PROTECTION

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Del Monte Foods One Market P.O. Box 193575, San Francisco, CA 94119-3575 Telephone: (415) 247-3000

October 17, 1996

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

Oakland, CA 94612

Dear Mr. Arigala:

Subject: Sitewide Risk Management Plan for Del Monte Plant 35

Enclosed is a copy of the Sitewide Risk Management Plan (Plan) for the former Del Monte Plant 35 property. Del Monte Foods is committed to managing the property to the requirements outlined in the Plan while the property is owned by Del Monte. Del Monte will communicate the requirements of the Plan to the party purchasing the property for redevelopment.

If you have any questions, please call me at (415) 247-3520

Sincerely,

Steven P. Ronzone

Director, Property Management

c: Brian Oliva/ACDEH
Thomas Bender/The Bender Partnership
Madeline Wall/CH2M HILL

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1. Introduction

1.1 Purpose and Scope

The purpose of this Sitewide Risk Management Plan is to describe the pollution management measures that will be implemented at the Del Monte Plant 35 property. The plan includes a summary of remedial activities performed at the site, a description of the nature and extent of chemical constituents remaining in onsite soil and groundwater, a summary of associated human health and environmental risks, a description of additional planned activities related to remediation, and a listing of risk management measures to be implemented.

1.2 Notification

As part of standard due diligence practices, it is the responsibility of the property owner to communicate this Sitewide Risk Management Plan to future property buyers.

1.3 Background

Del Monte Plant 35, located in an industrial area of Emeryville, was operated as a fruit and vegetable processing facility from the late 1920s through 1989. Plant 35 is located on approximately 13 acres; the West Parcel, located at 4204 Hollis Street, is approximately 2 acres in size and the East Parcel, located at 1250 Park Avenue, is approximately 11 acres in size. The site layout is shown on Figure 1.

Plant 35 is underlain by approximately 5 to 8 feet of fill, composed primarily of clay containing gravel. Native silty clay extends from beneath the fill to a depth of approximately 15 to 20 feet below ground surface (bgs). Discontinuous lenses of sand and gravels have also been encountered within the native silty clay. This silty clay zone is underlain with silty sand. Shallow groundwater exists beneath the property at a depth of approximately 7 to 10 feet bgs and flows in a southwesterly direction.

Since 1989, Del Monte has conducted extensive soil and groundwater investigations and completed remedial activities to address known and potential releases of petroleum and chlorinated hydrocarbons at Plant 35. The activities were conducted with the oversight of the Alameda County Environmental Health Department (ACDEH) and the San Francisco Bay Regional Water Quality Control Board (RWQCB). Chlorinated hydrocarbon compounds were found in soil and groundwater beneath the West Parcel in 1989. The source on the West Parcel was identified as four 50-gallon fuel oil storage tanks used by former Del Monte tenants. Chlorinated hydrocarbon and petroleum hydrocarbons were also found in soil and groundwater on the East Parcel. The source on the East Parcel was identified as an area of soil to the east of the main cannery building and an underground fuel oil storage tank adjacent to the boiler house. Contaminant source removal and groundwater remediation is described in the next section.

Sitewide Risk Management Plan Del Monte Plant 35 Emeryville, California

Prepared for Del Monte Foods

OCTOBER 1996

CHAM HILL

1111 Broadway Oakland, CA 94608

2. Summary of Remedial Activities

Remedial activities conducted at Plant 35 are summarized in Table 1. Figure 2 shows the locations of the remedial activities. Additional details of the remedial activities are provided below.

2.1 West Parcel

Del Monte removed four 50-gallon underground fuel oil storage tanks from the West Parcel in March 1989. The tanks were located adjacent to a building that Del Monte had leased to medical research companies. Tank contents were sampled before the tanks were removed and were found to contain chlorinated hydrocarbon compounds, primarily trichloroethene (TCE). Chlorinated hydrocarbon compounds were also detected in shallow groundwater near the former fuel oil tanks. After Del Monte demolished the building in December 1992, previously inaccessible soil affected by releases from the tanks was also removed.

In January 1993, Del Monte constructed and began operating a groundwater extraction and treatment (GET) system on the West Parcel. In August 1994, Del Monte expanded the groundwater extraction system by adding an extraction trench along the downgradient property edge. The purpose of adding the trench was to further reduce concentrations of chlorinated hydrocarbon compounds in groundwater and to minimize offsite migration. Del Monte operated the West Parcel GET system from January 1993 to June 1995 (approximately 30 months) at which time the RWQCB approved the GET system shut down. The approval was based on information provided in *Proposal to Shut Off West Parcel GET System* (CH2M HILL, 1995a) and additional information regarding results of past shutoffs and startups of the GET system (CH2M HILL, 1995b).

The West Parcel GET system extracted and treated a total of 4,381,361 gallons of groundwater during its operation, resulting in significant decreases in concentrations of chlorinated hydrocarbon compounds in groundwater in the West Parcel. The initial concentration of total chlorinated hydrocarbon compounds in the influent to the GET system was 666 μ g/L (January 19, 1993). The concentration measured in June 1995, just before the system was turned off, was 14.3 μ g/L. Groundwater on the West Parcel has been monitored with a series of monitoring wells on a quarterly basis since May 1989. (Monitoring well locations are shown on Figure 2.) As shown on Figure 3, levels of chlorinated hydrocarbons in groundwater decreased markedly since 1989. Groundwater monitoring results are tabulated in Table 2. Treatment system influent results are also shown in Table 2, labeled as "MW-8 (SP-D)".

2.2 East Parcel

Groundwater investigations conducted in 1994 on the East Parcel of Plant 35 indicated that a portion of East Parcel groundwater contained chlorinated and petroleum hydrocarbon compounds (CH2M HILL, 1994a and 1994b). An area of soil contaminated with tetrachloroethene (or perchloroethene [PCE]), TCE, and breakdown products was identified as the

3. Residual Chemical Constituents in Soil and Groundwater

Because the levels are below cleanup criteria and pose little or no risk to the environment or human health (see Section 4), low levels of residual chlorinated and petroleum hydrocarbons will remain in subsurface soil and groundwater at the Plant 35 property. This section describes the locations and concentrations of residual chemicals at the property.

3.1 West Parcel

All known soil affected by the release of chlorinated hydrocarbons from the four 50-gallon tanks was removed. During soil investigations, chlorinated hydrocarbon compounds were identified in soil at one location in the northern part of the West Parcel. At this location, the following chemicals were detected: at 2.5 feet bgs, 1,1,1-trichloroethane at 0.022 mg/kg and 1,1-dichloroethane at 0.03 mg/kg; and at 6 feet bgs, 1,1,1-trichloroethane at 0.01 mg/kg (CH2M HILL, 1993). At another location in the northern part of the West Parcel, motor oil was detected in the soil at 6 feet bgs at a concentration of 260 mg/kg (CH2M HILL, 1993). This level is below the target cleanup level of 500 mg/kg (see Section 5). Locations of these detections are shown on Figure 4. Chemical constituents present in West Parcel soil are summarized in Table 3.

West Parcel groundwater has been monitored quarterly by collecting and analyzing samples from four wells: MW-7, MW-9, MW-10, and MW-12. Chemicals detected during past monitoring events and their respective concentrations are shown on Table 2. Table 4 summarizes the results of groundwater monitoring on the West Parcel since the GET system was shut down in June 1995. The concentration of total chlorinated hydrocarbons in the West Parcel wells for the five events since shut down ranged from below the detection limits to 90 μ g/l, with an average of 31 μ g/l. The most recent sampling event was conducted on June 18, 1996. The data are summarized in Table 4. Chemicals present in West Parcel groundwater are TCE, PCE, and cis- and trans-1,2-dichloroethene (DCE). In the June 18, 1996 sampling event, total chlorinated hydrocarbon concentrations ranged from 6.7 to 44 μ g/l in the four wells sampled. The maximum concentrations were detected in MW-10. The average concentration of total chlorinated hydrocarbons in the four West Parcel wells in the June 18, 1996 event was 29.5 μ g/l.

3.2 East Parcel

Residual concentrations of chemicals present in soil on the East Parcel are summarized in Table 5. The data are from confirmation samples collected from soil left in place after the soil removal activities. Thirty four (34) confirmation samples were collected from the excavation of soil containing chlorinated and petroleum hydrocarbons east of the former Label Room and 21 samples were collected from the excavation at the former underground tank

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4. Summary of Human Health and Environmental Risks

4.1 Human Health Risks

A screening Health Risk Assessment (HRA) was conducted for the former Plant 35 property. Results of the HRA were presented in *Recommendation for Completion of Remedial Activities at Del Monte Plant 35 property in Emeryville, California* (CH2M HILL, 1996c). The HRA addressed potential future exposure to the volatile organic compounds present in soil and groundwater and was conducted in accordance with California Environmental Protection Agency (CAL-EPA) risk assessment guidance, as appropriate.

Del Monte Plant 35 is located in an industrial area of Emeryville. Currently, the only structure remaining on the property is the main cannery building. The planned future use of the property is light industrial/office complex. The HRA, however, also addressed potential multi-family residential property use. Chemicals present in groundwater and subsurface soil beneath the site could volatilize and migrate through soil into ambient air or air inside a future onsite building. The groundwater is not currently used as a domestic source of water and is not expected to be used as such in the future.

The purpose of the HRA was to quantitatively evaluate potential health risks to the public and onsite workers due to volatilization of chemicals from groundwater and subsurface soil, and transport through soil to air inside of a future onsite building. This screening HRA assumed that the only additional remedial actions taken at the site are the removal of "hot spots" of petroleum contamination that may be encountered during demolition of the remaining onsite structures.

The exposure scenarios for the Del Monte Plant assume a commercial/industrial worker or future resident could be exposed to VOCs present in groundwater or subsurface soil through volatilization and transport through soil into air inside a future onsite building or residence. The estimated hazard quotients and excess lifetime cancer risks for these exposure scenarios are summarized in Table 6.

The estimated hazard quotients were less than one for all of the groundwater and soil chemicals evaluated. The estimated hazard indices, or sum of all hazard quotients, for both the commercial and residential scenarios involving groundwater and soil are also less than one. For the East Parcel, the hazard indices for soil and groundwater combined are 0.002 for the commercial scenario and 0.002 for the residential scenario. For the West Parcel, the hazard indices for soil and groundwater combined are 0.0004 for the commercial scenario and 0.001 for the residential scenario. These values are well below one, the level where there is a concern for adverse health effects.

The estimated excess lifetime cancer risks for each of the groundwater and soil chemicals evaluated are below 10^4 . For the East Parcel, total risks from exposure to groundwater and soil are 5×10^4 for the commercial scenario and 3×10^5 for the residential scenario. For the West Parcel, total risks from exposure to groundwater and soil are 2×10^8 for the commer-

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In January 1993, Del Monte constructed and began operating a groundwater extraction and treatment (GET) system on the West Parcel. In August 1994, Del Monte expanded the groundwater extraction system by adding an extraction trench along the downgradient property edge. The purpose of adding the trench was to further reduce concentrations of chlorinated hydrocarbon compounds in groundwater and to minimize offsite migration. Del Monte operated the West Parcel GET system from January 1993 to June 1995 (approximately 30 months) at which time the RWQCB approved the GET system shut down. The approval was based on information provided in *Proposal to Shut Off West Parcel GET System* (CH2M HILL, 1995a) and additional information regarding results of past shutoffs and startups of the GET system (CH2M HILL, 1995b).

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Groundwater investigations conducted in 1994 on the East Parcel of Plant 35 indicated that a portion of East Parcel groundwater contained chlorinated and petroleum hydrocarbon compounds (CH2M HILL, 1994a and 1994b). An area of soil contaminated with tetrachloroethene (or perchloroethene [PCE]), TCE, and breakdown products was identified as the

contaminants from the East Parcel. Details of the contaminant transport analysis are presented in *Recommendation for Completion of Remedial Activities at Del Monte Plan 35 Property in Emeryville, California* (CH2M HILL, 1996c).

3. Residual Chemical Constituents in Soil and Groundwater

Because the levels are below cleanup criteria and pose little or no risk to the environment or human health (see Section 4), low levels of residual chlorinated and petroleum hydrocarbons will remain in subsurface soil and groundwater at the Plant 35 property. This section describes the locations and concentrations of residual chemicals at the property.

3.1 West Parcel

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3.2 East Parcel

Residual concentrations of chemicals present in soil on the East Parcel are summarized in Table 5. The data are from confirmation samples collected from soil left in place after the soil removal activities. Thirty four (34) confirmation samples were collected from the excavation of soil containing chlorinated and petroleum hydrocarbons east of the former Label Room and 21 samples were collected from the excavation at the former underground tank

accordance with applicable Alameda County Flood Control and Water Conservation District, Zone 7 requirements.

5. Completion of Remaining Activities

Site remediation-related activities that remain to occur are discussed below.

5.1 Soil Beneath Existing Structures and Pavement

After the existing structures and pavement over the former "proposed Haven Street" are demolished, underlying surface soil will be screened and sampled if screening results indicate the potential presence of petroleum hydrocarbons. If soil is found to contain petroleum hydrocarbons at levels exceeding cleanup criteria, the soil will be excavated and disposed at an appropriate offsite facility. Cleanup criteria will be 100 mg/kg for TPH-gasoline, 200 mg/kg for TPH-diesel, and 500 mg/kg for TPH-motor oil.

Surface soil screening will consist of walking the subject area at a maximum 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/motor oil, and benzene, toluene, ethylbenzene, and xylene.

5.2 Currently Stockpiled Soil

Excavated soil remaining onsite from the 1994 and 1995 East Parcel remediation activities will be used to backfill pits, or grade into the subsurface. The soil contains low or non-detectable levels of petroleum hydrocarbons. The following soil management plan was approved by the RWQCB in March 1996 (RWQCB, 1996 and CH2M HILL, 1995):

Soil with less than 100 mg/kg of TPH-gasoline, TPH-diesel, or TPH-motor oil, combined, may be returned to the excavation for backfill.

Soil with TPH-diesel between 100 and 200 mg/kg and/or TPH-motor oil between 100 and 500 mg/kg may be used as backfill between the ground surface and two feet above the groundwater table.

Excess soil that cannot fit into the excavations will be graded into the ground surface and compacted after the pavement at the site is demolished.

5.3 Groundwater Extraction System

Groundwater extraction from the East Parcel will be discontinued and the systems on both the East and West Parcels will be dismantled and removed from the site.

5.4 Well Abandonment

Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-9, MW-10, and MW-13, and the three piezometers installed on Park and Holden will be abandoned in

7. References

CH2M HILL, 1989. Property Assessment and Tank Removal Report, Del Monte Plant No. 35, Southwest Corner. September 1989.

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

CH2M HILL, 1994a. Supplemental Onsite Investigation Report for Del Monte Plant 35. May 1994.

CH2M HILL, 1994b. Technical Memorandum: Soil and Groundwater Investigation East of Boiler House on East Parcel, Del Monte Plant 35. August 12, 1994.

CH2M HILL, 1994c. Report on Focused Soil Removal, East Parcel Del Monte Plant 35. December 1994.

CH2M HILL, 1994d. Draft Remediation Plan, Del Monte Plant 35. April 1994.

CH2M HILL, 1995a. Proposal to Shut Off West Parcel GET System, Del Monte Plant 35. March 24, 1995.

CH2M HILL, 1995b. Letter to B. Oliva/ACDEH and S. Arigala/RWQCB from M. Wall/CH2M HILL regarding Results of Past Shut Off/Start Ups oaf West Parcel GET System. April 12, 1995.

CH2M HILL, 1995c. Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment Systems Status Report for Del Monte Plant 35 - West Parcel. October 31, 1995.

CH2M HILL, 1995d. Letter to B. Oliva/ACDEH and S. Arigala/RWQCB from M. Wall/CH2M HILL regarding Proposal to Revise Target Action Levels for Petroleum Hydrocarbons in Soil at Del Monte Plant 35 in Emeryville. October 27, 1995.

CH2M HILL, 1996a. Remedial Activities Conducted on the East Parcel, Del Monte Plant 35. February 1996.

CH2M HILL, 1996b. Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment Systems Status Report for Del Monte Plant 35. January 31, 1996.

CH2M HILL, 1996c. Recommendation for Completion of Remedial Activities at Del Monte Plant 35 Property in Emeryville, California. August 1996.

RWQCB, 1996. Letter from S. Morse/RWQCB to S. Ronzone/Del Monte. March 25, 1996.

Yeh, 1981. Yeh, G.T., AT 123D: Analytical Transient One-, Two-, and Three-Dimensional Simulation of Waste Transport in the Aquifer System. Oak Ridge National Laboratory, Environmental Sciences Division Publication No. 1439. March 1981.

6. Risk Management Measures

Pollution management measures that will be implemented at the former Del Monte Plant 35 property are described below. These measures are being implemented to minimize exposure to the residual contaminants that remain on the property.

The proposed property use is a light industrial/office complex. With this use, ground surface will be covered with structures, pavement, and landscaped areas using imported soil. Based on this use of the property, the owner shall comply with the following pollution management measures:

- The shallow groundwater beneath the site is not considered appropriate for beneficial uses and shall not be used.
- 2. Potential vertical conduits between the shallow and deeper aquifers shall not be created. If activities at the property require encroachment into the shallow and deeper aquifers, the plans for the proposed activities will be reviewed by a qualified professional, and appropriate measures will be taken to prevent the creation of vertical conduits. In addition, if borings or wells are to be advanced at the property, appropriate permits will be obtained from the Alameda County Flood Control and Water Conservation District, Zone 7. All work shall be performed in accordance with the requirements of those permits.
- 3. Appropriate site health and safety plans in compliance with OSHA and Cal-OSHA requirements shall be prepared prior to any activities involving exposure to contamination in soil or groundwater. All such activities shall comply with the requirements of the health and safety plans. The health and safety plans shall be submitted to the RWQCB and ACDEH for review before site activities are implemented.
- 4. Offsite groundwater will be monitored by collecting a sample from MW-12 on an annual basis, beginning June 1997. The sample will be analyzed for chlorinated hydrocarbons by EPA method 8010. Sample results will be submitted to the RWQCB and the ACDEH. If results indicate a potentially significant increase in chlorinated hydrocarbon levels, RWQCB and ACDEH staff will be contacted to discuss appropriate actions. After monitoring groundwater for three years (June 1997, June 1998, and June 1999), Del Monte will petition the RWQCB to remove the monitoring requirement.

If a significant land use change is proposed in the future (such as from the planned industrial/commercial use to residential use), RWQCB and ACDEH staff shall be notified.

TABLE 1 Summary of Remediation Activities and Results, Del Monte Plant 35

Activity	Date	Purpose of Activity	Summary of Remediation Results	Summary of Confirmation Sampling	Reference
West Parcel			•		
Underground tank removal	March 1989	Source removal	Four 50-gallon tanks removed (contained fuel oil contaminated with chlorinated hydrocarbons)	Chlorinated hydrocarbon levels in soil samples were well below 1 mg/kg	CH2M HILL, 1989.
Soil removal from location of four 50- gallon former un- derground tanks	December 1992	Construction of groundwater extraction pit and remaining soil source removal	Excavated soil containing low levels of chlorinated hydrocarbons and aerated onsite	No chlorinated hydrocarbons were detected in remaining soil.	
Groundwater ex- traction and treat- ment	Constructed in January 1993; extraction system expanded in August 1994; operated from January 1993 through June 1995	Groundwater remediation	Extracted and treated 4,381,361 gallons of groundwater; total chlorinated hydrocarbons reduced from 666 μg/L (1/93) to 14.3 μg/L (6/95)	Since shut down of extraction system (June 1995), quarterly verification monitoring has indicated that groundwater quality has stabilized at reduced levels	CH2M HILL, 1995a, 1995b, 1995c, and 1996a
East Parcel					
Soil removal from east of label room	November 1994	Source removal	600 cubic yards of soil containing chlorinated and petroleum hydrocar- bons removed and stockpiled onsite	Soil remaining beneath adjacent structures contained contaminants above cleanup criteria	CH2M HILL, 1994c
Soil removal from east of label room	June 1995	Source removal	2,700 cubic yards of additional soil removed	Chlorinated hydrocarbons in confirmation samples were < 1 mg/kg except in one sample (of 34) at 1.2 mg/kg at 14 feet bgs.	CH2M HILL, 1996b
Underground tank and soil removal	July 1995	Source removal	20,000 gallon closed-in-place tank and 2,000 cubic yard of affected soil removed	Petroleum hydrocarbons exceeded 100 mg/kg in three of 21 samples: at 104, 200, and 180 mg/kg. In all cases, the hydrocarbons were pre- dominantly diesel and motor oil	CH2M HILL, 1996b
Soil offhaul	November 1995	Soil disposal	1,228 tons of excavated soil were transported to BFI's Vasco Road Class III landfill for disposal	Not applicable	CH2M HILL, 1996b
Groundwater ex- traction and treat- ment	October 1995 to present	Groundwater remediation	554,000 gallons of East Parcel groundwater extracted between October 1995 to March 1995.	Not applicable	CH2M HILL, 1996a, 1996b. and 1995c.

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TABLE 1
Summary of Remediation Activities and Results, Del Monte Plant 35

Activity	Date	Purpose of Activity	Summary of Remediation Results	Summary of Confirmation Sampling	Reference
West Parcel					
Underground tank removal	March 1989	Source removal	Four 50-gallon tanks removed (contained fuel oil contaminated with chlorinated hydrocarbons)	Chlorinated hydrocarbon levels in soil samples were well below 1 mg/kg	CH2M HILL, 1989.
Soil removal from location of four 50- gallon former un- derground tanks	December 1992	Construction of groundwater extraction pit and remaining soil source removal	Excavated soil containing low levels of chlorinated hydrocarbons and aerated onsite	No chlorinated hydrocarbons were detected in remaining soil.	1
Groundwater ex- traction and treat- ment	Constructed in January 1993; extraction system expanded in August 1994; operated from January 1993 through June 1995	Groundwater remediation	Extracted and treated 4,381,361 gallons of groundwater; total chlorinated hydrocarbons reduced from 666 μg/L (1/93) to 14.3 μg/L (6/95)	Since shut down of extraction system (June 1995), quarterly verification monitoring has indicated that groundwater quality has stabilized at reduced levels	CH2M HILL, 1995a, 1995b, 1995c, and 1996a
East Parcel					
Soil removal from east of label room	November 1994	Source removal	600 cubic yards of soil containing chlorinated and petroleum hydrocar- bons removed and stockpiled onsite	Soil remaining beneath adjacent structures contained contaminants above cleanup criteria	CH2M HILL, 1994c
Soil removal from east of label room	June 1995	Source removal	2,700 cubic yards of additional soil removed	Chlorinated hydrocarbons in confirmation samples were < 1 mg/kg except in one sample (of 34) at 1.2 mg/kg at 14 feet bgs.	CH2M HILL, 1996b
Underground tank and soil removal	July 1995	Source removal	20,000 gallon closed-in-place tank and 2,000 cubic yard of affected soil removed	Petroleum hydrocarbons exceeded 100 mg/kg in three of 21 samples: at 104, 200, and 180 mg/kg. In all cases, the hydrocarbons were pre- dominantly diesel and motor oil	CH2M HILL, 1996b
Soil offhaul	November 1995	Soil disposal	1,228 tons of excavated soil were transported to BFI's Vasco Road Class III landfill for disposal	Not applicable	CH2M HILL, 1996b
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TABLE 2

DEL MONTE PLANT NO. 35 EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESLUTS

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MW8	10-Jul-90	5.0	<0.2	<0.5	91.0	36.0	3.0	<0.5	<0.5	not tested
MW8	17-Oct-90	59.0	<1.0	<1.0	160.0	21.0	2.0	<1.0	<1.0	not tested
MW8	24-Jan-91	160.0	<2.0	<5.0	450.0	13.0	9.0	27.0	<2.0	not tested
MW8	17-Apr-91	210.0	<5.0	<5.0	830.0	16.0	<5.0	<5.0	<5.0	not tested
MW8	31-Jul-91	85.0	<2.0	<2.0	350.0	30.0	<2.0	<2.0	<2.0	not tested
MW8	22-Oct-91	40.0	<5.0	<5.0	630.0	20.0	<5.0	<5.0	<5.0	not tested
MW8	23-Jan-92	160.0	<5.0	<5.0	690.0	29.0	<5.0	<5.0	<5.0	not tested
MW8	23-Apr-92	130.0	<10.0	<10.0	1600.0	30.0	<10.0	<10.0	<10.0	not tested
MW8	17-Jul-92	35.0	<2.0	<2.0	490.0	11.0	<2.0	<2.0	<2.0	not tested
MW8	12-Oct-92	22.0	<1.0	<1.0	110.0	24.0	1.3	<1.0	<1.0	not tested
MW8 (SP-D)	19-Jan-93	37.0	<0.5	<0.5	620.0	4.9	3.0	<0.5	<0.5	not tested
MW8 (SP-D)	26-Feb-93	50.0	<0.5	<0.5	350.0	14.0	<0.5	<0.5	<0.5	not tested
MW8 (SP-D)	11-Mar-93	44.9	<0.5	< 0.5	130.0	25.0	<0.5	<0.5	<0.5	not tested
MW8 (SP-D)	06-Арг-93	48.0	<1.0	<1.0	160.0	21.0	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	04-May-93	29.0	<0.5	<0.5	89.0	14.0	<0.5	<0.5	<0.5	not tested
MW8 (SP-D)	02-Jun-93	1.2 (t)	<1.0	<1.0	120.0	8.5	<1.0	<1.0	<1.0	not tested
MW8 (Extr. Well)	16-Jun-93	66.8	<2.0	<2.0	86.0	31.0	1.4	<2.0	<2.0	not tested
MW8 (SP-D)	16-Jun-93	62.0	<2.0	<2.0	102.0	24.0	<2.0	<2.0	<2.0	not tested
MW8 (SP-D)	02-Sep-93	<1.0 (t)	<1.0	<1.0	83.0	11.0	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	01-Oct-93	<1.0 (t)	<1.0	<1.0	41.0	10.0	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	05-Nov-93	<1.0 (t)	<1.0	<1.0	56.0	11.0	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	02-Dec-93	<1.0 (t)	<1.0	<1.0	68.0	11.0	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	09-Mar-94	<1.0 (t)	<1.0	<1.0	130.0	4.4	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	16-Jun-94	<1.0 (t)	<1.0	<1.0	37.0	13.0	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	17-Oct-94	<1.0 (t)	<1.0	<1.0	2.5	2.5	<1.0	<1.0	<1,0	not tested
MW8 (SP-D)	06-Dec-94	<1.0 (t)	<1.0	<1.0	5.5	1.4	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	09-Mar-95	<1.0 (t)	<1.0	<1.0	16.0	3.4	<1.0	<1.0	<1.0	not tested
MW8 (SP-D)	22-Jun-95	<1.0 (t)	<1.0	<1.0	9.1	5.2	<1.0	<1.0	<1.0	not tested
	Primary MCL	cis=6; trans=10	6	0.5	5	5	0.5	5	200	
1,2-Dichloroethene	(c) 1,2-Dichloroethane		(e) Tetrachloro	ethene	(g) 1,2-Dichlor		(i) Total fuel hydrocarbons as gasoline		asoline
1,1-Dichloroethene	·	d) Trichloroethene		(f) Vinyl chlorie	de	(h) 1,1,1-Trichl	loroethane	(t) trans		

TABLE 2

DEL MONTE PLANT NO. 35 EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESLUTS

1,2-Dichloroethene		(c) 1,2-Dichloroethane (d) Trichloroethene		(e) Tetrachloro (f) Vinyl chlori		(g) 1,2-Dichloro(h) 1,1,1-Trichlo	• •	(i) Total fuel hy (t) trans	drocarbons as ga	soune
	Primary MCL	cis=6; trans=10	6	0.5	5	5	0.5	5	200	
MW9	18-Jun-9 6	1.3 (cis) <1.0(t)	<1.0	<1.0	1.2	3.7	<1.0	<1.0	<1.0	not test
MW9	27-Mar-96	2.5(cis) < 0.5(t)	<0.5	<0.5	4.0	6.6	<0.5	<0.5	<0.5	not test
MW9	26-Dec-95	7.9(cis) <0.5(t)	<1.0	<1.0	4.7	9.8	<1.0	<1.0	<1.0	not test
MW9	25-Sep-95	<1.0 (t)	<1.0	<1.0	2.5	7.2	<1.0	<1.0	<1.0	not test
MW9	15-Aug-95	<1.0 (t)	<1.0	<1.0	2.5	7.0	<1.0	<1.0	0.1>	not test
MW9	21-Juո-95	<1.0 (t)	<1.0	<1.0	4.8	9.7	<1.0	<1.0	<1.0	not test
MW9	09-Mar-95	<1.0 (t)	<1.0	<1.0	3.4	8.4	<1.0	<1.0	<1.0	<50
MW9	29-Dec-94	<1.0 (t)	<1.0	<1.0	3.5	8.5	<1.0	<1.0	<1.0	not test
MW9	17-Oct-94	35.6	<0.5	<0.5	14.0	24.0	2.2	<0.5	<0.5	not test
MW9	15-Jul-94	42.4	<0.5	<0.5	15.0	24.0	7.1	<0.5	<0.5	not test
MW9	11-Apr-94	18.0	<0.5	<0.5	9.0	18.0	1.6	<0.5	<0.5	not test
MW9	14-Feb-94	30.8	<0.5	<0.5	11.0	25.0	4.2	<0.5	<0.5	not test
MW9	21-Dec-93	34.5	<0.5	<0.5	16.0	34.0	5.9	<0.5	<0.5	not test
MW9	17-Sep-93	1.6 (t)	<1.0	<1.0	11.0	21.0	3.5	<1.0	<1.0	not test
MW9	16-Jun-93	41.5	<2.0	<2.0	12.0	27.0	6.8	<2.0	<2.0	not test
MW9	30-Mar-93	26.0	<0.5	<0.5	9.6	22.0	2.1	< 0.5	< 0.5	not test
MW9	13-Jan-93	22.0	<0.5	<0.5	7.9	17.0	1.4	<0.5	< 0.5	not test
MW9	12-Oct-92	41.0	· <0.5	<0.5	17.0 -	36.0	3.0	<0.5	<0.5	not test
MW9	17-Jul-92	26.0	<0.5	<0.5	13.0	32.0	<0.5	<0.5	< 0.5	not test
MW9	23-Apr-92	22.0	<0.5	<0.5	11.0	29.0	<0.5	<0.5	<0.5	not test
MW9	23-Јап-92	64.0	<0.5	<0.5	10.0	27.0	2.1	<0.5	< 0.5	not test
MW9	22-Oct-91	71.0	<0.5	<0.5	15.0	33.0	2.8	<0.5	< 0.5	not test
MW9 '	31-Jul-91	55.0	<0.5	<0.5	14.0	32.0	2.3	<0.5	<0.5	not test
MW9	17-Арг-91	44.0	<0.5	<0.5	12.0	26.0	<0.5	<0.5	<0.5	not test
MW9	24-Jan-91	70.0	<2.0	<2.0	220.0	23.0	<2.0	<2.0 ∣	<2.0	not test
MW9	17-Oct-90	70.0	<0.5	<0.5	14.0	32.0	4.6	<0.5	<0.5	not test
MW9	10-Jul-90	3.0	<0.3	<0.5	9.0	43.0	10.0	<0.5	<0.5	not test
MW9	07-Feb-90	55.0	<0.5	<0.5	15.0	30.0	7.1	<0.5	<0.5	not test
MW9 MW9	24-Oct-89	6.4	<0.5	<0.5	29.0	48.0	23.0	<0.5	<0.5	not test
MW9	10-Jul-89	63.0	<0.5	<0.5	13.0	38.0	16.0	<0.5	<0.5	not test
Well	Date	1,2-DCE(a)	2001 PF GC F 4 70 F 17 K 1 3 30	1,2-DCA(c)		PCE(e)	. Ven	1,2-DP(g) 3-3	on the second	(0)

TABLE 2

DEL MONTE PLANT NO. 35 EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESLUTS

1,2-Dichloroethene	(6	c) 1,2-Dichloroethane Trichloroethene		(e) Tetrachloro (f) Vinyl chlorid		(g) 1,2-Dichlor(h) 1,1,1-Trichl		(i) Total fuel hy (t) trans	ydrocarbons as g	asoline
	Primary MCL	cis=6; trans=10	6	0.5	5	5	0.5	5	200	
MW10	18-Jun-96	13(cis) <1.0(t)	<1.0	<1.0	10	20	*1,0	-1,0		
MW10	27-Mar-96	26(cis) 2(t)	<0.5	<0.5	20 10	20	<0.3 <1.0	<1.0	<1.0	not teste
MW10	26-Dec-95	41(cis) 4(t)	<1.0	<1.0	25	26	<0.5	<0.5	< 0.5	not teste
MW10	25-Sep-95	<1.0 (t)	<1.0	<1.0	<1.0	20	<1.0 <1.0	<1.0	<1.0	not teste
MW10	15-Aug-95	<1.0 (t)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	not teste
MW10	21-Jun-95	<1.0 (t)	<1.0	<1.0	2.1	2.1 <1.0	<1.0°	<1.0	<1.0	not teste
MW10	09-Mar-95	1.7 (t)	<1.0	<1.0	13.0	9.8	<1.0 <1.0	<1.0	<1.0	not teste
MW10	29-Dec-94	<1.0 (t)	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0	<1.0	<50
MW10	17-Oct-94	20.6	<0.5	<0.5	37.0	19.0	<0.5 <1.0	<0.3 <1.0	<1.0	not teste
MW10	15-Jul-94	<0.5	<0.5	<0.5	1.0	1.0	<0.5 <0.5	<0.5	<0.5	not tester
MW10	11-Apr-94	3.7	<0.5	<0.5	2.2	1.5	<1.0	<0.5 <0.5	<0.5	not tested
MW10	14-Feb-94	9.9	<0.5	<0.5	5.4	4.4	<0.5	<0.5 <0.5	<0.5 <0.5	not tested
MW10	21-Dec-93	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5 <0.5	not tested
MW10	17-Sep-93	<1.0 (t)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	not tested
MW10	16-Jun-93	3.2	<2.0	<2.0	2.7	4.7	<2.0	<2.0	<2.0 <1.0	not tested
MW10	30-Mar-93	26.0	<0.5	<0.5	15.0	18.0	0.7	<0.5	<0.5	not tested
MW10	13-Jan-93	190.0	<1.0	<1.0	78.0	110.0	19.0	<1.0	<1.0	
MW10	12-Oct-92	110.0	<1.0	<1.0	45.0	46.0	11.0	<1.0	<1.0	not tested
MW10	17-Jul-92	180.0	<1.0	<1.0	78.0	82.0	15.0	<1.0	<1.0	not tested
MW10	23-Арт-92	210.0	<2.0	<2.0	89.0	110.0	<2.0	<2.0	<2.0	not tested
MW10	23-Jan-92	240.0	<2.0	<2.0	46.0	54.0	10.0	<2.0	<2.0	not tested
MW10	22-Oct-91	160.0	<1.0	<1.0	40.0	40.0	5.0	<1.0	<1.0	not tested
MW10	31-Jul-91	280.0	<2.0	<2.0	66.0	14.0	2.0	<2.0	<2.0	not tested
MW10	17-Apr-91	210.0	<2.0	<2.0	48.0	52.0	10.0	<2.0	<2.0	поt tested
MW10	24-Jan-91	65.0	<0.5	<0.5	14.0	31.0	3.3	<0.5	<0.5	not tested
MW10	17-Oct-90	140.0	< 0.5	<0.5	35.0	37.0	13.0	<0.5	<0.5	not tested
MW10-dup	10-Jul-90	10.0	5.0	<0.5	28.0	69.0	17.0	<0.5	<0.5	not tested
MW10	10-Jul-90	9.0	<0.2	<0.5	30.0	76.0	54.0	<0.5	<0.5	not tested
MW10	07-Feb-90	50.0	<0.5	<0.5	11.0	8.0	5.3	<0.5	<0.5	not tested
MW10	24-Oct-89	104.8	< 0.5	<0.5	37.0	28.0	6.9	<0.5	<0.5	not tested
MW10	10-Jul-89	85.0	0.8	<0.5	27.0	42.0	28.0	<0.5	<0.5	not tested
Well	Date	12-DCE(a)	(1-DCE(b))	1,2-DCA(c)	TCE(d)	PCE(e)	(s. VC(f)	1.2-DP(g)	(b)	(0)

TABLE 2

DEL MONTE PLANT NO. 35 EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESLUTS

2000								let a second			
	Monitoring Well + 1	Sampling	* 1,2-DCE(a)	1,1-DCE(b)	Conce	entration (ng/L TCE(d)		VC(0	12-Dr(e)	LLI-TCA (b)	TFH-gasoline (i)
[395.00	MW11	10-Jul-89	73.0	<1.0	4.0	160.0	12.0	16.0	5.7	<1.0	not tested
]	MW11	24-Oct-89	188.0	< 2.0	10.0	410.0	15.0	22.0	20.0	<2.0	not tested
	MW11	07-Feb-90	105.0	<2.0	2.0	270.0	8.0	11.0	13.0	<2.0	not tested
]	MWII	10-Jul-90	4.0	<2.0	23.0	46.0	18.0	15.0	< 0.5	<2.0	not tested
1	MWII	17-Oct-90	150.0	<2.0	11.0	300.0	8.0	<2.0	31.0	<2.0	not tested
J	MWII	24-Jan-91	120.0	<1.0	<1.0	29.0	29.0	3.0	· <1.0	<1.0	not tested
	MW11	17-Apr-91	100.0	<1.0	14.0	160.0	12.0	5.0	29.0	<1.0	not tested
l	MW11	31-Jul-91	250.0	<2.0	<2.0	61.0	65.0	12.0	2.0	<2.0	not tested
i	MW11	22-Oct-91	180.0	<2.0	5.0	560.0	20.0	5.0	30.0	<2.0	not tested
	MW11	23-Jan-92	160.0	<2.0	13.0	290.0	19.0	<2.0	21.0	<2.0	not tested
	MW11	23-Apr-92	30.0	<1.0	9.0	120.0	13.0	<1.0	14.0	<1.0	not tested
	MWII	17-Jul-92	26.0	< 0.5	1.4	81.0	<0.5	<0.5	3.5	<0.5	not tested
	MW11	12-Oct-92	63.0	<3.0	4.4	450.0	16.0	5.2	17.0	<3.0	not tested
	MW11	13-Jan-93	29.0	<1.0	2.2	140.0	13.0	3.2	6.4	<1.0	not tested
	MW11	30-Mar-93	17.0	<0.5	<0.5	55.0	10.0	1.6	5.1	< 0.5	not tested
	MWII	16-Jun-93	41.5	<2.0	6.3	230.0	20.0	7.0	7.2	<2.0	not tested
	MW11	17-Sep-93	<5.0 (t)	<5.0	<5.0	230.0	<5.0	<5.0	<5.0	<5.0	not tested
	MW11	21-Dec-93	32.2	<0.5	2.8	220.0	14.0	6.1	<0.5	<0.5	not tested
	MW11	14-Feb-94	11.8	<0.5	2.0	52.0	5.6	1.5	2.6	<0.5	not tested
	MW11	11-Арт-94	10.0	<0.5	< 0.5	57.0	4.9	<1.0	2.7	<0.5	not tested
	MW11	27-Jun-94	<0.5	<0.5	< 0.5	110.0	12.0	<0.5	<0.5	<0.5	not tested
	MW-11 (SP-E)	30-Sep-94	<1.0 (t)	<1.0	<1.0	2.6	2.8	<1.0	<1.0	<1.0	not tested
	MW-11 (SP-E)	06-Dec-94	<1.0 (t)	<1.0	<1.0	4.2	1.8	<1.0	<1.0	<1.0	not tested
	MW-11 (SP-E)	09-Mar-95	<1.0 (t)	<1.0	<1.0	2.3	1.1	<1.0	<1.0	<1.0	not tested
	MW-11 (SP-E)	22-Jun-95	<1.0 (t)	<1.0	<1.0	6.9	4.6	<1.0	<1.0	<1.0	not tested
	· · · · · · · · · · · · · · · · · · ·	Primary MCL	cis=6; trans=10	6	0.5	5	5	0.5	5	200	
(a)	1,2-Dichloroethene	(•	c) 1,2-Dichloroethane		(e) Tetrachloroe	thene	(g) 1,2-Dichloro	ргорапе	(i) Total fuel hy	drocarbons as ga	soline
(b)	1,1-Dichloroethene	(6	d) Trichloroethene		(f) Vinyl chlorid	le	(h) 1,1,1-Trichle	roethane	(t) trans		

TABLE 2

DEL MONTE PLANT NO. 35 EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESLUTS

mark.	Monitoring	C Sampling 15:	n - 1200 Egypt Tok- III 1,2-DCE(s) ****	Lif-DCE(b)		entration (ug/L TCE(d)) PCE(e)	vc(n	1,2-DP(g)	i,i,i-) CA : 4 - (h) - - (h)	TFH-gasoline
	Well MW12	Date 02-Mar-94	35.3	<0.5	<0.5	170.0	16.0	6.8	<0.5	<0.5	not tested
l	MW12 MW12	11-Apr-94	25.0	<0.5	<0.5	100.0	13.0	<1.0	< 0.5	<0.5	not tested
	MW12 MW12	15-Jul-94	31.9	<0.5	<0.5	82.0	19.0	4.2	<0.5	< 0.5	not tested
	MW12 MW12	17-Oct-94	<0.5	<0.5	<0.5	1.1	0.9	<0.5	<0.5	<0.5	not tested
	•	29-Dec-94		<1.0	<1.0	28.0	11.0	<1.0	<1.0	<1.0	not tested
1	MW12		<1.0 (t)		<1.0	64.0	16.0	<1.0	<1.0	<1.0	<50
	MW12	09-Mar-95	<1.0 (t)	<1.0	<1.0	32.0	15.0	<1.0	<1.0	<1.0	not tested
1	MW12	21-Jun-95	1.1 (t)	<1.0		18.0	11.0	<1.0	<1.0	<1.0	not tested
1	MW12	15-Aug-95	<1.0 (t)	<1.0	<1.0				<1.0 <1.0	<1.0 . <1.0	not tested
l	MW12	25-Sep-95	<1.0 (t)	<1.0	<1.0	20.0	9.9	<1.0			
	MW12	26-Dec-95	15(cis) 5(t)	<1.0	<1.0	34	14	<1.0	<1.0	<1.0	not tested
	MW12	27-Mar-96	11(cis) < 0.5(t)	<0.5	<0.5	15	11	<0.5	<0.5	<0.5	not tested
	MW12	18-Jun-96	5.7(cis) <1.0(t)	<1.0	<1.0	15	7.4	<1.0	<1.0	<1.0	not tested
	MW13	13-Oct-95	2.6 (t)	<1.0	<1.0	9.6	28	20	<1.0	<1.0	<50
1	MW13	26-Dec-95	38(cis) 13(t)	<1.0	<1.0	13	29	. 17	<1.0	<1.0	<50
1	MW13	27-Mar-96	27(cis) 2.2(t)	<0.5	<0.5	8.0	18.0	6.7	<0.5	<0.5	<50
	MW13	18-Jun-96	20(cis) 1.0(t)	<1.0	<1.0	4.1	12.0	8.7	<1.0	10	30
		Primary MCL	cis=6; trans=10	6	0.5	5	5	0.5	. 5	200	
 	n p) 11				(e) Tetrachloroe		(g) 1,2-Dichlore		(i) Total fuel h	ydrocarbons as gas	oline
n` '	2-Dichloroethene ,1-Dichloroethene		(c) 1,2-Dichloroethane (d) Trichloroethene		(f) Vinyl chlorid		(h) 1,1,1-Trichle		(t) trans	,	

TABLE 3
Chemicals Present in West Parcel Soil

Sample Location Number	Depth (bgs)	Chemical Constituent	Concentration (mg/kg)	Concentration Used in Risk Assessment* (mg/kg)
A10-SB-04	2.5 ft.	1,1,1-trichloroethane 1,1-dichloroethane	0.022 0.03	0.0066 0.0114
	6.0 ft.	1,1,1-trichloroethane	0.01	0.0066
A10-SB-07	6.0 ft.	Motor oil	260	NA

UCL₉₅; one-half the detection limit was substituted for nondetects when calculating UCL₉₅.

TABLE 4
Summary of Chlorinated Hydrocarbons in Groundwater (µg/l)^a

West Parcel⁵	6/18	/96	GET S	ts Since System Down	Concentration Used in Risk Assessments
	Range	Average	Range	Average	
PCE -	3.7 – 20	9.6	<1.0 – 26	9.7	12.1
TCE	1.2 – 15	9.8	<1.0 – 34	11.8	15.3
cis-1,2-DCE	1.3 – 17	9.3	1.3-41 ^d	14.5	20.2
trans-1,2-DCE	<1.0 – 1.5	0.75	<0.5 – 5	1.0	1.55

East Parcel*	6/18/96	4 Events Since Well Installation		Concentration Used in Risk Assessments ^b	
		Range	Average		
PCE	12	12.0 – 29	21.8	29.0	
TCE	4.1	4.1 – 13	8.7	13.0	
cis-1,2-DCE	20	$20 - 38^{d}$	28.3	38	
trans-1,2-DCE	1.0	1.0 – 13	4.7	13	
Vinyl Chloride	8.7	6.7 – 20	13.1	20.0	
1,1,1-TCA	10	<0.5 – 10	2.8	10.0	

^{*} Based on results of EPA Method 8010 analysis

Wells monitored are MW-7, MW-9, MW-10, MW-12.

Events since GET system turned off: August 15, September 25, December 26, 1995, March 27 and June 18, 1996.

d cis-1,2-DCE was not analyzed for in the August 15, September 25, or October 13, 1995 sampling events.

^{*} Well monitored is MW-13.

October 13 and December 26, 1995, March 27 and June 8, 1996.

UCL_{ss}; one-half the detection limit was substituted for nondetects when calculating UCL_{ss}.

maximum detected value.

PCE = Perchloroethene or tetrachloroethene

TCE = Trichloroethene

DCE = Dichloroethene

TCA = Trichloroethane

TABLE 5 Concentrations of Chlorinated and Petroleum Hydrocarbons Remaining in East Parcel Soil (mg/kg)

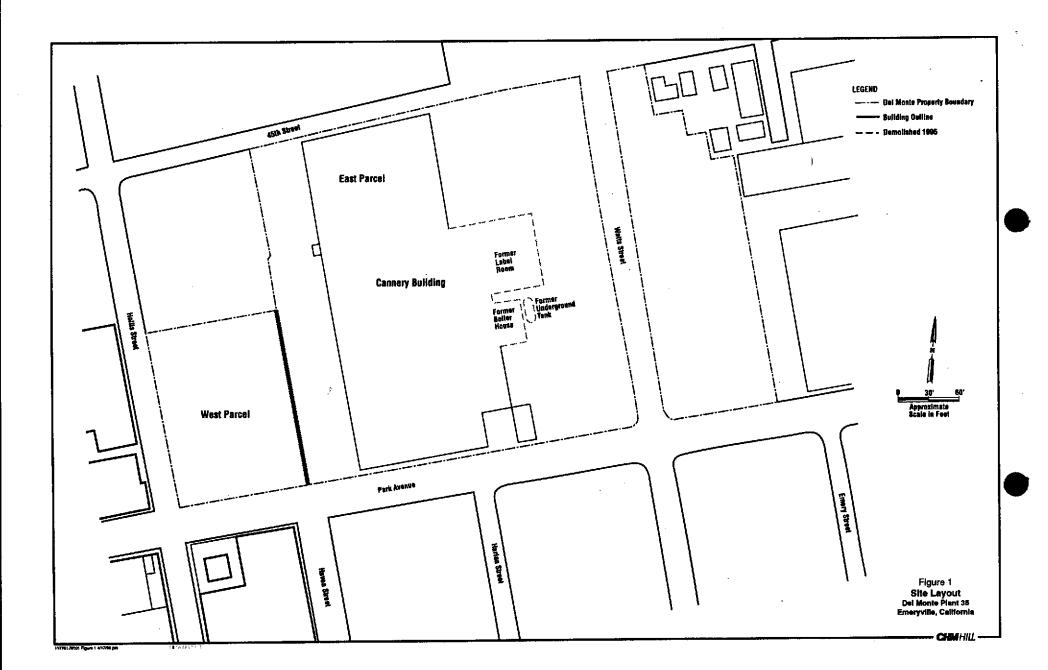
	Range	No. Of Detects	Concentration Used in Risk Assessment *
Source Area East of Labe	el Room		
Kerosene _	<1 to 4.5	1 of 34	NA
Diesel	<1 to 9.6	1 of 34	NA
Motor Oil	<1 to 19	3 of 34	NA .
PCE ^b	<0.005 to 0.960	15 of 34	0.0069
TCE°	<0.005 to 0.230	11 of 34	0.022
cis 1,2-DCE ^d	<0.005 to 0.200	12 of 34	0.026
trans 1,2-DCE	<0.005 to 0.050	5 of 34	0.0054
Vinyl Chloride	<0.005 to 0.081	6 of 34	0.012
Acetone	<0.005 to 0.047	2 of 34	0.0054
Former Underground Tai	nk Area		
Diesel	<1 to 60	5 of 21	NA
Motor Oil	<1 to 150	4 of 21	NA
Gasoline	<1 to 1.4	1 of 21	NA
TCE	<0.005 to 0.009	1 of 21	0.022
Methylene Chloride	<0.005 to 0.039	1 of 21	0.0043
cis 1,2-DCE	<0.005 to 0.011	6 of 21	0.026

³ UCL_{ss}; one-half the detection limit was substituted for nondetects when calculating the UCL_{ss}. ^bPCE = perchloroethene or tetrachloroethene
^{*}TCE = trichloroethene

^dDÇE = dichloroethene

		Table 6			
Estir	nated Excess Lifetime Cand	er Risks and Noncan	cer Hazard Quotients (a)		
Chemical	Commercial		Residential .		
	Excess Lifetime Cancer	Noncancer Hazard	Excess Lifetime Cancer	Noncancer Hazard	
	Risk	Quotient	Risk	Quotient	
Groundwater (West Parcel)					
cis-1,2-Dichloroethylene	(b)	6E-05	(b)	3E-04	
trans-1,2-Dichloroethylene	(b)	5E-06	(b)	2E-05	
Tetrachloroethylene	8E-09	1E-04	5E-08	5E-04	
Trichloroethylene	4E-09	2E-04	2E-08	8E-04	
Pathway TOTAL	1E-08	4E-04	7E-08	2E-03	
Soil (West Parcel) ug/kg					
1,1,1-Trichloroethane	(b)	2E-06	(b)	6E-06	
1,1-Dichloroethane	8E-09	3E-05	4E-08	9E-05	
Pathway TOTAL	8E-09	3E-05	4E-08	1E-04	
West Parcel TOTAL	2E-08	4E-04	1E-07	2E-03	
Groundwater (East Parcel)					
cis-1,2-Dichloroethylene	(b)	1E-04	(b)	5E-04	
trans-1,2-Dichloroethylene	(b)	4E-05	(b)	2E-04	
Vinyl chloride	1É-06		8E-06		
Tetrachloroethylene	2E-08	3E-04	1E-07	1E-03	
Trichloroethylene	3E-09	1E-04	2E-08	7E-04	
1,1,1-Trichloroethane	(b)	2E-06	(b)	8E-06	
Pathway TOTAL	2È-06	6E-04	8E-06	3E-03	
Soil (East Parcel) ug/kg				<u> </u>	
Methylene chloride	6E-10	6E-07	3E-09	2E-06	
cis-1,2-Dichloroethylene	(b)	4E-04	(b)	1E-03	
trans-1,2-Dichloroethylene	(b)	1E-04	(b)	4E-04	
Vinyl chloride	4È-06		2E-05		
Tetrachloroethylene	3E-08	4E-04	2E-07	1E-03	
Trichloroethene	1E-08	5E-04	6E-08	2E-03	
Acetone	(b)	1E-06	(b)	5E-06	
Pathway TOTAL	4Ë-06	1E-03	2È-05	5E-03	
East Parcel TOTAL	5E-06	2E-03	3E-05	7E-03	

⁽a) Based on worker or resident inhalation exposure to VOCs inside a building or residence (b) Cis- and trans-1,2-DCE; 1,1,1-TCA; and acetone have no slope factors



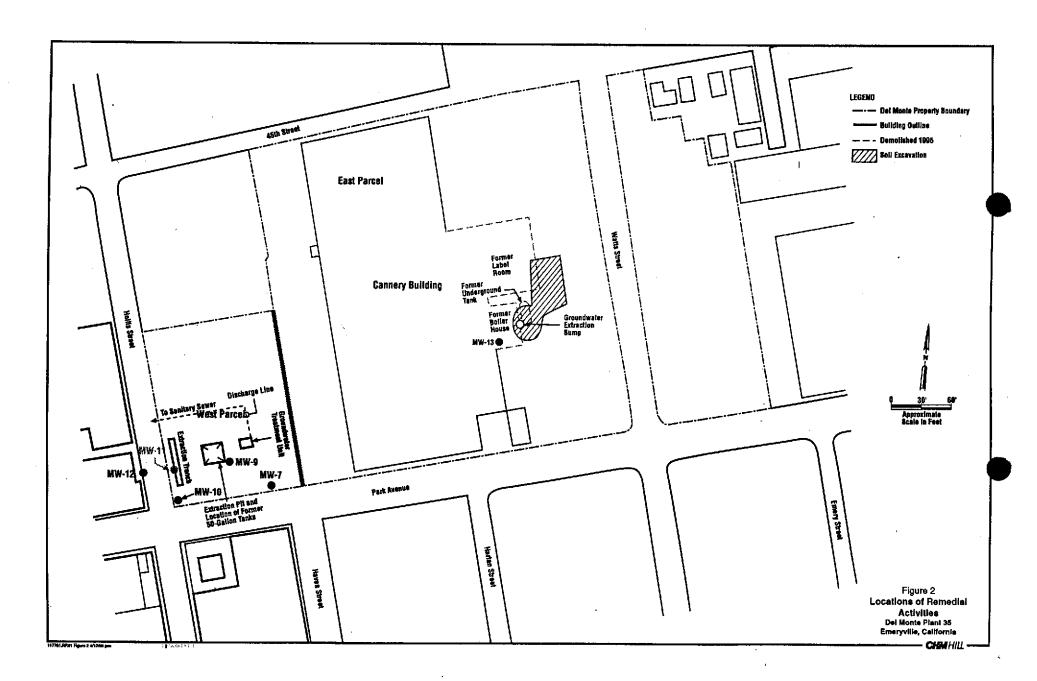


Figure 3

Total Chlorinated Hydrocarbon Concentration in Monitoring Wells

