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

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

July 24, 1995

STID 4096

REMEDIAL ACTION COMPLETION CERTIFICATION

Castro Valley Unified School District
P.O. Box 2146
Castro Valley, CA 94546
Attn: William Macedo

RE: CASTRO VALLEY HIGH SCHOOL, 19400 SANTA MARIA AVENUE, CASTRO VALLEY

Dear Mr. Macedo:

This letter confirms the completion of site investigation and remedial action for one fuel and one waste oil underground storage tanks formerly located at the above-described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e). If a change in land use is proposed, the owner must promptly notify this agency.

Please contact Scott Seery at (510) 567-6783 if you have any questions regarding this matter.

Sincerely,

Rafat A. Shahid
Director of Environmental Services

cc: Thomas Peacock, Acting Chief, Env. Protection Division
Kevin Graves, RWQCB
Mike Harper, SWRCB
Jim Ferdinand, Alameda County Fire Department

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: 07/05/95**

Agency name: **Alameda County-EPD** Address: **1131 Harbor Bay Pkwy #250**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Scott Seery** Title: **Sr. Haz. Materials Spec.**

II. CASE INFORMATION

Site facility name: **Castro Valley High School**
Site facility address: **19400 Santa Maria Avenue, Castro Valley 94546**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4096**
URF filing date: **8/10/93** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Castro Valley Unified School District Attn: William Macedo	P.O. Box 2146 Castro Valley, CA 94546	510/537-3000

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	5000 gal	fuel oil	removed	8-4-93
2	500 "	waste oil	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: UNK

Site characterization complete? YES

Date approved by oversight agency:

Monitoring Wells installed? NO Number: NA

Proper screened interval? NA

Highest GW depth below ground surface: UNK Lowest depth:

Flow direction: UNK (presumed south)

Most sensitive current use: school

Are drinking water wells affected? NO Aquifer name: C.V. Basin

Is surface water affected? NO Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): NONE

Leaking Underground Fuel Storage Tank Program

Report(s) on file? **YES** Where is report filed? **Alameda County**
1131 Harbor Bay Pkwy
Alameda CA 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	(1 x 500; 1 x 5000 gal)	disposal-H&H Env Service	8-4-93
Piping	~60 ft	(presumed as above)	~9-7-93
Free Product	NA		
Soil	144 yds^3	disposal- BFI landfill Livermore	9/2, 9/7, 9/8/93
	27 yds^3	disposal- Redwood LF Novato, CA	8/8 and 9/10/93
Groundwater	NA		
Barrels	"		

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)
Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm) Before	Soil (ppm) After	Water (ppb) Before	Water (ppb) After
TPH (Gas)	ND	NA	NA	NA
TPH (Diesel)	400	ND	ND	"
Benzene	ND	"	"	"
Toluene	0.0074	"	"	"
Xylene	0.037	"	1.3	"
Ethylbenzene	0.0093	"	ND	"
Oil & Grease	1100	"	NA	"
Heavy metals	*	NA	"	"
Other **SVOC**	2**	"	"	"
HVOC	ND	"	"	"

* All target metals appear to be present at geogenic concentrations.

** Result is for the SVOC 2-methyl naphthalene detected in *stockpile* sample.

Comments (Depth of Remediation, etc.):

Discoloration and the odor of hydrocarbons were identified in native clayey material surrounding the 500 gallon waste oil UST upon its removal. The initial soil sample collected at the base of the excavation (~9' BG) revealed 1100 ppm TOG and 400 ppm TPH-D. TPH-G, fuel aromatics and HVOCs were "ND." Metals appear to be at geogenic concentrations. Of the SVOCs sought, only 2 ppm of 2-methyl naphthalene was identified in *stockpiled* material. The excavation was expanded vertically to ground water (~11' BG) and horizontally to a finished dimension of 13 x 16 x 11' deep. Four (4) sidewall samples were collected. All selected analytes were "ND" in these final samples.

Leaking Underground Fuel Storage Tank Program

Although at least one throughgoing corrosion hole was observed in the 5000 gallon fuel oil tank upon its removal, no obvious sign of a release was observed. Ground water (GW) was present in this excavation with what appeared to be product emulsion floating on its surface. A water sample revealed only the presence of total xylene isomers at a concentration of 1.3 ug/l. Two (2) sidewall samples, collected from either end of the excavation, failed to reveal the presence of any target compounds.

Supply, return, and vent piping leading from the fuel oil UST towards the boiler room was removed several weeks later. Two (2) soil samples were collected. Analysis revealed only very minor concentrations of TEX.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Undetermined

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Undetermined

Does corrective action protect public health for current land use? YES
Site management requirements: NA

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommisioned: NA

Number Decommisioned: NA Number Retained: NA

List enforcement actions taken: NONE

List enforcement actions rescinded: NONE

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Scott Seery Title: Sr Haz Mat Specialist
Signature: Date: 7-5-95

Reviewed by
Name: Juliet Shin Title: Sr Haz Mat Specialist
Signature: Date: 7/5/95

Name: Tom Peacock Title: Supervising HMS
Signature: Date: 7-5-95

Leaking Underground Fuel Storage Tank Program

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:
RWQCB Staff Name: Kevin Graves Title: San. Engineering Asso. Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

The subject USTs were located well within the boundaries of this multiple acre site. The fuel oil UST closure results were essentially "clean" with only trace (1.3 ug/l) total xylenes in sampled GW. Although soil contamination was identified in native materials during the course of the waste oil UST closure, overexcavation revealed that the contamination was severely limited in both extent and chemical composition: only TOG and TPH-D were present in the initial sample at noteworthy concentrations, and were reduced to "ND" within a couple feet of the UST. Aromatic compounds were not identified in sampled material at all. Encountered native sediments surrounding the waste oil UST were fine grained with a substantial clay content.

Although strictly according to current RWQCB guidance documents a GW investigation should follow, such does not appear warranted for the following reasons:

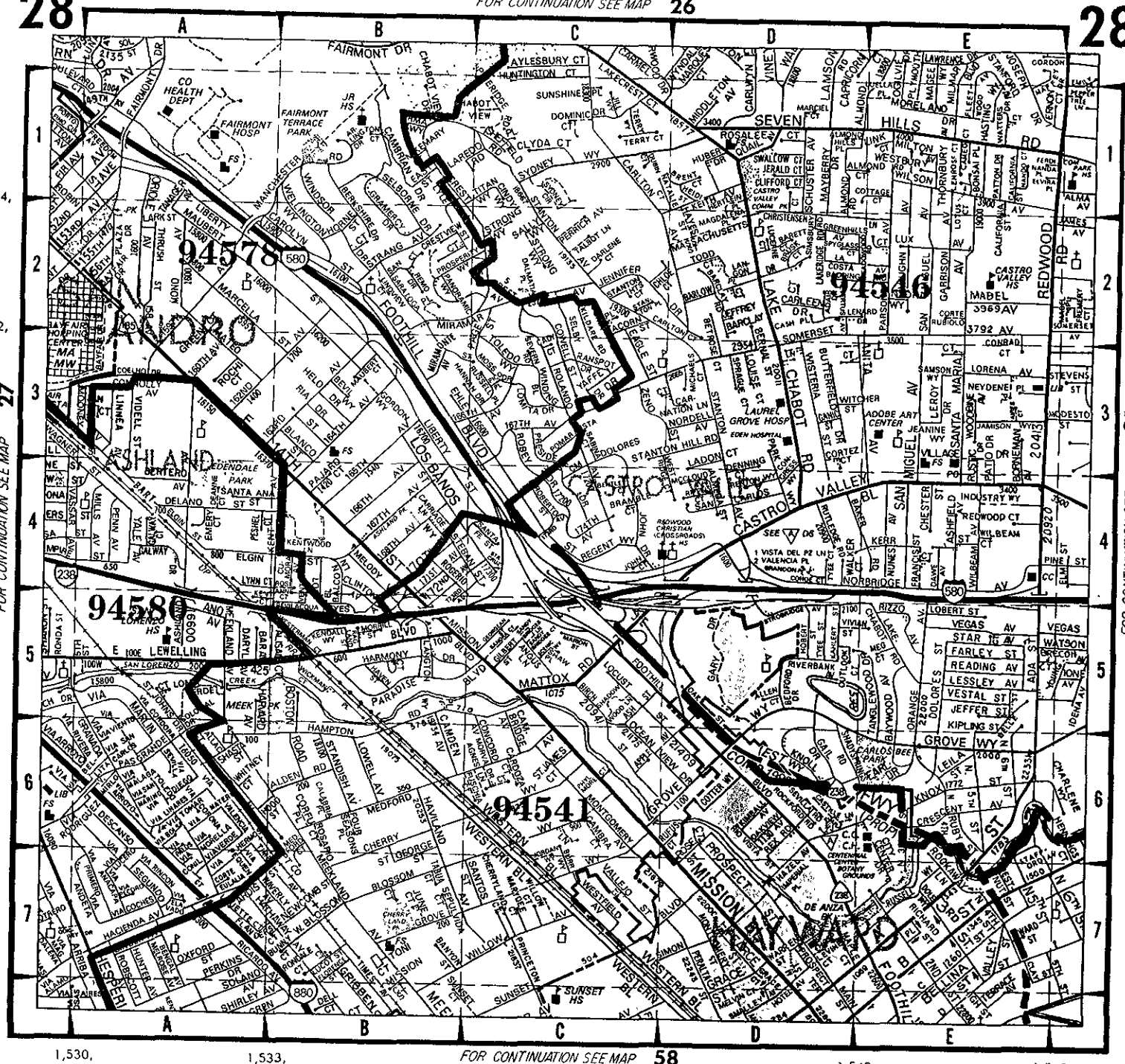
1) Native sediments are fine grained with a substantial clay content. As evidenced in the waste oil UST excavation, contaminant migration under both saturated and vadose zone conditions is severely attenuated by the adsorptive properties of such fine grained materials.

2) No aromatic compounds were identified in analyzed samples from the waste oil UST excavation. Higher boiling point, long chain hydrocarbons were exclusively present.

3) Only 2 ppm of a single PNA species was identified in sampled material from the waste oil UST excavation *stockpile*.

4) Only 1.3 ug/l total xylene isomers were identified in shallow GW collected from the fuel oil UST excavation.

5) The subject USTs were located within the heart of a large contiguous site. Based on known general Castro Valley GW flow regimes, the closest site boundary is located several hundred feet downgradient (south) of the former UST locations. The likelihood of a hydrocarbon plume, if present, to migrate beyond site boundaries is improbable.


28
FOR CONTINUATION SEE MAP 26
28
A
B
C
D
E
ALAMEDA CO
ZIP
DETAIL
94578
94580
94541
94546
HAYWARD
SAN LORENZO
ASHLAND
CASTRO VALLEY
FAIRVIEW
SEVEN HILLS
FOOTHILL
LOS BANOS
CHABOT RD
REDWOOD RD
MISSION BLVD
MATTOX RD
PARADISE
HAMPTON
HARDER
HARMONY
LEWELLING
STANTON HILL RD
CASTRO VALLEY BL
FOOTHILL BL
WESTERN BL
SUNSET HS
CASTRO VALLEY HS
FAIRMONT HOSP
CO HEALTH DEPT
FAIRMONT TERRACE PARK
JR HS
LAUREL GROVE HOSP
ADOBE ART CENTER
CENTENNIAL CENTENNIAL CENTER BOTANIC GROUNDS
FOR CONTINUATION SEE MAP 27
FOR CONTINUATION SEE MAP 31
FOR CONTINUATION SEE MAP 58
442,
434,
432,
1,530,
1,533,
1,542,
1,545,
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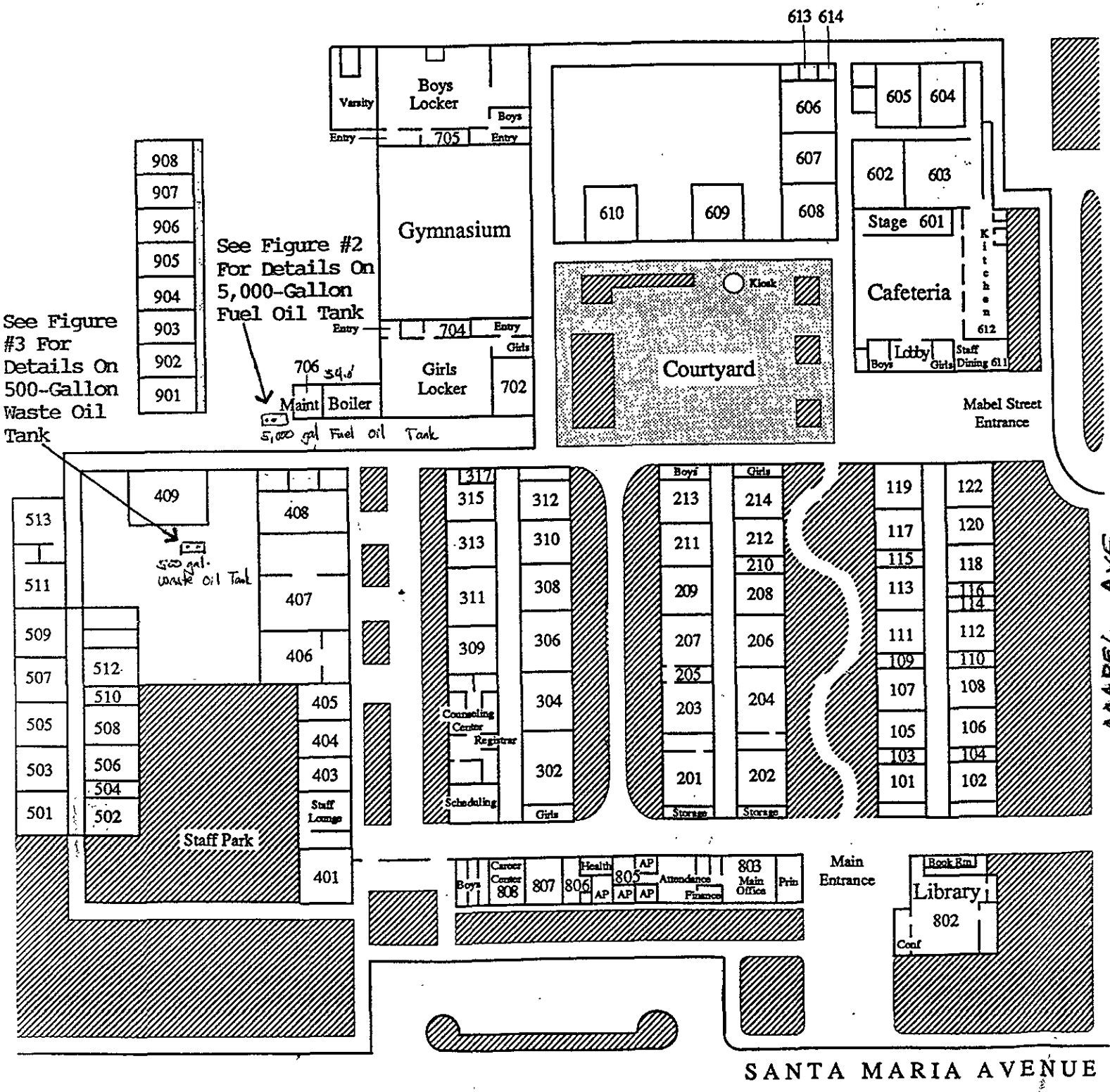
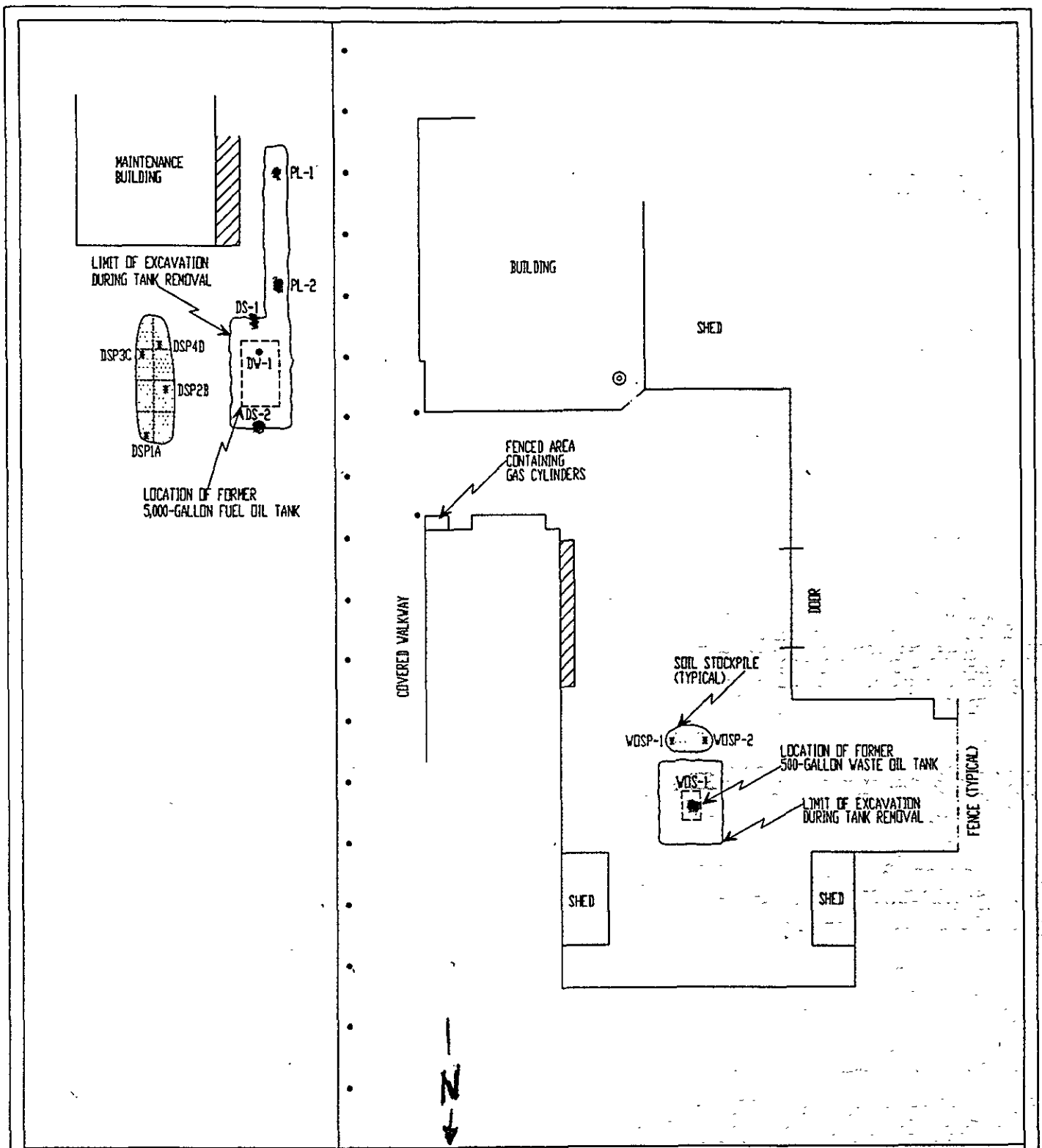
Castro Valley High School

19400 Santa Maria Avenue • Castro Valley, California

FIGURE #1

Campus Plan



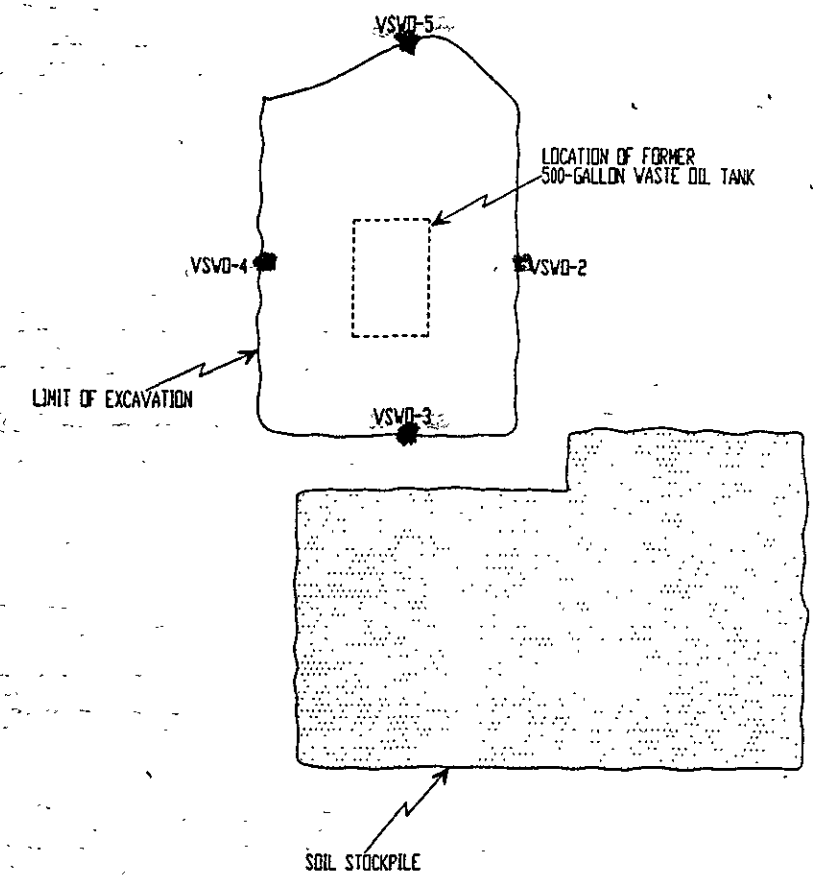


TANK PROTECT ENGINEERING

SITE PLAN:
TANK REMOVAL (8/14/93)

CASTRO VALLEY HIGH SCHOOL
19400 SANTA MARIA AVENUE
CASTRO VALLEY, CA 94546

DATE	3/25/94
FIGURE	1
FILE #	275-1
DRAWN BY	MT
CHECKED BY	JM



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LEGEND

VSWD-2 * NAME AND LOCATION OF SOIL SAMPLES

-N-

NOT TO SCALE

TANK PROTECT ENGINEERING

SITE PLAN:
VERIFICATION SOIL SAMPLING (8/19/93)

CASTRO VALLEY HIGH SCHOOL
19400 SANTA MARIA AVENUE
CASTRO VALLEY, CA 94546

DATE	3/25/94
FIGURE	2
FILE #	275-2
DRAWN BY	MT
CHECKED BY	JM

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
(ppm[1])

Sample ID Name	Date	Depth (Feet)	TPHD	TPHG	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease
DS-1	08/04/93	9.5	<1.0	NA[2]	<.0050	<.0050	<.0050	<.0050	NA
DS-2	08/04/93	9.5	<1.0	NA	<.0050	<.0050	<.0050	<.0050	NA
DSP-1A	08/04/93	3.0	<1.0	NA	<.0050	<.0050	<.0050	<.0050	NA
DSP-2B	08/04/93	3.0	<1.0	NA	<.0050	<.0050	<.0050	<.0050	NA
DSP-3C	08/04/93	3.0	<1.0	NA	<.0050	<.0050	<.0050	<.0050	NA
DSP-4D	08/04/93	3.0	6.9	NA	<.0050	<.0050	<.0050	<.0050	NA
[redacted]	08/04/93	9.0	[redacted]	<1.0	<.0050	<.0050	<.0050	<.0050	[redacted]
WOSP-(1-2)[3, 4]	08/04/93	1.0-1.5	210	<1.0	<.0050	<.0050	<.0050	<.0050	280
S1-1,2,3,4[5, 6]	08/18-19/93	9.0-9.5	780	NA	NA	NA	NA	NA	440
VSWO-2	08/19/93	9.0	<1.0	NA	NA	NA	NA	NA	<10
VSWO-3	08/19/93	10.0	<1.0	NA	NA	NA	NA	NA	<10
VSWO-4	08/19/93	9.0	<1.0	NA	NA	NA	NA	NA	<10
VSWO-5	08/19/93	9.0	<1.0	NA	NA	NA	NA	NA	<10
PL-1	09/07/93	4.0	<1.0	NA	<.0050	<.0050	.0076	.021	NA
PL-2	09/07/93	4.0	<1.0	NA	<.0050	.0074	.0093	.037	NA

[1] PARTS PER MILLION

[2] NOT ANALYZED

[3] ALSO ANALYZED BY EPA METHOD 8010; ALL RESULTS WERE NONDETECTABLE (SEE APPENDIX C)

[4] ALSO ANALYZED BY EPA METHOD 8270; ALL RESULTS WERE NONDETECTABLE WITH THE EXCEPTION OF 2 ppm 2-METHYL NAPHTHALENE DETECTED IN SAMPLE WOSP-(1-2) (SEE APPENDIX C)

[5] ALSO ANALYZED BY EPA METHOD 8240; ALL RESULTS WERE NONDETECTABLE (SEE APPENDIX C)

[6] ALSO TESTED FOR STLC CAM 17 METALS, REACTIVITY, CORROSIVITY AND IGNITABILITY (SEE TABLE 4 AND APPENDIX C FOR RESULTS)

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
FOR METALS
(ppm[1])

Sample ID Name	Date	Cadmium	Chromium	Lead	Nickel	Zinc
WOS-1	08/04/93	0.6	32	14	27	38
WOSP-(1-2)	08/04/93	0.5	37	9.7	42	27

[1] PARTS PER MILLION

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
(ppb[1])

Sample ID Name	Date	TPHD	Benzene	Toluene	Ethyl-Benzene	Xylenes
DW-1	08/04/93	<50	<0.5	<0.5	<0.5	1.3

[1] PARTS PER BILLION