CH2MHILL
Engineers
Planners
Economists
Scientists

April 25, 1994

BAE28830.P2.01

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Division of Hazardous Materials
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Oakland, California 94621

Dr. Ravi Arulanantham
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Mr. Sum Arigala
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Subject: Draft Remediation Plan
Del Monte Plant 35, Emeryville, California

Enclosed for your review is a copy of the Draft Remediation Plan for the Del Monte Plant 35 property located at 4204 Hollis Street and 1250 Park Avenue in Emeryville, California. The plan describes the remaining remedial tasks to be conducted at Plant 35 to formally close the site with approval of the ACDEH and the RWQCB.

Two additional field investigations have recently been conducted: a supplemental offsite groundwater investigation and a supplemental onsite soil and groundwater investigation. Reports presenting the results of these investigations and recommendations on the need for additional investigation or remediation are being prepared and will be submitted under separate cover. If results of the additional investigations indicate the need for remedial actions beyond those described in the Draft Remediation Plan, Del Monte will develop additional remediation plans for agency review. Once such plans are approved, they will be considered an addendum to the Remediation Plan for Plant 35.

According to the contractual agreement between Del Monte and Kaiser for the property transaction of Plant 35, a remediation plan approved by the RWQCB and the ACDEH must

be in place by the end of May. With this schedule in mind, we would like to meet with you during the week of May 9th to discuss your comments on the enclosed draft remediation plan.

Please contact us if you have any questions about this submittal. We can be reached at (510) 251-2888, ext. 2118 (Bern) or 2189 (Madeline).

Sincerely,

CH2M HILL

Bern Baumgartner
Project Manager

Madeline Wall
Project Engineer

cc: Mr. Thomas Bender/Del Monte
Mr. Steven Ronzone/Del Monte
Mr. Soon Kim/Del Monte
Mr. Mark Zemelman/Kaiser
Mr. David Harnish/ENVIRON

Draft
Remediation Plan
Del Monte Plant 35
Emeryville, California

Prepared for
Del Monte

Prepared by
CH2M HILL

April 1994

SFO10012EBF.WP5

Contents

Tables

Figures

1.0 Introduction

Del Monte Plant 35 in Emeryville, California operated as a fruit and vegetable processing facility from the late 1920s to 1989. Since 1986, Del Monte Foods, Inc. (Del Monte) has conducted several soil and groundwater investigation and remediation activities, with ongoing agency review and approval, to address known and potential releases of petroleum hydrocarbons and chlorinated hydrocarbons.

Del Monte Plant 35 is located on approximately 13 acres of land in Emeryville, California. Its location is shown on Figure 1-1. The land use in the vicinity of Plant 35 is primarily industrial. Releases of hazardous substances from nearby businesses have been documented. Groundwater in the vicinity of Plant 35 is not used for drinking.

Purpose

Del Monte and Kaiser Permanente (Kaiser) have entered into a property transaction agreement for Plant 35. Kaiser has proposed to build a hospital on land that includes all of the current Plant 35 property. A very important aspect of the property transaction between Del Monte and Kaiser is that the Alameda County Department of Environmental Health (ACDEH) and the Regional Water Quality Control Board (RWQCB) agree to conditions for environmental closure of the Plant 35 property.

The purpose of this document is to describe the remaining remedial tasks to be conducted at Plant 35 to formally close the site with the approval of the ACDEH and the RWQCB.

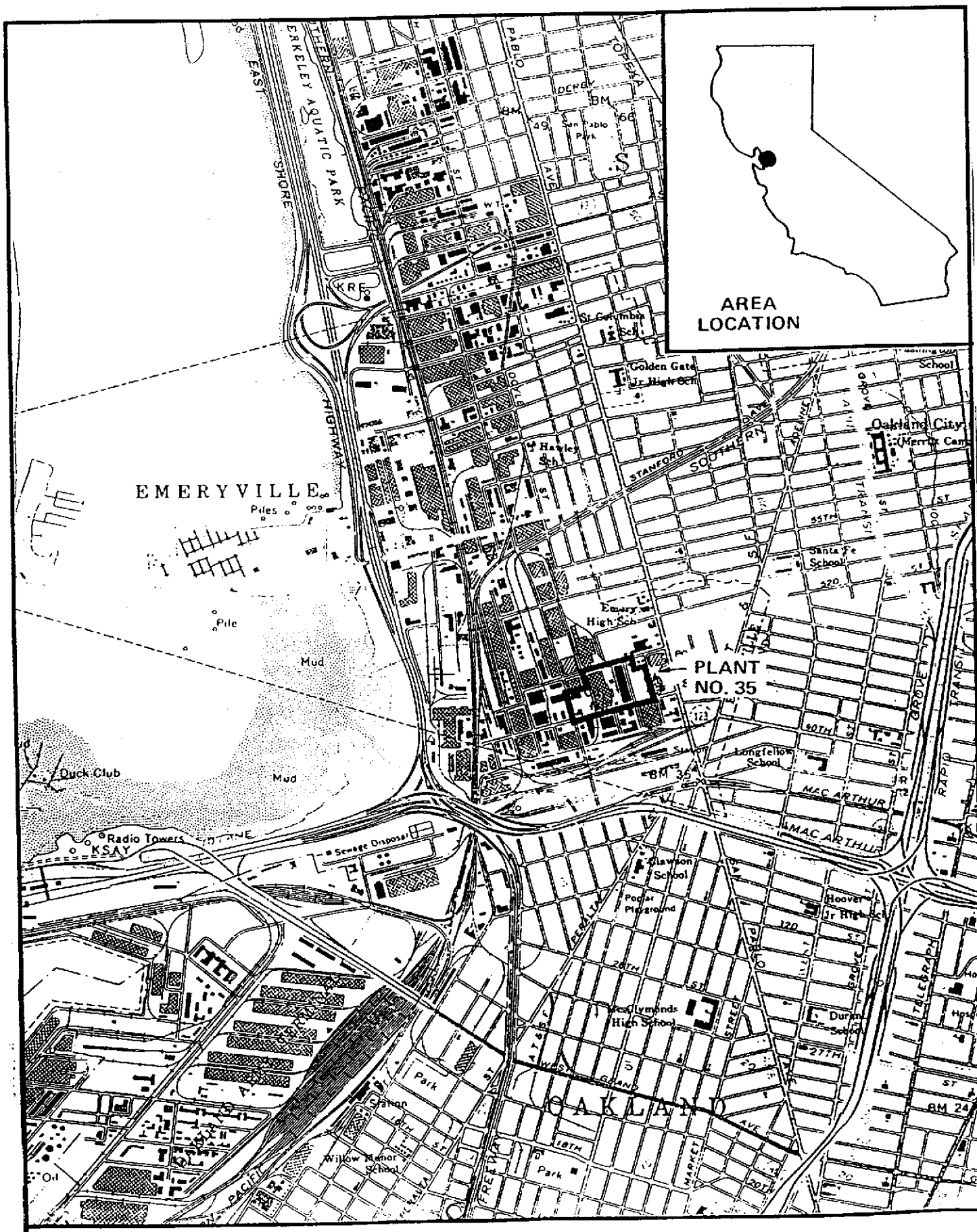

FIGURE 1-1
PROPERTY LOCATION MAP
DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

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Scope

Section 2 of this plan summarizes the current status of the Plant 35 remediation activities and the planned future remedial activities. Section 3 describes the remaining remedial tasks to be completed. Section 4 provides the anticipated schedule for task completion.

2.0 Summary of Plant 35 Remediation

2.0 Summary of Plant 35 Remediation

Soil and groundwater investigation and remediation activities conducted by Del Monte include underground tank removals, soil excavations, and construction and operation of a groundwater extraction and treatment system. The locations of these actions are shown on Figure 2-1. To date, Remedial Action Completion Certificates have been issued by the ACDEH for the following three underground tanks (locations are shown on Figure 2-1):

- 3,500-gallon underground gasoline tank formerly located on the East Parcel (ACDEH, 1992a)

- 550-gallon underground gasoline tank formerly located on the East Parcel (ACDEH, 1992b)

- 550-gallon underground gasoline tank formerly located on the West Parcel (ACDEH, 1992c)

Copies of the certificates are provided in Appendix A.

As part of the property sale preparations, subsurface remedial tasks were planned for implementation at Plant 35 and described in a remediation activities plan presented to the ACDEH in letters dated June 26 and August 12, 1992, copies of which are provided in Appendix B (CH2M HILL, 1992a and 1992b). Written approval of the planned activities was given by the ACDEH (ACDEH, 1992d). Table 2-1 provides a summary of the completion status of the Plant 35 remedial tasks, including the future planned activities and their scheduled dates. Details of the nine tasks listed in Table 2-1 are presented in Section 3 of this document.

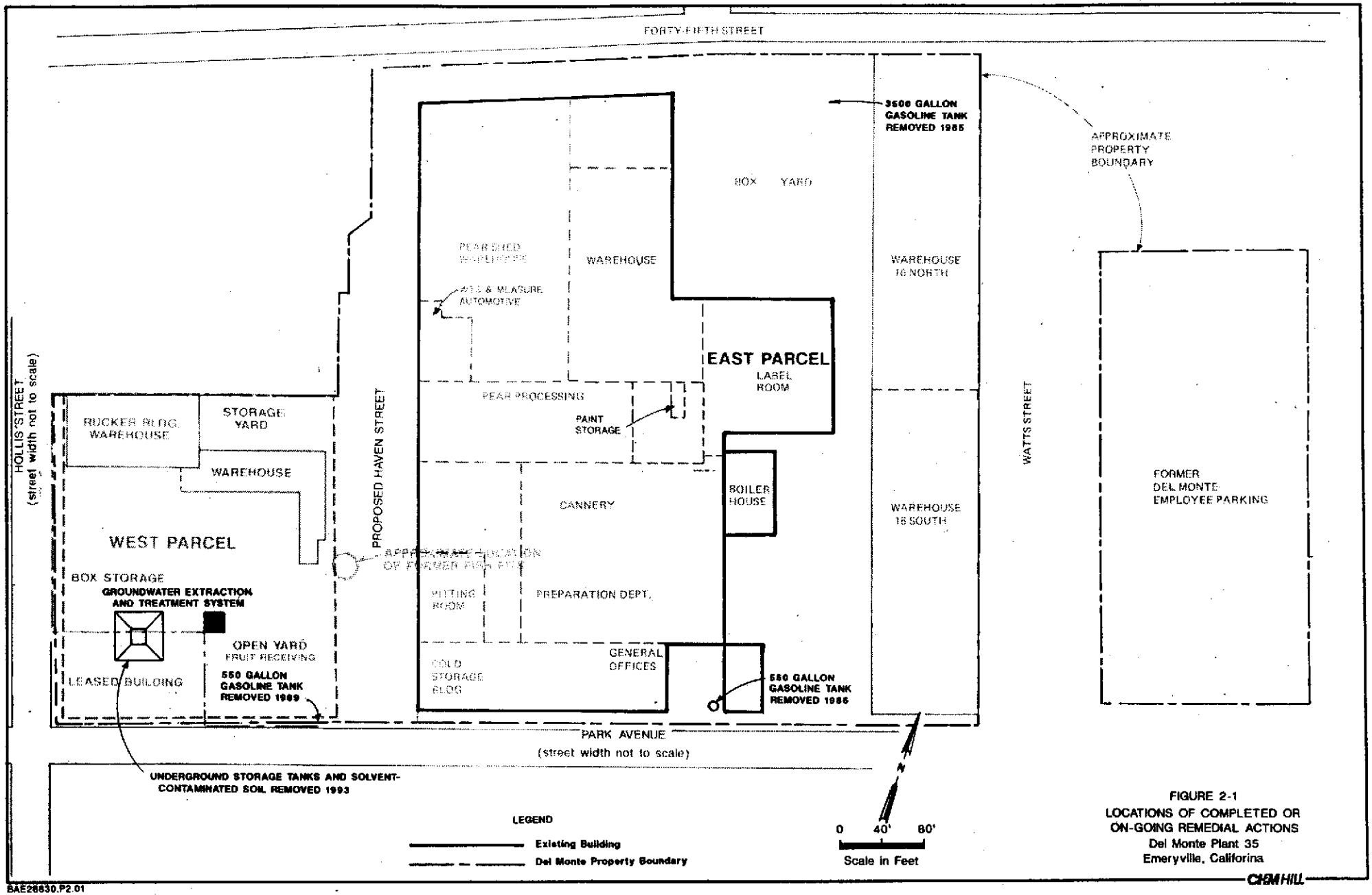

FIGURE 2-1
LOCATIONS OF COMPLETED OR ON-GOING REMEDIAL ACTIONS
Del Monte Plant 35
Emeryville, California

CH2M HILL

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Table 2-1
Summary of Plant 35 Remediation Plan

Task No.	Activity	Status	Future Activity	Date Scheduled
1	Groundwater treatment system	Treatment system continues to operate. Excavated, aerated soil remains onsite.	Expand collection and treatment system and continue operation. Reuse aerated soil onsite.	May 1994 for system expansion. Operate system until Kaiser's construction begins (estimated July 1995) or asymptotic levels are reached.
2	Haven St. soil excavation	Plans for this activity were submitted to and approved by ACDEH in 1992.	Excavate and dispose of soil containing petroleum hydrocarbons at levels exceeding 100 mg/kg.	After site demolition activities – September 1994.
3	Soil excavation beneath process building	Sampled soil beneath sumps and gutters in October/November 1993.	Excavate known areas of soil containing petroleum hydrocarbons exceeding 100 mg/kg. Inspect soil underlying building for evidence of petroleum hydro-carbons and sample suspect areas. Conduct additional excavation as appropriate.	After site demolition activities – September 1994.
4	Removal of 2[illegible]-gallon tank	Plans for this activity were submitted to and approved by ACDEH in 1992.	Remove tank and affected soil and install well (MW-13).	After site demolition activities – [illegible]
5	Well destruction	Plans for this activity were submitted to and approved by ACDEH in 1992.	Destroy wells MW-1 through MW-6 and MW-9.	Prior to Kaiser's construction beginning (estimated July 1995).
6	Groundwater monitoring	Ongoing	Continue monitoring MW-7, 9, 10, 11, and new wells MW-12 and MW-13.	Quarterly through June 1996, then re-evaluated for future monitoring needs.
7	Closure report	No action	Prepare closure report and submit to agencies.	After groundwater treatment system is shut down (see Task 1) (estimate August 1995).

3.0 Remediation Tasks

3.0 Remediation Tasks

The seven remedial tasks remaining to be completed at Plant 35 are described in this section.

Task 1: Groundwater Treatment System Expansion

A groundwater collection and treatment system has been operating in the southwest corner of the Del Monte property since January 1993. The system has been successful in reducing levels of chlorinated hydrocarbons detected in nearby monitoring wells, although elevated levels of TCE are still being detected, particularly in monitoring well MW-11. Monitoring results of samples collected February 11, 1994 after the system had been shut down for two months did not indicate a rebound of contaminant levels. The system has been collecting groundwater at a rate of approximately 3.5 gallons per minute.

The objective of this task is to reduce chlorinated hydrocarbon concentrations in groundwater and minimize offsite migration of chlorinated hydrocarbons by expanding the system to collect and treat a greater volume of groundwater at the downgradient edge of the Del Monte property. The downgradient edge is along Hollis Street as shown in Figure 3-1.

Figure 3-2 shows a conceptual view of the proposed system expansion. The expanded system adds a groundwater extraction trench 75 feet long parallel to Hollis Street near the downgradient property boundary of Plant 35. The extraction trench, which will supplement the existing extraction pit, will be 19 feet deep, with the bottom 9 feet lined with filter fabric and filled with drain gravel. The top 10 feet will be backfilled with the soil that was excavated, provided the soil does not contain detectable levels of chlorinated hydrocarbons

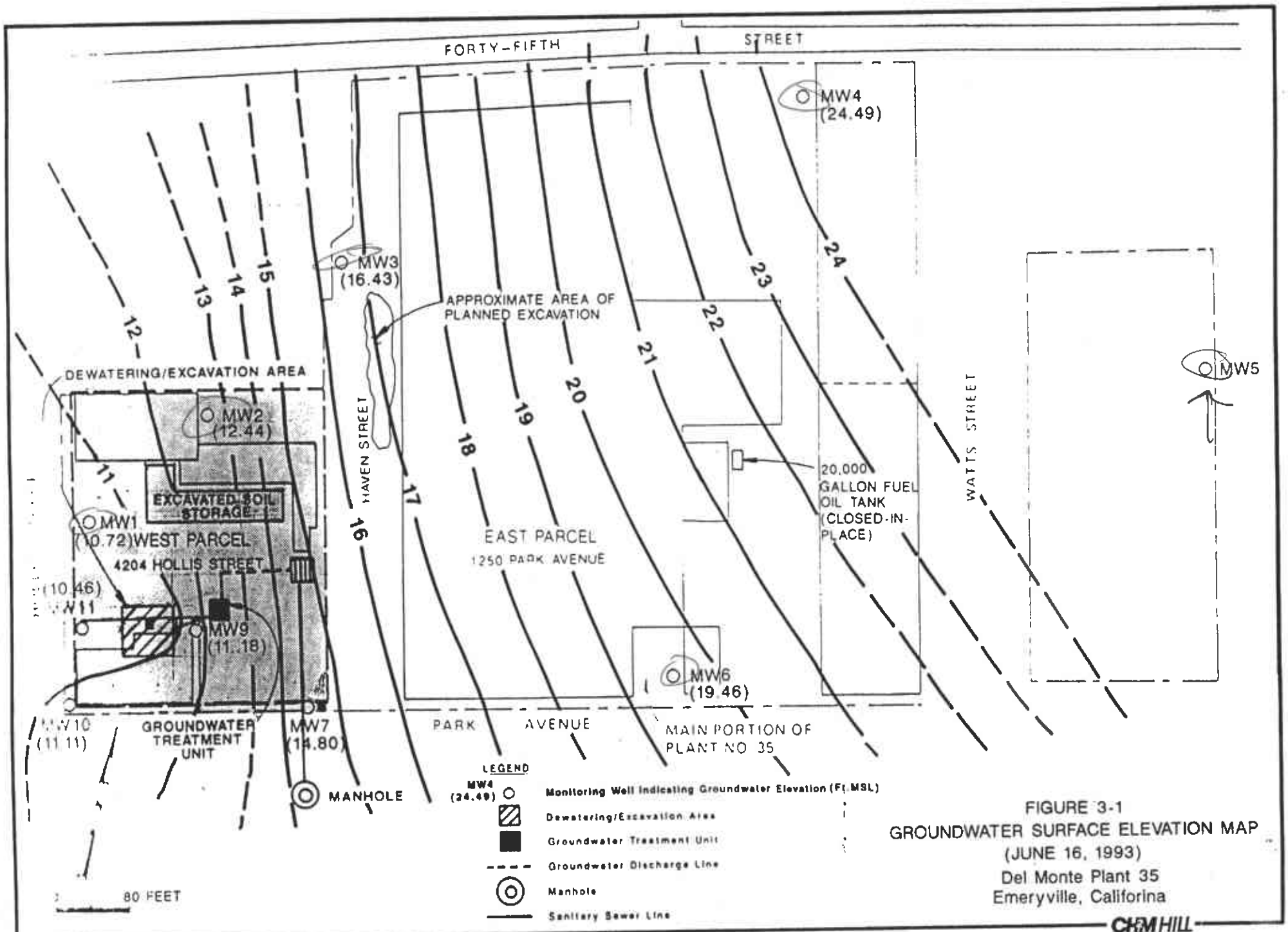

FIGURE 3-1
GROUNDWATER SURFACE ELEVATION MAP
(JUNE 16, 1993)
Del Monte Plant 35
Emeryville, California

CH2M HILL

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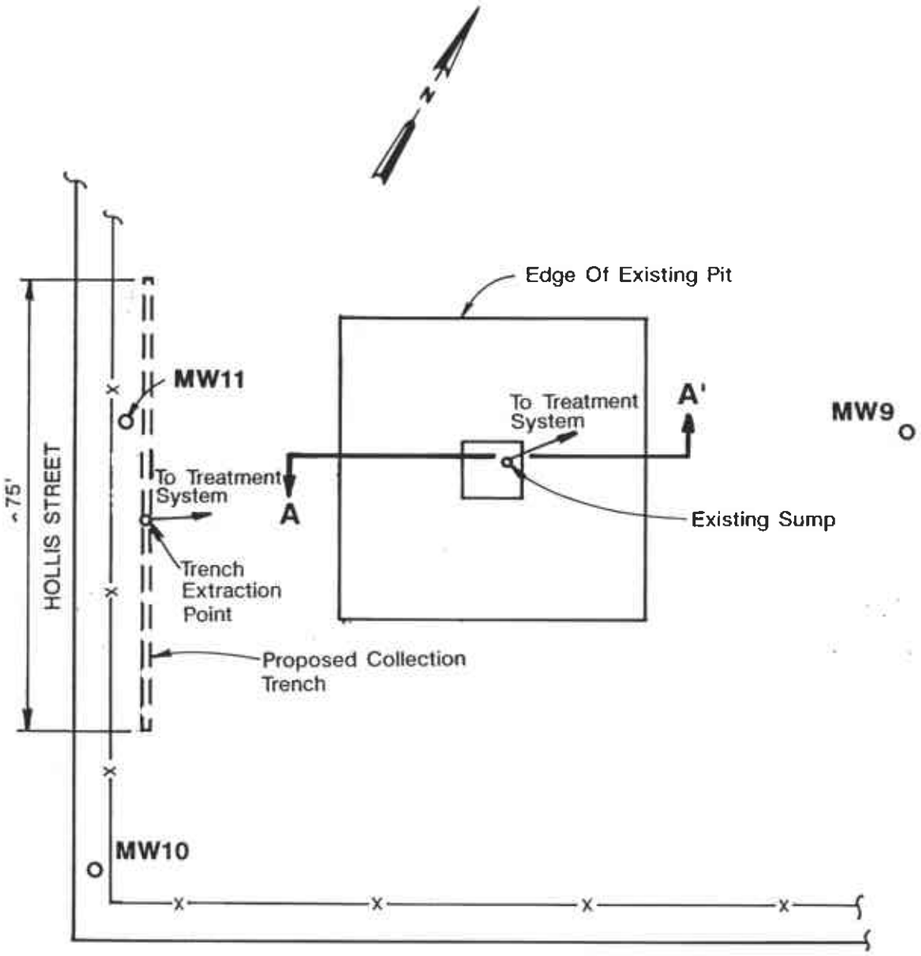
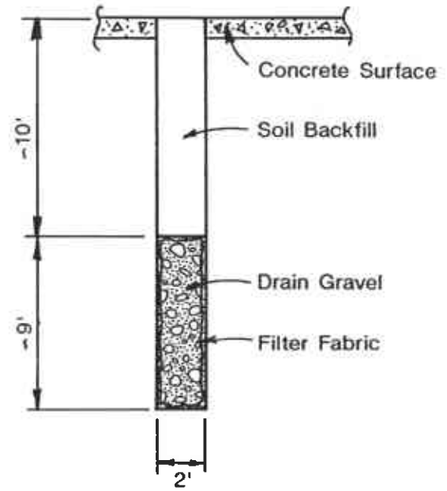


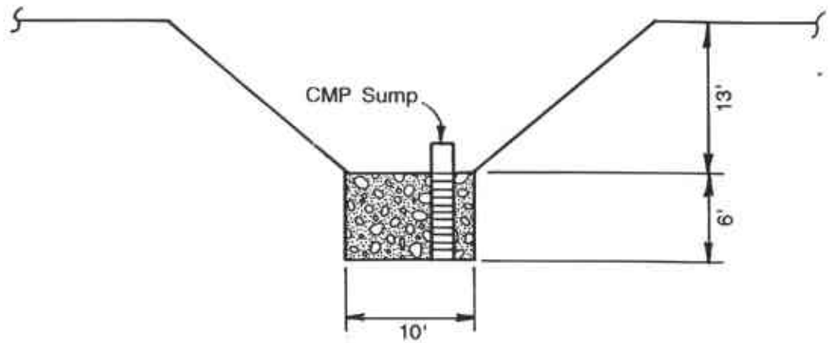
PLAN

Scale: 1" = 25'



COLLECTION TRENCH CROSS-SECTION

Not To Scale



SECTION A-A'

Not To Scale

FIGURE 3-2
PROPOSED EXPANSION OF COLLECTION SYSTEM
CONCEPTUAL DESIGN

Del Monte Plant 35
Emeryville, Califorina

CH2M HILL

and the soil can be sufficiently compacted. Backfill compaction will achieve 95 percent of the maximum dry density at optimum moisture as determined from the Standard or Modified Proctor Test.

The expanded system is expected to extract an estimated 5 to 6 gallons per minute, based on groundwater flow rates into the existing extraction sump. To accommodate the increased flow, the treatment capacity will be increased by adding a set of two carbon canisters to operate in parallel to the existing set and making other necessary system modifications. A flow diagram of the existing treatment system is provided in Figure 3-3.

Figures depicting the estimated capture zone for the current extraction system and the proposed expanded system are provided in Appendix C. To monitor the actual capture zone, we propose installing three piezometers downgradient of the estimated capture zone and measuring water elevations monthly.

We anticipate operating the system until Kaiser's construction begins (estimated to be June 1995) or until asymptotic concentration levels of chlorinated hydrocarbons in the groundwater are achieved, whichever occurs first. Asymptotic concentrations of chlorinated hydrocarbons will be assessed from monitoring data of onsite wells MW-7, MW-9, MW-10, and MW-11 (Hollis Street).

Task 1.1 Construction

Before construction activities begin, Del Monte will contact Alameda County, the Emeryville Fire Department, Bay Area Air Quality Management District, and East Bay Municipal Utility District.

The system expansion will be constructed by a remediation contractor with oversight provided by CH2M HILL. CH2M HILL will collect soil samples from the sidewalls of the excavated trench and from stockpiled excavated soil to characterize soil potentially useable

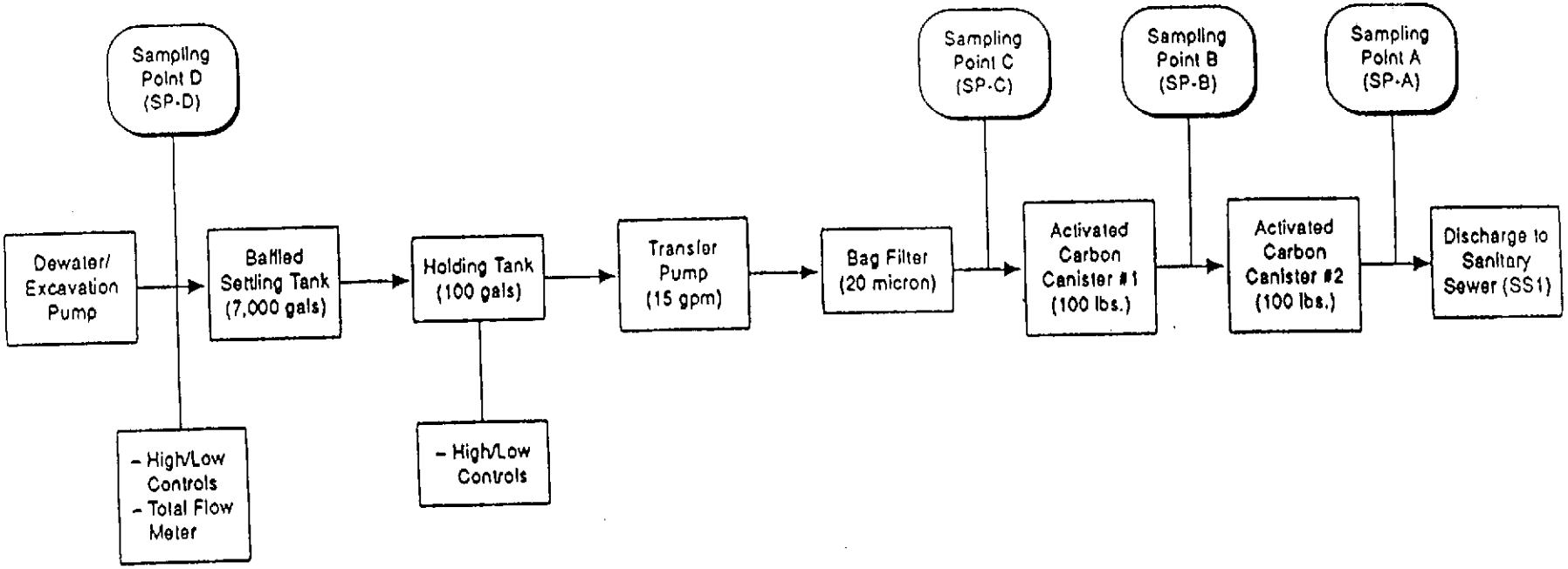


FIGURE 3-3
DEL MONTE PLANT 35
GROUNDWATER TREATMENT UNIT
Del Monte Plant 35
Emeryville, Califorina

CH2M HILL

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as backfill for the trench and to provide data on the presence of chlorinated hydrocarbons. Soil samples will be analyzed for chlorinated hydrocarbons (EPA Method 8010). Four soil samples will be collected from trench sidewalls, one from above the groundwater table and one from below the groundwater table at two locations. In addition, samples of the excavated soil will be collected to confirm its suitability for use as backfill and to determine appropriate disposal options for excess soil.

Task 1.2 Treatment System O&M

Operation and maintenance (O&M) activities will consist of semi-monthly system inspections and quarterly water sampling from the treatment system. Water samples will be analyzed for chlorinated hydrocarbons by EPA Method 601. Monitoring well water level measurements will be collected weekly until levels stabilize and monthly thereafter.

Results of water sample analyses and other measurements will be presented in the Del Monte Plant 35 quarterly groundwater monitoring reports submitted to the agencies in accordance with the groundwater monitoring program for the property.

Task 2: Haven Street Soil Excavation

This task was previously proposed to the ACDEH and approved (CH2M HILL, 1992a; ACDEH, 1992d).

A soil investigation was conducted along the proposed Haven Street location by CH2M HILL in 1989. The investigation revealed that three adjacent shallow (1 to 1-1/2 feet below ground surface) soil samples contained total petroleum hydrocarbons (TPH) above 100 mg/kg (CH2M HILL, 1992c).

The objective of Task 4 is to remove unsaturated soil in the vicinity of the 1989 Haven Street investigation sample points where TPH in soil exceeded 100 mg/kg as shown on Figure 3-4. As requested by the ACDEH, to confirm that 100 mg/kg is an appropriate cleanup level, one soil sample with total extractable petroleum hydrocarbon (TEPH) levels of approximately 100 mg/kg will be subjected to the EPA Toxic Characteristic Leaching Procedure (TCLP) using simulated rainwater in place of acid. The resultant leachate will be tested for TEPH.

Task 2.1 Soil Excavation and Oversight

A remediation contractor will excavate soil from the target area using standard excavation equipment. During excavation work, CH2M HILL will collect soil samples from the excavation bottom and side walls for laboratory analysis (EPA 8015 mod. or EPA 418.1). The use of an onsite mobile laboratory is anticipated to provide immediate results of confirmation samples.

Excavated soil will be temporarily stockpiled while additional soil analyses are performed to meet waste characterization requirements for acceptance at offsite disposal facilities. The soil will be stockpiled on plastic and covered to control erosion or dispersal from wind or rainfall.

Task 2.2 Soil Disposal

Soil will be transported to an appropriate offsite facility for disposal. Additional laboratory analyses of excavated soil samples may be conducted to meet offsite facility waste characterization requirements.

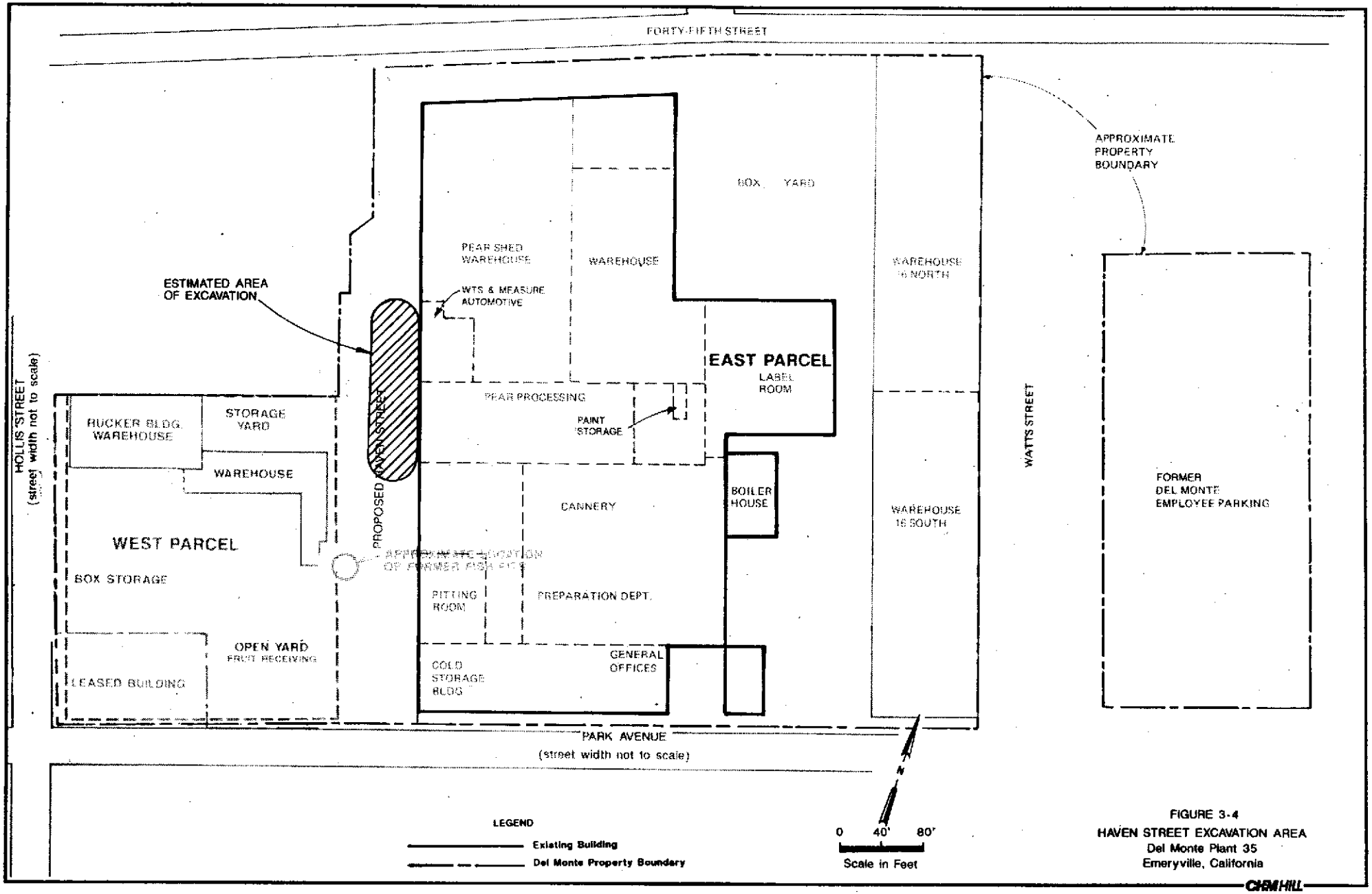


FIGURE 3-4
HAVEN STREET EXCAVATION AREA
Del Monte Plant 35
Emeryville, California

CHM HILL

Task 2.3 Documentation and Reporting

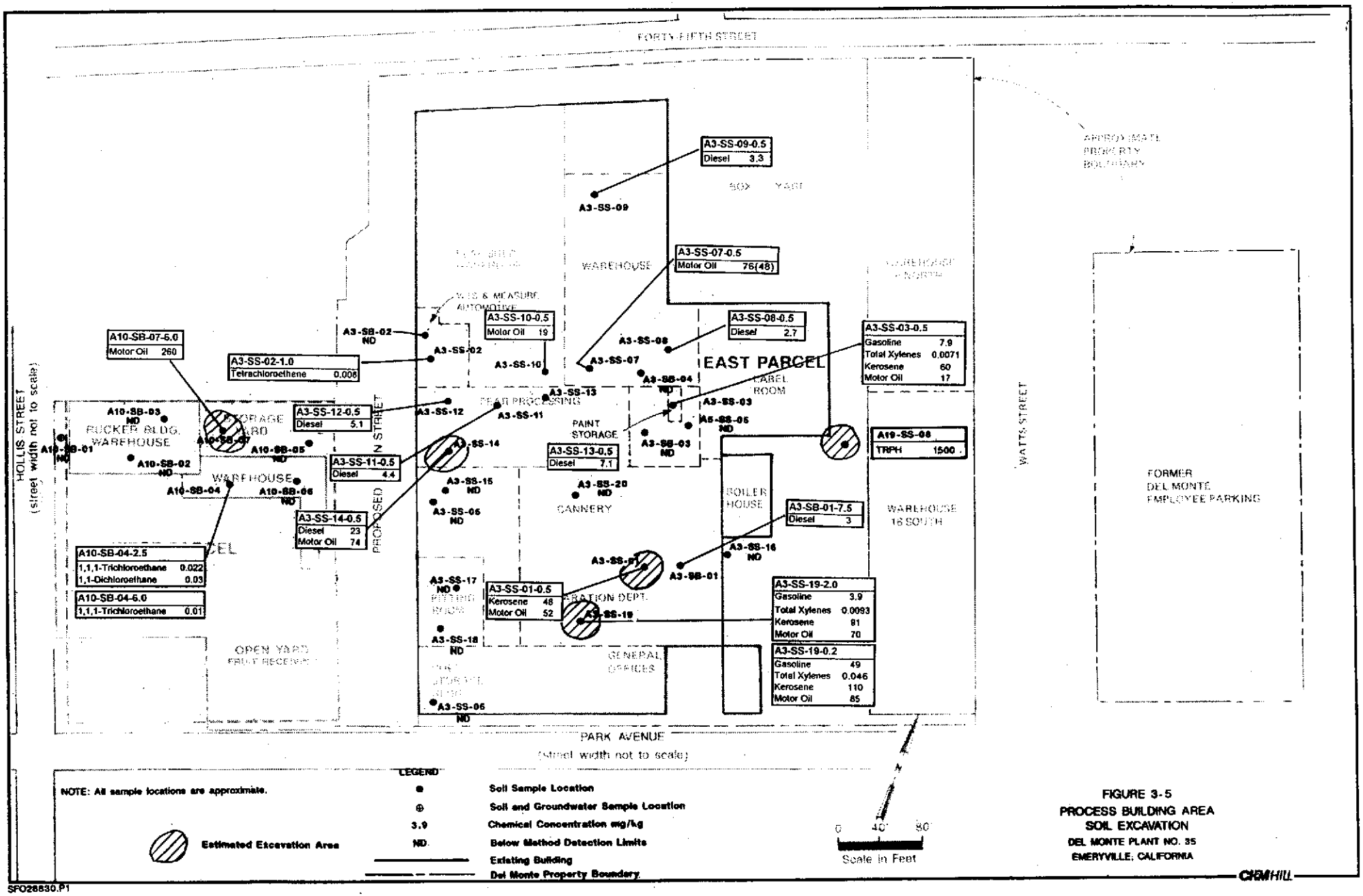
A letter-report will be prepared describing the field activities and analytical results of this task. The report will be submitted to the ACDEH, the RWQCB, and the Cal-EPA Department of Toxic Substances Control (DTSC).

Task 3: Inspection/Sampling/Excavation of Soil Beneath Main Processing Building and Other Areas

This task was previously proposed to the ACDEH and approved (CH2M HILL, 1992a; ACDEH, 1992d).

The main processing building on the East Parcel contains numerous floor gutters and sumps. To assess the potential presence of petroleum and chlorinated hydrocarbons, in October/November 1993 CH2M HILL collected soil samples from 36 locations beneath the processing building floor. The soil samples were analyzed for TPH as gasoline, TPH as diesel/fuel oil, and BTEX (EPA Method 8015 modified); and chlorinated hydrocarbons (EPA Method 8010). Petroleum hydrocarbons were detected at levels exceeding 100 mg/kg at three sampling points beneath the process building. In addition, a sample collected from 2.5 feet below ground surface from one boring east of the main process building contained 1,500 mg/kg of total recoverable petroleum hydrocarbons (TRPH). West of the main process building in the former storage yard, motor oil was detected at 260 mg/kg in a soil sample collected at a depth of 6 feet below ground surface. The locations of these areas are shown on Figure 3-5.

The objective of Task 3 is to identify and remove soil beneath the building foundation and the adjacent areas where petroleum hydrocarbon levels exceed 100 mg/kg and stem from onsite sources. As described for Task 2, a soil sample will be analyzed for leachable petroleum hydrocarbons to confirm the appropriateness of the 100 mg/kg cleanup criteria.



NOTE: All sample locations are approximate.

LEGEND

- Soil Sample Location
- Soil and Groundwater Sample Location
- 3.9 Chemical Concentration mg/kg
- ND Below Method Detection Limits
- Existing Building
- Del Monte Property Boundary
- Estimated Excavation Area

FIGURE 3-5
PROCESS BUILDING AREA
SOIL EXCAVATION
DEL MONTE PLANT NO. 35
EMERYVILLE, CALIFORNIA

CH2MHILL

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The activities in this plan do not include remediation of the elevated levels of petroleum hydrocarbons encountered in the soil and groundwater at the eastern property boundary of Plant 35. It appears that these petroleum hydrocarbons stem from an upgradient, offsite source (CH2M HILL, 1993). Based on discussions with the ACDEH and the RWQCB, closure of Plant 35 property will be based on mitigation of releases from onsite sources.

Task 3.1 Survey Sampling Points

Following removal of the building foundation the locations of the October/November 1993 sampling points (drilled through the warehouse floor) will be re-surveyed and marked.

Task 3.2 Soil Inspection

Upon completion of foundation removal work at the main processing building, CH2M HILL will walk the subject area at a minimum grid spacing interval of 20 feet. The surface soil will be screened visually and with a hand held volatile organic compound screening instrument. Soil suspected of containing petroleum hydrocarbons will be marked and sampled. Soil samples will be analyzed for TPH as gasoline, TPH as diesel/fuel oil, and BTEX (EPA Method 8015 Mod.). The use of an onsite mobile laboratory is anticipated.

Task 3.3 Excavation/Disposal

Soil containing greater than 100 mg/kg total petroleum hydrocarbons will be excavated and temporarily stockpiled onsite. The stockpile area will be lined with plastic and covered to control wind and water erosion. Excavated soil will be transported to an appropriate off-site facility for disposal. If necessary, supplemental analyses of the soil will be conducted according to the requirements of the disposal facility.

Task 3.4 Documentation and Reporting

A letter-report will be prepared describing the field activities and analytical results of this task. The report will be submitted to the ACDEH, the RWQCB, and the DTSC.

Task 4: 20,000-Gallon Tank Excavation

This task was previously proposed to the ACDEH and approved (CH2M HILL, 1992a; ACDEH, 1992d).

An old railroad tank car, formerly used to store fuel oil, is located immediately adjacent to the boiler room building on the East Parcel. The tank was filled-in-place with grout in 1985. Two soil borings drilled adjacent to the tank in July 1992 indicated that TPH as diesel and as fuel oil is present in soil and groundwater at concentrations in excess of regulatory guidelines. In October 1993, a groundwater grab sample was collected about 50 feet in the presumed downgradient direction of the tank. No extractable petroleum hydrocarbons were detected in the sample (CH2M HILL, 1993).

The objective of Task 4 is to remove the tank and surrounding soil containing petroleum hydrocarbons and to assess the groundwater quality in the tank vicinity.

Task 4.1 Tank Excavation

The tank will be removed and shipped to an offsite disposal facility in accordance with regulatory requirements. Tank removal is expected to involve excavating the soil around the tank, breaking up the tank and its contents by mechanical means, and transporting concrete and tank pieces to appropriate permitted offsite facilities. After tank removal, soil samples will be collected from excavation sidewalls. Unsaturated soil containing petroleum hydrocarbons in excess of 100 mg/kg will be removed. As described above for Tasks 2

and 3, TCLP analyses using simulated rainwater will be conducted to confirm the appropriateness of the 100 mg/kg criteria. Soil samples will be analyzed for BTEX and TPH as gasoline (EPA Method 8015), and TPH as diesel/fuel oil (EPA Method 8015). Groundwater standing in the excavated pit will be pumped and disposed of at an appropriate offsite facility.

Upon completion of the excavation work, the remediation contractor will backfill the excavation with clean fill according to the compaction requirements specified in the Del Monte/ Kaiser purchase agreement (95% of maximum dry density). The backfill operation will be observed by a geotechnical engineer and compaction tests will be conducted. A report will be prepared that presents compaction test results and describes the backfill operation. The excavated soil will be temporarily stockpiled on plastic and covered while offsite disposal decisions are pending. The tank will be disposed of offsite.

Task 4.2 Soil Disposal

Soil samples will be collected from the excavated soil pile and analyzed to characterize the material for acceptance at an offsite disposal facility. Analytical methods will be those specified by the disposal facility. Upon acceptance, the excavated soil will be transported to the appropriate offsite disposal facility.

Task 4.3 Monitoring Well Installation, Development, and Sampling

As required by the ACDEH and the RWQCB, one monitoring well (MW-13) will be installed downgradient within 10 feet of the tank excavation. A 2-inch diameter monitoring well will be installed and developed. At a minimum of 1 week after development, the well will be purged and a groundwater sample will be collected for laboratory analysis. The water sample will be analyzed for BTEX, TPH as gasoline, and TPH as diesel/fuel oil. Following the initial sampling of the well, it will be sampled quarterly as part of the Plant 35 groundwater monitoring program described in Task 6.

Development and purge water will be treated by the groundwater treatment unit for the West Parcel excavation/extraction system. If results of groundwater monitoring indicate the need, additional remedial plans which are compatible with Kaiser construction plans will be developed, agency concurrence obtained, and the plans implemented.

Task 4.4 Documentation/Reporting

Upon completion of the above tasks for removal of the 20,000-gallon tank, Del Monte will prepare a letter-report documenting field activities and analytical results. The report will be submitted to the ACDEH and the RWQCB.

Task 5: Well Destruction of MW-1 Through MW-6 And MW-9

Monitoring wells MW-1 through MW-6 are currently not part of any monitoring program at Plant 35. The ACDEH has provided written concurrence for the destruction of these six monitoring wells (see Appendix B). MW-9 and the well installed during Task 4 may need to be destroyed because of planned construction at their locations.

The objective of this task is to abandon these seven wells in accordance with Alameda County and State of California guidelines. Well destruction permits will be obtained from Alameda County and notices filed with the California Department of Water Resources. Well destruction will take place before Kaiser's construction activities begin (estimated July 1995).

CH2M HILL will oversee the drilling contractor during well destruction activities. All field activities will be documented.

Task 6: Groundwater Monitoring Program

The current groundwater monitoring program will continue until June 1996, 4 quarters after the groundwater treatment is shut off. At that time Del Monte, ACDEH, and the RWQCB will evaluate future monitoring needs. Groundwater samples will be collected quarterly from MW-7, MW-9, MW-10, MW-11, MW-12, and the new well installed during Task 4. MW-9 and the new well installed during Task 4, however, may need to be destroyed in July 1995 to allow Kaiser's construction to proceed. Samples from one well (at the location of the 20,000 gallon tank) will be analyzed for TPH-gas, BTEX, and TPH-diesel/fuel oil. Samples from the other wells will be analyzed for chlorinated hydrocarbons.

This task includes collecting and analyzing the samples on a quarterly basis and preparing quarterly reports presenting the results. The reports will also include the groundwater treatment system monitoring results. The reports will be submitted to the East Bay Municipal Utility District, the ACDEH, and the RWQCB.

Groundwater purged during well sampling will be discharged to the onsite groundwater treatment system while it is operating. After the system is dismantled, disposal options of purged groundwater will be evaluated. Potential options include discharge to the POTW and transportation to an offsite facility for treatment and disposal.

Task 7: Closure Report

Following completion of the work outlined in this remediation plan, a report will be prepared that summarizes the work completed and presents results and findings. The report will incorporate the separate letter reports prepared for Tasks 4, 5, and 6. The report will be submitted to the ACDEH, the RWQCB, and the DTSC along with a request for final closure of the site.

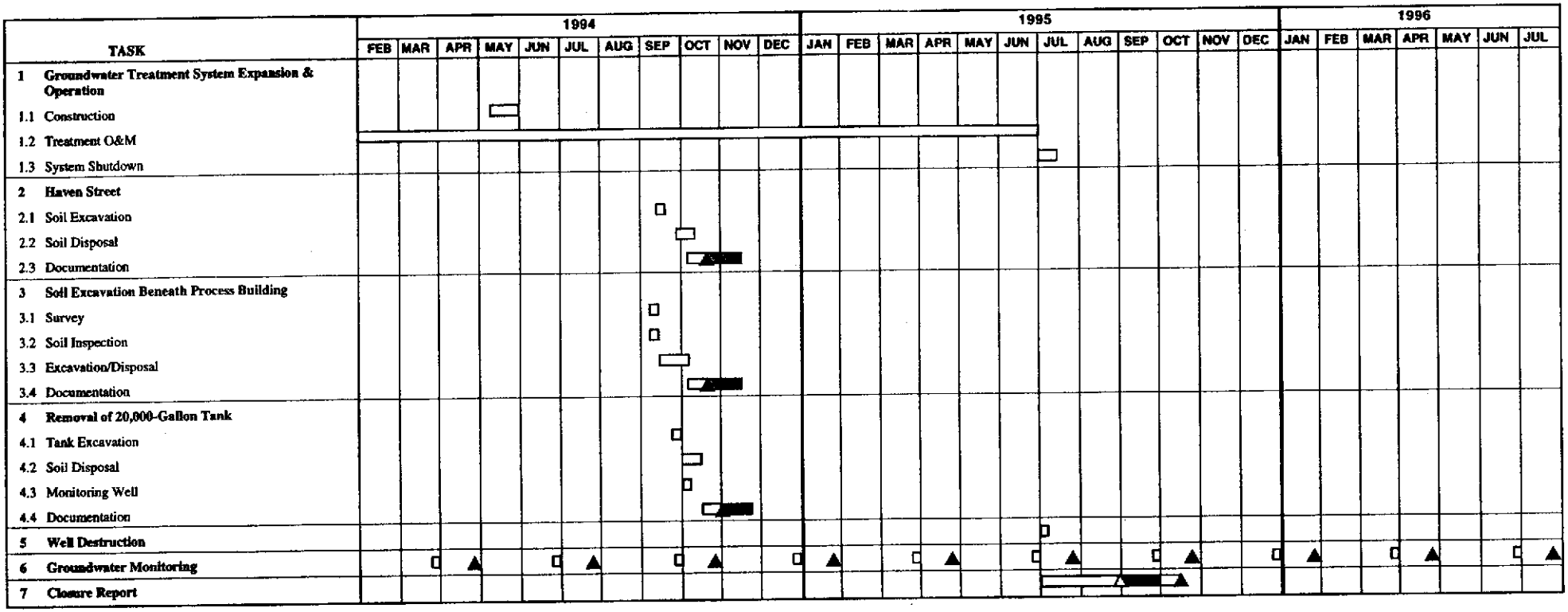
4.0 Schedule

Agency approval of this remediation plan is critical to the property transaction between Del Monte and Kaiser. Written approval of the plan is needed by May 13, 1994.

The proposed schedule for the work described above is shown on Figure 4-1. Task 1, the expansion of the groundwater collection and treatment system is scheduled to take place in May 1994.

Tasks 2, 3, and 4 are planned to occur after Del Monte demolishes the process building and other site improvements. Demolition is expected to occur in August 1994. The groundwater treatment system is planned to operate until asymptotic levels are reached or Kaiser's construction begins (estimated June 1995) at which time it will be shut down and the treatment unit dismantled. Task 5, destruction of 5 to 7 monitoring wells will take place when Kaiser's construction begins (estimated July 1995). Groundwater monitoring (Task 6) will continue on a quarterly schedule until June 1996, four quarters after groundwater treatment ceases, when future monitoring needs will be evaluated.

Reports documenting field activities are scheduled to be completed within four weeks after the field activities are completed. The Closure Report (Task 7) will be prepared after groundwater treatment ceases and will incorporate the letter reports (including addressing agency comments) prepared to document the activities of Tasks 2, 3, and 4.



Note: Schedule assumes Kaiser's construction begins July 1995.

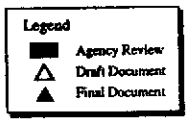


FIGURE 4-1
REMEDIATION SCHEDULE
DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

BAE28830.P2.01

5.0 References

ACDEH. 1992a. Letter from B. Oliva/Alameda County Department of Environmental Health (ACDEH) to L. Bosche/Del Monte Foods, re: closure of 3,500-gallon tank. October 30.

ACDEH. 1992b. Letter from B. Oliva/ACDEH to L. Bosche/Del Monte Foods, re: closure of 550-gallon tank on east parcel. October 30.

ACDEH. 1992c. Letter from B. Oliva/ACDEH to L. Bosche/Del Monte Foods, re: closure of 550-gallon tank on west parcel. October 29.

ACDEH. 1992d. Letter from B. Oliva/ACDEH to L. Bosche/Del Monte Foods, re: Remediation Activities Plan. August 10.

CH2M HILL. 1992a. Letter from B. Baumgartner/CH2M HILL to B. Oliva/ACDEH re: Remediation Activities Plan. June 26.

CH2M HILL. 1992b. Letter from B. Baumgartner/CH2M HILL to B. Oliva/ACDEH re: Addendum to Remediation Activities Plan. August 12.

CH2M HILL. 1992c. Phase I/II/III Compilation Report, Del Monte Plant 35 West and East Parcels. March.

CH2M HILL. 1993. Investigation Report for Del Monte Plant 35. December.

CH2M HILL. 1994. Letter from B. Baumgartner/CH2M HILL to B. Oliva and R. Arulanantham/ACDEH and R. Hiett/RWQCB re: Workplan for groundwater treatment system expansion and additional investigation activities. February 16.

Appendix A

Remedial Action Completion Certificates

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

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

PRIVILEGED
AND
CONFIDENTIAL

October 30, 1992

Mr. Lee Bosche
Del Monte Foods
P.O. Box 9004
Walnut Creek, CA 94598

REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Mr. Bosche:

Subject: Closure of former 3,500-gallon underground gasoline tank located at Del Monte Plant 35 - East Parcel, 1250 Park Avenue, Emeryville, California

Dear Mr. Bosche:

This office has received the Site Closure Report for the referenced site, dated October 23, 1992. Thank you for submitting the October Monitoring results with the request. It appears that you have met the requirements set forth in previous meetings with Rich Hiett from the Regional Board, Dennis Byrne and myself from the Alameda Division of Hazardous Materials.

This letter therefore, confirms the completion of site investigation and remedial action for this underground storage tank removal. This certificate is granted with the provision that the information supplied to this agency was accurate and representative of the existing conditions. It is, therefore the position of this office that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code for past, present, or future operations at the site. Nor does it relieve you of the responsibility to clean up existing, additional or previously unidentified conditions at the site, which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Furthermore, be advised that changes in the present or proposed use of the site may require site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings or site usage.

PRIVILEGED
AND
CONFIDENTIAL

Please contact this office at (510) 271-4320 should you have any questions concerning the site.

Sincerely,

Brian P. Oliva

Brian P. Oliva, REHS, REA
Hazardous Materials Specialist

cc: Rich Hiett, SFBRWQCB
Bern Baumgartner, CH2M Hill
KT

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

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

October 30, 1992

PRIVILEGED
AND
CONFIDENTIAL

Mr. Lee Bosche
Del Monte Foods
P.O. Box 9004
Walnut Creek, CA 94598

REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Mr. Bosche:

Subject: Closure of former 550-gallon underground gasoline tank located at Del Monte Plant 35 -East Parcel, 1250 Park Avenue, Emeryville, CA

This office has received the Site Closure Request for the referenced site, dated October 5, 1992. Thank you for submitting the most recent laboratory results with such a request. It appears that you have met the requirements set forth in previous meetings with Rich Hiett from the Regional Board, Dennis Byrne and myself from the Alameda Division of Hazardous Materials.

This letter therefore, confirms the completion of site investigation and remedial action for this underground storage tank removal. This certificate is granted with the provision that the information supplied to this agency was accurate and representative of the existing conditions. It is, therefore the position of this office that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code for past, present, or future operations at this site. Nor does it relieve you of the responsibility to clean up existing, additional or previously unidentified conditions at the site, which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Furthermore, be advised that changes in the present or proposed use of the site may require site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings, or site usage.

PRIVILEGED
AND
CONFIDENTIAL

Please contact this office if at (510) 271-4320 should you have any questions concerning the site.

Sincerely,

Brian P. Oliva

Brian P. Oliva, REHS, REA
Hazardous Materials Specialist

cc: Rich Hiett, SFBRWQCB
Bern Baumgartner, CH2M Hill
KT

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

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

October 29, 1992

PRIVILEGED
AND
CONFIDENTIAL

Mr. Lee Bosche
Del Monte Foods
P.O. Box 9004
Walnut Creek, CA 94598

REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Mr. Bosche:

Subject: Closure of former 550-gallon underground gasoline tank located at Del Monte Plant 35 - West Parcel, 4204 Hollis St., Emeryville, CA

This office has received the Site Closure Request for the referenced site. Thank you for remitting the necessary Quarterly Monitoring Results with the request. It appears that you have met the requirements set forth in previous meetings with Rich Hiett from the Regional Board, Dennis Byrne and myself from the Alameda Division of Hazardous Materials.

This letter therefore confirms the completion of site investigation and remedial action for this underground storage tank removal. This certificate is granted with the provision that the information supplied to this agency was accurate and representative of the existing conditions. It is, therefore the position of this office that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code for past, present, or future operations at this site. Nor does it relieve you of the responsibility to clean up existing, additional or previously unidentified conditions at the site, which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Furthermore, be advised that changes in the present or proposed use of the site may require site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings, or site usage.

PRIVILEGED
AND
CONFIDENTIAL

Please contact this office at (510) 271-4320 should you have any questions concerning the site.

Sincerely,

Brian P. Oliva

Brian P. Oliva REHS, REA
Hazardous Materials Specialist

cc; Rich Hiett, SFBRWQCB
Bern Baumgatner, CH2M Hill

Appendix B

June 26 and August 12, 1992 Letters to ACDEH

Engineers
Planners
Economists
Scientists

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June 26, 1992

SFO28830.BB.PR

Mr. Brian Oliva
Alameda County Health Agency
Division of Hazardous Materials
80 Swan Way, Room 200
Oakland, CA 94621

Subject: REVISED Remediation Activities Plan for Del Monte Plant 35 located at 1250 Park Avenue and 4204 Hollis Street in Emeryville, California

Dear Mr. Oliva:

Del Monte requests written concurrence from the Alameda County Health Agency (ACHA) on the planned remediation activities at Del Monte Plant 35, located at 1250 Park Avenue and 4204 Hollis Street in Emeryville, California (Figure 1). The remediation plan was first outlined in CH2M HILL's letter dated May 5, 1992 to ACHA and then discussed and modified according to the ACHA requests at the May 18, 1992 meeting with ACHA, Del Monte, and CH2M HILL. This letter presents the agreed upon plan for remediation activities to be conducted at Del Monte Plant 35.

During the past seven years, Del Monte has conducted several subsurface investigations and remedial actions at Plant 35. Del Monte is planning to remove some of the above-ground structures at Plant 35 which will allow easier access to some of the subsurface soil. During or after removal of some of the Plant 35 above-ground structures, Del Monte will implement the various subsurface investigations and remedial actions presented within this plan and requests concurrence from the ACHA.

BACKGROUND

Del Monte Plant 35 was a food processing plant which has not been in operation since 1989. Past environmental studies, subsurface investigations, and remedial activities conducted at Plant 35 are presented in the "Phase I/II/III Compilation Report Del Monte Plant No. 35, West and East Parcel, Emeryville, California, Volume 1 and 2 (CH2M HILL, March 1992)". Much of this work was conducted with the oversight of Mr.

Suite 1200, Oakland, CA 94607-4046 510.251.2426 Fax 510.893.8205

Dennis Byrne of the ACHA. Past activities for the East and West Parcels include the following:

East Parcel

- Removal of a 3,500-gallon underground gasoline tank near 45th Street (January 1986).
- An old railroad tank car (approximately 20,000 gallons) used to store fuel oil was filled in place with grout (1985/1986).
- Removal of a 550-gallon underground gasoline tank near Park Avenue (January 1986).
- Installation and sampling of four groundwater monitoring wells (MW-3, MW-4, MW-5, MW-6) (1988).
- Soil investigation along the proposed Haven Street location (November 1989).

West Parcel

- Installation and sampling of two groundwater monitoring wells (MW-1 and MW-2) (1988).
- Removal of a 550-gallon gasoline tank and soil surrounding the tank near Park Avenue (March 1989).
- Removal of four 50-gallon fuel oil tanks located near the southwest corner of the West Parcel (March 1989).
- Soil and groundwater investigation in the vicinity of the former fuel oil tanks (1988/1989).
- Quarterly groundwater monitoring of West Parcel wells (MW-7 through MW-11) (1989 - Current).

PLANNED ACTIVITIES

Del Monte expects to remove various above-ground structures at Plant 35, including a formerly leased building located at the corner of Park Avenue and Hollis Street (Figure 1). During or after the removal of above-ground structures, Del Monte proposes to conduct the following additional investigative and remedial activities:

East Parcel

- Excavation and treatment/disposal of soil containing petroleum hydrocarbons along the proposed Haven Street location.

- One-time groundwater sampling of monitoring well MW-3 located downgradient of the Haven Street location.
- Investigation and potential excavation of soil beneath sumps, gutters, drains, etc.
- Investigation of the filled-in-place 20,000-gallon underground fuel oil tank.
- Destruction of monitoring wells MW-3 through MW-6 on the East Parcel.

Excavation of soil containing petroleum hydrocarbons along the proposed Haven Street location

During a past soil investigation of the proposed Haven Street location, shallow soil samples contained TPH as gasoline concentrations in excess of 100 mg/kg. Del Monte is planning to excavate the unsaturated soil along the proposed Haven Street location which exceeds 100 mg/kg. Initially, soil samples will be analyzed with a field screening device (ie. EnSys RISc or Hanby field test kits) which detects TPH as gasoline with a detection limit between 10 and 100 mg/kg. Unsaturated soil will be excavated in areas where the field screening device indicates concentrations in excess of 100 mg/kg. When soil excavation is determined to be complete according to field screening devices, confirmation soil samples will be collected for laboratory analysis (EPA method 8015 modified). These confirmation soil samples will be collected at 20-foot interval grid spacing along the base of the excavation and at 20-foot interval spacing along the excavation side walls with a minimum of one sample collected at the base and each side wall. The impacted soil may be aerated onsite to less than 10 mg/kg TPH as gasoline and then returned to the excavation.

One-time groundwater sampling of monitoring well MW-3 located downgradient of the Haven Street location.

A groundwater sample will be collected from the downgradient monitoring well MW-3 to confirm that petroleum hydrocarbons reported in the soil in the Haven Street area have not impacted shallow groundwater. The sample will be analyzed for BTEX/TPH as gasoline (EPA method 8015 modified) and TRPH (EPA method 8015 modified). No BTEX, TPH as gasoline, or TRPH's (reported as TPH as diesel fuel) were detected in a previous sample collected from MW-3 in December 1988.

Investigation and potential excavation of soil beneath sumps, gutters, and drains

Unsaturated accessible soil beneath sumps, gutters, and drains will be inspected for stains or odors and screened with a photoionizer (HNu). Soil beneath sewer and storm drains will not be included in this investigation. Soil beneath gutters and drains will be screened for TPH as gasoline and diesel (EnSys RISc or Hanby field test kits) at a minimum linear interval of 20 feet. Soil suspected of containing petroleum hydrocarbons according to visual observation and field screening techniques will be analyzed for BTEX/TPH as gasoline (EPA method 8015 modified) and total recoverable petroleum hydrocarbons (TRPH) (EPA method 8015 modified). Unsaturated soil containing detectable levels of benzene, or TPH as gasoline or TRPH in excess of 100 mg/kg will be excavated.

Investigation of the filled-in-place 20,000-gallon underground fuel oil tank

During an investigation of a filled-in-place 20,000 gallon fuel oil tank in 1985, low concentrations of petroleum hydrocarbons reported as volatile hydrocarbons, extractable hydrocarbons, and oil and grease were detected in samples from a soil boring and one groundwater grab sample. At the time of the investigation the current underground tank investigation regulations were not firmly established and therefore, BTEX and TPH as diesel analyses were not performed on the collected samples. To further characterize the tank area and proceed with closure, two borings will be drilled near the ends of the tank and downgradient (west side). Two soil samples and a groundwater grab sample will be collected from each boring and analyzed for BTEX and TPH as diesel (EPA method 8015 modified). Results of the sampling will be discussed in a letter to the ACHA requesting no further action at the tank area.

Destruction of monitoring wells MW-3 through MW-6 on the East Parcel

Groundwater quality is no longer being monitored on the East Parcel. Therefore monitoring wells MW-3 through MW-6 (four wells) will be destroyed according to the California Department of Water Resources Well Standards.

West Parcel

- Excavation and treatment/disposal of soil containing solvents in the vicinity of the former fuel oil tanks.
- Investigation and potential excavation of soil beneath sumps, gutters, drains, etc.

- Groundwater investigation downgradient of the former fuel oil tanks area (across Hollis St.) to assess if solvents are present offsite.
- One-time groundwater sampling of monitoring well MW-2 located downgradient of the Haven Street location.
- Destruction of monitoring wells MW-1 and MW-2.
- Continued quarterly groundwater monitoring of wells MW-7 through MW-11 for chlorinated hydrocarbons (No BTEX or TPH-gas analysis for MW-7).

Excavation of soil containing chlorinated solvents in the vicinity of the former fuel oil tanks

Unsaturated soil containing chlorinated solvents in the vicinity of the former fuel oil tanks will be excavated to nondetectable or background levels after demolition of the leased building (Figure 1). These levels will be negotiated later with the ACHA. It is assumed that approximately 50 cubic yards of impacted soil will be removed. Laboratory detection limits are presented in Table 1. A minimum of four and a maximum of 25 confirmation soil samples will be collected within the excavation. Due to the proximity of monitoring well MW-8 to the planned excavation, it will be necessary to destroy MW-8; this well destruction will be conducted according to California Department of Water Resources Well Standards.

Investigation and potential excavation of soil beneath sumps, gutters, and drains

The investigation and potential excavation of soil beneath sumps, gutters, and drains located on the West Parcel will be conducted in the same manner as described for the East Parcel.

Groundwater investigation downgradient of the tanks area (across Hollis St.) to assess if chlorinated solvents are present offsite

Quarterly groundwater quality data from monitoring wells MW-8 through MW-11 indicate chlorinated solvents are present in the shallow groundwater in the area of the former fuel oil tanks (4). To assess if chlorinated solvents are present offsite, Del Monte will drill a soil boring and collect a groundwater grab sample across Hollis Street using a temporary well casing. The sample will be analyzed for chlorinated solvents by EPA method 601. The results of the sampling will be used to assess if further investigation is

required based on future use of the site, extent of the contamination, and the relative success of source removal (soil excavation onsite).

One-time groundwater sampling of monitoring well MW-2 located downgradient of the Haven Street location.

A groundwater sample will be collected from the downgradient monitoring well MW-2 to confirm that petroleum hydrocarbons reported in the soil in the Haven Street area have not impacted shallow groundwater. The sample will be analyzed for BTEX/TPH as gasoline (EPA method 8015 modified) and TRPH (EPA method 8015 modified). No BTEX, TPH as gasoline, or TRPH's (reported as TPH as diesel fuel) were detected in a previous sample collected from MW-2 in December 1988.

Destruction of monitoring wells MW-1 and MW-2 on the West Parcel

Groundwater quality is no longer being monitored in wells MW-1 and MW-2 on the West Parcel. Therefore monitoring wells MW-1 and MW-2 will be destroyed according to the California Department of Water Resources Well Standards.

Continued quarterly groundwater quality monitoring of wells MW-7 through MW-11 for chlorinated hydrocarbons

Groundwater quality will continue to be monitored for chlorinated solvents in monitoring wells MW-7 through MW-11. Samples collected will be analyzed by EPA Method 601 only. Results of the monitoring will continue to be reported to the ACHA and RWQCB quarterly.

No BTEX/TPH as gasoline analyses will be performed in MW-7 located downgradient of the removed 550-gallon gasoline storage tank (Figure 1). According to the ACHA, the removed 550-gallon gasoline storage tank area is no longer an environmental issue and is considered closed.

During demolition of the leased building on the West Parcel and excavation of impacted soils at the former fuel oil tank area, monitoring well MW-8 will be destroyed (Figure 1).

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SOIL TREATMENT/DISPOSAL

Excavated soil containing petroleum hydrocarbons or chlorinated solvents will be placed in onsite, plastic-lined and bermed aeration beds. This soil will be aerated according to Bay Area Air Quality Management District guidelines. Soil will be aerated in separate beds according to the constituents present in the soil. Upon completion of soil aeration, discreet soil samples will be collected approximately every 20 cubic yards and submitted for laboratory analysis. Soil containing chlorinated solvents above detection limits (Table 1) or TPH in excess of 10 mg/kg will be transported to an appropriate landfill for disposal. Soil containing less than 10 mg/kg TPH will be backfilled on the Plant 35 property.

I look forward to your written concurrence. Del Monte is planning to proceed with portions of this work on July 2, 1992. If you have any questions or comments which you would like to discuss, please call me at (510) 251-2888 (ext. 2118).

Sincerely,

CH2M HILL

Bern Baumgartner
Project Manager

BEB/prep
cc: Mr. Dennis Byrne/Alameda County Health Agency
Mr. Steve Ronzone/Del Monte
Mr. Mark Rosenquist/Del Monte
Mr. Gene Sylls/Del Monte
Mr. Wilbur Sprague/Associated Services
Ms. Liz Dodge/CH2M HILL/SFO
Mr. Jeff Holloway/CH2M HILL/SFO

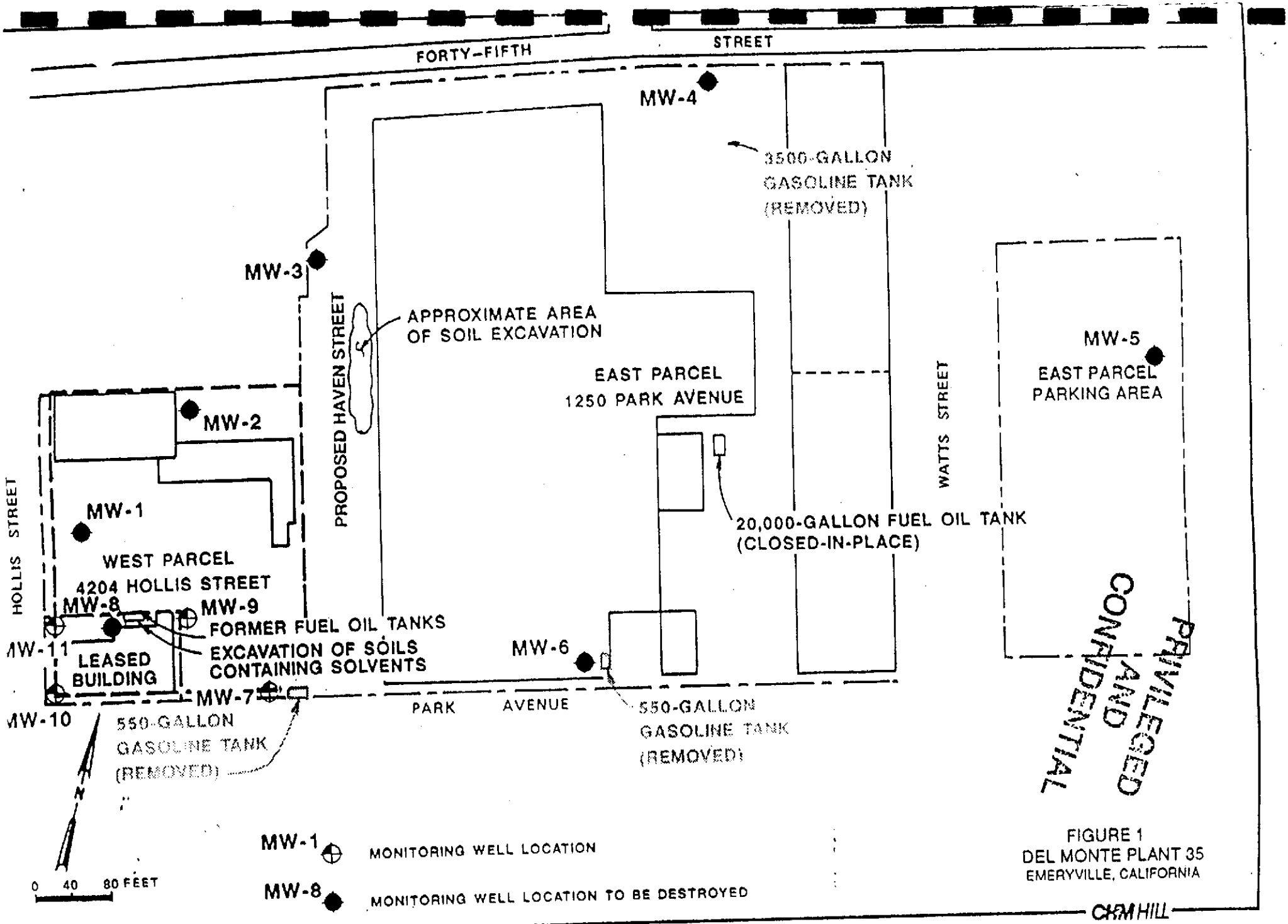

FIGURE 1
DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

CH2M HILL

FO28830.RC

Table 1
Soil Remediation Levels in Fuel Oil Tank Area
Del Monte Plant 35 - West Parcel

Compound	Method	Detection Limit (ug/kg)
1,2-Dichloroethylene	EPA 8240	5 ug/kg
1,1-Dichloroethylene	EPA 8240	5 ug/kg
1,2-Dichloroethane	EPA 8240	5 ug/kg
Trichloroethylene (TCE)	EPA 8240	5 ug/kg
Perchloroethylene (PCE)	EPA 8240	5 ug/kg
Vinyl Chloride	EPA 8240	10 ug/kg

Engineers
Planners
Economists
Scientists

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August 12, 1992

SFO28830.BB.RP

Mr. Brian Oliva
Alameda County Health Agency
Division of Hazardous Materials
80 Swan Way, Room 200
Oakland, CA 94621

Subject: Addendum to June 26, 1992 Remediation Activities Plan for Del Monte Plant 35 located at 1250 Park Avenue and 4204 Hollis Street in Emeryville, California

Dear Mr. Oliva:

As you requested, I am submitting an addendum to the "Remediation Activities Plan for Del Monte Plant 35, located at 1250 Park Avenue and 4204 Hollis Street in Emeryville, California" submitted to you on June 26, 1992. This addendum describes the groundwater sampling methodology for the Hollis Street investigation and the closed-in-place tank investigation. The groundwater sampling method proposed for these two investigations was described to Mr. Dennis Byrne of the Alameda County Health Agency (ACHA) on June 23, 1992 and Mr. Richard Hyatt of the Regional Water Quality Control Board on July 2, 1992. Both Mr. Byrne and Mr. Hyatt had no objection to the proposed methodology and preferred it to Hydropunch sampling.

The proposed groundwater sampling methodology is as follows:

1) Drill a 7-inch diameter borehole with a hollow-stem auger drilling rig to a depth of approximately 5 to 10 feet below the existing water table and remove augers.

2) Purge approximately three borehole volumes of groundwater from the borehole and ensure that conductivity stabilizes to within 10 percent and pH stabilizes to within 0.20.

3) Install a 2-inch diameter PVC well casing with a minimum of 10 feet of well screen (0.01-inch slot size opening). Position the well screen so that is intersects the groundwater table.

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4) Purge an additional gallon of groundwater from the borehole through the well casing.

5) Collect a groundwater sample with a bailer that has a low-flow attachment to prevent possible volatilization.

6) Remove the well casing from the borehole and seal the borehole with grout.

The above groundwater sampling methodology obtains a representative groundwater sample by allowing the sampler to purge the well as recommended by the United States Environmental Protection Agency (Groundwater Handbook, March 1987) and the Alameda County Water District (Groundwater Monitoring Guidelines, February 1990).

Del Monte is looking forward to your written concurrence of the June 26, 1992 Remediation Activities Plan letter. If you have any questions or comments, please call me at (510) 251-2888 (ext. 2118).

Sincerely,

CH2M HILL

Bern Baumgartner
Environmental Engineer

beb/

cc: Mr. Dennis Byrne/Alameda County Health Agency
Mr. Ron Thibault/Del Monte
Mr. Lee Bosche/Del Monte
Mr. Bharat Shah/Del Monte
Mr. Mark Rosenquist/Del Monte
Mr. Steve Ronzone/Del Monte
Mr. Gene Sylls/Del Monte
Ms. Liz Dodge/CH2M HILL/SFO
Mr. Jeff Holloway/CH2M HILL/SFO

Appendix C

Estimated Capture Zone for Groundwater Extraction System

Following is a summary of results of the QuickFlow modeling effort for the groundwater extraction system at Del Monte Plant 35.

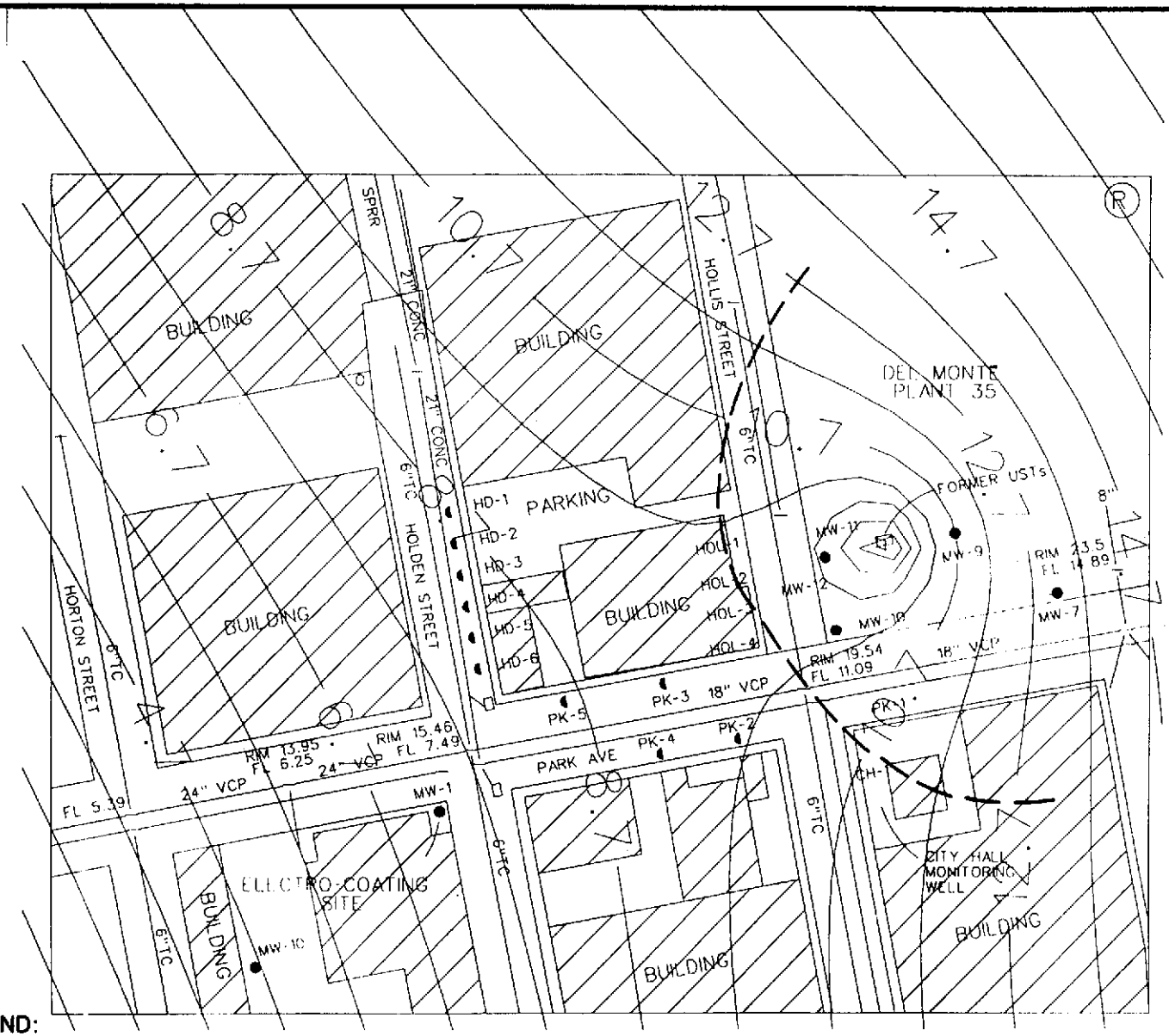
Figure C-1 represents groundwater levels and the capture zone of the current extraction system: extracting groundwater with the existing sump only. This figure is based on the observed groundwater levels at Plant 35 on June 16, 1993. The observed average pumping rate of the existing sump is 3.7 gpm. In order to reproduce the observed groundwater levels and pumping rate of the existing sump, the following methods and aquifer parameters were used:

- Four - ten foot long 'headline sinks' arranged in a square were used to simulate the existing sump. The headline sinks keep water levels at a specified head level within the line sink, in this case 3 feet MSL, which corresponds to the bottom of the sump.

- Hydraulic conductivity = 2.7 ft/day
- Specific yield (unconfined aquifer) = 0.1
- Porosity = 0.3
- Aquifer top = 100 ft MSL (mimics unconfined conditions)
- Aquifer bottom = -10 ft MSL
- Gradient = 0.01 @ 204 degrees (southwest)
- Reference head = 16.8 feet MSL in upper left corner of Figure C-1

Figure C-2 represents groundwater levels and the capture zone at Plant 35 with the existing extraction sump and a 75 foot long extraction trench (75 foot headline sink). The specified head in the extraction sump is 3 ft MSL and the specified head in the extraction trench is 0 ft MSL. The above aquifer parameters were used to generate this figure.

To keep the water levels at the specified heights in the headline sinks, the total pumping rate of the system becomes 5.9 gpm, with the pumping rate of the trench at 4.4 gpm and the pumping rate of the sump at 1.5 gpm.

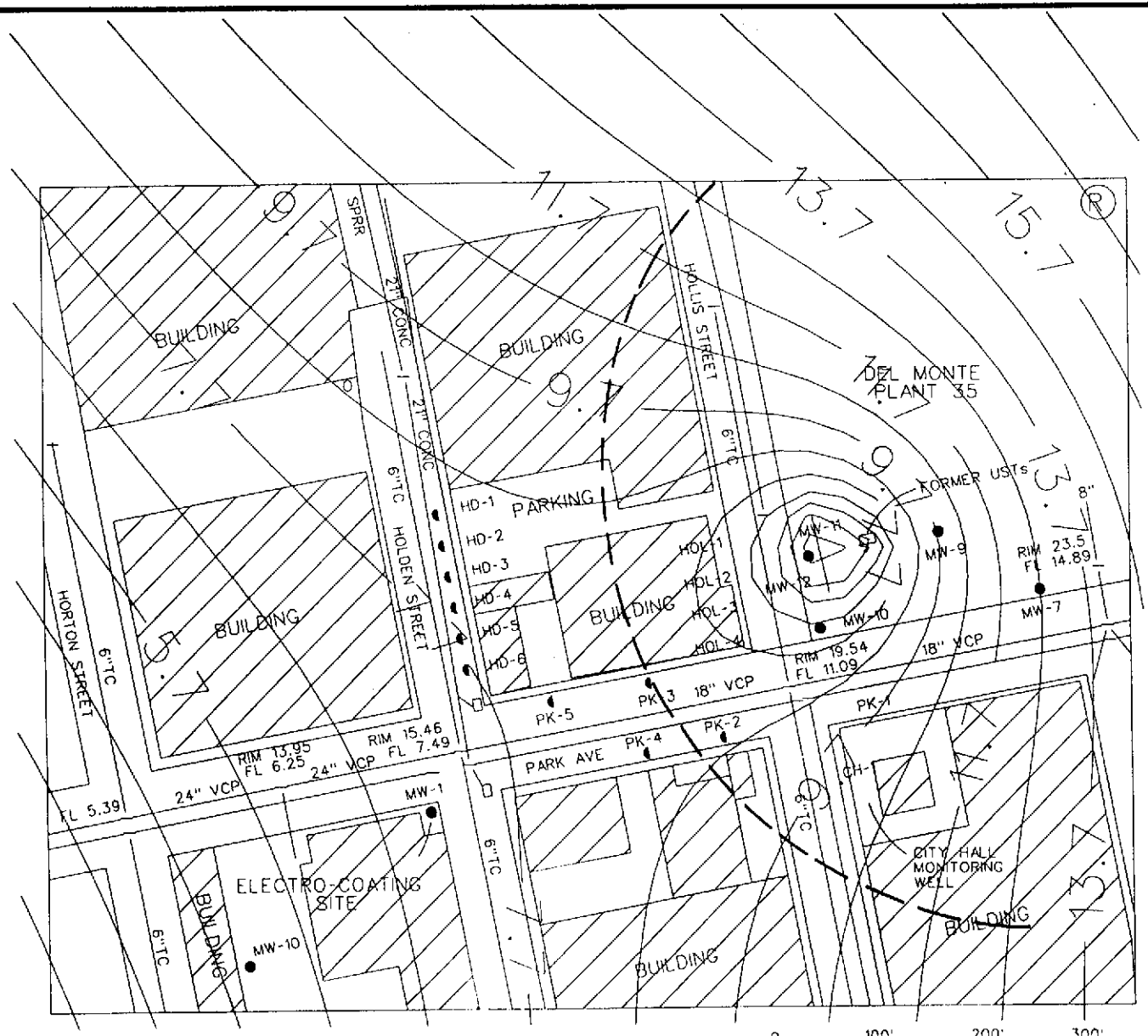


LEGEND:

— — — Estimated Limit Of Capture Zone.

Figure C-1
Estimated Capture Zone-Current Extraction System
Del Monte Plant 35
Emeryville, California

CH2M HILL



LEGEND:

— — — Estimated Limit Of Capture Zone.

Figure C-2
Estimated Capture Zone-Proposed Expanded Extraction System
Del Monte Plant 35
Emeryville, California

CH2M HILL

BAE28830.P2.01