PRELIMINARY HYDROLOGICAL ASSESSMENT WORK PLAN

FORMER BEACON STATION #574

ULTRAMAR INC.

22315 REDWOOD ROAD

CASTRO VALLEY, CALIFORNIA

DELTA PROJECT NO. 40-90-818

Prepared by:

DELTA ENVIRONMENTAL CONSULTANTS, INC.
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1.0 INTRODUCTION

Delta Environmental Consultants, Inc. (Delta), has been authorized by Ultramar Inc. to prepare this work plan for the installation of three monitoring wells, conduct soil and ground water sampling, develop and survey the monitoring wells, and prepare a preliminary site investigation report. The site is a former Beacon service station (#574) located at 22315 Redwood Road, Castro Valley, Alameda County, California (Figure 1). A detailed site map is shown in Figure 2.

The purpose of this initial investigation is to evaluate the possible presence of petroleum hydrocarbon constituents in soil and ground water beneath the site. Delta proposes the following activities to accomplish this objective:

- Drill three soil borings to approximately 30 feet below grade and complete them as monitoring wells (MW-1, MW-2, and MW-3).

- Collect soil samples at 5-foot intervals with a modified California sampler and classify soils according to the Unified Soil Classification System (USCS).

- Screen the recovered soil samples with a photoionization detector (PID) in the field for the presence of petroleum hydrocarbon constituents.

- Submit selected soil samples from each soil boring to a California-certified laboratory for chemical analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) by U.S. Environmental Protection Agency (EPA), and total petroleum hydrocarbons (TPH) as gasoline using Leaking Underground Fuel Tank (LUFT) Manual methodologies.

- Develop and survey the monitoring wells.

- Measure water levels in each monitoring well (MW-1, MW-2, and MW-3).
- Collect ground water samples from MW-1, MW-2, and MW-3.
- Submit ground water samples to a California-certified laboratory for chemical analysis of BTEX and TPH as gasoline by EPA and LUFT Manual approved methodologies.
- Prepare a report of our findings.

2.0 PROPOSED WORK PLAN

Delta proposes to advance three soil borings to be completed as ground water monitoring wells to evaluate the possible presence of petroleum hydrocarbon constituents in soil and the possible presence of these constituents in the ground water beneath the site.

2.1 Soil Borings

The proposed soil borings will be advanced at locations identified as MW-1, MW-2, and MW-3 in Figure 3. Data available from local sources indicates ground water is present at approximately 15 feet below grade and that ground water flow is toward the southwest. The soil borings will be advanced to a depth of approximately 30 feet below grade for the installation of monitoring wells (Section 2.3).

The proposed boring for MW-1 is located downgradient and within 10 feet of the location of the former underground storage tanks. The boring for MW-2 is located near the southwest corner of the existing parking lot and is intended to monitor water quality downgradient and to the west of the former underground tank locations. MW-3 is intended to serve as an upgradient monitoring well and will also be used as a triangulation point to determine ground water flow direction beneath the site.

2.2 Soil Sample Collection and Screening

Soil samples will be collected at 5-foot intervals at each soil boring. A California-modified split-barrel sampler will be used to extract the soil samples from the soil borings. Soil samples will be performed in accordance with ASTM 1586-84 standards. Three 6-inch brass tubes will be inserted in the California sampler to retain the soil sample. Upon retrieval of each soil sample, the middle tube will be capped, sealed, labeled, and stored on ice for possible transport to a state-certified laboratory for chemical analysis.

Soils from the lead tube will be placed in plastic bags for field screening for the presence of petroleum hydrocarbon constituents with a PID.

2.3 Monitoring Well Installation

Three 4-inch-diameter monitoring wells (MW-1, MW-2, and MW-3) will be constructed. Installation of these monitoring wells will be performed by a state-licensed drilling contractor and supervised by a qualified hydrogeologist under the supervision of a registered geologist. Proposed monitoring well construction details are shown in Figure 4. Monitoring well design details were determined based on boring logs from a site located approximately 200 feet northeast of this location. A well screen slot width of 0.010-inch (#10) will be used with a #3 Lonestar sand filter. This well design is considered to be appropriate for monitoring purposes. A representative soil sample will be collected during drilling activities and sent to a laboratory for a sieve analysis.

2.4 Decontamination

All drilling and sampling equipment will be cleaned before each soil boring is drilled using a high-pressure steam cleaner. The California split-spoon sampler will be cleaned with phosphate-free soap and rinsed with water following collection of each sample.

2.5 Soil Cuttings

Drill cuttings from the soil borings will be placed on visquine and stockpiled on site. Upon chemical analysis of soil samples collected from the soil borings, the stockpiled soil will be transported to an appropriate landfill for disposal. It is anticipated that approximately 3 cubic yards of drill cuttings will be generated from the soil borings.

2.6 Monitoring Well Development

Each monitoring well will be developed after construction with a suction-lift pump until the water produced is sediment-free. No water or chemicals will be introduced into the monitoring wells during well development. All development water will be contained and placed in drums, and will be stored on site for collection and recycling by Ultramar. It is anticipated that approximately 50 gallons of water will be produced from each monitoring well during well development.

2.7 Ground Water Level Measurements and Sampling

Water level measurements will be made using an electronic sounding device or an interface probe. After the wells are developed and allowed to recover fully, depth to water measurements will be made to the nearest 0.01-foot. Water level measurements will be made relative to a marked reference point on the well casing riser. This marked point will be established as the reference elevation by the well survey (Section 2.8).

Ground water samples will be collected a minimum of 24 hours after the monitoring wells have been developed. Before each monitoring well is purged, a subjective analysis will be performed. This will be accomplished by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/water interface. The bailer will then be retrieved and the sample contained within the bailer will be examined for the presence of separate-phase floating product, appearance of petroleum product sheen, and detectable petroleum product odor. After the subjective analysis, three to five well casing volumes of water will be removed from each well. A water sample will then be collected with the same dedicated bailer. Each water sample will be appropriately labeled and stored on ice from the time of collection through the time of delivery to the laboratory. Ground water samples will be transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses. A trip blank, provided by the laboratory performing the analysis, will accompany the ground water sample containers.

2.8 Chemical Analyses

Selected soil samples collected from the soil borings and ground water samples collected from the monitoring wells will be submitted to a state-certified laboratory for chemical analyses. Soil samples, ground water samples, and the trip blank will be analyzed for BTEX and TPH using EPA and LUFT Manual approved methodologies.

2.9 Survey

Well riser elevations will be surveyed relative to mean sea level to the nearest 0.01-foot. The survey point on each well riser will be marked to insure uniform reference elevations for ground water level measurements (Section 2.7). Horizontal locations will be surveyed to the nearest 0.1-foot.

3.0 QUALITY ASSURANCE PLAN

3.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each soil and ground water sample will be collected in a suitable container, preserved correctly for the intended analyses, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of soil and ground water samples to be used on this project can be found in Section 2.0.

3.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis will have a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations will be recorded on the borehole log or in the field records. All samples will be analyzed by a state-certified laboratory.

A chain-of-custody form will be used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them will relinquish the samples by signing the chain-of-custody form and noting the time of shipment. The sample-control officer will verify sample integrity and confirm that is was collected in the proper container, preserved correctly, and that there is an adequate volume for analysis.

3.3 Analytical Quality Assurance

In addition to routine calibration of the analytical instruments with standards and blanks, the analyst is required to run duplicates and spikes on 10 percent of the analyses to insure an added measured on precision and accuracy. Accuracy is also verified through the following:

1. EPA and state certification programs.

2. Participation of an interlaboratory or "round-robin" quality assurance program.

3. Verification of results with an alternative method. For example, calcium may be determined by atomic absorption, ion chromatography, or titrimetric methods. Volatile organics may be determined through either purge and trap or liquid-liquid extraction methods.

3.4 Miscellaneous Checks of Accuracy

Where trace analysis is involved, purity of the solvents, reagents, and gases employed is of greater concern. The laboratory maintains a service contract on all major instrumentation; gas chromatograph, atomic absorption, ion chromatography, and total organic carbon analyzers are all serviced and maintained regularly.

4.0 SITE SAFETY PLAN

A health and safety plan addressing safety provisions to be employed during investigative fieldwork at the site is included as Appendix A. The objective of the plan is to describe procedures and actions to protect the worker, as well as involved parties, from inhalation and ingestion of, and direction skin contact with, potentially hazardous materials that may be encountered at the site. The plan describes (1) personnel responsibilities and (2) protective equipment to be worn as appropriate when working on the site. The plan also contains emergency service contact information.

4.1 Personnel Responsibilities

Key personnel directly involved in the investigation who will be responsible for monitoring the execution of safe work practices and the provisions of this plan are: (1) the drilling-subcontractor project supervisor and (2) the Delta project field manager. These personnel are responsible for knowing the provisions of the plan, communicating plan requirements to workers under their supervision and to site visitors, and for enforcing the plan.

4.2 Personnel Protection

The designated personnel-protective equipment is selected to prevent field personnel from exposure to gasoline fuel products that may be present at the site. To prevent direct skin contact, the following protective clothing was worn as appropriate while working at the site:

1. Hard hat with optional face shield.
2. Tyvek coveralls.
3. Butyl rubber or disposable vinyl gloves.
4. Steel toe boots.
5. Goggles or safety glasses (if optional face shield not used on the hard hat).

The type of gloves used will be determined by the type of work being performed. Drilling personnel will be required to wear butyl rubber gloves because they will have long-duration contact with the subsurface materials. Delta sampling personnel will wear disposable gloves when handling any sample. These gloves will be changed between each sample.

Appropriate personnel-protective equipment shall be put on before entering the immediate work area. The sleeves of the coveralls shall be outside of the cuffs of the gloves to facilitate removal of clothing with the least potential contamination of personnel. If at any time protective clothing (coveralls, boots, or gloves) becomes torn, wet, or excessively soiled, it will be replaced immediately.

These precautions include, but are not limited to the following: (1) donning of respirators (with appropriate cartridges) by site personnel, (2) forced ventilation of the site, and (3) shutdown of work until such time as appropriate safety measures sufficient to insure the health and safety of site personnel can be implemented.

No eating, drinking, or smoking will be allowed in the vicinity of the drilling operations. Delta will designate a separate area on site for eating and drinking. Smoking will not be allowed at the vicinity of the site except in designated areas. No contact lenses will be worn by field personnel.

5.0 SCHEDULE

It is anticipated that soil boring and sampling, installation of the three monitoring wells, monitoring well development, ground water sampling, and the well survey can be accomplished within 3 weeks of approval of this work plan. Analytical results typically require 2 weeks turnaround time. The preliminary report will be submitted approximately 4 weeks after completion of field activities. Total estimated time to complete the scope of work proposed in this work plan is approximately 7 weeks.

6.0 REMARKS/SIGNATURES

The recommendations contained in this report represent our professional opinions, and are based in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

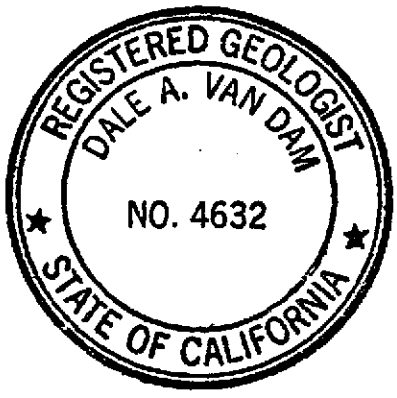
DELTA ENVIRONMENTAL CONSULTANTS, INC.

This report was prepared by: Hal Hansen Date 8-20-90

Hal Hansen
Hydrogeologist/Project Manager

The work performed in this report was done under the supervision of a California Registered Geologist: Dale A. van Dam Date 8/20/90

Dale A. van Dam, R.G.
California Registered
Geologist #4632



/law

R.2 W.

GENERAL NOTES:

BASE MAPS FROM U.S.G.S.
HAYWOOD, CA.
15 MINUTE TOPOGRAPHIC

North

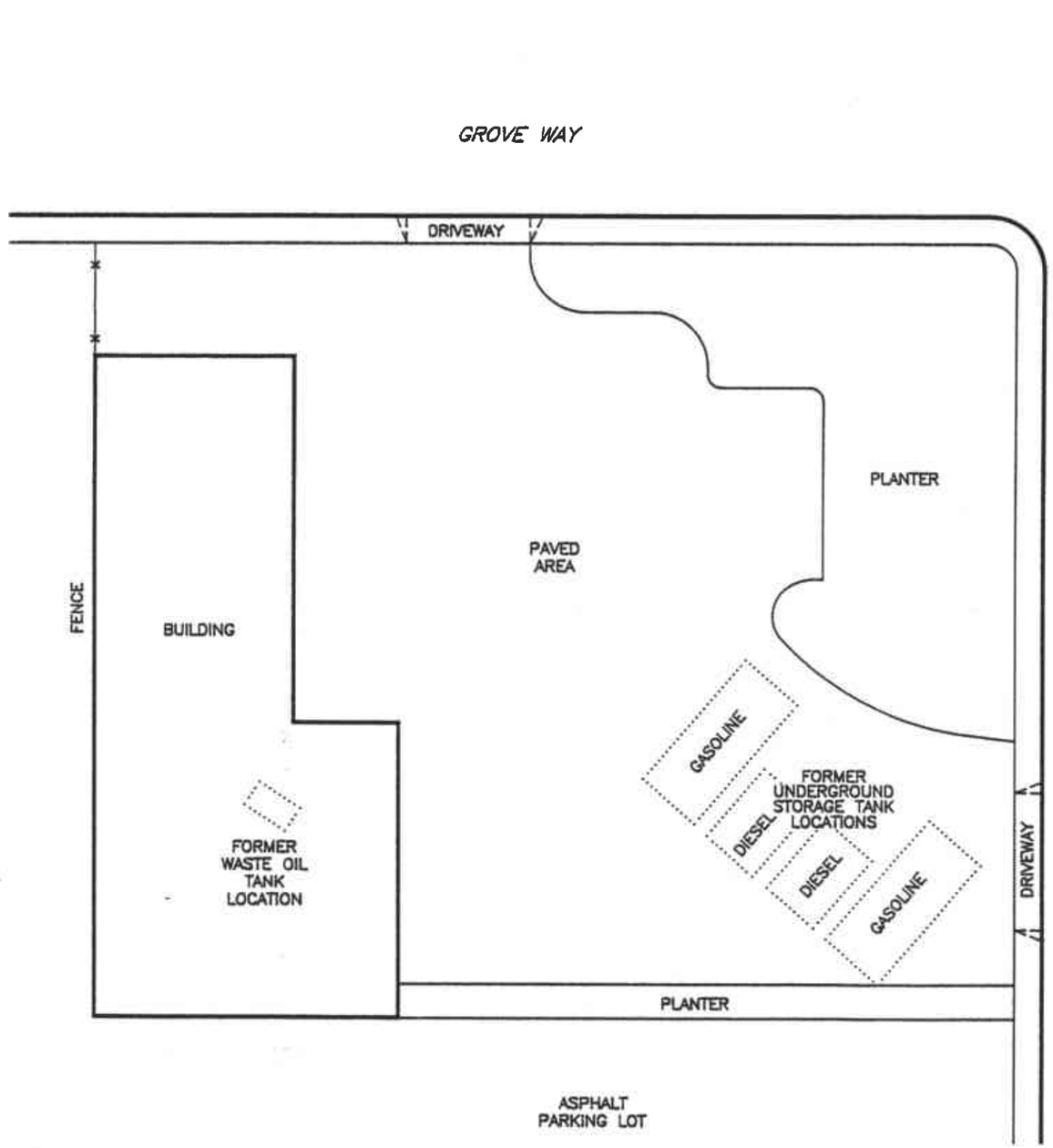
QUADRANGLE LOCATION

0 2000 FT

SCALE 1 : 24,000

FIGURE 1
SITE LOCATION MAP
FORMER BEACON STATION NO 574
22315 REDWOOD ROAD
CASTRO VALLEY, CA.

PROJECT NO. 40-90-818	DRAWN BY I.H. 8/17/90	Delta Environmental Consultants, Inc.
FILE NO. —	PREPARED BY HEH 8/17/90	
REVISION NO. 1	REVIEWED BY DJD 8/17/90	



North

NOTE:

SITE MAP ADAPTED FROM FIGURE SUPPLIED BY ULTRAMAR INC. 8/16/90.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

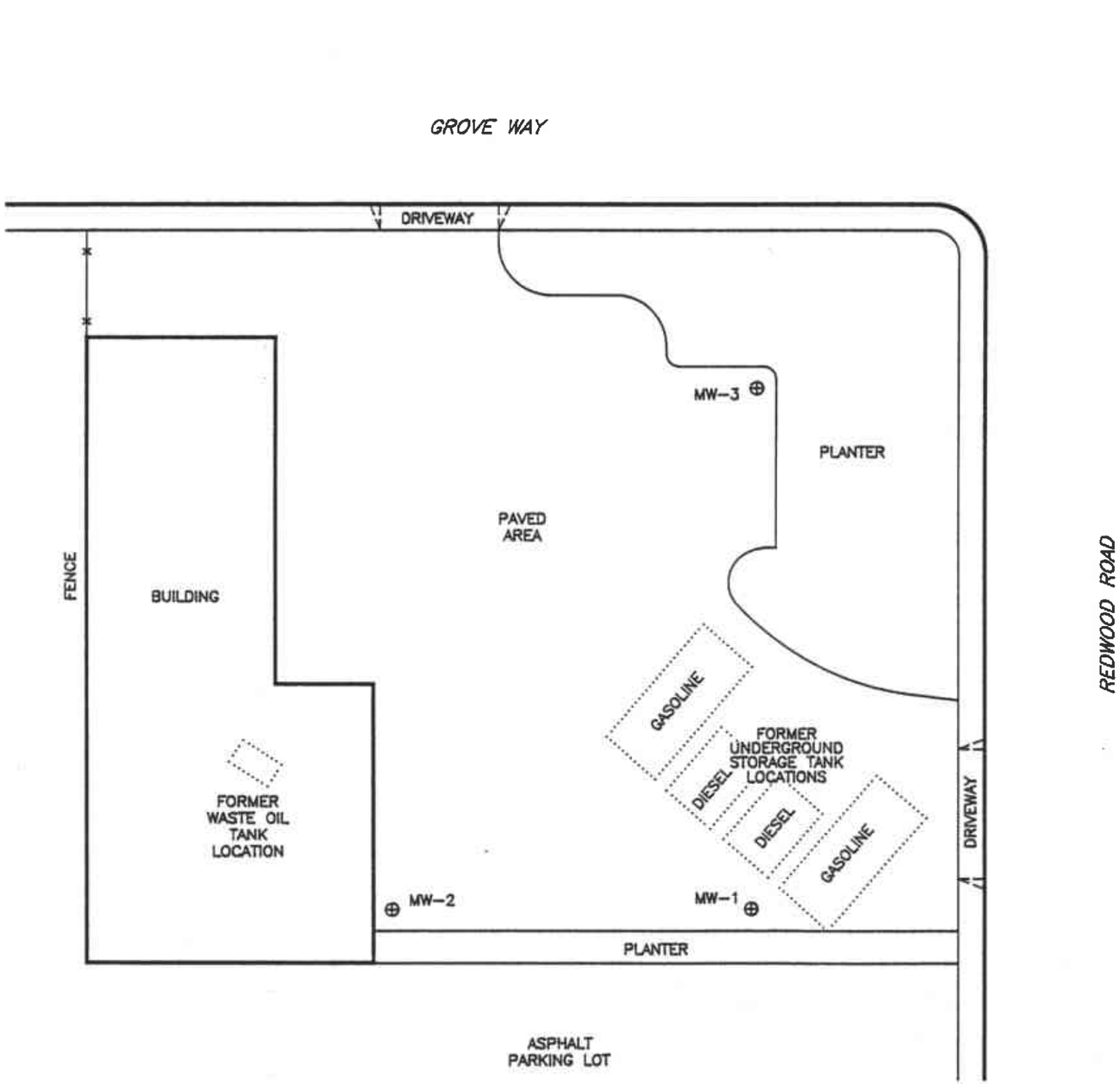
0 20 FT

SCALE (APPROX. ONLY)

FIGURE 2
SITE MAP
FORMER BEACON STATION NO 574
22315 REDWOOD ROAD
CASTRO VALLEY, CA.

PROJECT NO. 40-90-618	DRAWN BY LH. 8/16/90
FILE NO. 90-618-1	PREPARED BY HEH 8/16/90
REVISION NO. 1	REVIEWED BY, DvD 9/17/90

Delta Environmental Consultants, Inc.



North

LEGEND:

⊕MW-1 PROPOSED MONITORING WELL LOCATION

NOTE:

SITE MAP ADAPTED FROM FIGURE SUPPLIED BY ULTRAMAR INC. 8/16/90.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

0 20 FT

SCALE (APPROX. ONLY)

FIGURE 3
PROPOSED MONITORING WELL LOCATION MAP
FORMER BEACON STATION NO 574
22315 REDWOOD ROAD
CASTRO VALLEY, CA.

PROJECT NO. 40-90-818	DRAWN BY LH. 8/17/90
FILE NO. 90-818-1	PREPARED BY HEH 8/16/90
REVISION NO. 1	REVIEWED BY CWD 9/17/90

Delta Environmental Consultants, Inc.

Surface cover on-site includes:

[] Soil/bare ground	[] Clay caps	[] Plastic cover
[] Grass	[■] Paving/asphalt	[] Water bodies
[] Woods	[] Swamp	[] Brush/scrub
[] Buildings	[] Unpaved roads	[] other _____

Site surface area estimated at: 10,000 sq. ft.

Percentage of surface area:

paved	95 %
vegetated	____ %
bare soil	5 %
under water	____ %

Potential for dust generation on-site: High [] Medium [] Low [■]

Any site access restrictions: Yes [] No [■]
Fenced/locked [] Posting (signs) [] Security guards []

Is there evidence of public access to the site: Yes [] No [■]
If yes, describe:

Chemicals/Waste Stored On-site: N/A

	How many?	Size?	Chemical?
[] drums			
[] tanks			
[] vats			
[] surface impoundments			
[] pits/landfills			
[] other _____			

Utilities location/ownership (Electrical, Gas, Telephone, Cable TV):
unknown

History (worker or non-worker injury; complaints from public; previous agency action):
unknown

Have citizen complaints been filed regarding the site: Yes [] No []
If yes, describe:
unknown

Are regulatory agencies involved with the site: Yes [x] No [ ]
If yes, are they federal [ ] state [ ] local [x]?

Regulatory Contacts:

Name	Agency	Phone
Scott Seery	Novato, DEH	F-415-271-4330

E. HAZARD EVALUATION

List all chemicals below that have been identified or are suspected on site and their maximum concentrations in soil/water. Information on hazardous properties are listed in the appendix. For chemicals not shown in the appendix, enter the hazardous property information in the spaces provided.

Chemical Name	PEL/TLV	Maximum Concentration in Soil	Maximum Concentration in Water	Health Hazards/ Comments
Gasoline	300 ppm	ug/kg (ppb)	ug/l (ppb)	
Benzene	1 ppm	ug/kg (ppb)	ug/l (ppb)	Carcinogen
Total Lead	50/ug/m^3	ug/kg (ppb)	ug/l (ppb)	
Tetraethyl lead	75/ug/m^3	ug/kg (ppb)	ug/l (ppb)	Absorbed through skin
Tetramethyl lead	75/ug/m^3	ug/kg (ppb)	ug/l (ppb)	Absorbed through skin
Kerosene	none est.	ug/kg (ppb)	ug/l (ppb)	
Diesel Fuel	none est.	ug/kg (ppb)	ug/l (ppb)	

(Refer to appendix for detailed Hazardous Property information)
P = results pending

Potential Hazards (check boxes that apply to the site):

[ ] corroded containers	[ ] visible leachate	[ ] underground tanks
[ ] visible soil contamination	[ ] odors	[ ] surface tanks
[ ] observed free product	[ ] dust	[ ] observed tanks
[ ] open lagoons	[ ] open pits	

[ ] air stack emissions	[ ] on-site surface water contamination
[ ] visible on-site releases	[ ] off-site surface water contamination
[ ] visible off-site releases	[ ] interior building contamination
[ ] visible on-site erosion	[X] no obvious hazards

F. SITE SAFETY WORK PLAN

PERSONNEL:

Team Members (list)	Responsibility
Hal Hansen	Project Manager
Hal Hansen	Site Safety Officer
Hal Hansen/Randy Stephenson	Public Information
Hal Hansen	Field Team Leader

PERIMETER ESTABLISHMENT:

Map/Sketch attached: Yes [X] No [ ] Site secured: Yes [X] No [ ]

Perimeter identified: Yes [ ] No [ ] Zone(s) of Contamination identified: Yes [ ] No [ ]

INVESTIGATION-DERIVED MATERIAL DISPOSAL:

Disposal of soil cuttings and water are the responsibility of the subcontractor.

FL. PERSONAL SAFETY

SITE ENTRY PROCEDURES: none - N/A

PERSONNEL PROTECTION:

Level of Protection: A [ ] B [ ] C [ ] D [X]

Modifications:

1. All personnel must wear hardhat, safety shoes, safety glasses and/or face shield.
2. Neoprene gloves and tyvek/saranax suit should be worn if contact with contaminated water or soil is likely.
3. Hearing protection must be worn if noise levels prevent normal conversation at a distance of

three feet. No smoking, eating, or drinking is allowed on site.

4. No personnel are to enter or approach any excavation area where there is a danger of wall collapse or confined space entry.

5. Respiratory protection is dependent on conditions listed in next section..

Surveillance Equipment and Materials:

Instrumentation	Action Level	Action
photoionization detector (hNu)	_____5__units*	Level C, air purifying respirator with organic vapor cartridge.

Other (specify):

oxygen meter	< 19.5% oxygen	do not enter area or confined space
explosimeter	> 10% LEL	eliminate all ignition sources and
	> 20% LEL	reduce levels immediately or leave site

*Method of calculation: Chemical known - ½ x TLV = Level C - Air purifying respirator
5 x TLV = Level B - Supplied air respirator
Unknowns - 5 x background or 5 units = Level C - APR with combination organic vapor/dust cartridges
10 x background or 10 units = Level B - Supplied air respirator

First Aid Equipment: Standard first aid kit, portable eye wash

First Aid Procedures:

Ingestion:	DO NOT induce vomiting, summon medical help
Inhalation:	Move victim to fresh air, seek medical attention if needed
Dermal Exposure:	Remove contaminated clothing, flush with water

DECONTAMINATION PROCEDURE:

Level: A. [] B. [] C. [] D. [X] (refer to Health and Safety Manual for detailed instructions)
Personnel: Flush exposed skin with soap and water.
Special requirements:

WORK LIMITATIONS (time of day, weather, heat/cold stress):

In high ambient temperatures, follow heat-stress precautions: Provide plenty of cool water and electrolytes (e.g. Gatorade), remove protective clothing during breaks; check resting pulse and increase number of breaks if pulse does not return to normal during work breaks.

In cold ambient temperatures (< 0°F.), follow hypothermia precautions.

Work may only progress during daylight hours or under conditions of adequate lighting.

ELECTRICAL HAZARDS: will be done 2 days before drilling when permission to proceed is received

Utilities located by _____ on _____ (date) before drilling.

Maintain at least 10 feet clearance from overhead power lines. If unavoidably close to overhead or buried power lines, turn power off and lockout circuit breaker. Avoid standing in water when operating electrical equipment.

CONFINED SPACES:

If entry into confined space is necessary, an Entry Permit must be completed and authorized, and confined space entry procedures followed.

G. SITE SKETCH

see attached map

HAZARDOUS PROPERTY INFORMATION
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 discreet 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.

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

b. Solubility of metals depends on the compound in which they are present.

c. Several chlorinated hydrocarbons exhibit no flash point in conventional sense, but will burn in presence of high energy ignition source or will form explosive mixtures at temperatures above 200°F.

d. Practically non-flammable under standard conditions.

e. Expressed as mm Hg under standard conditions.

f. Explosive concentrations of airborne dust can occur in confined areas.

g. Values for Threshold Limit Value-Time Weighted Average (TLV-TWA) are OSHA Permissible Exposure Limits except where noted in h and i.

h. TLV-TWA adopted by the American Conference of Governmental Industrial Hygienists, which is lower than the OSHA PEL.

i. 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.

j. A - corrosive
B - flammable
C - toxic
D - volatile
E - reactive
F - radioactive
G - carcinogen
H - infectious

k. Dermal Toxicity data is summarized in the following three categories:

Skin Penetration

- A - negligible penetration (solid-polar)
+ B - slight penetration (solid-nonpolar)
++ C - moderate penetration (liquid/solid-nonpolar)
+++ D - high penetration (gas/liquid-nonpolar)

K. Dermal Toxicity data (cont.)

Systemic Potency

E - slight hazard - LD_{50} = 500-15,000 mg/kg
lethal dose for 70 kg man = 1 pint - 1 quart
F - moderate hazard - LD_{50} = 50-500 mg/kg
lethal dose for 70 kg man = 1 ounce - 1 pint
G - extreme hazard - LD_{50} = 10-50 mg/kg
lethal dose for 70 kg man = drops to 20 ml

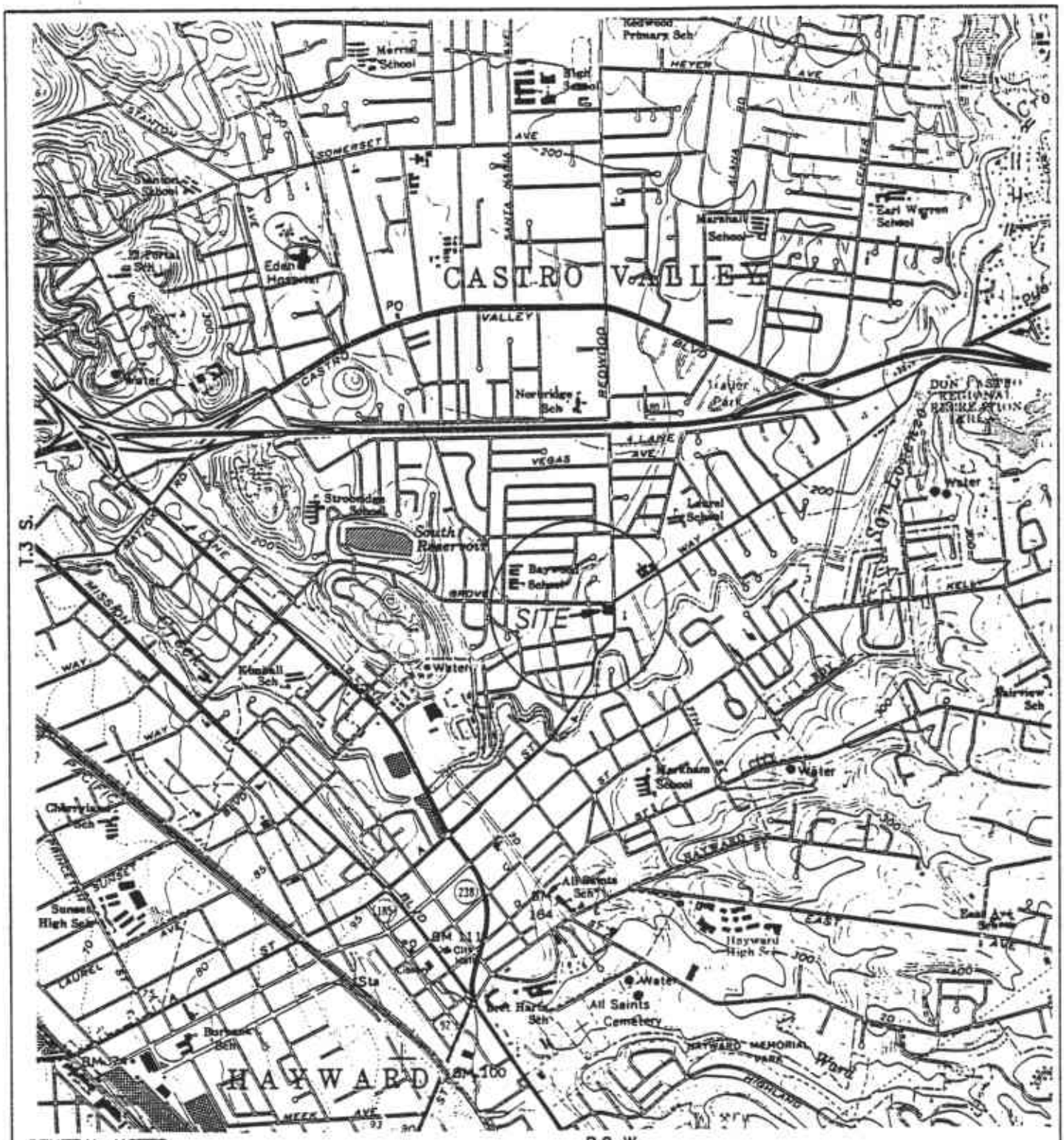
Local Potency

H - slight - reddening of skin
I - moderate - irritation/inflammation of skin
J - extreme - tissue destruction/necrosis

L. Acute Exposure Symptoms

A - abdominal pain
B - central nervous system depression
C - comatose
D - convulsions
E - confusion
F - dizziness
G - diarrhea
H - drowsiness
I - eye irritation
J - fever
K - headache
L - nausea
M - respiratory system irritation
N - skin irritation
O - tremors
P - unconsciousness
Q - vomiting
R - weakness

MATERIAL (CAS)	WATER SOLUBILITY[A]	SPECIFIC GRAVITY	VAPOR DENSITY	FLASH POINT DEG. F	VAPOR PRESSURE	LEL/ UEL	LD_{50} MG/KG	TLV-TWA[G]	IDHL LEVEL	ODOR THRESHOLD OR WARNING CONCENTRATION	HAZARD[J] PROPERTY	DERMAL TOXICITY	ACUTE[L] EXPOSURE
sel fuel	Insoluble	.81-0.90	N/A	130	N/A	0.6-1.3 6-7.5		None Estab.	NE	0.008 ppm	BCD	CI	BCDHFIKLMNP
oline	Insoluble	.72-0.76	3-4	-45	Var.	1.4% 7.6%		300 ppm	NE	<1 ppm	BCD	CI	BCEFHIKLMNP
osene	Insoluble	0.83-1.0	N/A	100-165	5	0.7% 5.0%		None Estab.	NE	0.008 ppm	BCD	CI	BCDFHIKLMNP



GENERAL NOTES:
BASE MAPS FROM U.S.G.S.
HAYWOOD, CA.
15 MINUTE TOPOGRAPHIC

QUADRANGLE LOCATION

0 2000 FT

SCALE 1 : 24,000

FIGURE 1
SITE LOCATION MAP
FORMER BEACON STATION NO 574
22315 REDWOOD ROAD
CASTRO VALLEY, CA.

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FILE NO. —	PREPARED BY HEH 8/17/90
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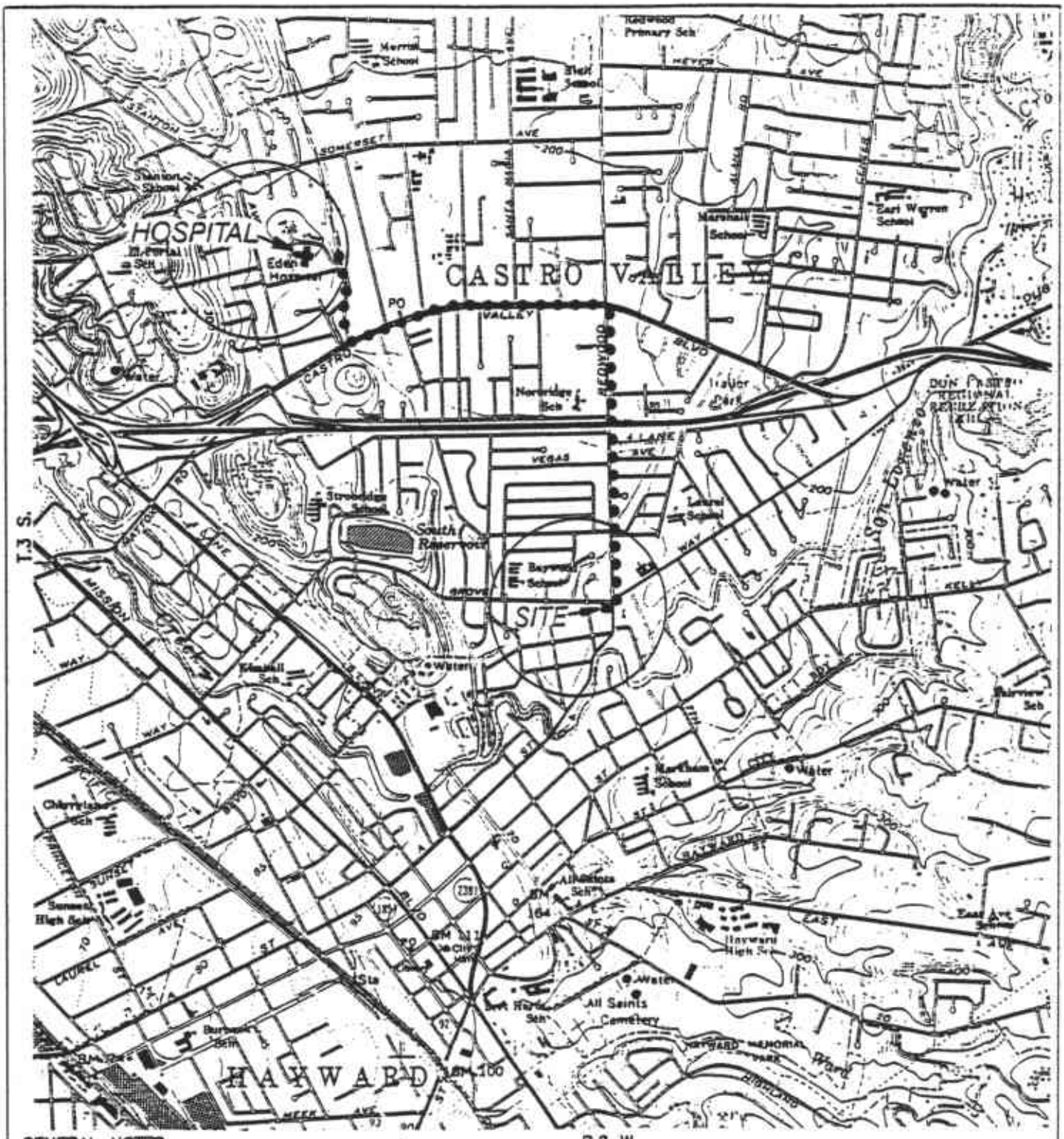

GENERAL NOTES:
BASE MAPS FROM U.S.G.S.
HAYWOOD, CA.
15 MINUTE TOPOGRAPHIC

HOSPITAL LOCATION MAP
FORMER BEACON STATION NO 574
22315 REDWOOD ROAD
CASTRO VALLEY, CA.

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FILE NO. —	PREPARED BY HEH 8/17/90
REVISION NO. 1	REVIEWED BY

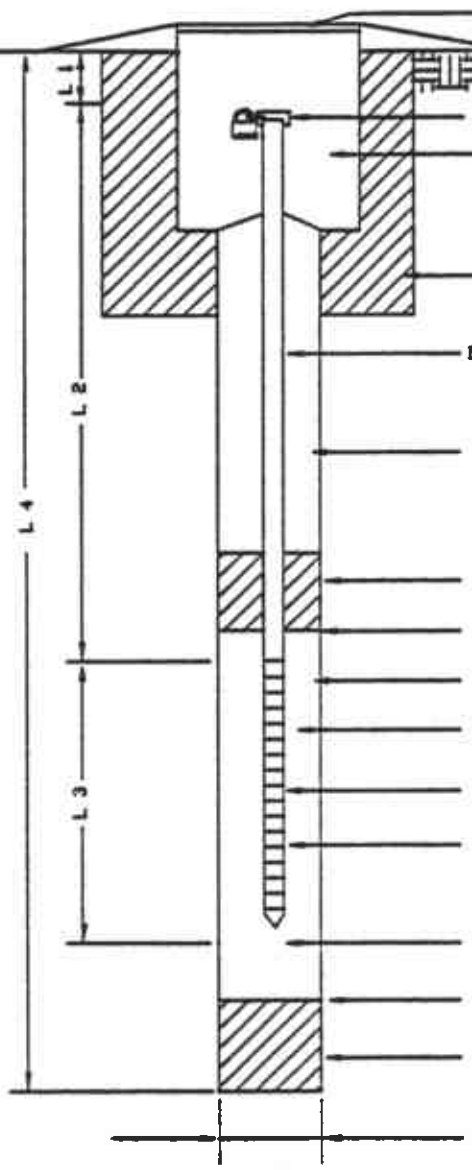
Delta Environmental Consultants, Inc.

PROPOSED FLUSH GRADE
MONITORING WELL CONSTRUCTION DETAILS

Figure 4

PROJECT 22315 Redwood Road
Castro Valley

DELTA NO. 40-90-818



12-inches steel	
12 inches	
1/4 inch	
2 feet concrete	
4 inch Schedule 40 PVC Flush Thread	
Cement with 5% bentonite	
2 feet bentonite	
2 feet	
#3 Lonestar	
Schedule 40 PVC	
0.010-inch (#10)	
4 inch x 10 feet	
30 feet	
30 feet	
N/A	
10 inches	

L 1 = 0.25 FT.

L 2 = 9.75 FT.

L 3 = 20. FT.

L 4 = 30. FT.

Delta Environmental Consultants, Inc.

1023 B/3-89

APPROVED 6-27-90

POST ON-SITE

FIELD INVESTIGATION TEAM
CLASS III PETROLEUM SITE HEALTH AND SAFETY PLAN

Prior to initiating field activities the Site Safety Officer (SSO) must review the Site Health and Safety Plan (SHSP) with all members of the field crew. Each member must then sign and date a copy of the SHSP indicating they have reviewed and understand all aspects of the SHSP. This signed copy is returned to the project file upon completion of field activities.

SHSP's may be revised, or rewritten for different phases of a project, if site activities are distinctly different, if areas of differing hazard are involved, or as information about contaminants and hazards changes. Changing conditions may justify either tightening or loosening SHSP restrictions and action levels, depending upon the additional information generated.

DELTA PROJECT NUMBER 40-90-618

SIGNATURES OF REVIEWERS/FIELD CREW: Signature indicates that the signer has reviewed and understands all segments of the SHSP.

Signature	Date
Del A. Mc	8/17/90
Dal E. Henson	8-17-90

LOCAL EMERGENCY TELEPHONE NUMBERS (provide area code):

Ambulance	all
Hospital Emergency Room	1-415-537 1234
Poison Control Center	All
Fire Department	all
Airport	1415-5-1212
Explosives Unit	All

A. GENERAL INFORMATION

Client: Ultramar Inc.

Delta Project Number: 40-90-818

Site Name: Castro Valley Beacon

Client Claim/P.O. Number:

Site Address: 33215 Redwood Road

Site Owner: Ultramar

Project Manager: Hal Hansen

Plan Prepared by: Hal Hansen

Date: 6-20-90

Approved by: Debra Putnam, CHT

Date: 6-27-90

Revised by:

Date:

Revision Approved by:

Date: unknown

Objectives: Investigate the extent of on-site soil and ground water contaminants and take necessary cleanup action.

Phase I - Soil borings and monitoring wells

Phase II - Soil excavation as needed

Phase III - Site cleanup to include, as needed, recovery well, treatment system construction and maintenance.

Proposed Date of Investigation: unknown project on hold

Hazard Summary/Level of Protection:

A. [ ] B. [ ] C. [ ] D. [X] (with modifications - see Section D.1)

Summary of Available Information:

Tanks pulled

Sources of Background Information:

Report from previous consultant

B. EMERGENCY INFORMATION

LOCAL TELEPHONE NUMBERS (provide area codes):

Ambulance	911
Hospital Emergency Room	1-415-784-4251
Poison Control Center	911
Fire Department	911
Airport	1-[illegible]-21
Explosives Unit	911

Note: If you list 911, check to be sure it is activated in the site area, and determine whether or not it is enhanced.

SITE RESOURCES:

Water supply available on site:	Yes ■	No □
Telephone available on site:	Yes ■	No □
Bathrooms available on site:	Yes ■	No □
Other resources available on site:	Yes ■	No □

If yes, identify: Electricity

If you answered "no" to any of the above questions, identify the closest available facility, and provide directions.

EMERGENCY CONTACTS	PHONE NUMBER (provide area codes) Work	Home
1. Project Manager: Hal Hansen	916 638-2085	916 783 5454
2. District Manager: Debra Nicholas	916 535-4555	916-676-3631
3. Health and Safety Officer: Hal Hansen	"	
4. Site Contact: Hal Hansen	"	
5. Regulatory Consultant: Scott Seery	1-415-271-4330	
6. National Health and Safety Officer: Steve Reynolds	800/888-1331	612/699-4197
7.		
8.		
9.		
10.		

C. EMERGENCY ROUTES

(Give name, address, telephone number, directions, distance and time estimate, and map.)

Hospital:
Eden Hospital 20103 Lake Chabot Rd. 1-415-537-1234
go north on redwood Rd. turn left on Castro Valley Blvd. turn right on Lake Chabot on left. approximately 4 miles 15 minutes away

Other:

D. SITE/WASTE CHARACTERISTICS

Waste/Contaminant Type(s): Liquid [ ] Soil [X] Solid [ ] Sludge [ ] Gas [ ]

Characteristic(s): [ ] Corrosive [X] Ignitable [ ] Radioactive
[X] Volatile [X] Toxic [ ] Reactive
[ ] Unknown [ ] Other (Name) _____

Major Spills/Releases

Release Type	Date	Chemical	Quantity	Contaminated Media*
unknown				

(*air, surface water, soil, or ground water)

Free Product: Yes [ ] No [X] unknown Dissolved: Yes [ ] No [X] unknown

Have removal actions occurred: Yes [X] No [ ]

If yes, describe: tanks were removed and some soil

General Facility Description:

Gasoline Service Station

Site Characterization:

Description: Active [ ] Closed/Abandoned [X]

Site Activities:

(operations on-site, products, raw materials used, etc.)

How many years has the site been operating: unknown

Was the site used by previous owners: Yes [ ] No [ ] [X] unknown

Describe previous site activity: