arsenic and those metals detected in groundwater samples are included in the table.

Source: Data for samples P-1 and P-5 obtained from Erler & Kalinowski report dated 5 September 1995



Table 2a  
 Groundwater Monitoring Well Analytical Results  
 By Others and Treadwell Rollo  
 TPH and BTEX  
 1465 65th Street  
 Emeryville, California

Sample ID	Sample Date	TPHg	TPPH	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TEPH as Diesel	TEPH as Motor Oil	TEPH	Metals EPA 6000 Series		
													Arsenic	Lead	Chromium
RMW-1	8/11/1993	--	--	--	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--	--	--
	9/14/1993	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/2/1993	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/24/1993	57	--	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
	3/24/1995	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	210	<5	<5	<10
	12/19/2001	--	--	--	<0.5	<0.5	<0.5	<0.5	--	61b	<250	--	--	--	--
	12/19/2001	--	--	--	<0.5	8.0	<0.5	<0.5	--	80g	280	--	--	--	--
RMW-1GWDUP	4/25/2002	--	--	<5	<0.5	<0.5	<0.5	<0.5	--	190g	1,200	--	--	--	--
RMW-2	8/11/1993	--	--	--	1.3	<0.5	<0.5	0.59	<50	--	--	--	--	--	--
	9/14/1993	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/2/1993	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/24/1993	50	--	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
	3/24/1995	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	150	7.6	<5	<10
	12/18/2001	--	--	--	<0.5	<0.5	<0.5	<0.5	--	<50	<250	--	--	--	--
	4/25/2002	--	--	<5	<0.5	<0.5	<0.5	<0.5	--	<50	<250	--	--	--	--
RMW-3	8/11/1993	NS: Floating free-phase hydrocarbons 0.01 feet													
	9/14/1993	NS: Floating free-phase hydrocarbons 0.02 feet													
	11/2/1993	NS: Floating free-phase hydrocarbons 0.04 feet													
	11/24/1993	NS: Floating free-phase hydrocarbons 0.02 feet													
	3/27/1995	--	11,000	--	<10	<10	<10	<10	--	--	--	97,000	<5	<5	<10
	12/18/2001	--	--	--	<0.5	<0.5	<0.5	1.4	--	--	--	--	--	--	--
	4/25/2002	--	--	<5	<0.5	<0.5	<0.5	<0.5	--	9700b,g,h	5,000	--	--	--	--

**Table 2a**  
**Groundwater Monitoring Well Analytical Results**  
**By Others and Treadwell Rollo**  
**TPH and BTEX**  
**1465 65th Street**  
**Emeryville, California**

Sample ID	Sample Date	TPHg	TPPH	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TEPH as Diesel	TEPH as Motor Oil	TEPH	Metals EPA 6000 Series		
													Arsenic	Lead	Chromium
MW-2	3/23/1995	--	71	--	<0.5	<0.5	<0.5	<0.5	--	--	--	260	<5	<5	<10
	12/17/2001	--	--	--	<0.5	<0.5	<0.5	<0.5	--	<50	<250	--	--	--	--
	4/25/2002	--	--	<5	--	--	--	--	--	--	--	--	--	--	--
MW-3	3/23/1995	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	150	13	<5	<10
	12/17/2001	--	--	--	<0.5	<0.5	<0.5	<0.5	--	<50	<250	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/23/1995	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	190	<5	<5	<10
	12/19/2001	--	--	--	<2.5	<2.5	<2.5	<2.5	--	<50	<250	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FB-GW	12/19/2001	--	--	--	<0.5	<0.5	<0.5	<0.5	--	<50	<250	--	--	--	--
TRIP BLANK	4/25/2002	--	--	<5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
Indoor Air Cancer-Based RBSL	2001	NA	NA	NA	5.8E+03	NC	NC	NC	NA	NA	NA	NA	NV	NV	NV
Indoor Air Noncancer-Based RBSL	2001	NA	NA	NA	NA	5.3E+05 sol	1.7E+05 sol	1.6E+05 sol	NA	NA	NA	NA	NV	NV	NV

**Notes**

All results are reported in micrograms per liter (ug/L)

0.5 or ND - not detected at or above the indicated laboratory reporting limit

**Bold** indicates detection above laboratory reporting limit

-- - Not Analyzed

NS - Not Sampled

FB-GW - Field Blank of Distilled Water

RMW-1GW DUP - Duplicate Groundwater sample from well RMW-1

TPHg - Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015

TPPH - Total Purgeable Petroleum Hydrocarbons

TPPHd - Total Petroleum Hydrocarbons as Diesel by EPA Method 8015

TPH - Total Extractable Petroleum Hydrocarbons

NA - not applicable

NC - non carcinogen

NV - not volatile

RBSL - Residential Scenario Risk Based Screening Level for Fine-Grained Soil (RWQCB 2001)

sol - Solubility threshold (the calculated RBSL exceeds the solubility threshold of the chemical)

I&R data collected on 18 and 19 December 2001

Source - Final Site Investigation Report for the 64th and 65th Street Properties, Emeryville, California, EKI, 5 September 1995.

b - diesel range compounds are significant, no recognizable pattern

g - oil range compounds are significant

h - lighter than water immiscible sheen/product is present

**Table 2b**  
**Groundwater Monitoring Well Analytical Results**  
**By Others and Treadwell Rollo**  
**VOC and PAH**  
**1465 65th Street**  
**Emeryville, California**

Sample ID	Sample Date	VOCs							PAHs	
		1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl chloride	Bis(2-ethylhexyl) Phthalate	All Other PAHs
RMW-1	3/24/1995	<1.2	1.4	<1.2	16	10	53	<2.5	ND	ND
	12/19/2001	<0.5	1.3	1.5	12	8.5	31	<0.5	--	--
RMW-1GWDUP	12/19/2001	<0.5	2.0	1.3	18	13	48	<0.5	--	--
	4/25/2002	<1	1.2	<1	8.8	6.3	23	<1	--	--
RMW-2	3/24/1995	<0.5	0.96	<0.5	12	8.4	26	<1	ND	ND
	12/18/2001	<0.5	1.5	<0.5	9.8	4.4	27	<0.5	--	--
	4/25/2002	<1	1.2	<1	5.9	2.8	21	<1	--	--
RMW-3	3/27/1995	11	<0.5	1.4	25	22	36	3.7	ND	ND
	12/18/2001	1.5	<0.5	<0.5	20	2.8	12	2.4	340	ND
	4/25/2002	<1	<1	<1	16	18	42	2.2	--	--
MW-2	3/23/1995	<1.2	<1.2	<1.2	60	46	2.5	<2.5	ND	ND
	12/17/2001	<0.5	<0.5	<0.5	12	0.99	<0.5	<0.5	--	--
	4/25/2002	<0.5	<0.5	<0.5	5.6	<0.5	<0.5	<0.5	--	--
MW-3	3/23/1995	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	ND
	12/17/2001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
	4/25/2002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MW-4	3/23/1995	<1.2	<1.2	<1.2	28	16	54	<2.5	ND	ND
	12/19/2001	<2.5	<2.5	<2.5	29	12	57	<2.5	--	--
	4/25/2002	<1	<1	<1	23	14	42	<1	--	--
MW-4D	4/25/2002	<1	<1	<1	24	14	44	<1	--	--
FB-GW	12/19/2001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
TRIP BLANK	4/25/2002	<1	<1	<1	<1	<1	<1	<1	--	--
Indoor Air Cancer-Based RBSL	2001	2.24E+04	4.70E+04	NC*	NC	NC	1.28E+04	1.17E+02	NV	NV
Indoor Air Noncancer-Based RBSL	2001	1.54E+06	NA	NA	1.29E+05	1.50E+05	NA	NA	NV	NV

**Notes**

- All results are reported in micrograms per liter (ug/L)
- 0.5 and ND = Not detected at or above the indicated laboratory reporting limit
- Bold indicates detection above laboratory reporting limit
- RMW-1GWDUP = Duplicate Groundwater Sample from RMW-1
- MW-4D = Duplicate Groundwater Sample from MW-4
- VOCs = Volatile Organic Compounds
- DCA = Dichloroethane
- DCE = Dichloroethene
- TCE = Trichloroethene
- PAH = Polycyclic Aromatic Hydrocarbons
- PAHs determined by EPA method 8270 by Treadwell & Rollo for 2001 sampling event
- NA - not applicable
- NC - noncarcinogen
- NV - not volatile
- RBSL = Residential Scenario Risk-Based Screening Level for Fine-Grained Soil (RWQCB 2001)

\* 1,1-DCE is classified by the U.S.E.P.A. as a Class C carcinogen. According to S. DiZio of the California Department of Toxic Substances (DTSC), the State of California, Department of Health Services Office of Drinking Water regulates 1,1-DCE as a non-c  
Treadwell & Rollo data was collected on 18 and 19 December 2001  
Source: Final Site Investigation Report for the 64th and 65th Street Properties, Emeryville, California, EKI, 5 September 1995

Table 9  
 Summary of Well Construction Details and Water Levels  
 Sybase, Inc.  
 64th and 65th Street Properties, Emeryville, California  
 (EKI 940018.08)

Well ID	Date Well Installed	Depth of Well (ft bgs)	Screen Interval (ft bgs)	Sand Pack Interval (ft bgs)	Top of Casing Elevation (ft msl)	24 March 1995		7 July 1995	
						Depth to Water (ft bgs)	Groundwater Elevation (ft msl)	Depth to Water (ft bgs)	Groundwater Elevation (ft msl)
MW-1	3/6/95	20	5 - 20	4 - 20	18.24	2.97	15.27	3.81	14.43
MW-2	3/8/95	15.5	5.5 - 15.5	4 - 15.5	19.45	3.03	16.42	4.20	15.25
MW-3	3/7/95	19	4 - 19	3 - 19	15.24	2.72	12.52	6.22	9.02
MW-4	3/6/95	20	5 - 20	4 - 20	14.02	4.57	9.45	5.77	8.25
MW-5	3/7/95	15	5 - 15	4 - 15	12.99	5.75	7.24	6.06	6.93
MW-6	3/6/95	14	4 - 14	3 - 14	12.86	2.55	10.11	5.01	7.65
RMW-1	8/8/93	15.5	4.5 - 15.5	4 - 15.5	14.38	3.81	10.77	4.45	9.93
RMW-2	8/8/93	15.5	4.5 - 15.5	4 - 15.5	14.55	3.35	11.2	4.18	10.37
RMW-3	8/8/93	15.5	4.5 - 15.5	4 - 15.5	14.15	2.95	11.2	3.70 (a)	10.45
TMW-1	4/12/90	15	5 - 15	4 - 15	16.31	2.59	13.72	3.27	13.04
TMW-2	4/12/90	15.5	5 - 15	4 - 15	15.57	NM	-	NM	-
TMW-3	4/12/90	15.5	5 - 15	4 - 15	15.15	1.85	13.5	2.28	12.87

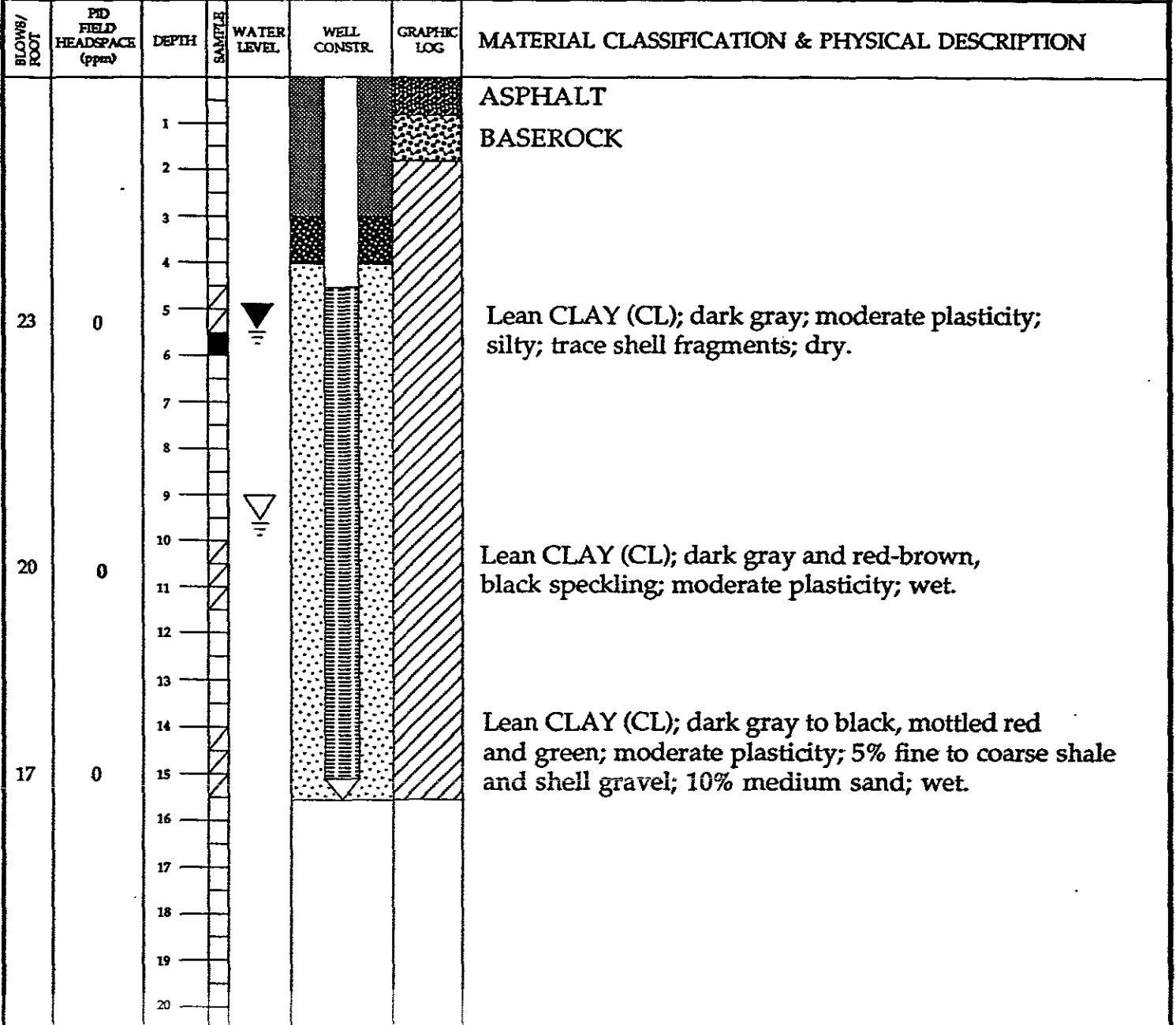
NOTES:

(a) Free-phase hydrocarbons present at a thickness of less than 0.01 foot.

ABBREVIATIONS:

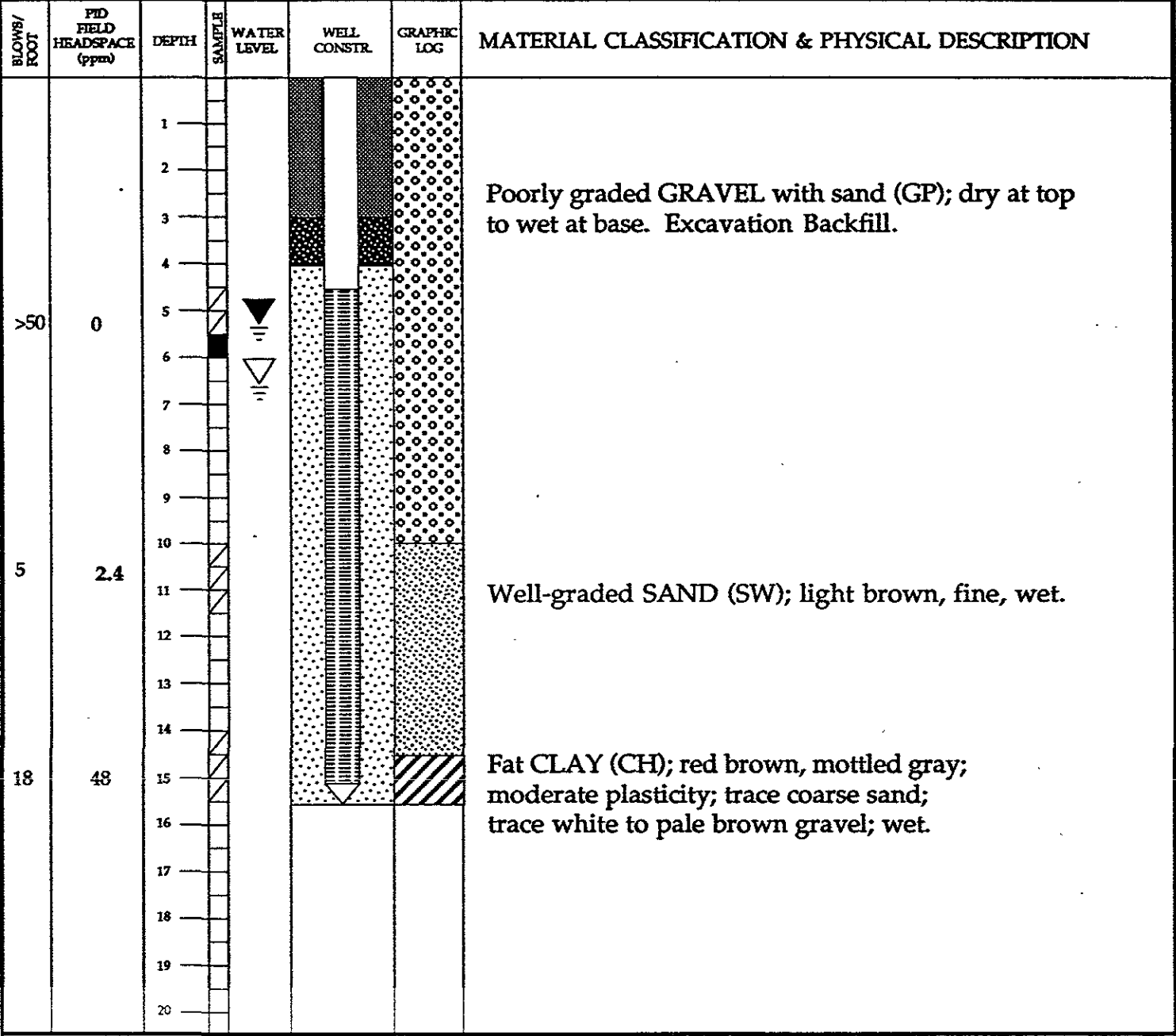
- ft bgs = feet below ground surface
- ft msl = feet relative to mean sea level
- NM = not measured, well obstructed by dirt

LOCATION 65th St, Emeryville, CA		BEGUN 8/6/93	BORING DIAMETER 8 Inches	ANGLE/BEARING 90 Degrees	BORING NO B-1
DRILLING CONTRACTOR Bayland Drilling		COMPLETED 8/6/93	FIRST ENCOUNTERED WATER DEPTH 9.0 Feet		BOTTOM OF BORING 15.5 Feet
OPERATOR Adam Huajardo		LOGGED BY Ruary Allan	STATIC WATER DEPTH/DATE 4.87 Feet		WELL NO. MW-1
DRILL MAKE & MODEL CME-75		SAMPLING METHOD California Modified Split-Spoon			BOTTOM OF WELL 15 Feet
WELL MATERIAL 2" SCH 40 PVC	SLOT SIZE 0.020"	FILTER PACK #2	WELL SEAL Neat cement over hydrated bentonite pellets		PLANNED USE Monitoring



<b>HYDR - ENVIRONMENTAL TECHNOLOGIES, INC.</b>	SOIL BORING LOG AND WELL CONSTRUCTION DIAGRAM MW-1  Ryerson Steel & Aluminum, Inc. 1465 65th Street Emeryville, CA 94608	PLATE C-2 SHEET 1 OF 1
		JOB NO. 7-231
DATE: September 2, 1993		
APPROVED BY: John H. Turney, P.E.		

65th St, Emeryville, CA	BEGUN 8/6/93	BORING DIAMETER 8 Inches	ANGLE/BEARING 90 Degrees	BORING NO B-2
DIGGING CONTRACTOR Dayland Drilling	COMPLETED 8/6/93	FIRST ENCOUNTERED WATER DEPTH 6.0 Feet		BOTTOM OF BORING 15.5 Feet
OPERATOR Adam Huajardo	LOGGED BY Ruary Allan	STATIC WATER DEPTH/DATE 4.64 Feet		WELL NO. MW-2
DRILL MAKE & MODEL CME-75		SAMPLING METHOD California Modified Split-Spoon		BOTTOM OF WELL 15 Feet
WELL MATERIAL 2" SCH 40 PVC	SLOT SIZE 0.020"	FILTER PACK #2	WELL SEAL Neat cement over hydrated bentonite pellets	PLANNED USE Monitoring



**HYDR - ENVIRONMENTAL TECHNOLOGIES, INC.**

DATE: September 2 1993

APPROVED BY: John H. Turney, P.E.

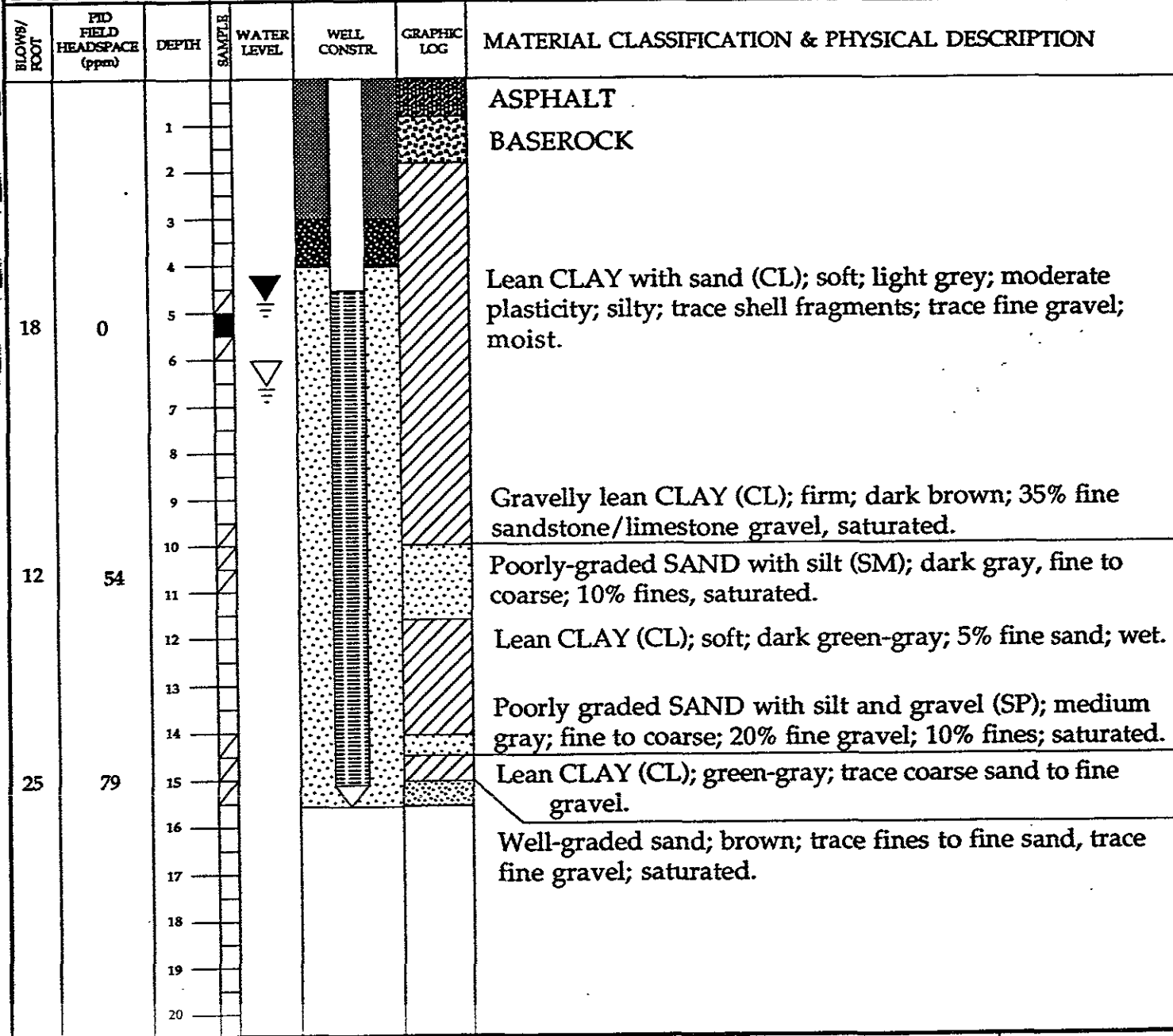
SOIL BORING LOG AND WELL CONSTRUCTION DIAGRAM MW-2

Ryerson Steel & Aluminum, Inc.  
1465 65th Street  
Emeryville, CA 94608

PLATE C-3  
SHEET 1 OF 1

JOB NO. 7-231

65th St, Emeryville, CA	BEGIN 8/6/93	BORING DIAMETER 8 Inches	ANGLE/BEARING 90 Degrees	BORING NO B-3
DRILLING CONTRACTOR Dayland Drilling	COMPLETED 8/6/93	FIRST ENCOUNTERED WATER DEPTH 6.0 Feet	BOTTOM OF BORING 15.5 Feet	
OPERATOR Adam Huajardo	LOGGED BY Ruary Allan	STATIC WATER DEPTH/DATE 4.18 Feet	WELL NO. MW-3	
DRILL MAKE & MODEL CME-75	SAMPLING METHOD California Modified Split-Spoon		BOTTOM OF WELL 15 Feet	
WELL MATERIAL 2" SCH 40 PVC	SLOT SIZE 0.020"	FILTER PACK #2	WELL SEAL Neat cement over hydrated bentonite pellets	
				PLANNED USE Monitoring



<b>HYDR - ENVIRONMENTAL TECHNOLOGIES, INC.</b> DATE: September 2, 1993 APPROVED BY: John H. Turney, P.E.	<b>SOIL BORING LOG AND WELL CONSTRUCTION DIAGRAM MW-3</b>  Ryerson Steel & Aluminum, Inc. 1465 65th Street Emeryville, CA 94608	PLATE C-4 SHEET 1 OF 1 JOB NO. 7-231
--	---	--

**Jon Wactor**

**From:** sgcolman@sbcglobal.net  
**Sent:** Thursday, June 20, 2002 8:15 AM  
**To:** Barbara Cook; Stephen Hill  
**Cc:** Betty Graham; Lynn Nakashima; Ignacio Dayrit; Lynn Tracy Nerland; Michael G. Biddle; Charles Bryant; Susan Hugo; Jon Wactor  
**Subject:** Ryerson - Emeryville's Conditional Approval

Attached to this letter is Emeryville's conditional approval of the Closure Plan for the Ryerson site for your review and concurrence. The conditional approval is based on the Closure Plan (March 26, 2002), Closure Plan Addendum (May 6, 2002), and Closure Plan Final Addendum (June 18, 2002) prepared by Treadwell&Rollo, which have been sent to you separately by Ignacio Dayrit. The City requests your concurrence with the City's conditional approval by **Thursday, July 2, 2002**. Please send your concurrence with the approval of the closure plan by U.S. mail, facsimile, or email to Ignacio Dayrit with a copy to me. If you have any questions or comments on the Closure Plan, please contact Ignacio Dayrit at 510-596-4356 or myself at 415-467-2599.

Susan G. Colman  
104 San Benito Road  
Brisbane, CA 94005-1610  
415-467-2599  
415-468-1520 (fax)

The materials transmitted by this electronic mail are confidential, are only for the use of the intended recipient, and may also be subject to applicable privileges. Any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify sender. Please also remove this message from your hard drive, diskette, and any other storage device.

6/20/02



June 20, 2002

Stephen Hill  
California Regional Water Quality Control Board, San Francisco Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Barbara Cook  
Department of Toxic Substances Control Board  
700 Heinz Street, Suite 200  
Berkeley, CA 94710

Subject: Ryerson-Tull Facility, 1465 65<sup>th</sup> Street, Emeryville

As indicated in the March 5, 2002 letter to you from Ignacio Dayrit of the City of Emeryville, attached to this letter is Emeryville's conditional approval of the Closure Plan for the above site for your review and concurrence. The City's conditional approval and recommendation for closure does not pertain to the former underground storage tank, which is under the jurisdiction of Alameda County.

The attached conditional approval summarizes the site background, soil and groundwater investigations, proposed development plan, risk evaluation, and site mitigation measures. The Closure Plan (March 26, 2002), Closure Plan Addendum (May 6, 2002), and Closure Plan Final Addendum (June 18, 2002) prepared by Treadwell&Rollo have been sent to you separately by Ignacio Dayrit. References included in the conditional approval refer to these documents.

The conditional approval is based on the data submitted to date for the subject property and with the provision that all information provided to the City are accurate and representative of site conditions. If additional information or data indicate that the data included herein are not representative of site conditions, additional mitigation measures may be required. This conditional approval applies only to the planned development included herein and not to any other site development.

The City requests your concurrence with the City's conditional approval by **Thursday, July 2, 2002**. Please send your concurrence with the approval of the closure plan by U.S. mail, facsimile, or email to Ignacio Dayrit with a copy to me. If you have any questions or comments on the Closure Plan, please contact Ignacio Dayrit at 510-596-4356 or myself at 415-467-2599.

Sincerely,

Susan G. Colman, for City of Emeryville

cc: Susan Hugo  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Ignacio Dayrit  
1333 Park Avenue  
City of Emeryville  
Emeryville, CA 94608

Betty Graham  
California Regional Water Quality  
Control Board, San Francisco Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Jon Wactor  
Luce Forward  
121 Spear Street, Suite 200  
San Francisco, CA 94105

## CONDITIONAL APPROVAL OF CLOSURE PLAN FOR RYERSON-TULL FACILITY, 1465 65<sup>TH</sup> STREET, EMERYVILLE

### BACKGROUND

The approximately 4.5 acre site is located at the southwest corner of 65<sup>th</sup> and Hollis Streets in Emeryville (Figure 1) and is owned by Joseph T. Ryerson & Son, Inc., which wholesales steel products. The northern part of the site is covered by a steel and concrete warehouse approximately 160,000 square feet in size, and the southern part is covered by an asphalt-paved outdoor storage and parking area (Figure 2). The current site improvements will be demolished to make way for site redevelopment.

Several phases of environmental investigations have been completed at the site by Treadwell&Rollo (T&R), and previously by others. These include investigations in 1993 and 1995 for underground storage tank (UST) closure and monitoring, and in 2001 to assess soil and groundwater quality at suspected on-site contamination source areas and at up and down-groundwater gradient areas of the site. The reports are on file with the City of Emeryville and the County of Alameda.

According to the Closure Plan signed by Jeffrey F. Ludlow, a California registered geologist, the upper 1 to 4 feet of soil consists of clayey silt, silt, and clayey silty sand fill, and the soil from approximately 4 to 13 feet below ground surface (bgs) consists of clayey silt, silty clay and clay with minor amounts of sand (T&R, March 2002). Also based on the Closure plan signed by Jeffrey F. Ludlow, a California registered geologist, groundwater was encountered in wells from approximately 3.25 feet bgs to 5.0 feet bgs and was estimated to flow southwest beneath the site; however, groundwater flow direction beneath the site was calculated by several consultants and found to flow northwest, west-southwest and southwest (T&R, March 2002). Based on these flow directions and the site area topography, the groundwater flow direction may vary season to season but in general flows west towards San Francisco Bay (T&R, March 2002).

### SOIL AND GROUNDWATER INVESTIGATIONS

Soil and groundwater investigations to date have shown the presence of elevated concentrations of total petroleum hydrocarbons and volatile organic compounds (VOCs). In 1993, an UST was removed from the site and soil and groundwater samples were collected in the vicinity of the former UST in 1993 and 1995 (T&R, March 2002). In 2001, soil and groundwater investigations were conducted. The 1993 to 2001 investigations are summarized in the Phase II Environmental Assessment (T&R, January 2002) and Closure Plan (T&R, March 2002). Additional groundwater sampling was conducted in April 2002 and is described in the May 6, 2002 letter. Observations regarding the soil and groundwater data collected at the site are presented below based on the Closure Plan and May 6, 2002 letter, which were signed by Jeffrey F. Ludlow, a California Registered Geologist, and Philip G. Smith, a California Registered Environmental Assessor II (the data tables referenced are in the Closure Plan and May 6, 2002 letter)

#### Soil

- Concentrations of petroleum hydrocarbons as diesel, and benzene, toluene, ethylbenzene, and xylenes (BFTX) in soil samples collected in the vicinity of the

former UST in 1993 (see Table 1 in Closure Plan), and in soil samples collected in 1995 (Table 3 in Closure Plan) were below the California Regional Water Quality Control Board, San Francisco Region's (RWQCB's) Risk Based Screening Levels (RBSLs; December 2001) for residential soil where groundwater is not a current or potential source of drinking water. Total xylenes were detected in only two of seven soil samples collected in 2001 throughout the site at concentrations of 8.1 milligrams per kilogram (mg/kg) in sample DP-2-1.5 and at 9.6 mg/kg in sample DP-4-1.5 (Table 3 in Closure Plan), which are above the residential RBSL of 1 mg/kg.

- Most metals concentrations in soil (Table 4 in Closure Plan) were below the residential soil RBSLs, except for cadmium and zinc in one sample, and for arsenic and chromium in four of six and all six samples, respectively. However, the reported arsenic (maximum of 6.8 mg/kg) and chromium (maximum of 45 mg/kg) concentrations are below the background concentrations of 19.1 mg/kg arsenic and 99.6 mg/kg chromium reported for the San Francisco Bay Area by the Lawrence Berkeley National Laboratory (LBNL; 1995)
- Concentrations of chlorinated volatile organic compounds (VOCs) reported in soil samples collected in 1988, 1989, 1995, and 2001 (Table 3 in Closure Plan) were below residential RBSLs, except for tetrachloroethene reported in 1995 in one sample collected at 4.5 feet bgs at 0.81 mg/kg, which is above the RBSL of 0.15 mg/kg for coarse-grained soil but below the RBSL of 0.95 mg/kg for fine-grained soil. As stated above, the soil at 4.5 feet bgs consists of clayey silt, silty clay and clay with minor amounts of sand (T&R, March 2002).

#### Groundwater

- One of six grab groundwater samples collected in 2001 contained Total Extractable Petroleum Hydrocarbons (TEPH) as diesel above the RBSL of 640 micrograms per liter ( $\mu\text{g}/\text{l}$ ) for groundwater where a drinking water source is not threatened and two of six samples contained TEPH as motor oil above the RBSL of 640  $\mu\text{g}/\text{l}$  (Table 6 in Closure Plan). However, concentrations reported in groundwater samples collected from completed monitoring wells were below the RBSL (Table 2a in Closure Plan).
- BTEX were not detected in grab groundwater samples (Table 6 in Closure Plan) at concentrations above the RBSL for groundwater where a drinking water source is not threatened, except for total xylenes reported in one sample at 17  $\mu\text{g}/\text{l}$ , which is above the RBSL of 13  $\mu\text{g}/\text{l}$ . However, BTEX concentrations reported in groundwater samples collected from completed monitoring wells were below the RBSL (Table 2a in Closure Plan).
- 1,1-Dichloroethene (1,1-DCE) was reported in two of six grab groundwater samples collected in 2001 (Table 5 in Closure Plan) at concentrations above the RBSL of 9.6  $\mu\text{g}/\text{l}$  for groundwater where a drinking water source is not threatened. However, concentrations reported in groundwater samples collected from completed monitoring wells were below the RBSL (Table 2b in Closure Plan)
- Total VOC concentrations in groundwater were below 500  $\mu\text{g}/\text{l}$  and have remained constant or have decreased since 1995 (Tables 2a, 2b, 5, and 6 in Closure Plan and

Tables 2a and 2b in the May 6, 2002 letter). In addition, VOC concentrations in groundwater are similar to concentrations reported at surrounding sites that have been closed by Alameda County and/or the RWQCB (e.g., Liquid Sugars at 1274 65<sup>th</sup> Street and 1269 66<sup>th</sup> Street; former RIX Industries Property at 6460 Hollis Street; Former Capital Refining Company / Lowenberg Property at 65<sup>th</sup> and Hollis Streets).

### **PROPOSED SITE DEVELOPMENT PLAN**

Opus West Corporation proposes to construct five 4-story apartment buildings clustered together with central landscaped courtyards and a swimming pool on the northern part of the site, and an above ground multi-story parking garage on the southern part of the site (Figure 3 in Closure Plan). For the apartment buildings and garage, spread footing foundation excavations will extend to approximately 3 feet below existing site grade except in the southwest corner of the site where they will extend to approximately 6 feet below existing site grade. Excavations for the swimming pool and elevator pits will extend to approximately 6 to 8 feet below existing site grade. Approximately 70,000 square feet of area between the apartment buildings will be constructed as courtyards. An approximately 20-foot by 20-foot square "tot lot" is planned in the western courtyard area.

The courtyards areas, including the tot lot area, will have the top 2 feet of existing soil replaced with clean fill from an off-site source. A concrete slab will be poured over the imported soil in the tot lot, a rubber mat will be placed on top of the slab, and typical playground bark or finish mats will be placed over the rubber mat. Any sand box or dirt area where digging may occur will be entirely contained within the limits of the tot lot, above the concrete slab and imported clean fill. For geotechnical purposes, select non-expansive fill may be imported and placed beneath portions of the building pads on the eastern side of the site.

In addition, a vapor barrier that conforms to ASTM Standard E-1643 will be installed beneath the apartment buildings. Although a conceptual design is presented in the June 18, 2002 Closure Plan Final Addendum, a design plan for the vapor barrier, including specifications, will be prepared for review and approval by the City or its designee.

### **RISK EVALUATION**

To assess the potential adverse health effects resulting from the constituents of concern in soil and groundwater beneath the site, T&R estimated excess cancer risks and noncarcinogenic hazard quotients for the future site construction workers and occupants. To estimate these risks, they used the RBSL process established by the RWQCB (December 2001). This process was developed to estimate risks based on indoor air quality for a residential exposure scenario, and direct dermal contact and vapor inhalation for the construction worker exposure scenario assuming site-specific data. These data include a fine-grained soil and exposure point or maximum detected concentrations for each constituent detected at the property (Tables 8, 9, 10, and 11 in Closure Plan).

For the future residential exposure scenario, using the above site-specific data on the Tier 1 Lookup Tables of the RBSL process (Table 10 in Closure Plan), the excess cancer risk for future site occupants was calculated to be  $8.10 \times 10^{-7}$  or 8.10 chances in 10 million. The noncancer hazard index was calculated to be  $8.18 \times 10^{-6}$ . These values are both below the

target or regulatory accepted cancer risk of  $1 \times 10^{-6}$  and target hazard index of 1, as recommended by the U.S. Environmental Protection Agency (U.S. EPA) (RWQCB, 2001).

For the future unprotected construction worker exposure scenario, the excess cancer risk was calculated to be  $4.20 \times 10^{-6}$  or 4.20 chances in 1 million. The noncancer hazard index was calculated to be  $4.35 \times 10^{-2}$ . The excess cancer risk for the construction worker was calculated to be greater than the risk of  $1 \times 10^{-6}$  recommended by the U.S. EPA. (RWQCB, 2001). Chromium contributes the greatest risk ( $3.46 \times 10^{-6}$ ) to the total excess cancer risk because the chromium soil screening level assumes chromium exists as a 1/6 ratio of chromium VI to chromium III. However, the construction worker risk evaluation will be an over-estimate of risk due to the implementation of site-specific health and safety protocols and engineering controls to reduce potential dust emissions and direct worker contact with soil (see next section). These protocols and controls, including worker protective clothing, dust control and personal hygiene control, will reduce construction worker exposures. Chemicals detected in the groundwater were not evaluated in the risk evaluation of the construction worker as the exposure duration would be too short for risk estimation using the RBSL process. As with the soil, site-specific health and safety protocols and engineering controls will be implemented to reduce potential worker contact with groundwater.

#### **SITE MITIGATION MEASURES**

Potential risks at the site will be mitigated using the following mechanisms:

- Containers of oils and drums of groundwater and soil stored at the property will be properly disposed. Also, several areas of accumulated dry oil stains (approximately 15,000 square feet) observed on the building concrete floor slab will be separated from the slab prior to slab demolition. The containers and accumulated oil stains will be removed prior to building demolition to prevent these materials from being disposed with the debris resulting from the building demolition. Copies of disposal documentation will be provided to the City.
- A Construction Risk Management Plan (RMP) will be prepared to outline soil and groundwater handling procedures to reduce worker and public exposure to constituents detected at the property during construction. The Construction RMP will be provided to the City for review prior to building demolition and other site work. Opus will reimburse the City for the costs for reviewing the Construction RMP. The Construction RMP will include the items listed in Section 4.2 of the Closure Plan (T&R, March 26, 2002) and additional items included here. It will describe contingency procedures for unexpected hazardous materials found during construction, including notification of the City within 48 hours of discovery and procedures for soil sampling, analysis, and removal, if warranted. The Construction RMP will describe site capping (i.e. building slabs, asphalt paved parking lots, clean imported fill, and concrete slab beneath the tot lot) to isolate the affected soil from the future site occupants. A concrete slab will be poured over the imported soil in the tot lot, a rubber mat will be placed on top of the slab, and typical playground bark or finish mats will be placed over the rubber mat. Any sand box or dirt area where digging may occur will be entirely contained within the limits of the tot lot, above the concrete slab and imported clean fill. For excavated soil not used on site, the plan will include proper soil profiling and disposal procedures. In addition, the

Construction RMP will include dewatering procedures to properly handle and dispose of the groundwater that is encountered in excavations. The groundwater will likely require some degree of pre-treatment prior to disposal into the East Bay Municipal Utility District (MUD) sewer system under a Special Discharge Permit or the storm water system under an existing NPDES permit for the Emeryville area.

- Opus West Corporation has agreed and is required to install a vapor barrier beneath the apartment buildings. Although a conceptual design is presented in the June 18, 2002 Closure Plan Final Addendum, the vapor barrier will conform to ASTM Standard E-1643. The design plan, including specifications, for the vapor barrier will be reviewed and approved by the City or its designee.
- A deed restriction will be recorded that prohibits single-family residential use of the property and includes a Site Operations and Maintenance Hazardous Materials RMP, which will be prepared. The Site Operations and Maintenance Hazardous Materials RMP will include the items listed in Section 4.3 of the Closure Plan (T&R, March 26, 2002) and additional items included here. It will outline inspection requirements for the future owner/operator to ensure that the integrity of long-term site mitigation measures, specifically soil and concrete caps and vapor barrier, will remain effective during the site's use and occupancy period, including inspections at least every two years and after any emergency situation (e.g., seismic activity, fire) and penetration of the cap for utility repair or other purpose. The Site Operations and Maintenance Hazardous Materials RMP will also include disclosure statements for persons who may occupy or purchase the property. The owner and operator will sign and maintain this RMP and will be responsible for informing prospective owners/occupants, and any employee or contractor performing below grade construction, of the environmental conditions, soil management concerns, and health and safety requirements stipulated in this plan. As previously mentioned, the site will be capped with concrete foundations, asphalt parking areas, and 2 feet of existing soil will be replaced with clean soil in courtyard areas, including the tot lot area. The Site Operations and Maintenance Hazardous Materials RMP and deed restriction will be reviewed and approved by the City or its designee. Opus will reimburse the City for the costs for reviewing the Site Operations and Maintenance Hazardous Materials RMP.
- Opus will submit all soil and groundwater data to the City in electronic format, including, geographic position system (GPS) coordinates for groundwater monitoring wells (including closed wells, if any), grab groundwater sampling locations, and soil boring locations; soil and groundwater data in Excel format; and pertinent reports and maps in pdf format. Opus will reimburse the City for costs to incorporate the electronic information into the City's database system (approximately \$500; additional cost will be incurred for non-electronic submissions).

## SUMMARY AND RECOMMENDATION

The cumulative risk associated with constituents in soil and groundwater is below the  $1 \times 10^{-6}$  cancer threshold and below the noncancer hazard index of 1. ACM and LBP and containers of hazardous materials will be removed prior to demolition of the building. A vapor barrier will be installed beneath the apartment buildings, and 2 feet of existing soil will be replaced with clean fill in courtyard areas, including the tot lot area. A deed restriction and risk management plans will be prepared to guide construction and long-term maintenance of site controls. The risk management plans and vapor barrier design plan will conform to ASTM Standard E-1643 and will be reviewed and approved by the City or its designee. The City's designee will be on site periodically to observe site and soil conditions during demolition and construction.

Based on the discussion above, the City of Emeryville recommends that the Closure Plan and addenda be approved. This conditional approval is based on the data submitted to date for the subject property and with the provision that all information provided to the City are accurate and representative of site conditions. If this assumption is determined to be erroneous at some point in the future or additional information indicates that the data included herein are not representative of site conditions, the City, RWQCB, DTSC, or other appropriate regulatory agency shall reopen the site for regulatory review and action, including requiring additional mitigation measures, as warranted. This conditional approval applies only to the planned development included herein and not to any other site development. The recommendation for closure does not pertain to the former UST, which is under the jurisdiction of Alameda County.

## REFERENCES

- California Regional Water Quality Control Board, San Francisco Bay Region. December 2001. Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater. Volume 1: Summary Tier 1 Lookup Tables. Volume 2: Background Documentation for the Development of Tier 1 Soil and Groundwater Screening Levels.
- Lawrence Berkeley National Laboratory (LBNL), August 1995, Protocol for Determining Background Concentrations of Metals in Soil at Lawrence Berkeley National Laboratory.
- Secor, November 2001, Phase I Environmental Site Assessment, Ryerson-Tull Steel Property, 1465 65<sup>th</sup> Street, Emeryville, California.
- Treadwell&Rollo, January 2002, Phase II Environmental Assessment, Ryerson-Tull Steel Property, 1465 65<sup>th</sup> Street, Emeryville, California.
- Treadwell&Rollo, March 2002, Closure Plan, Ryerson-Tull Steel Property, 1465 65<sup>th</sup> Street, Emeryville, California.
- Treadwell&Rollo, May 6, 2002, Closure Plan Addendum, Ryerson-Tull Steel Property, 1465 65<sup>th</sup> Street, Emeryville, California.
- Treadwell&Rollo, June 18, 2002, Closure Plan – Final Addendum, Ryerson-Tull Steel Property, 1465 65<sup>th</sup> Street, Emeryville, California.

**Treadwell & Rollo**

24 June 2002  
Project 3212.02

Opus West Corporation  
c/o Jon K. Wactor, Esq.  
Wactor & Wick LLP  
180 Grand Avenue, Suite 950  
Oakland, California 94612

Subject: Methane Issues  
Ryerson-Tull Steel Property  
1465 65<sup>th</sup> Street  
Emeryville, California

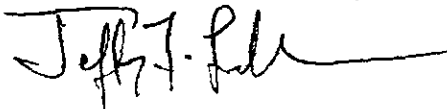
Dear Mr. Wactor:

Per your request, Treadwell & Rollo, Inc. presents this letter regarding potential methane issues at the Ryerson-Tull Steel facility at 1465 65<sup>th</sup> Street in Emeryville, California ("site"). We understand that Opus West Corporation intends to purchase the site and construct apartment buildings and a parking garage at the site. Previously, SECOR completed a Phase I Environmental Site Assessment (ESA) dated 9 November 2001 and we completed a Phase II ESA, dated 21 January 2002, and a Closure Plan for the site, dated 26 March 2002. In the Phase I ESA, SECOR identified a potential environmental concern related to the generation of methane gas resulting from the anaerobic degradation of organic material below the fill layer beneath the site.

Treadwell & Rollo drilled 16 soil borings to total depths of 5.5 to 13 feet below ground surface (bgs) during the Phase II ESA. Below the fill layer, at approximately 1 to 4 feet bgs, dark grey to greenish brown clay, clayey sand and sandy clay were generally observed to the total depths drilled. Groundwater was encountered at approximately 3 to 5 feet bgs in the site monitoring wells. Based on our extensive experience with similar near bay shore development projects, it is our opinion that the site conditions observed in our Phase II ESA show that the site does not likely contain sufficient organic materials that could generate methane gas in quantities or concentrations that would cause a concern to human health or site development.

If you have any questions or comments, please call.

Sincerely yours,  
TREADWELL & ROLLO, INC.



Jeffrey F. Ludlow, R.G.  
Senior Project Manager

32120215.JFL

cc: Randy Ackerman – Opus West Corporation



Philip G. Smith, R.E.A. II  
Principal Geologist