

N

Wagner, Katharine

From: Mary Rose Cassa [MCassa@waterboards.ca.gov]
Sent: Wednesday, May 10, 2006 8:01 AM
To: Wagner, Katharine
Cc: Lee, Joy; Chuck Headlee
Subject: Re: Vincent Road sites - Etch-tek response to the supplementalsite history request - CASE #: 07S0183

Katharine,

Thank you for pointing out the missing document on GeoTracker. It is now posted.

Regards,

Mary Rose

>>> "Wagner, Katharine" <kwagner@DowneyBrand.com> 5/9/2006 5:02 PM >>>

Mary Rose, I was wondering why the Etch-tek response to the supplemental site history request, responding to the Regional Board's request of March 21, 2005, is not up on Geotracker. Can you please let me know if the report will be posted, and why it is not posted yet?

Thank you. Katharine Wagner

Katharine Wagner
DOWNEY BRAND
555 Capitol Mall, 10th Floor
Sacramento, CA 95814
P: 916/444-1000 X6311
F: 916/444-2100
kwagner@downeybrand.com
Assistant: Joy Lee X6288
jlee@downeybrand.com
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-----Original Message-----

From: Mary Rose Cassa [mailto:MCassa@waterboards.ca.gov]
Sent: Wednesday, April 19, 2006 9:24 AM
To: Wagner, Katharine
Subject: Re: Mayhew Center: Etch tek Response to Site HistorySupplemental Request

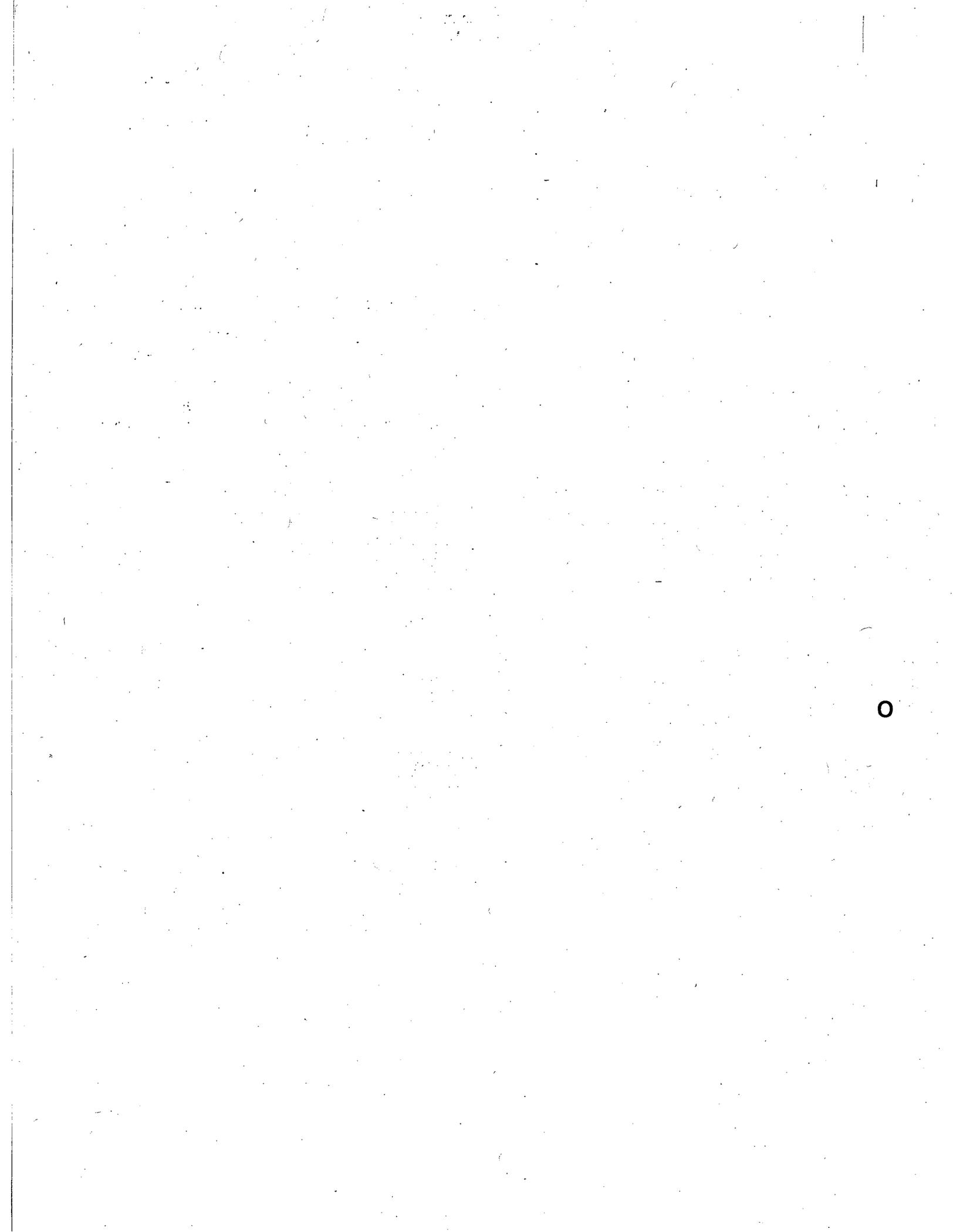
Attached.

>>> "Wagner, Katharine" <kwagner@DowneyBrand.com> 4/19/2006 8:58 AM >>>

Mary Rose, did you receive, and can you assist in obtaining a copy of, a response from Etch tek to the Regional Board's request for additional information relating to site history?

Thank you. Katharine Wagner

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From: George Leyva
To: Cassa, Mary Rose
Date: 12/9/2005 12:47:27 PM
Subject: SOMA Eng. Report Re: Mayhew Center / Walnut Creek Manor

Mary Rose,

I just got a call from Dean Dunivan asking for historical perspective regarding Walnut Creek Manor (WCM). I briefly reviewed the report (in Geotracker) that he had SOMA prepare indicating that WCM had a UST removed in 1998 along with 21 yds of contaminated soil. Since this is clearly something we would have wanted to know last year when we were asking for a site investigation from WCM, this may be something that this Board should consider for enforcement regarding false reporting. We should be requesting WCM to respond why this was not reported in their Feb'05 submittal pursuant to our Dec. 9, 2004, letter requesting the info.

As I recall, the WCM Feb'05 submittal specifically indicated that very little or no potential existed for pollution from their property, no indication of the UST was expressed nor implied. This caused us to approve a site investigation that in retrospect, avoided obvious locations for soil borings, (except for Boring B-7 which caused Dunivan to do a site investigation without warrant).

I realize obviously, that I am not the case handler for this and I believe you are eminently qualified to handle all that comes up for this case, but I want to communicate to you that I would have directed WCM differently last year and with a focus on the UST, had we known about this unreported information. It would have also given us insight to not request a site investigation from Dunivan; at least not for the time being.

I am cc'ing Dunivan because of his request for help on this and to show that I have a concern for setting the record straight.

George Leyva, EG
San Francisco Bay Region
Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

510-622-2379
gleyva@waterboards.ca.gov

CC: Dean Dunivan

EXHIBIT E



ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

August 31, 2007

Ms. Elizabeth Allen
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Supplement to Scope of Work to Address Data Gaps at the 3301-3341 Vincent Road Property in Pleasant Hill, California

Dear Ms. Allen:

On behalf of Mayhew Center, LLC (Mayhew Center), this letter responds to comments and conditions presented in a letter from the San Francisco Regional Water Quality Control Board (RWQCB) to Mr. Dean Dunivan of Mayhew Center dated August 14, 2007 ("the August 14 letter", attached). The August 14 letter provided a conditional approval of the report: "Scope of Work to Address Data Gaps at the 3301-3341 Vincent Road Property in Pleasant Hill, California," dated May 30, 2007, prepared by LFR and submitted on behalf of Mayhew Center on May 30, 2007 ("the Scope of Work report").

Prior to the issuance of the RWQCB August 14 letter, LFR submitted a letter report to the RWQCB on August 8, 2007 titled "Schedule of Scope of Work - 3301-3341 Vincent Road Property in Pleasant Hill, California." That letter included a Project Schedule and other items that address comments and conditions in the August 14 letter. The August 14 letter from the RWQCB did not acknowledge receipt of the August 8 letter from LFR. In response to your request, this letter incorporates the content of the August 8 letter.

Conditions and comments included in the August 14 letter, and our response to those comments, are provided below.

RWQCB Conditions/Comments #1 and #2

These two comments request that the passive soil vapor survey included in the Scope of Work report be extended to the south and to the east.

Response

In our opinion, the grid of passive soil gas probes provided in the Scope of Work report would provide data that would meet the objectives of the investigation (page 3 of the Scope of Work report) and satisfy the requirements set forth in the RWQCB's December 14, 2006 letter.

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Based on our current conceptual model for this site, it is expected that concentrations of VOCs in passive soil gas probes will tend to decrease to the south and east, away from the suspected source area location. If soil gas data collected from this phase of investigation do not adequately confirm this hypothesis, then additional sampling would be indicated in a subsequent phase of work. This investigation approach is consistent with the December 14 letter, which stated: "the Workplan may propose a phase investigation, such as including a soil-vapor investigation to identify hot-spots for follow-up sampling..." (page 5 paragraph 3).

We understand that RWQCB staff has a differing opinion on this issue. To respond to RWQCB requests in the August 14 letter, we have revised the proposed passive soil vapor grid as indicated on the attached Figure 4. We trust that these revisions adequately respond to the RWQCB requests.

RWQCB Condition/Comment #3

This includes a recommendation for sampling in the sewer lateral area of Building II to confirm that it does not represent a groundwater PCE contamination source.

Response

As presented in the CSM report, groundwater quality data and passive soil gas data collected downgradient from the Mayhew Center Buildings and associated sewer lateral and sewer main connections do not indicate the presence of a source for PCE. These data are consistent with a lack of historical PCE use at the Site. As such, additional characterization work in the sewer lateral area of Building II requested by the RWQCB is outside of the data gaps included in the CSM. However, to respond to the RWQCB requests included in the August 14 letter, LFR has developed the following Scope of Work to assess for the presence of a potential source area for PCE to groundwater in the vicinity of the sewer lateral for Building II.

Additional Scope of Work. Two soil borings are proposed to collect data to assess for potential releases of PCE associated with the northern portion of Building II and associated former printed wiring board business. The approximate locations of these proposed borings are shown on Figure 2 (attached). These borings have been located to assess for potential release of PCE from the sewer lateral exiting the Building, with a focus on the 90-degree elbow in that lateral (see Figure 2).

A dual tube direct push assembly or hand auger would be used to advance the temporary soil borings and to facilitate the collection of soil samples. A Photoionization Detector would be used to qualitatively assess for the presence of VOCs during boring advancement and collection of soil samples. At least one soil sample will be collected from each soil boring from approximately 1 foot below the bottom of the sewer lateral line (i.e., approximately 3 to 6 feet below the ground surface). The depth of the sewer lateral would be verified in the field by measuring the depth at which that lateral enters the sewer main on Vincent Road.



If a hand auger is used, once the desired depth is obtained, soil samples would be collected into brass tubes using a slide hammer sampler. The brass tube containing the soil sample would be removed from the sampler, capped, labeled, and placed into chilled cooler for transportation to the off-site laboratory under chain of custody protocol. If a direct push method is used, soil samples would be collected into an acetate liner using the direct push assembly, the desired depth interval of soil would be removed from the dual tube sampler, cut at the targeted depth, capped, labeled and placed in a cooler for transportation to an off-site analytical laboratory. After sampling is completed, each of the temporary soil borings would be grouted from the bottom to the ground surface with neat cement, in accordance with Contra Costa County drilling permit requirement and guidelines. Collected soil samples will be analyzed for VOCs using EPA Method 8260.

RWQCB Condition/Comment #4

This comment/condition included a request for a schedule for the work presented in the Scope of Work report, a discussion of the approximately number of MIP and discrete sampling locations that may be needed to address the data gaps identified in the SCM report, and a schedule for implementing this (follow-up) phase of investigation.

Response

Discussion of MIP and discrete borings

As discussed in the Scope of Work report, the number of MIP and discrete soil boring locations that would be needed to adequately address the data gaps identified in the SCM report would be determined based on the results of the soil vapor survey.

Data Gaps Associated with the Apparent Source Area at WCM/Mayhew Center Property Boundary. Based on the current SCM and site understanding, it is anticipated that approximately 8 to 20 borings may be recommended to follow-up on the results of the soil gas surveys to address the data gaps associated with the apparent source area near the WCM/Mayhew Center property boundary.

Data gap associated with the downgradient extent of PCE impacts to groundwater downgradient from the apparent source area near the WCM/Mayhew Center property boundary. Based on current data, it is estimated that approximately 15 to 25 passive soil gas points, followed by 5 to 10 borings may be recommended to assess the downgradient extent of PCE impacts associated with the WCM/Mayhew Center apparent source area.

Project Schedule

Our anticipated schedule to complete the work presented in the Scope of Work report is illustrated below. Note that this schedule includes the passive soil gas survey and follow-up MIP/soil boring work.



Table 1: Project Schedule

Task	Schedule (Week after Receipt of RWQCB Approval of Scope of Work)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
<i>Soil Sampling Near Building II</i>																								
Permitting	█	█																						
Collect Soil Samples			█																					
Laboratory Analysis				█	█																			
Data Evaluation						█	█																	
<i>Passive Soil Gas Survey</i>																								
Permitting/Utility Clearance	█	█	█																					
Install Vapor Modules				█																				
Vapor Module Residence					█	█	█																	
Retrieve Vapor Modules								█																
Laboratory Analysis									█	█														
Data Evaluation/Recommendations for MIP Program										█	█													
RWQCB Review												█	█											
<i>MIP/Soil/Groundwater Sampling Program</i>																								
Permitting/Utility Clearance													█	█										
MIP/Soil/Groundwater Sampling														█	█									
Laboratory Analysis																	█	█						
Data Evaluation and Reporting																				█	█	█	█	█

NOTE: This schedule is contingent upon factors that are beyond the control of LFR and Mayhew Center including inclement weather, subcontractor availability, site access, project coordination, etc.

As explained in the Scope of Work report, the additional time necessary to implement the passive soil vapor survey and follow-up soil boring work proposed to address the downgradient extent of impacts associated with the apparent source area at the WCM/Mayhew Center property boundary would be similar to that outlined above (i.e., approximately 24 weeks) and would be initiated after completion of the property boundary investigation.

Proposed Sampling on WCM Property

The August 14 letter states that the work proposed in the Scope of Work report “goes beyond the requirement of our directive of December 14, 2006, in that it proposes sampling on Walnut Creek Manor property.” LFR disagrees with that assessment. Rather, we believe that meeting the requirements of the December 14 2006 letter requires collection of data on both sides of the property boundary between WCM and Mayhew Center, as explained below.

The December 14 2006 letter acknowledges that the source area of the release “appears to straddle the boundary between your property and WCM” (page 5, 2nd paragraph). The December 14 2006 letter also states that the data from this investigation will assist in “identifying a source area near the property boundary and may also be used to determine the responsible party for the release to



the environment.” Also, the December 14 2006 letter directs that the requested sampling program be designed to “document concentration gradients in soil and groundwater and identify source areas...” Meeting the RWQCB objectives of identifying and characterizing a source that straddles a property boundary in a technically sound manner requires collection of data on both sides of the WCM/Mayhew Center boundary. Data collected on either side of the property boundary can be accurately interpreted and assessed only relative to surrounding data in order to establish concentration gradients and to identify the apparent source. As a result, the sampling proposed on WCM is necessary to meet the objectives of the December 14 2006 directive, and does not go beyond the requirements set forth in that letter.

Closing

The following should be noted regarding the RWQCB directive and subsequent work plans from Mayhew Center and Walnut Creek Manor. On December 14, 2006, the RWQCB issued simultaneous directives to WCM and Mayhew Center to produce work plans. Mayhew Center has urged that requirements first be satisfied by WCM, and that Mayhew Center be required to act only if WCM's work indicates that the source is not at WCM but at Mayhew Center. WCM and Mayhew Center have each appealed the December 14, 2006, directives; however, the RWQCB has not deferred requirements for either company.¹ Mayhew Center has authorized submission of this Scope of Work report in good faith pending the determination of the appeal or other resolution of the matter.²

Thank you for your attention to this matter. If you have any questions, please me (916) 786-0342, or Katrin Schliewen at (510) 596-9567.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Scott Seyfried', written in a cursive style.

J. Scott Seyfried, P.G., CH.G.
(CA P.G. # 7374, CA CH.G. # 764)
Principal Hydrogeologist

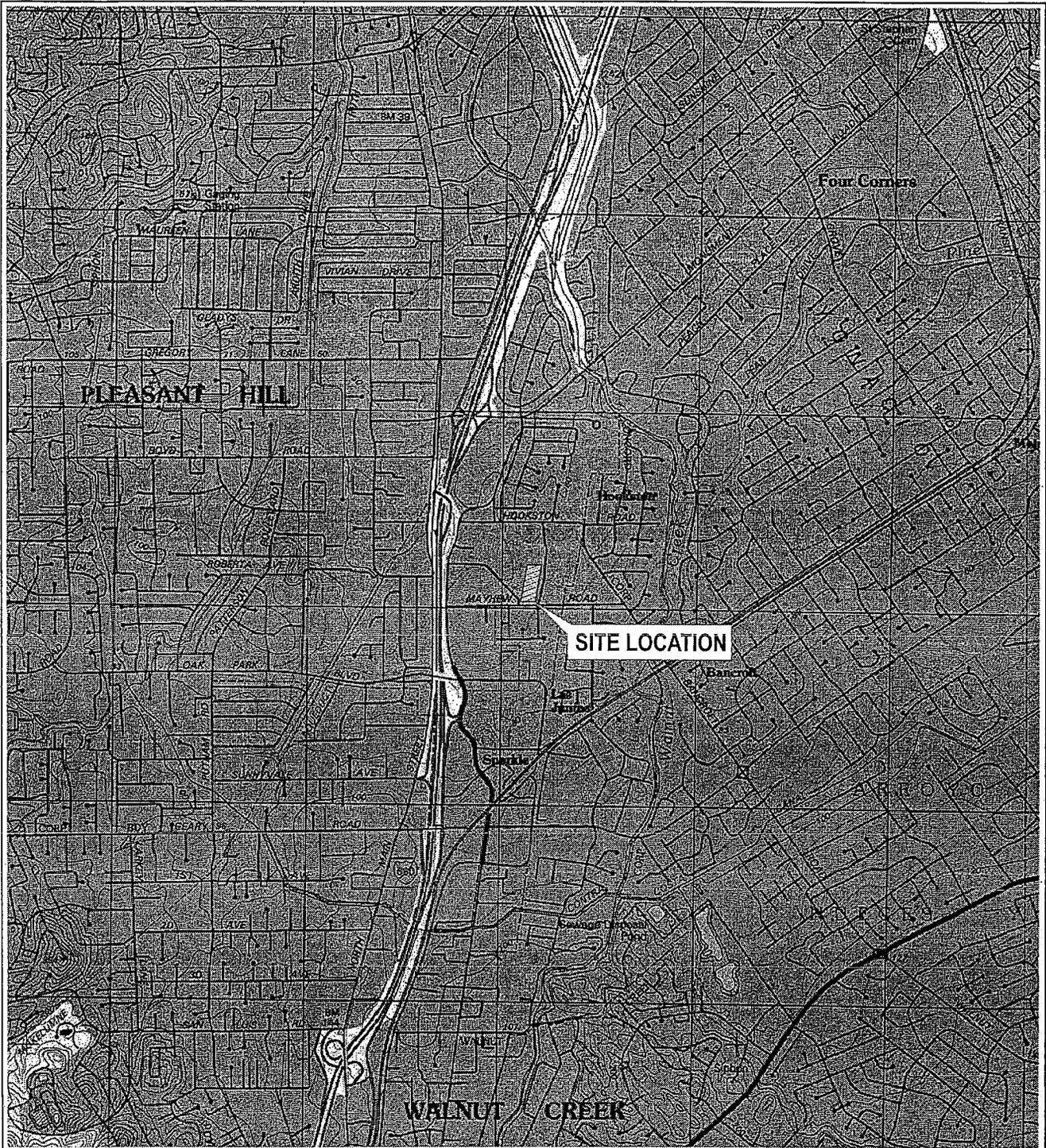
cc: Mayhew Center, LLC

attachments

¹ It should be also noted that correspondence from WCM suggests that it will not submit a data gap work plan.

² The submission of this report is without prejudice to Mayhew Center's appeal, nor its objections to bearing the costs of this work and any further investigations. This Scope of Work satisfies the RWQCB directive to Mayhew Center, and does not constitute a commitment by Mayhew Center to carry out the work identified, which was not required in the December 14, 2006, directive.

J:\Illustrator\Mayhew\Mayhew_Fig1: Site_Location.ai 012507



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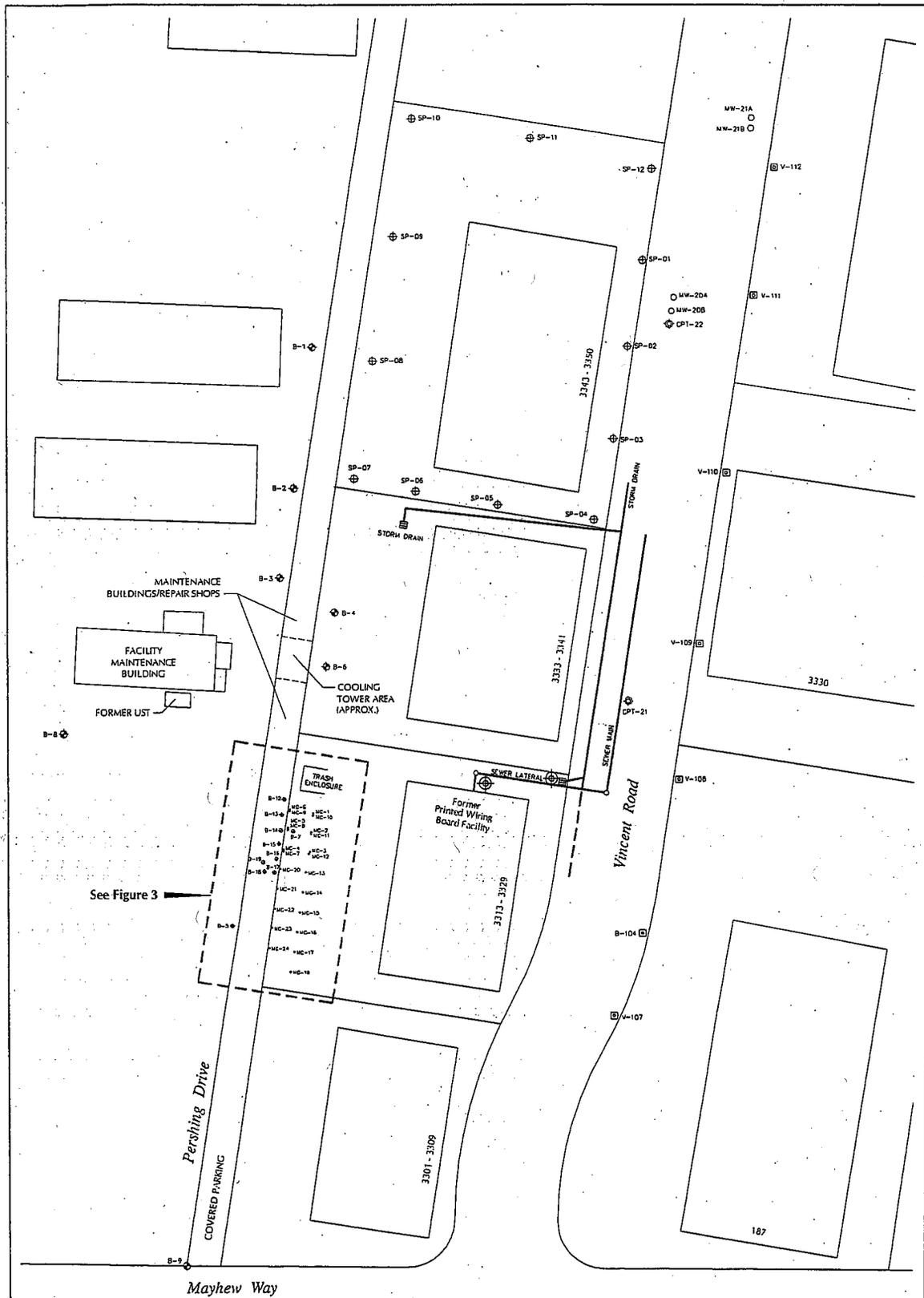
SOURCE: USGS Topographic Map, PLEASANT HILL, CA.

Site Location Map

Mayhew Center, Pleasant Hill, California



Figure 1



LEGEND

- MW-21A GROUNDWATER MONITORING WELL
- MC-10 SOIL BORING ADVANCED BY MAYHEW CENTER
- ⊕ B-8 SOIL BORING ADVANCED BY WALNUT CREEK MANOR
- ⊕ SP-09 SOIL BORING ADVANCED BY CUFF PROPERTIES
- ⊕ V-107 PASSIVE SOIL GAS SAMPLING POINT BY ERM
- ⊕ B-104 SOIL BORING BY ERM
- ⊕ CP1-21 CONE PENETROMETER TEST BORING BY ERM
- ⊕ PROPOSED SOIL BORING

SOURCE: ERM 2004
Survey data from Kier & Wright 2007

Site Plan Showing Locations of
Proposed Soil Borings Near Building II
Mayhew Center, Pleasant Hill, California

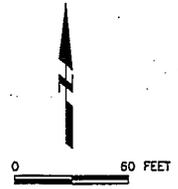
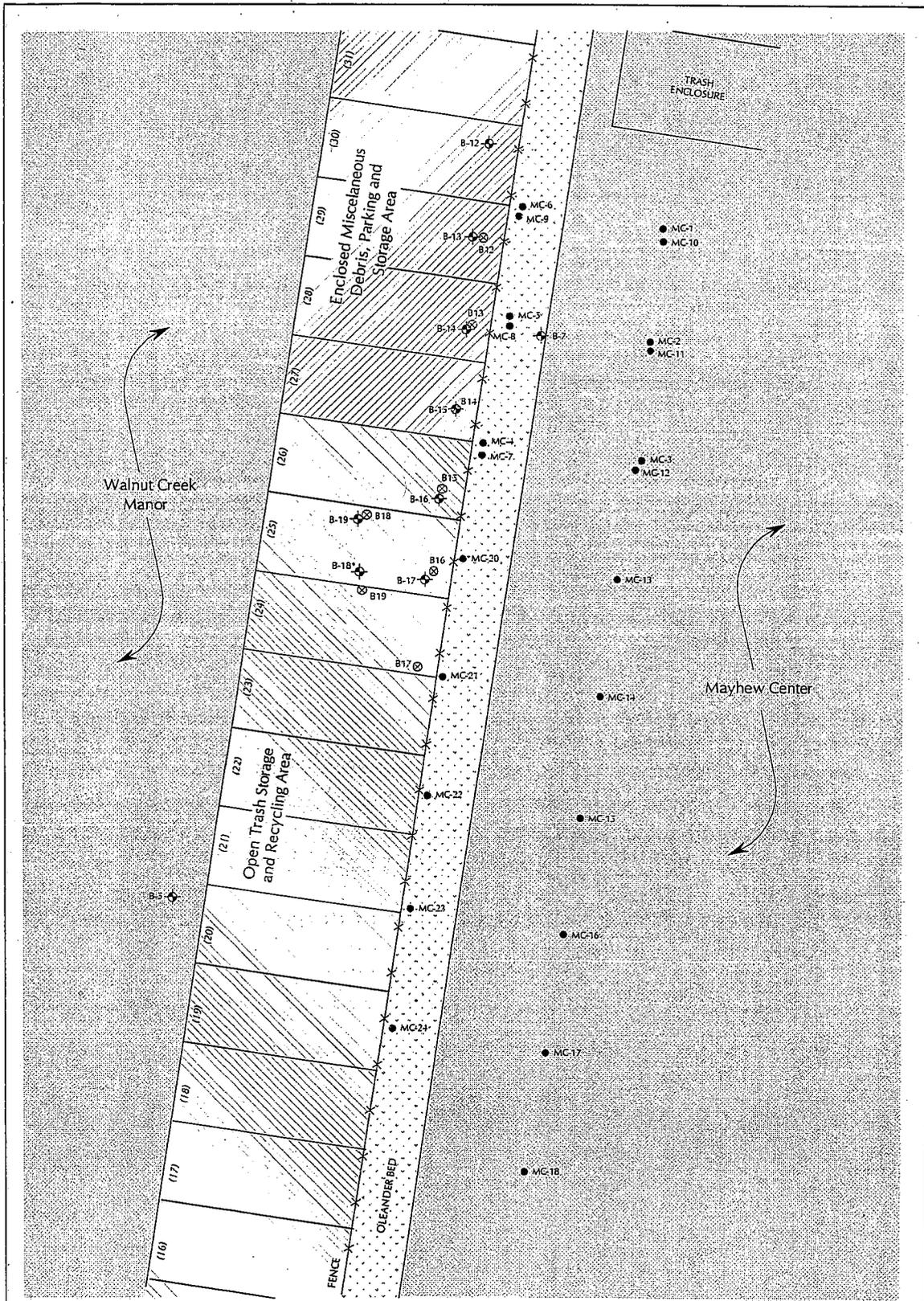


Figure 2



LEGEND

- (21) PARKING SPACE DESIGNATION (HEILSHORN, 2005)
- ⊕ B-3 SOIL BORING (WCM)
- MC-17 SOIL BORING (MAYHEW CENTER)
- ⊗ B-17 WCM BORING LOCATION (AS MAPPED IN THE FIELD BY SOMA)
- LOCATION OF BORING ESTIMATED FROM BORING LOG DESCRIPTION (HEILSHORN, 2005)



ASPHALT

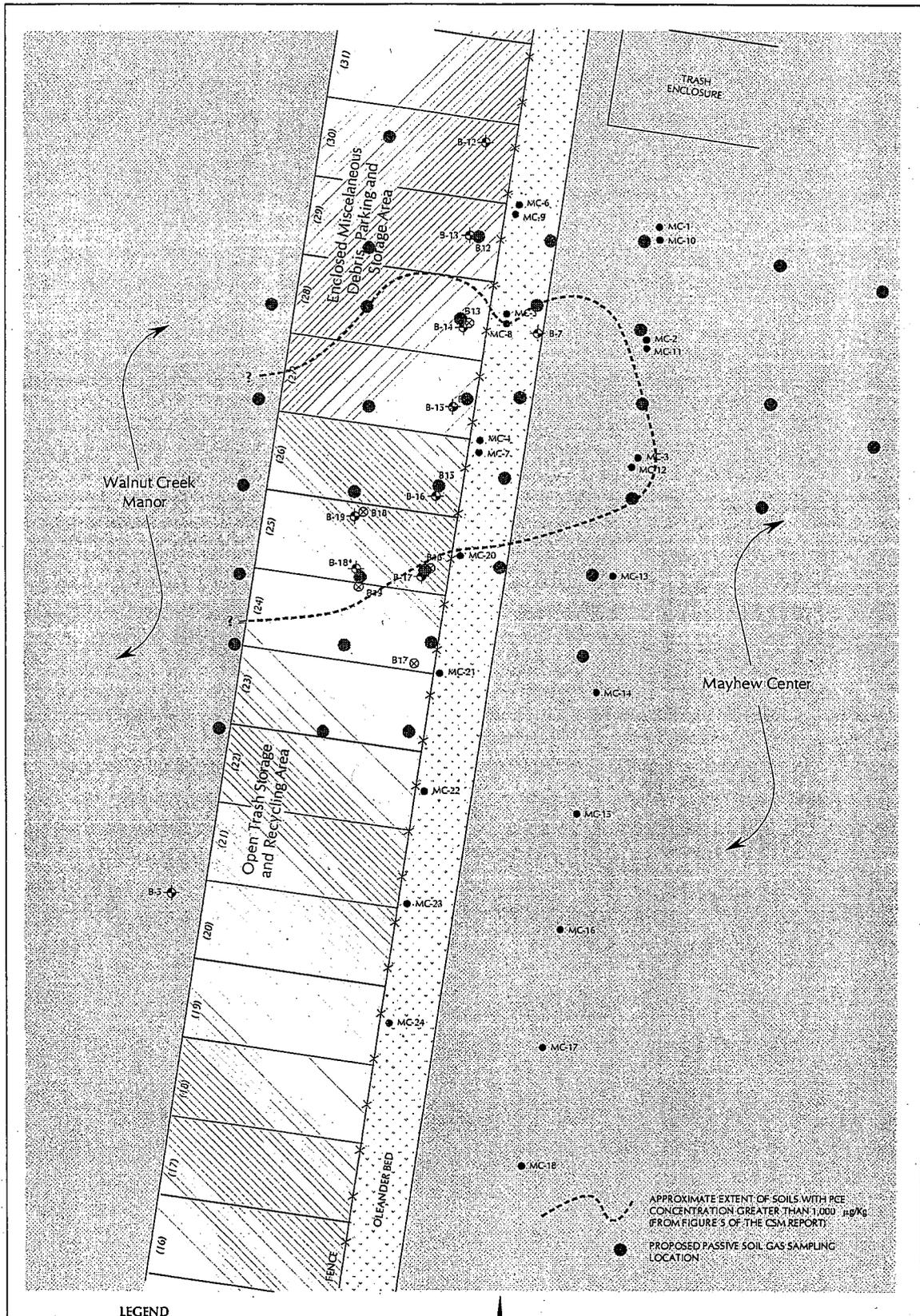


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Potential Source Area
Near the WCM/Mayhew Center
Property Boundary Area
 Mayhew Center, Pleasant Hill, California



Figure 3

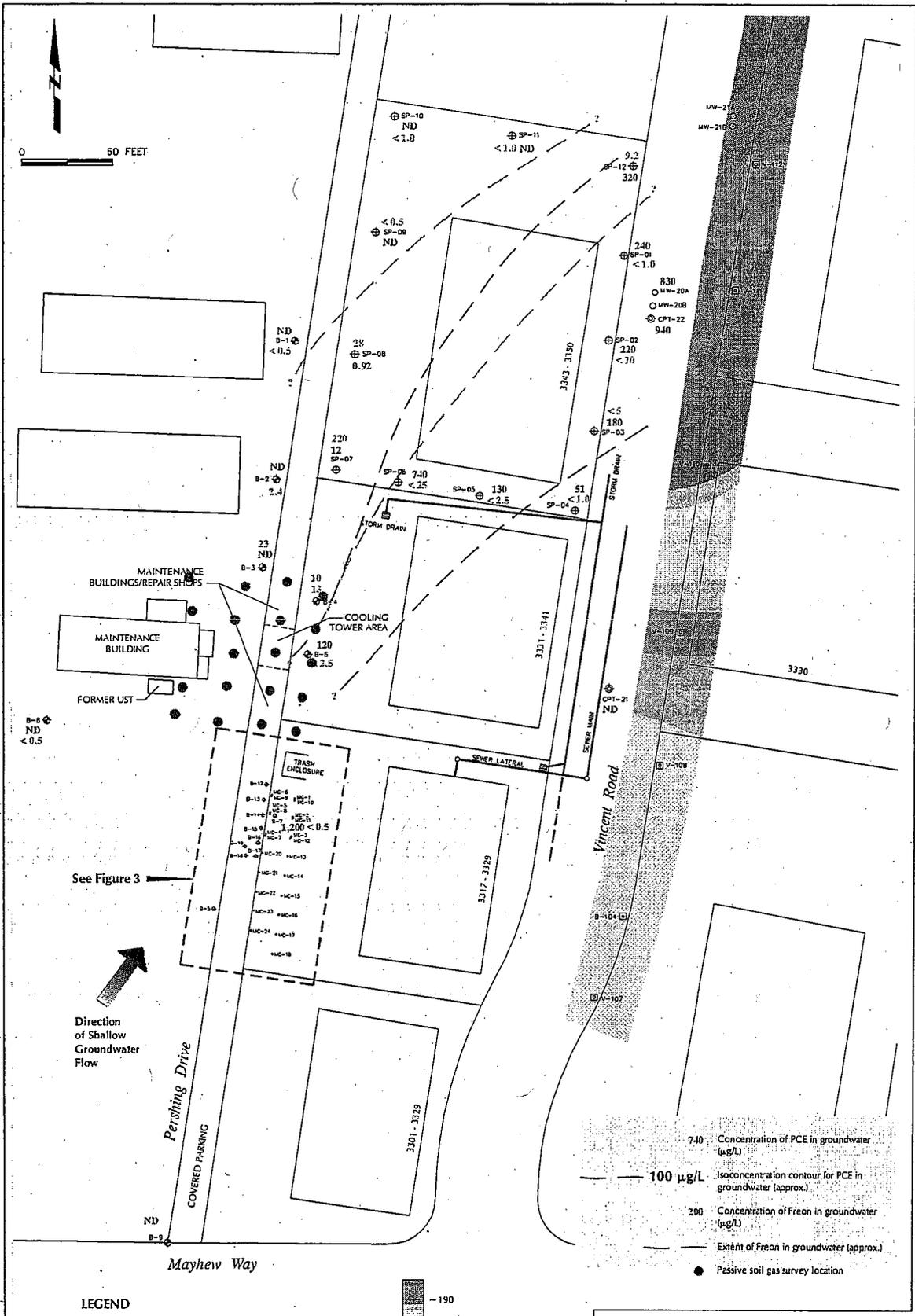


- LEGEND**
- (21) PARKING SPACE DESIGNATION (HEILSHORN, 2005)
 - ⊕ B-3 SOIL BORING (WCM)
 - MC-17 SOIL BORING (MAYHEW CENTER)
 - ⊗ B-17 WCM BORING LOCATION (AS MAPPED IN THE FIELD BY SOMA)
 - ⊕ LOCATION OF BORING ESTIMATED FROM BORING LOG DESCRIPTION (HEILSHORN, 2005)
 - ASPHALT

**Passive Soil Gas Survey Locations
Near the WCM/Mayhew Center
Property Boundary Area**
Mayhew Center, Pleasant Hill, California

Figure 4





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MAINTENANCE BUILDINGS/REPAIR SHOPS
 MAINTENANCE BUILDING
 FORMER UST

COOLING TOWER AREA

TRASH ENCLOSURE

See Figure 3

Direction of Shallow Groundwater Flow

Pershing Drive

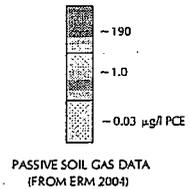
COVERED PARKING

Mayhew Way

Vincent Road

740 Concentration of PCE in groundwater (µg/L)
 100 µg/L Isoconcentration contour for PCE in groundwater (approx.)
 200 Concentration of Freon in groundwater (µg/L)
 Extent of Freon in groundwater (approx.)
 ● Passive soil gas survey location

- LEGEND**
- MW-21A GROUNDWATER MONITORING WELL
 - MC-10 SOIL BORING ADVANCED BY MAYHEW CENTER
 - B-8 SOIL BORING ADVANCED BY WALNUT CREEK MANOR
 - ⊕ SP-08 SOIL BORING ADVANCED BY CUFF PROPERTIES
 - ⊕ V-107 PASSIVE SOIL GAS SAMPLING POINT BY ERM
 - ⊕ B-104 SOIL BORING BY ERM
 - ⊕ CPT-21 CONE PENETROMETER TEST BORING BY ERM



Passive Soil Gas Survey Locations in Maintenance Areas
 Mayhew Center, Pleasant Hill, California

EXHIBIT F



ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

May 30, 2007

Ms. Elizabeth Allen
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Scope of Work to Address Data Gaps at the 3301-3341 Vincent Road Property in Pleasant Hill, California

Dear Ms. Allen:

On behalf of Mayhew Center, LLC, this letter presents a scope of work designed to address data gaps identified in the Conceptual Site Model (CSM) for the subject site that was submitted to the San Francisco Regional Water Quality Control Board (RWQCB) on May 16, 2007 ("the CSM Report", attached for reference). This scope of work letter and the CSM report are submitted on behalf of Mayhew Center in response to the RWQCB directive dated December 14, 2006, and in accordance with a Work Plan prepared by LFR, dated January 26, 2007 ("the Work Plan"). The Work Plan was approved by the RWQCB in its letter dated March 21, 2007.

1.0 Review of Data Gaps

The following data gaps were identified in the CSM Report. For reference, site location and site plan maps are presented on attached Figures 1, 2, and 3.

1. The location and distribution of the apparent source for PCE detected in soil and grab groundwater collected from the subsurface in the vicinity of the Walnut Creek Manor (WCM)/Mayhew Center property boundary.
2. The lateral extent of PCE impacts and the possible presence of source area(s) to the west of former soil borings B-14, B-15, and MC-4/7.
3. The vertical extent of PCE in soil and potentially groundwater beneath the vicinity of former soil borings B-14, B-15, MC-4/7, B-16, and B-19.
4. The nature and extent of PCE impacts to groundwater downgradient from the apparent source area in the vicinity of the WCM/Mayhew Center property boundary.
5. Potential groundwater quality impacts associated with historical and/or current operations upgradient from (and west of) Mayhew Center Building III (3333 to 3341 Vincent Road; Figure 2), including the cooling tower and maintenance shop areas, the maintenance building, and the former UST area, on the WCM property.

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Data gaps 1, 2, and 3 relate to the apparent source area in the vicinity of the WCM/Mayhew Center property boundary, and a scope of work designed to address these three data gaps is presented in Section 2.0 of this letter.

Data gaps 4 and 5 and 5 are related to areas downgradient from the apparent source area, and to other potential source areas at WCM. A scope of work designed to address these data gaps is presented in Sections 3.0 and 4.0.

2.0 Scope of Work to Address Data Gaps 1, 2 and 3

The collection of near-continuous VOC concentration data from proposed temporary soil borings in the apparent source area using a the Membrane Interface Probe (MIP) technology, followed with collection of depth-discrete soil and grab groundwater samples from strategic depths selected based on the results of the MIP screening, is recommended to address Data Gap 1 (source location for VOCs) and Data Gap 3 (vertical extent of VOCs). A passive soil gas survey is recommended to help select the locations for the MIP and soil borings, and to address Data Gap 2 (lateral extent of VOCs).

2.1 Rationale and Approach

Existing soil and groundwater quality data collected from the site to date consist of depth discrete soil and grab groundwater samples collected from direct push or hand auger temporary soil borings. These discrete data points do not provide a sufficient level of detail to accurately assess the location of the apparent source area for PCE, and do not allow for a reliable assessment of the mechanism, or the potentially responsible party, of the potential release. Also, chemical analyses of samples collected to date have been limited to the halogenated VOCs (i.e., the 8010 list of analytes) within the more complete compound list provided by the EPA 8260 method of analysis. This limited subset of laboratory analytes prevents a more complete evaluation of the other chemicals that may be associated with the potential source area (e.g. aromatic compounds), and the potential release mechanism for the VOCs that have been detected to date. Finally, as described above in Data Gaps 1, 2, and 3, the vertical extent of VOC impacts to soil and groundwater beneath the apparent source area, and the lateral extent of VOC impacts to the west of the WCM/Mayhew Center property boundary, have not been assessed.

2.1.1 MIP Screening and Soil and Groundwater Sampling

This recommended approach consists of advancing a MIP at select locations within the apparent source area to depths of approximately 30 to 40 feet bgs (i.e., through the "A Zone"). The MIP technology provides a near continuous indication of the relative magnitude of VOCs in soil and groundwater with depth, in real-time as the probe is pushed through the soil. MIP data collected from each soil boring location would be analyzed in the field to assess the vertical distribution of VOCs with depth. Depending on field conditions and MIP signals, the MIP would be advanced approximately until the vertical extent of VOCs in soil and/or groundwater has been sufficiently



characterized. Based on the MIP data, depth-discrete soil and grab groundwater samples would be collected for laboratory analyses from strategic depths in temporary soil borings co-located near the MIP boring locations. The MIP and soil and/or grab groundwater quality data would aid in the assessment for the possible presence of non-aqueous phase liquids (NAPL; VOCs), may help determine the most likely responsible party for the apparent release, and would assist in developing potential remedies.

2.1.2 Selection of Boring Locations Using Passive Soil Gas Survey

A passive soil gas survey of the apparent source area in the vicinity of the WCM/Mayhew Center property boundary, using the Gore™ Module (formerly known as the Gore-Sorber® Module) technology by W.L. Gore & Associates (Gore), is recommended to provide data to help select appropriate locations for the proposed temporary soil borings for the MIP screening and the soil/groundwater sampling. Data from the passive soil gas survey also would assist in addressing Data Gap 2 (the lateral extent of VOC impacts to the west of former soil borings B-14, B-15, and MC-4/7), and would be used to confirm previous results of samples collected from Mayhew Center, which do not indicate the presence of a source for VOCs.

Given the relative expense of the MIP/soil boring approach and because of the potential physical challenge that would need to be addressed (i.e. vertical clearance consideration associated with drilling under the car port area on WCM), completion of a passive soil gas survey is recommended to help select proposed drilling locations that would yield the most useful data.

Specific objectives for the recommended passive soil gas survey are as follows:

- Help identify appropriate locations for the MIP and soil/groundwater soil borings;
- Assess the lateral extent of VOC impacts to the west of former soil borings B-14, B-15, and MC-4/7;
- Confirm and further characterize the conceptual location and orientation of the apparent source area depicted using iso-concentration contours on Figure 5 of the CSM Report;
- Confirm analytical results for soil samples previously collected on the Mayhew Center property, which helped characterize the lateral extent of VOCs to the east of the property boundary and which did not indicate the presence of a source of VOCs; and,
- Assess the potential presence of other (non halogenated) VOCs in the apparent source area that may assist in identifying the release mechanisms and potential responsible parties.

The recommended passive soil gas survey consists of installing temporary Gore™ Modules at the approximate locations shown on Figure 4, and collecting and analyzing the soil gas samples using standard methodology, as described below. It is important to note that the soil gas survey would accomplish the objectives outlined above only if the entire sampling grid is completed. Collection of passive soil gas samples from only a portion of the grid (i.e. on only the east side of the WCM/Mayhew property boundary), would not result in a sufficiently complete field of data to allow for accurate contouring of data.



It is also important to note that the passive soil gas survey would yield semi-quantitative data regarding the relative magnitude of concentrations of VOCs in soil gas. Detection of VOCs on any given passive probe likely would not provide information regarding the VOC source (e.g., soil source or off-gassing from groundwater), or the magnitude of that source (i.e., the concentration of the VOC in surrounding soil and underlying groundwater). Rather, data from the passive soil gas survey would indicate where VOCs are found in the relatively highest concentration, such that these higher concentration areas can be targeted for further work.

2.2 Methods and Procedures

2.2.1 Pre-Field Activities

Prior to startup of field work, a site-specific Health and Safety Plan (HSP) would be prepared that documents potential hazards to worker health and safety at the Site during the proposed field activities and specifies the appropriate means to mitigate or control these hazards. The required soil boring drilling permits would be obtained from Contra Costa County prior to conducting the invasive work. The appropriate underground utility clearance measures (including notifying Underground Service Alert and sub contracting a private underground utility clearance surveyor, as necessary) would be taken to ensure the proposed soil boring locations are clear of underground utilities.

2.2.2 Passive Soil Gas Survey

The passive soil gas survey using the Gore™ Modules would be conducted in accordance with guidelines set forth by Gore, and as summarized generally below.

Installation of Passive Soil Gas Sampling Points. Gore™ Modules would be installed at each of the approximate locations shown on Figure 4. The temporary soil borings for each module would be advanced to a depth of approximately 3 feet below the ground surface (bgs) using a hand-held roto-hammer, or similar device. Given the clayey nature of the soil at this site, it is anticipated that the approximately 1-inch-diameter shallow soil borings advanced would remain open for this procedure.

After each temporary soil boring is advanced to the target depth, a passive soil gas Gore™ Module assembly provided by Gore would carefully be lowered into each shallow soil boring, released, and the hole would be capped with a cork, according to standard procedures provided by Gore. The Gore™ Module number for each location (permanently attached to each module) would be recorded on a field map at the time of installation. Other potentially relevant field observations (temperature, etc.) also would be recorded on a field note book at the time of installation.

After a period of approximately 14 days, the Gore™ Modules would be retrieved and sent to the laboratory in clean sample containers provided by Gore, appropriately labeled with the module identification number for chemical analysis for VOCs using EPA Method 8260.



Analysis of Passive Soil Gas Data. Chemical analysis data from the passive soil gas survey would be evaluated for accuracy, plotted on the site plan, and an iso-concentration contour map would be developed. The contoured soil gas data would be used to assess for the possible presence of relatively elevated area(s) for VOCs, which would then be considered for MIP and soil boring work, described below.

2.2.3 MIP and Soil and Groundwater Sampling

Results from the passive soil gas survey would be used to select appropriate locations for the proposed deeper temporary soil borings for MIP screening and soil and groundwater sampling.

Membrane Interface Probe. Temporary soil borings for MIP screening would be advanced using a 16,800-pound truck-mounted direct push rig, or if necessary, a 30-ton direct-push (CPT-type) drill rig. Given the 13-foot vertical clearance of most direct push rigs, advancing this type of soil boring under the WCM car port roof structure would require temporary removal of the roof. The total depth of these soil borings is anticipated to be approximately 30 to 40 feet bgs, depending on the real-time MIP data obtained, field conditions, and achievable drilling depths.

The MIP would be advanced using a standard string of 1.25- or 1.5-inch-diameter drilling rods and a direct-push probing unit. Before each probe is advanced, the tubing that houses the carrier gas and conductivity cable is connected to the MIP tool and is strung through the probe rod. The rods are then loaded on a rod cart or fixed tool rack for easy dispensing and storage. As the probe is driven to depth, the advancement is stopped at desired intervals (typically 6 inches) to gather real-time VOC data. Conductivity logging data are gathered on a continuous basis. At the desired intervals, the permeable membrane interface on the wall of the probe is heated. Any VOCs that are exposed to the membrane are volatilized and picked up by the carrier gas behind the membrane, which in turn delivers the gas to the gas chromatograph detector at the surface (typically an electron capture detector [ECD], photoionization detector [PID], and/or flame ionization detector [FID]). A string pot, which is mounted on the probe, senses movement of the probe and thereby measures depth and speed. The data are stored in spreadsheet-compatible format for later graphing and analysis. The gas chromatographs provide total VOC readings and are also stored for plotting. The MIP would be equipped with either a CPT or an EC detector to simultaneously collect data from which lithology is inferred. Continuous MIP and CPT/EC measurements would be made at each boring location. CPT/EC-based lithologic logs and MIP-derived concentration logs would be generated based on the data obtained from each of the temporary soil borings.

Soil and Groundwater Sampling. MIP data would be used to select locations and depths for the collection of soil and grab groundwater samples. A dual tube direct push assembly would be used to advance the temporary soil boring and to facilitate the near-continuous collection of soil samples in an acetate liner. The desired depth interval of soil would be removed from the dual tube sampler, cut with a hack saw, capped, labeled and placed in a cooler for transportation to an off-site analytical laboratory.



A hydropunch sampler would be advanced to collect depth-discrete grab groundwater samples. The groundwater samples would be collected using a hydraulically driven temporary piezometer consisting of a hollow-rod assembly with a 3-foot-long stainless steel screen attached at the leading end of the assembly (Hydropunch). The temporary piezometer would be advanced to the desired depth interval based upon the CPT-derived lithology and the MIP results. At the selected depths, the rod assembly would then be retracted to raise the outer piezometer sleeve, exposing the screen and allowing groundwater to pass through the screen into the piezometer. Each groundwater sample would be collected by lowering a Teflon or stainless steel bailer through the hollow-push rods into the piezometer screen. The groundwater would be transferred into clean preserved laboratory-provided sample bottles, stored in an ice-chilled cooler, and transported under chain-of-custody.

After sampling is completed, each of the temporary soil borings would be grouted from the bottom to the ground surface with neat cement, in accordance with Contra Costa County drilling permit requirement and guidelines.

Chemical Analysis. Depth-discrete soil and groundwater samples collected from each temporary soil boring would be analyzed for VOCs using EPA Method 8260. The laboratory would be requested to report all detected and tentatively identified compounds (TICs).

2.2.4 Land Survey

After completion of the passive soil gas survey and drilling of temporary soil borings for the MIP screening and collection of soil and grab groundwater samples, the location of each temporary soil boring and sample location would be surveyed by a California-licensed land surveyor. The surveyed locations would be added to the site base maps to accurately depict each sample location.

3.0 Scope of Work to Address Data Gap 4 – Downgradient Extent of PCE Impacts to Groundwater Downgradient from Apparent Source Area Near the WCM/Mayhew Center Property Boundary

This data gap could be addressed through completion a passive soil gas survey on Mayhew Center property northwest (i.e., downgradient) of the apparent source area, followed by collection of grab groundwater samples at locations selected using that data.

Specific locations for this survey should be developed after the results from the investigation described in Section 2.0 and section 4.0 (below) are completed, and are not presented in this document.



4.0 Scope of Work to Address Data Gap 5 - Potential groundwater quality impacts associated with historical and/or current operations upgradient from (northwest of) Mayhew Center Building III

As discussed in the CSM report, the detection of Freon and PCE in groundwater on the Mayhew Center Building III property (i.e., in borings B-6 and B-4) and the detection of petroleum hydrocarbons in downgradient well MW-20 (on Vincent Road) indicate the possible presence of an upgradient source or sources of VOCs and other chemicals.

A passive soil gas survey upgradient from (northeast of) Mayhew Center Building III, including the cooling tower and maintenance shop areas, the maintenance building, and the former UST area, is recommended to address this data gap. Proposed locations for this survey are indicated on Figure 5. This survey would be completed using the same methods described in Section 2.2.1, above.

Results from this passive soil gas survey would be used to assess whether additional follow up soil and/or groundwater sampling may be warranted to further potential source areas, and to assess potential downgradient impacts from those sources.

Closing

The following should be noted regarding the RWQCB directive and subsequent work plans from Mayhew Center and Walnut Creek Manor. On December 14, 2006, the RWQCB issued simultaneous demands to WCM and Mayhew Center to produce work plans. Mayhew Center has urged that requirements first be satisfied by WCM, and that Mayhew Center be required to act only if WCM's work indicates that the source is not at WCM but at Mayhew Center. WCM and Mayhew Center have each appealed the December 14, 2006, directives; however, the RWQCB has not deferred requirements for either company.¹ Mayhew Center has authorized submission of this Scope of Work report in good faith pending the determination of the appeal or other resolution of the matter.²

¹ It should be also noted that correspondence from WCM suggests that it will not submit a data gap work plan. WCM also has refused to grant access for a survey proposed by Mayhew Center and has indicated to the RWQCB that it would not grant access to laboratory data sought pursuant to LFR's January 2007 Work Plan.

² The submission of this report is without prejudice to Mayhew Center's appeal, nor its objections to bearing the costs of this work and any further investigations. This Scope of Work satisfies the RWQCB directive to Mayhew Center, and does not constitute a commitment by Mayhew Center to carry out the work identified, which was not required in the December 14, 2006, directive.



Thank you for your attention to this matter. If you have any questions, please me (916) 786-0342, or Katrin Schliewen at (510) 596-9567.

Sincerely,

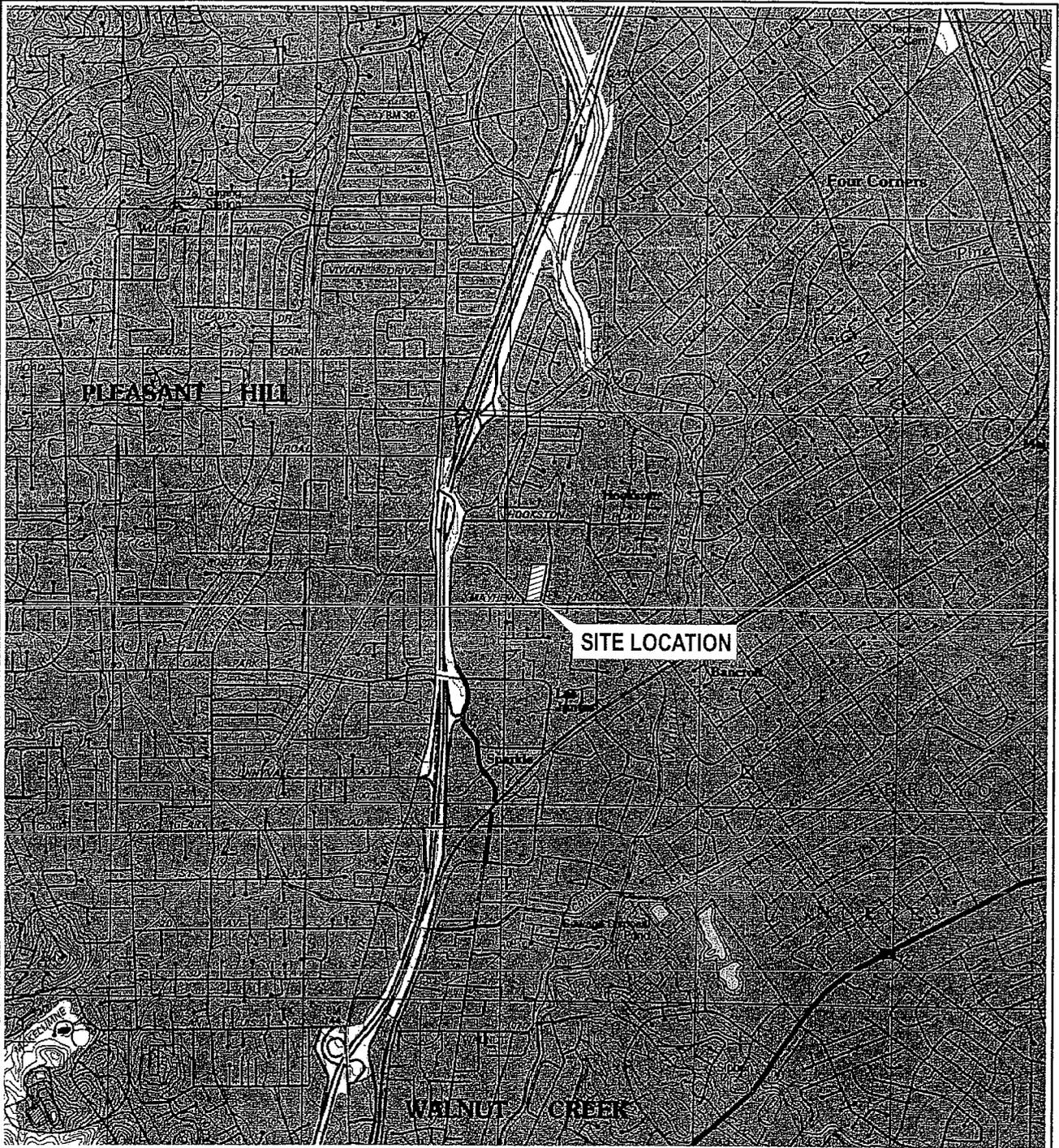
A handwritten signature in black ink, appearing to read 'J. Scott Seyfried'.

J. Scott Seyfried, P.G., CH.G.
Principal Hydrogeologist
(CA P.G. # 7374, CH.G. # 764)

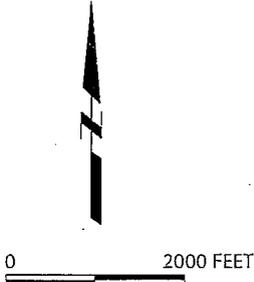
cc: Mayhew Center, LLC

attachments

Figures



J:\Illustrator\Mayhew\Mayhew_Fig1: Site_Location.ai 012507

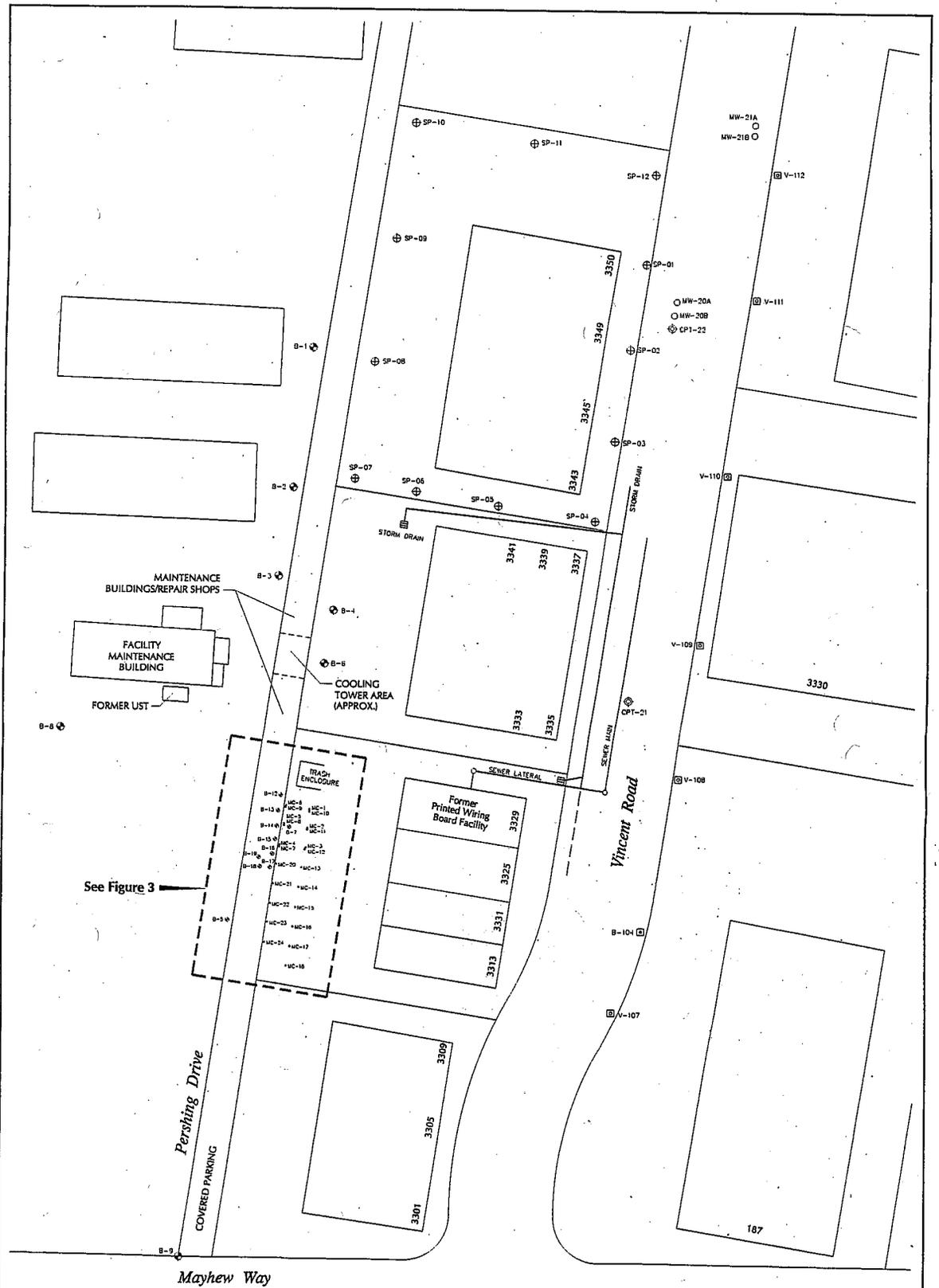


SOURCE: USGS Topographic Map, PLEASANT HILL, CA.

Site Location Map
 Mayhaw Center, Pleasant Hill, California



Figure 1



See Figure 3

LEGEND

- MW-21A GROUNDWATER MONITORING WELL
- MC-10 SOIL BORING ADVANCED BY MAYHEW CENTER
- ⊕ B-8 SOIL BORING ADVANCED BY WALNUT CREEK MANOR
- ⊕ SP-09 SOIL BORING ADVANCED BY CUFF PROPERTIES
- ⊠ V-107 PASSIVE SOIL GAS SAMPLING POINT BY ERM
- ⊠ B-104 SOIL BORING BY ERM
- ⊕ CPT-21 CONE PENETROMETER TEST BORING BY ERM

SOURCE: ERM 2004
Survey data from Kier & Wright 2007

Site Plan

Mayhem Center, Pleasant Hill, California

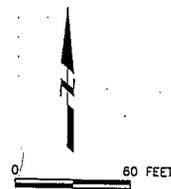
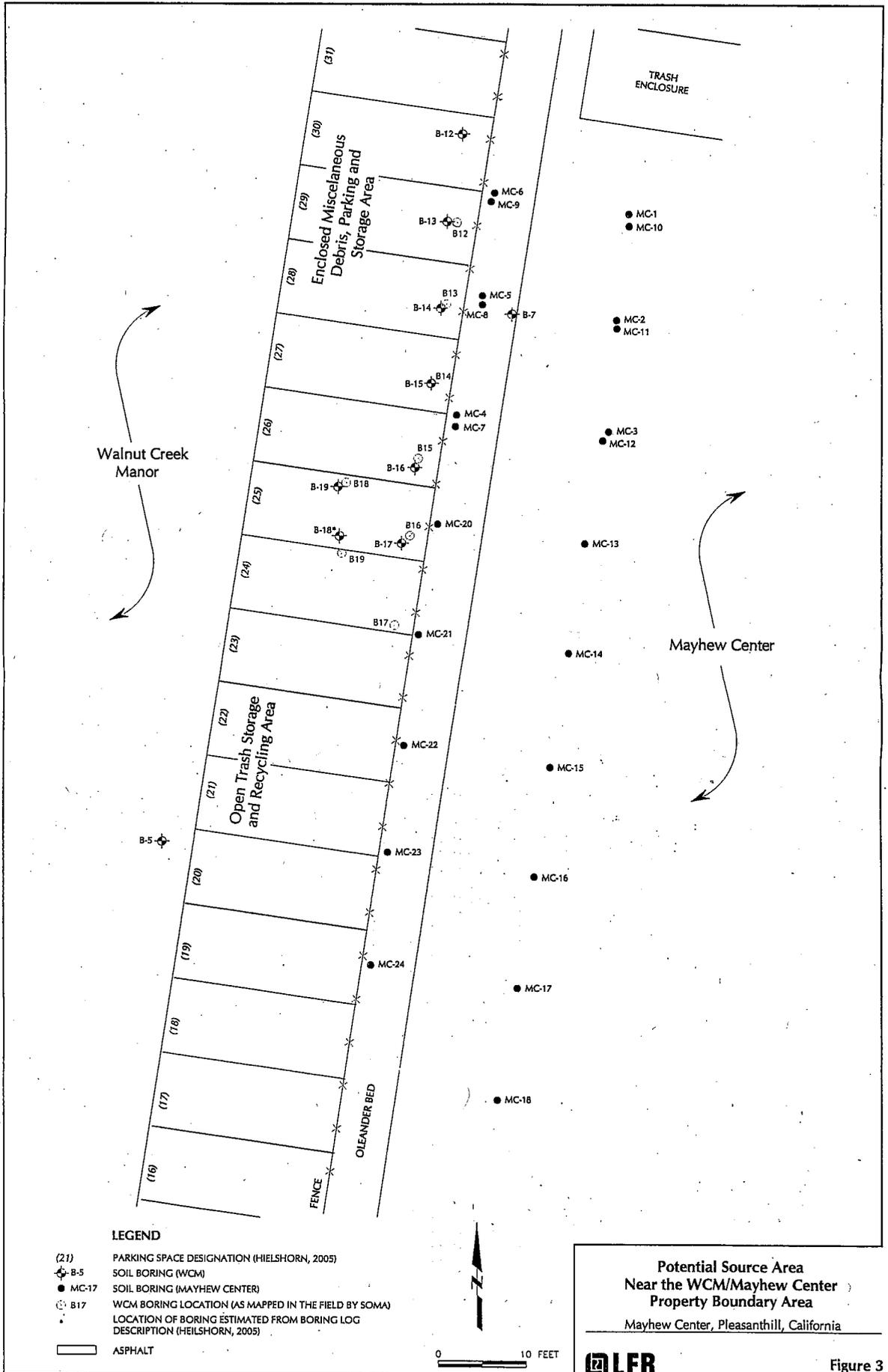
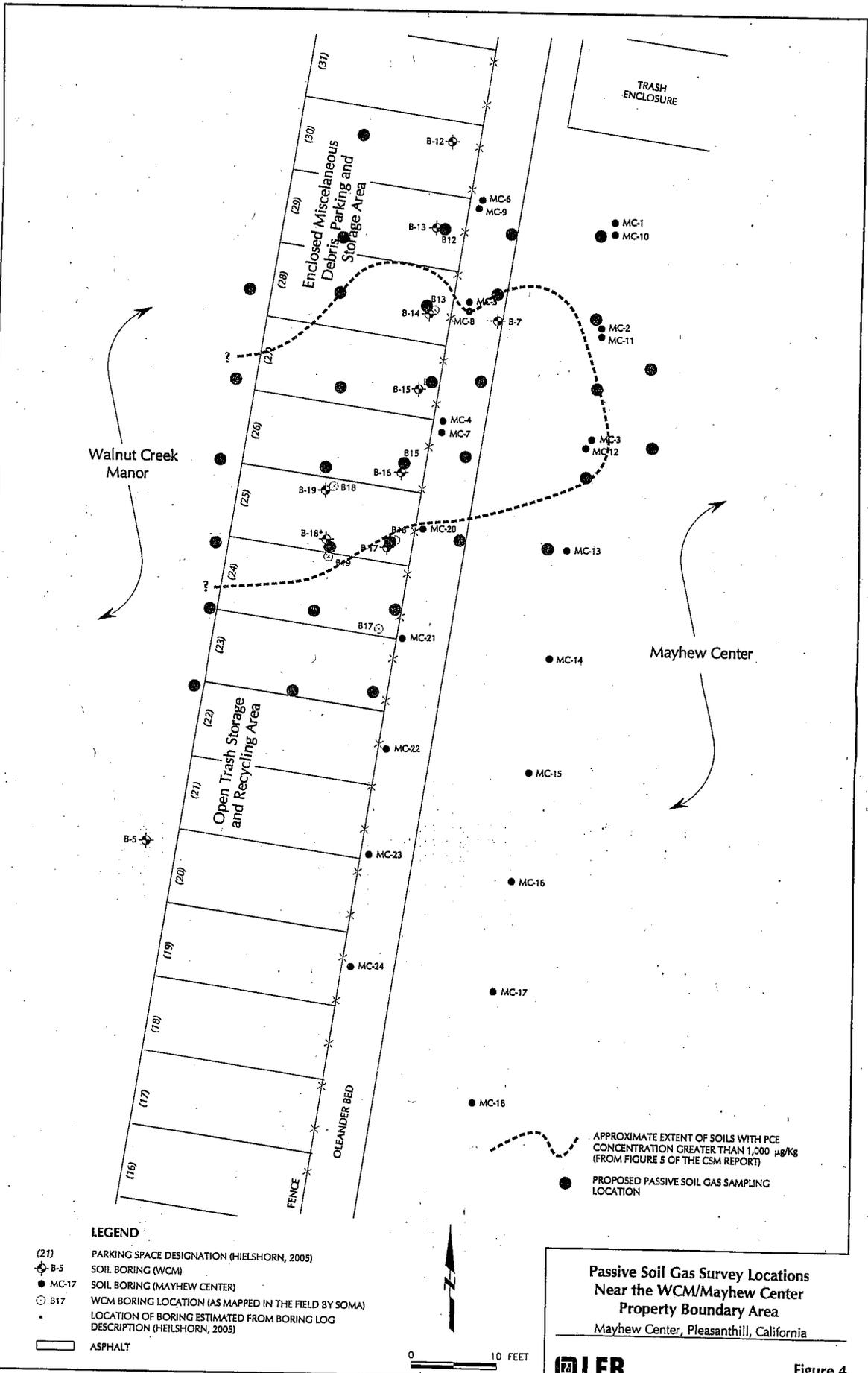


Figure 2





Walnut Creek Manor

Mayhew Center

TRASH ENCLOSURE

Enclosed Miscellaneous Debris Parking and Storage Area

Open Trash Storage and Recycling Area

OLEANDER BED

LEGEND

- (21) PARKING SPACE DESIGNATION (HIELSHORN, 2005)
- ⊕ B-5 SOIL BORING (WCM)
- MC-17 SOIL BORING (MAYHEW CENTER)
- ⊙ B17 WCM BORING LOCATION (AS MAPPED IN THE FIELD BY SOMA)
- LOCATION OF BORING ESTIMATED FROM BORING LOG DESCRIPTION (HIELSHORN, 2005)
- ▭ ASPHALT

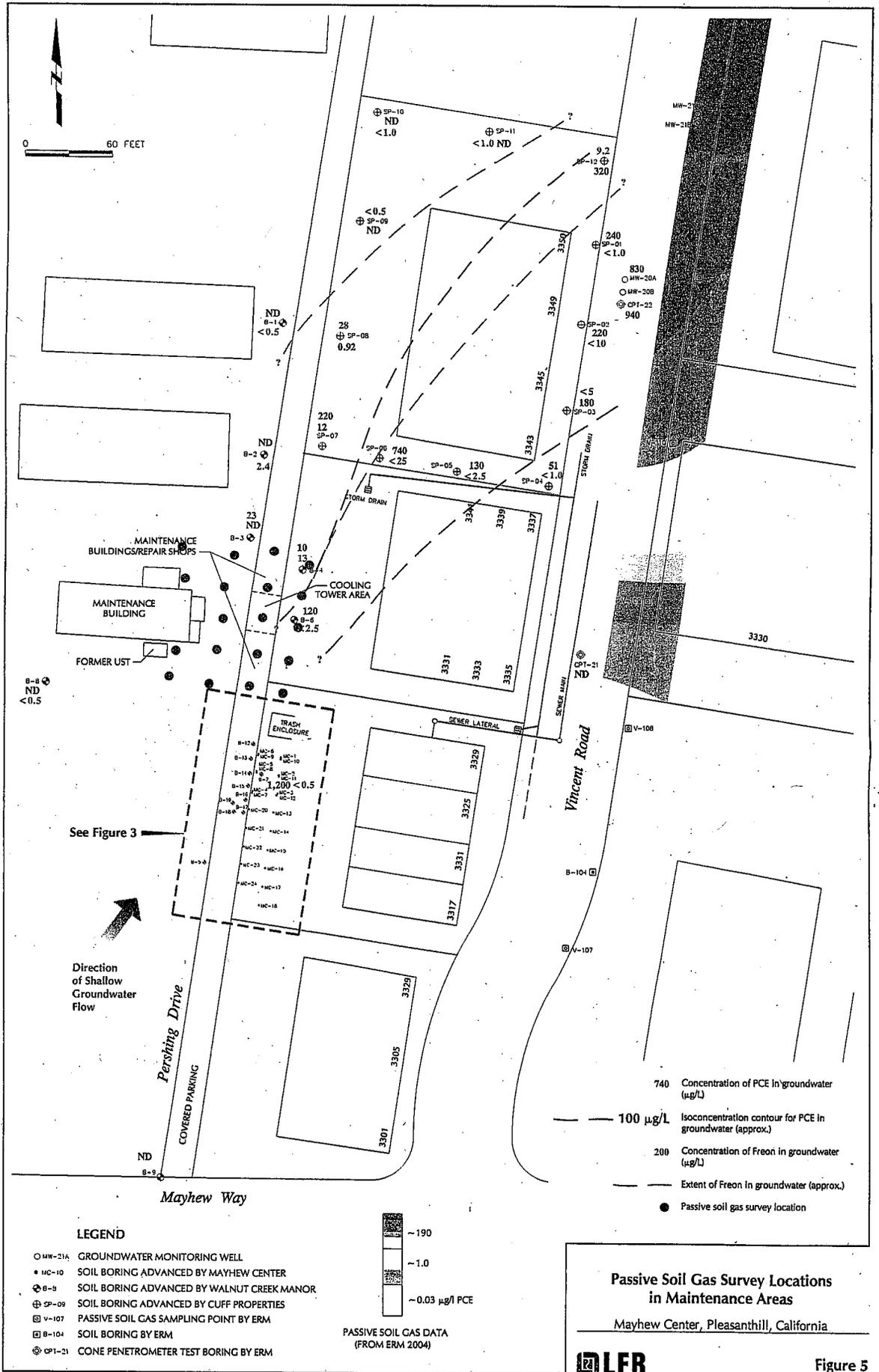
APPROXIMATE EXTENT OF SOILS WITH PCE CONCENTRATION GREATER THAN 1,000 µg/Kg (FROM FIGURE 5 OF THE CSM REPORT)

● PROPOSED PASSIVE SOIL GAS SAMPLING LOCATION

Passive Soil Gas Survey Locations Near the WCM/Mayhew Center Property Boundary Area
 Mayhew Center, Pleasant Hill, California



Figure 4



0 60 FEET

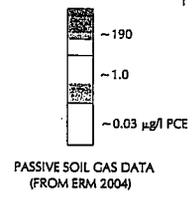
B-8
ND
< 0.5

See Figure 3

Direction
of Shallow
Groundwater
Flow

LEGEND

- MW-21A GROUNDWATER MONITORING WELL
- MC-10 SOIL BORING ADVANCED BY MAYHEW CENTER
- ⊕ B-5 SOIL BORING ADVANCED BY WALNUT CREEK MANOR
- ⊕ SP-09 SOIL BORING ADVANCED BY CUFF PROPERTIES
- ⊕ V-107 PASSIVE SOIL GAS SAMPLING POINT BY ERM
- ⊕ B-104 SOIL BORING BY ERM
- ⊕ CPT-21 CONE PENETROMETER TEST BORING BY ERM



- 740 Concentration of PCE in groundwater (µg/L)
- 100 µg/L Isoconcentration contour for PCE in groundwater (approx.)
- 200 Concentration of Freon in groundwater (µg/L)
- Extent of Freon in groundwater (approx.)
- Passive soil gas survey location

**Passive Soil Gas Survey Locations
in Maintenance Areas**
Mayhew Center, Pleasant Hill, California



Figure 5

Attachment 1

Conceptual Site Model and Data Gap Evaluation
3301-3341 Vincent Road Property, Pleasant Hill, California
May 16, 2007

**Conceptual Site Model and Data Gap Evaluation
3301-3341 Vincent Road Property
Pleasant Hill, California**

**003-09256-00
May 16, 2007**

Prepared for
Mayhew Center LLC
3301 Vincent Road
Pleasant Hill, California

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- 1 Summary of Laboratory Analysis Data for Soil
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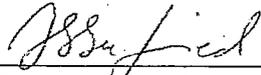
- 1 Site Location Map
- 2 Site Plan
- 3 Potential Source Area
- 4 Site Plan Showing Groundwater Quality Data
- 5 Isoconcentration Contours of PCE Concentrations in Soil at Depth Interval Between 60 and 64 feet
- 6 Cross Section A-A'

APPENDICES

- A Photographic Log
- B Partitioning Analysis

CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by an LFR Inc. California Professional Geologist.



J. Scott Seyffried, P.G., C.HG.
Principal Hydrogeologist
Professional Geologist (7374)
Registered Hydrogeologist (764)

05/16/07
Date



1.0 INTRODUCTION

On behalf of Mayhew Center, LLC, LFR Inc. (LFR) has prepared this report presenting a Conceptual Site Model (CSM) and describing data gaps associated with the CSM for the 3301-3341 Vincent Road property and vicinity in Pleasant Hill, California ("the Site"). This report is submitted in response to a request from the San Francisco Regional Water Quality Control Board (RWQCB) that was included in its letter to the Mayhew Center dated December 14, 2006.¹ The work performed for this report was conducted in accordance with a Work Plan prepared by LFR and dated January 26, 2007, and approved by the RWQCB in its letter dated March 21, 2007 ("the Work Plan").

1.1 Background

The Site comprises three contiguous parcels of real estate, each developed with a commercial building and surrounded by a graded asphalt surface and landscaping. The Site includes approximately 3 acres of land and is bounded to the south by Mayhew Way, to the east by Vincent Road, to the north by the Cuff property, and to the west by the Walnut Creek Manor (WCM) site (Figure 2). Commercial/light industrial buildings, including the Cuff property (3343-3350 Vincent Road), lie to the north and east of the property, and across Vincent Road. The Hookston Station site is located further to the east of the Site.

Volatile organic compounds (VOCs), including tetrachloroethylene (PCE), have been detected in soil, soil gas, and groundwater beneath the Site and surrounding sites. Previous investigations have included the collection of soil and groundwater samples from the Site and WCM, and groundwater characterization and monitoring conducted downgradient from these properties at the Cuff and Hookston Station sites.

Soil gas, soil, and groundwater data indicate that VOCs are generally not present downgradient from the building facilities at the Site. However, VOCs have been detected in soil and groundwater at an apparent source area located in the immediate vicinity of the property boundary that separates the Site from the property adjacent to and west of the Site. WCM owns the property to the west of the Site and operates a recycling and miscellaneous debris storage and trash collection area immediately adjacent to the Site's western property boundary.

¹ The RWQCB issued a simultaneous demand for work plan to WCM on December 14, 2006. WCM and Mayhew Center have appealed the December 14, 2006 directives; thus, there are pending proceedings considering whether the letters were properly issued by the RWQCB. Mayhew Center has urged that requirements first be satisfied by WCM, and that Mayhew Center be required to act only if WCM work indicates that the source is not at WCM but at Mayhew Center. Mayhew Center has authorized submission of this report in good faith pending the determination of the appeal or other resolution of the matter, without prejudice to its appeal or its objections to bearing the costs of further investigations.

Based on the detection of PCE in soil and groundwater beneath the Site, the RWQCB required Mayhew Center to submit a work plan designed to further characterize the soil and groundwater beneath the Site, and to develop a better understanding of the nature and extent of PCE detected in soil and groundwater. According to the December 14, 2006 letter, results from further characterization activities will assist in identifying a source for the PCE that has been detected near the property boundary, and may be used to determine a responsible party for the release of PCE into soil and groundwater.

1.2 Objectives and Scope of Work

The primary objective of this study is to develop a better understanding of the potential sources, nature, and extent of VOCs that have been detected in soil and groundwater at and downgradient from the Site. This objective was met through the completion of a subsurface utility survey, a land survey of relevant site features, and an analysis of existing soil, soil gas, and groundwater quality data. Existing hydrogeologic, land use, and chemical analysis data were compiled with the survey data collected during this study to support the development of a CSM for the Site. These data also were used to define existing data gaps that would need to be addressed in order to develop a more complete CSM. These data will be used to develop a scope of work designed to fill the identified data gaps, as requested in the December 14, 2006 letter.

1.3 Report Organization

This report is presented in the following sections:

Section 2.0 presents the scope of work completed for this study.

Section 3.0 describes the site conditions, including soils, hydrogeology, and historical and current land use.

Section 4.0 describes the nature and extent of VOCs and other compounds that have been detected in soil and groundwater at and downgradient from the Site.

Section 5.0 describes data gaps that have been identified during this study.

Sections 6.0 and 7.0 present limitations and references for this report, respectively.

2.0 SCOPE OF WORK

2.1 Subsurface Utility Survey

C. Cruz Sub-Surface Locators Inc., a licensed subsurface utility locating company, performed a subsurface utility survey of the Site on April 24, 2007, under the supervision of an LFR geologist. The survey focused on locating potential underground

utilities between the western side of Mayhew Center Building II (3317-3329; Figure 2), and the western property boundary for the Site. The survey also included Building III (3333-3341). Storm drain, sanitary sewer, and other subsurface utilities were located and marked on the ground surface with spray paint.

2.2 Land Survey

Kier & Wright, Civil Engineers and Surveyors, Inc., a licensed surveying and engineering firm ("Kier & Wright"), was retained to conduct a survey of relevant site features, including the location of building features, subsurface utilities, and the location of soil borings that had been advanced at the Site. LFR requested permission to enter the WCM property to survey similar site features so that the WCM and Mayhew Center site features could be mapped using the same horizontal datum. WCM did not allow access to its property (letter from WCM dated April 13, 2007; WCM 2007). LFR proceeded with the survey on the Mayhew Center property only.

Kier & Wright obtained survey data from the survey firm that had previously conducted a survey of the WCM property (Cunha Engineers), as presented in Heilshorn 2005a. Kier & Wright used the same survey datum used by Cunha Engineers, so that relevant site features for both properties (especially the locations of previous soil borings) could be accurately plotted.

2.3 Data Analysis

Subsurface utility and land survey data were used to prepare an accurate site plan (Figure 2) and map of the potential source area near the property boundary between the Site and the WCM property (Figure 3). Chemical analytical results from previous soil and groundwater investigations were plotted on those plans to assist in evaluation of the data (Figures 4 and 5). In addition, a cross section through the apparent VOC source area was developed (Figure 6).

The potential source area map (Figure 3) includes two sets of locations for borings completed on WCM. The locations shown in black are plotted from the Cunha survey, as referenced in Heilshorn 2005a, and tied in by the Kier & Wright survey described above. The locations in blue are plotted using data obtained in the field by SOMA Engineers ("SOMA") on behalf of Mayhew Center. SOMA was reportedly on the WCM site during the investigation of the WCM property performed by Heilshorn, and mapped the locations of borings in the field at that time (SOMA 2005). The Cunha survey was reportedly performed some time after completion of the Heilshorn field investigation, and after the asphalt parking lot had been resurfaced. As shown on Figure 3, there are discrepancies between the locations mapped by Cunha and those mapped by SOMA.

For the purposes of this study, the WCM boring locations mapped by Cunha were used, with the following exception. Boring B-18 was placed at the location shown on Figure 3 based on the lithologic log for that boring, which indicates that B-18 was

advanced in parking stall #25. In contrast, the Cunha survey shows the location for B-18 to be approximately 20 feet to the north of the location indicated on Figure 3, within parking stall #27.

2.4 Variances from the Work Plan

The Work Plan included a task of evaluating existing laboratory analysis data to assess for the presence of non-halogenated compounds that may have been detected in the chemical analysis that the laboratory used (EPA Method 8260), but that may not have been reported using the EPA Method 8010 list that the laboratory was instructed to use. The RWQCB requested permission from WCM to request these data from the laboratory that was used for the WCM investigation. WCM did not allow access to these data, and this task was not completed for this study.

3.0 SITE DESCRIPTION

3.1 Site Setting

The Site comprises three contiguous parcels of real estate, each developed with a commercial building as follows:

- 3301-3309 Vincent Road ("Building I")
- 3313-3329 Vincent Road ("Building II")
- 3333 -3341 Vincent Road ("Building III")

Each of these commercial buildings is surrounded by graded and drained asphalt surface and landscaping. Site topography is generally flat. There is an approximately 4.5-foot-wide oleander bed west of the site buildings and immediately east of the property line that separates WCM and the Site (Figure 3). There is an abrupt, approximately 2-foot drop in elevation at the property line between the Site and the WCM property to the west. The ground surface elevations on the WCM property (approximately 66 feet mean sea level [msl]) are approximately 2 feet lower than the ground surface elevation immediately adjacent and on the Site (approximately 68 feet msl).

3.2 Hydrogeology

3.2.1 Lithology

Soils beneath the Site and site vicinity to a depth of approximately 5 feet below the ground surface (bgs) consist primarily of the Clear Lake Clay series (NRCS 2007). The Clear Lake Clay is described as having a clay content of 35 to 60 percent, a high shrink/swell potential, and an organic carbon content ranging from 1 to 4 percent.

Lithologic data collected from the Site are generally consistent with this soil type. Lithologic logs collected from the WCM property also indicate the presence of an approximately interval of sandy gravel base material encountered from immediately beneath the asphalt ground cover to a depth of approximately 1 foot bgs.

Sediments beneath 5 feet bgs consist primarily of silty clay with interbedded discontinuous intervals of sandy material to a depth of approximately 40 feet bgs. This sandy interval has been identified as the "A zone" in the area.

The thickness and continuity of the sandy sediments increase beneath the A zone, and a relatively continuous sandy interval has been encountered between the approximate depths of 40 and 70 feet bgs in the area. This sandier depth interval has been identified as the "B zone." The lithologic log for boring B-7, advanced at the Site, is consistent with that general description. According to the lithologic log of boring B-7, heaving sands were encountered at approximately 60 feet bgs at that location.

3.2.2 Groundwater Occurrence and Flow

Shallow groundwater is encountered at approximately 13 to 24 feet bgs in the area, and has been reported to occur at approximately 13 feet bgs beneath the Site (boring B-7; Heilshorn 2005a). The potentiometric surface of groundwater in the B zone is slightly lower in elevation and is encountered at approximately 16 to 21 feet bgs (RWQCB 2007).

The direction of groundwater flow in both the A and B zones is toward the northeast, based on groundwater elevation data collected over several years from numerous groundwater monitoring wells located in the vicinity of the Hookston Station site (ERM 2004). Groundwater elevation contours developed by ERM for A-zone groundwater indicate that the direction of shallow groundwater flow immediately to the east of the Site is approximately N40°E (ERM 2005). This northeastern groundwater flow orientation is illustrated with an arrow on Figure 4.

3.3 Subsurface Utilities

The location of storm drains and sanitary sewer lines in the vicinity of Building II are shown on Figure 2. Based on the results of the subsurface utility survey, there are no storm drains, sanitary sewers, or other subsurface utilities or piping on Mayhew Center west of Building II, between that building and the Site's boundary with WCM. This finding is consistent with a utility survey conducted by Heilshorn in 2005 (Heilshorn 2005a) to clear the drilling locations on Mayhew Center property associated with its investigation (e.g., B-7, B-4, and B-6).

As shown on Figure 2, Building II is serviced by a sewer lateral that exits the northern side of the building, and runs east to connect with the sewer main on Vincent Road that drains toward the north. The storm drain for the Building III parcel exits near the northwestern corner of the building and runs east to connect with a storm drain on Vincent Road (Figure 2).

3.4 Site History and Use

3.4.1 Mayhew Center Site

The building parcels at the Mayhew property were developed in the early to mid-1970s. Prior to that time, land use at the Site was orchards. The three commercial building structures were constructed at the Site as follows:

- Building I (3301 to 3309 Mayhew Way) was constructed in 1972.
- Building II (3313 to 3329 Vincent Road) was constructed in 1976.
- Building III (3333 to 3341 Vincent Road) was constructed in 1978.

Mayhew Center assumed ownership of the property on January 3, 1993.

Commercial space at the Site has been and continues to be used primarily as leased commercial office space, with some tenant uses including parts storage and handling. A description of the tenant history for the Site since approximately 1993 is provided in a letter from Mr. Dean Dunnivan of Mayhew Center LLC to Mr. Bruce Wolfe of the RWQCB, dated February 3, 2005 (Dunnivan 2005).

Former Printed Wiring Board Facility. Tenant use at the Site included the use of a portion of the 3329 Vincent Road space in Building II for the production of Printed Wiring Boards (PWBs) by Etch-Tek, Inc. (ETI) from approximately 1976 to approximately February 1981. Information regarding these past operations in Building II were obtained from two reports prepared by the former officers of ETI in response a request from the RWQCB (Beard 2006a,b). PWBs are metal clad dielectrics with conductors etched onto one or both sides of the board (U.S. Environmental Protection Agency [U.S. EPA] 1996). Contaminants associated with the process include water-insoluble oily materials such as oils, greases, rosin, and waxes; water-soluble materials such as rosin flux activators, sodium chloride, and plating and etching salts; and particulates such as dust and fragments from drilling and punching of the PWBs (U.S. EPA 1996). PWB manufacture may involve the use of a cleaning solvent (e.g., alcohol, acetone, trichlorofluoromethane [Freon], 1,1,1-trichloroethane) to remove drilling and soldering residue from the PWB. A detailed description of the PWB manufacturing process focusing on the potential wastes associated with that process does not list or mention PCE as a potential waste associated with the manufacture of PWBs (U.S. EPA 1996).

According to chemical use information assembled by former officers of ETI (Beard 2006a,b), chemicals used at the former ETI facility were limited to acids (hydrochloric, sulfuric), flux solution, metallic solutions, caustic soda, and isopropyl alcohol (IPA). These historical chemical use data indicate that organic solvents used at the ETI facility were limited to IPA, and did not include chlorinated solvents. This reported chemical use history is consistent with U.S. EPA literature on PWB manufacturing and indicates that PCE was likely not used at the ETI facility.

3.4.2 WCM Property

The WCM property comprises an approximately 24-acre apartment complex completed with multiple one-story apartment buildings, a club house, and a swimming pool. Construction at WCM began in 1962, and occupancy of the apartments began in 1964. Prior to construction of the apartment complex facility, the Site was used as an orchard (Heilshorn 2005a).

Maintenance, repair, and storage facilities, a cooling tower, and a former underground storage tank (UST) are located on the easternmost portion of the WCM facility, near the western property line that separates the WCM property and the Site. These features are shown on Figure 2. Maintenance and repair activities, and associated chemical usage in this area were described by Heilshorn (2005a) to include:

- storage of tools, pumps, and other associated parts for the apartment complex
- a woodshop used to make and service doors and countertops
- a water heating and cooling system, with associated water treatment chemicals
- storage of pesticides and herbicides
- storage and use of paints
- pool treatment and maintenance chemicals
- waste oil from pumps and blowers

Debris, Recycling, and Miscellaneous Chemical Storage Areas Adjacent Mayhew Center. As shown on Figure 3, a portion of the covered parking space oriented along the WCM/MC property line is used for storage of miscellaneous debris, chemicals, and recycling. Observations of this area by LFR personnel during a site visit indicate that housekeeping practices in this area are poor, as evidenced by observations of staining on the ground and the presence of several different types of containers. These included waste oil and other unidentified containers of liquids on and near the ground surface that did not appear to be labeled or stored in appropriate chemical-storage-designated areas (see Photographic Log; Appendix A). Visually significant staining (see Photographic Log) was observed on the ground surface within approximately 1 foot west of the WCM/Mayhew Center property line, and approximately 2 feet north of the boundary between the enclosed and open debris/storage areas. Also, the eastern portion

of the ground surface of the open debris/storage area, apparently at or near the WCM/Mayhew Center property line, is not covered with asphalt (see Photographic Log).

Former Underground Storage Tank. Historical operation of the WCM facility included the use of a 5,000-gallon steel UST at the approximate location shown on Figure 2. According to a UST removal report on file at Contra Costa County Environmental Health Department (CCCEHD), the subject UST was installed in 1963 and removed in 1998. That same report indicated approximately 5,000 gallons of "used oil and water" were removed from the UST prior to removal of the UST (SOMA 2006).

Two soil samples were reportedly collected from the vicinity of the excavation and analyzed for petroleum hydrocarbons. Laboratory results for those samples did not indicate the presence of petroleum hydrocarbons above the laboratory detection limit. The CCCEHD issued a "No Further Action" letter for this UST on May 13, 2005.

Given the steel construction and long (35-year) residence time in the ground for this UST, and the observation of water in the UST at removal, it is not clear that the two samples that were collected from the excavation at the time the tank was removed provide an adequate characterization of potential impacts to soil and groundwater that may be associated with this UST. Groundwater quality data collected from wells MW-20 and MW-21, downgradient from this UST location, have indicated the presence of petroleum hydrocarbons at concentrations up to 580 micrograms per liter ($\mu\text{g}/\text{l}$) that exhibit a distinct peak in the diesel and motor oil ranges (SOMA 2006). Given the lack of other known sources of petroleum hydrocarbons in the area, these water quality data may indicate the presence of groundwater impacts from the former UST at WCM. Considering that a typical expected life expectancy for a steel UST is on the order of 15 to 20 years (NDSU 1998), and considering the water quality data described above, indicate the need for further assessment of potential impacts associated with the former UST.

4.0 NATURE AND EXTENT OF VOCS

Soil, soil gas, and groundwater quality data have been collected from several borings advanced at and in the vicinity of the Site (Figures 2 and 3). As shown on Figure 2, soil and groundwater data have been collected from the following borings:

- B-1 through B-9 and B-12 through B-19, advanced by Heilshorn on behalf of WCM (Heilshorn 2005a, 2005b)
- MC-1 through MC-24, advanced on the Site by Mayhew Center in 2005 (Dunnivan 2005)
- SP-1 through SP-12, advanced by Quest GSM on behalf of Cuff Properties in 2004
- V-107 through V-112 (passive soil gas borings), installed by ERM in 2001

- CPT-21 and CPT-22, advanced by ERM
- MW-20A, MW-20B, MW-21A, and MW-21B, installed by ERM
- Laboratory analysis data for soil and groundwater samples collected these borings have been used to develop an understanding of the nature and extent of VOCs and other compounds in soil and groundwater beneath the Site and site vicinity. These data are summarized on Tables 1 and 2.

It is important to note that soil boring advancement and soil sample collection for the MC borings on the Site was not conducted under the direction of a licensed professional, and detailed documentation regarding the soil conditions, conditions of the soil samples, and sample depths are not available for these borings. Also, photoionization detector readings were not collected during advancement of these borings. Therefore, use of the data from the MC borings carries a degree of uncertainty as to the overall quality of the data. However, laboratory analysis data for the soil samples collected from the MC borings appear valid, and the magnitudes of VOC concentrations reported from the MC borings are similar to and consistent with data collected from the WCM investigation. Based on these considerations, laboratory data were collected from MC were included in this evaluation. Potential uncertainties with the MC boring data will be addressed, as warranted, in the data gap scope of work, which will be submitted under separate cover.

4.1 Nature and Extent of VOCs in Groundwater in the Site Vicinity

The general distribution of VOCs in shallow A-zone groundwater in the site vicinity is illustrated on Figure 4. Passive soil gas data collected by ERM (ERM 2004) are also shown on Figure 4. Based on the results of passive soil gas surveys conducted ERM on other portions of the Hookston Station site, passive soil gas data provide a reasonable indication of the magnitude of VOCs in underlying soil and groundwater in this area.

As shown on Figure 4, groundwater quality data and passive soil gas data collected downgradient from the Mayhew Center Buildings I, II, and III, and associated the sewer lateral and sewer main connections, do not indicate the presence of a source for PCE. These data are consistent with the historical lack of PCE use, and indicate that the Mayhew Center buildings are not a likely source for PCE in soil or groundwater at the Site.

The concentrations of Freon detected in groundwater are also shown on Figure 4. The estimated extent of Freon in groundwater depicted on Figure 4 is consistent with a plume of Freon oriented along the primary groundwater flow direction, and indicates the presence of a potential source of Freon in the general vicinity of the cooling tower location at WCM.

PCE concentration data collected from the Cuff property, when considered with the data collected from nearby wells MW-20A and CPT-22, indicate the presence of a plume of PCE-affected groundwater oriented along the regional direction of shallow

groundwater flow (see 100 $\mu\text{g/l}$ isoconcentration contour, Figure 4). The concentration of PCE in groundwater directly upgradient from the Cuff property appears to decrease (e.g., from 740 $\mu\text{g/l}$ at SP-06 to 10 $\mu\text{g/l}$ at B-4 and 120 $\mu\text{g/l}$ at B-6). These data are not consistent with an upgradient source for the PCE detected on the Cuff property and in samples collected from downgradient well MW-20.

4.2 PCE in Soil and Groundwater in the Apparent Source Area at WCM/Mayhew Center Boundary

Soil quality data collected near the apparent source area at the WCM/Mayhew Center boundary are plotted on Figure 5. An interpreted isoconcentration contour for PCE in soil is also shown. A cross section through the apparent source area, and oriented at an oblique angle to the property line, is illustrated on Figure 6.

The data plotted on Figure 5 indicate the presence of a relatively widespread distribution of lower concentrations of PCE (i.e., less than approximately 1,000 $\mu\text{g/kg}$), within which there is a more localized occurrence of higher concentrations of PCE in soil (greater than approximately 1,000 $\mu\text{g/kg}$; indicated in color). The more widespread occurrence of lower concentrations of PCE is likely associated with the off-gassing of vapor-phase PCE from higher PCE concentrations in underlying soil and groundwater, and the subsequent adsorption and dissolution of that vapor-phase PCE onto the overlying soil and into soil water. Results of a partitioning analysis (Appendix B) indicate that shallow soil in equilibrium with, and/or overlying groundwater with a concentration of PCE of 1,000 $\mu\text{g/l}$, could be expected to exhibit a total concentration of 1,000 $\mu\text{g/kg}$.

Based on this evaluation, the concentration of PCE in shallow soil overlying the area of more elevated concentrations, shown in color on Figure 5 (e.g., 210 $\mu\text{g/kg}$ at 1.5 feet in B-14, 40 $\mu\text{g/kg}$ at 2.5 at MC-4/7), likely reflect offgassing of PCE from underlying soils and groundwater.

Similarly, relatively lower concentrations of PCE detected in shallow soils away from the area of elevated concentrations appear to reflect offgassing from the source area. For example, relatively lower concentrations of PCE detected in soil to the north (B-12), east (MC-2/11), and south (MC-21) appear to reflect the effects of offgassing and lateral and vertical transport of vapor-phase PCE from an area of higher concentration.

Soil Quality Data Collected from Mayhew Center Site. Elevated concentrations of PCE on the Site also are limited in extent to a relatively small area near the boundary between the open and enclosed storage areas at WCM (i.e., the close vicinity of MC-4/7). The highest concentrations of PCE were detected at MC-7, located immediately adjacent to the WCM storage area described in Section 3.4.2.

Soil quality data collected on the Site do not indicate the presence of a source of PCE that resulted in the concentrations of PCE detected at B-7 or MC-4/7. The detection of relatively elevated concentrations of PCE at the Site appears limited to elevations below approximately 65 feet msl, or approximately below the ground surface elevation of WCM (see Figure 6). Given the fine-grained nature of sediments beneath the Site, it is expected that a surface source for PCE that percolated through the fine-grained soil would result in elevated residual concentrations of PCE in shallow soil (i.e., greater than 1,000 $\mu\text{g}/\text{kg}$), even considering attenuation of PCE concentrations that may occur after the source was released. The lack of elevated concentrations of PCE in shallow on-site soil, which overlies deeper soil with higher concentrations, indicates that the source of the PCE detected in the shallow soil is not located at the Site.

Soil Quality Data Collected from WCM. Soil quality data collected from the WCM property indicates the presence of an apparently continuous area of elevated concentrations from B-14 to the north (3,200 $\mu\text{g}/\text{kg}$) to B-16 to the south (1,800 $\mu\text{g}/\text{kg}$). The vertical extent associated with this area of elevated PCE concentrations has not been assessed. Also, the lateral extent of these elevated concentrations has not been characterized to the west. Similar to the Site, lower concentrations of PCE detected in the shallowest soils on the WCM property indicate that the location of a historical PCE source at ground surface has not been determined using this current data set.

5.0 DATA GAP EVALUATION

LFR has identified the following data gaps that would need to be filled in order to support the development of a more complete CSM.

1. The location and distribution of the apparent source for PCE in soil and groundwater at the WCM/Mayhew Center property boundary.

The existing data set does not clearly delineate or define the location of the source for the relatively elevated concentrations of PCE that have been detected in soil and groundwater at the WCM/Mayhew Center property boundary.

As described above, existing soil quality data do not indicate the presence of a PCE source at the Site. Elevated concentrations of PCE detected on the Site are limited in horizontal extent to a relatively small area near the boundary between the open and enclosed storage areas at WCM. The detection of relatively elevated concentrations of PCE at the Site is limited to elevations below approximately 65 feet msl, below the ground surface elevation of the WCM property. Soils with the highest concentrations of PCE (i.e., MC-7) are overlain by soils with significantly lower concentrations.

These data indicate that the elevated concentrations encountered at depth are not from a Mayhew Center surface release. These soil data are consistent with site layout data showing that there are no subsurface utilities in the area; site land use data indicating

that PCE was not used; and groundwater quality data collected downgradient from facility sewer lines and storm drains that do not indicate the presence of a release or source of PCE associated with the Site.

Shallow soil quality data collected from WCM to date also do not reveal the location of a surface source for PCE. Further characterization of PCE in soil in the vicinity of B-14, B-15, and MC-4/7 may help delineate the potential source in this area.

2. The lateral extent of PCE impacts and the possible presence of source area(s) to the west of B-14, B-15, and MC-4/7.

Existing data are not adequate to define the lateral extent of PCE impacts to the west of these former soil boring locations, where elevated PCE concentrations have been detected. These lateral extent data would be needed to more fully assess the apparent source area near the WCM/Mayhew Center property boundary.

Additional data are needed to better understand the horizontal extent of PCE-affected soil to the west, and the vertical distribution of elevated concentrations of PCE in soil and groundwater in the apparent source area.

3. The vertical extent of PCE in soil and potentially groundwater beneath the vicinity of borings B-14, B-15, MC-4/7, B-16, and B-19.

Laboratory analysis data collected soil borings in this area indicate that the concentrations of VOCs were increasing with depth. Data regarding the vertical extent of PCE impacts at these locations would assist in identifying the nature of the apparent PCE source in this area.

4. The nature and extent of PCE impacts to groundwater beneath the Mayhew Center property downgradient from the apparent source area near the WCM/Mayhew Center property boundary.

There are insufficient data to assess the downgradient extent of PCE-affected groundwater associated with the apparent source area near the WCM/Mayhew Site property boundary. Existing data indicate that the concentration of PCE in groundwater may decrease to relatively low levels (less than 100 $\mu\text{g/l}$) a short distance away from the apparent source area (i.e., within the Mayhew Center property footprint), and appear to increase further downgradient on the Cuff property. However, water quality data directly downgradient from the apparent source area have not been assessed sufficiently to confirm this hypothesis.

5. Potential groundwater quality impacts associated with historical and/or current operations upgradient from (northeast of) Mayhew Center Building III, including the cooling tower and maintenance shop areas, the maintenance building, and the former UST area.

Detection of Freon and PCE in groundwater on Mayhew Center Building III property (i.e., in borings B-6 and B-4) and the detection of petroleum hydrocarbons in downgradient well MW-20 indicate the possible presence of a source or sources of VOCs and other chemicals associated with the potential source areas described above.

A scope of work designed to confirm the Site CSM and fill these data gaps will be submitted to the RWQCB under separate cover, in accordance with the RWQCB December 14, 2006 letter.

6.0 LIMITATIONS

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by LFR and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, express or implied, is intended or given. To the extent that LFR relied upon any information prepared by other parties not under contract to LFR, LFR makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

Results of any investigations or testing and any findings presented in this report apply solely to conditions existing at the time when LFR's investigative work was performed. It must be recognized that any such investigative or testing activities are inherently limited and do not represent a conclusive or complete characterization. Conditions in other parts of the project Site may vary from those at the locations where data were collected. LFR's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100 percent confidence in environmental investigation conclusions cannot reasonably be achieved.

LFR, therefore, does not provide any guarantees, certifications, or warranties regarding any conclusions regarding environmental contamination of any such property. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

7.0 REFERENCES

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Tables

Table 1
Summary of Laboratory Analysis Data for Soil
Mayhew Center Site and Vicinity
Pleasant Hill, California

Boring Number	Sample ID	Depth (ft bgs)	Elevations (feet, msl)		Concentration of VOCs				
			Top of boring	Sample	PCE	TCE	DCE	Vinyl Chloride	PID (ppmv)
B1	B1-TOH	--	66.85						--
	B1-5	5		61.85	ND	ND	ND	ND	--
	B1-15	15		51.85	ND	ND	ND	ND	--
	B1-25	25		41.85	ND	ND	ND	ND	--
B2	B2-TOH	--	66.25						--
	B2-5	5		61.25	ND	ND	ND	ND	--
	B2-15	15		51.25	ND	ND	ND	ND	--
	B2-25	25		41.25	ND	ND	ND	ND	--
B3	B3-TOH	--	66.16						--
	B3-5	5		61.16	ND	ND	ND	ND	--
	B3-15	15		51.16	ND	ND	ND	ND	--
	B3-25	25		41.16	ND	ND	ND	ND	--
B4	B4-TOH	--	69.34						--
	B4-5	5		64.34	12	ND	ND	ND	--
	B4-15	15		54.34	ND	ND	ND	ND	--
	B4-25	25		44.34	45	ND	ND	ND	--
	B4-35	35		34.34	45	5.8	ND	ND	--
B5	B5-TOH	--	66.13						--
	B5-5	5		61.13	ND	ND	ND	ND	--
	B5-15	15		51.13	ND	ND	ND	ND	--
	B5-25	25		41.13	ND	ND	ND	ND	--
B6	B6-TOH	--	69.41						--
	B6-5	5		64.41	17	ND	ND	ND	--
	B6-15	15		54.41	17	ND	ND	ND	--
	B6-25	25		44.41	36	ND	ND	ND	--
	B6-35	35		34.41	58	ND	ND	ND	--
B7	B7-TOH	--	69.47						--
	B7-5	5		64.47	2800	ND	ND	ND	--
	B7-15	15		54.47	6600	ND	ND	ND	--
	B7-25	25		44.47	ND	ND	ND	ND	--
B8	B8-TOH	--	66.08						--
	B8-5	5		61.08	ND	ND	ND	ND	--
	B8-15	15		51.08	ND	ND	ND	ND	--
	B8-25	25		41.08	ND	ND	ND	ND	--
B9	B9-TOH	--	--						--
	B9-5	5		--	ND	ND	ND	ND	--
	B9-15	15		--	ND	ND	ND	ND	--
	B9-25	25		--	ND	ND	ND	ND	--
B10	B10-TOH	--	67.77						--
	B10-5	5		62.77	ND	ND	ND	ND	--
	B10-15	15		52.77	ND	ND	ND	ND	--
	B10-25	25		42.77	ND	ND	ND	ND	--

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			Top of boring	Sample	PCE	TCE	DCE	Vinyl Chloride	PID (ppmv)
B11	B11-TOH	--	65.98	--					--
	B11-5	5		60.98	ND	ND	ND	ND	--
	B11-15	15		50.98	ND	ND	ND	ND	--
	B11-25	25		40.98	ND	ND	ND	ND	--
B12	B12-TOH	--	66.05	--					--
	B12-0.5	0.5		65.55	ND	ND	ND	ND	--
	B12-1.5	1.5		64.55	200	ND	ND	ND	--
	B12-4.0	4		62.05	190	ND	ND	ND	0.9
	B12-6.0	6		60.05	240	ND	ND	ND	4.6
B13	B13-TOH	--	66.04	--					--
	B13-0.5	0.5		65.54	130	ND	ND	ND	--
	B13-1.5	1.5		64.54	220	ND	ND	ND	1.5
	B13-4.0	4		62.04	470	ND	ND	ND	4.8
	B13-6.0	6		60.04	640	ND	ND	ND	--
B14	B14-TOH	--	66.16	--					--
	B14-0.5	0.5		65.66	8.5	ND	ND	ND	--
	B14-1.5	1.5		64.66	210	ND	ND	ND	--
	B14-4.0	4		62.16	1200	ND	ND	ND	--
	B14-6.0	6		60.16	3200	ND	ND	ND	12.7
B15	B15-TOH	--	66.22	--					--
	B15-0.5	0.5		65.72	55	ND	ND	ND	0.5
	B15-1.5	1.5		64.72	750	ND	ND	ND	0.9
	B15-4.0	4		62.22	550	ND	ND	ND	--
	B15-6.0	6		60.22	4200	ND	ND	ND	5.7
B16	B16-TOH	--	66.28	--					--
	B16-0.5	0.5		65.78	8.6	ND	ND	ND	3.4
	B16-1.5	1.5		64.78	800	ND	ND	ND	2
	B16-4.0	4		62.28	1800	ND	ND	ND	2.1/1.8
	B16-6.0	6		60.28	1200	ND	ND	ND	5
B17	B17-TOH	--	66.24	--					--
	B17-0.5	0.5		65.74	95	ND	ND	ND	--
	B17-1.5	1.5		64.74	370	ND	ND	ND	--
	B17-4.0	4		62.24	630	ND	ND	ND	--
	B17-6.0	6		60.24	580	ND	ND	ND	--
B18	B18-TOH	--	66.13	--					--
	B18-0.5	0.5		65.63	12	ND	ND	ND	--
	B18-1.5	1.5		64.63	870	ND	ND	ND	0.5
	B18-4.0	4		62.13	1700	ND	ND	ND	1.9
	B18-6.0	6		60.13	610	ND	ND	ND	2.5

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			Top of boring	Sample	PCE	TCE	DCE	Vinyl Chloride	PID (ppmv)
B19	B19-TOH	--	66.16	--					--
	B19-0.5	0.5		65.66	490	ND	ND	ND	--
	B19-1.5	1.5		64.66	640	ND	ND	ND	--
	B19-4.0	4		62.16	540	ND	ND	ND	--
	B19-6.0	6		60.16	1200	ND	ND	ND	--
MC-1	MC-1A	5	69.80	64.80	420	ND	ND	ND	--
	MC-1B	6.5		63.3	360	ND	ND	ND	--
MC-2	MC-2A	5	69.90	64.90	840	ND	ND	ND	--
	MC-2B	6		63.9	730	ND	ND	ND	--
MC-3	MC-3A	5	69.98	64.98	370	ND	ND	ND	--
	MC-3B	6		63.98	1100	ND	ND	ND	--
MC-4	MC-4A	2	68.06	66.06	24	ND	ND	ND	--
	MC-4B	2.5		65.56	40	ND	ND	ND	--
MC-5	MC-5A	2	68.33	66.33	9.5	ND	ND	ND	--
	MC-5B	2.25		66.08	ND	ND	ND	ND	--
	MC-5C	2.5		65.83	21	ND	ND	ND	--
MC-6	MC-6A	2	68.40	66.40	11	ND	ND	ND	--
	MC-6B	2.5		65.9	13	ND	ND	ND	--
MC-7	MC-7A	6	68.16	62.16	11000	ND	ND	ND	--
	MC-7B	5		63.16	9100	ND	ND	ND	--
	MC-7C	4.5		63.66	6800	ND	ND	ND	--
	MC-7D	5		63.16	7700	330	ND	ND	--
MC-8	MC-8A	6	68.30	62.30	460	ND	ND	ND	--
	MC-8B	5.5		62.80	360	ND	ND	ND	--
	MC-8C	5		63.30	230	ND	ND	ND	--
	MC-8D	4		64.3	690	ND	ND	ND	--
MC-9	MC-9A	5	68.43	63.43	260	ND	ND	ND	--
	MC-9B	4.5		63.93	620	ND	ND	ND	--
	MC-9C	4		64.43	400	ND	ND	ND	--
	MC-9D	3.5		64.93	320	ND	ND	ND	--
MC-10	MC-10A	2	69.77	67.77	390	ND	ND	ND	--
MC-11	MC-11A	2	69.89	67.89	380	ND	ND	ND	--
MC-12	MC-12A	2	69.99	67.99	920	ND	ND	ND	--
MC-13	MC-13A	2	70.01	68.01	390	ND	ND	ND	--
	MC-13B	3.5		66.51	470	ND	ND	ND	--
MC-14	MC-14A	2	70.05	68.05	100	ND	ND	ND	--
	MC-14B	3.5		66.55	200	ND	ND	ND	--
	MC-14C	4		66.05	130	ND	ND	ND	--
MC-15	MC-15A	2	70.01	68.01	ND	ND	ND	ND	--
	MC-15B	4		66.01	ND	ND	ND	ND	--

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			Top of boring	Sample	PCE	TCE	DCE	Vinyl Chloride	PID (ppmv)
MC-16	MC-16A	2	70.10	68.10	ND	ND	ND	ND	--
	MC-16B	3		67.10	ND	ND	ND	ND	--
	MC-16C	4		66.1	ND	ND	ND	ND	--
MC-17	MC-17A	2	70.22	68.22	ND	ND	ND	ND	--
	MC-17B	3		67.22	ND	ND	ND	ND	--
	MC-17C	4		66.22	ND	ND	ND	ND	--
MC-18	MC-18A	2	70.35	68.35	ND	ND	ND	ND	--
	MC-18B	3		67.35	ND	ND	ND	ND	--
	MC-18C	4		66.35	ND	ND	ND	ND	--
MC-20	MC-20A	2	67.81	65.81	55	ND	ND	ND	--
	MC-20B	5		62.81	800	ND	ND	ND	--
	MC-20C	6		61.81	580	ND	ND	ND	--
MC-21	MC-21A	2	67.87	65.87	26	ND	ND	ND	--
	MC-21B	5		62.87	120	ND	ND	ND	--
	MC-21C	6		61.87	120	ND	ND	ND	--
MC-22	MC-22A	--	67.77	--	ND	ND	ND	ND	--
	MC-22B	5		62.77	17	ND	ND	ND	--
	MC-22C	6		61.77	34	ND	ND	ND	--
MC-23	MC-23A	2	67.85	65.85	ND	ND	ND	ND	--
	MC-23B	5		62.85	ND	ND	ND	ND	--
	MC-23C	6		61.85	ND	ND	ND	ND	--
MC-24	MC-24A	2	67.68	65.68	ND	ND	ND	ND	--
	MC-24B	5		62.68	ND	ND	ND	ND	--
	MC-24C	6		61.68	ND	ND	ND	ND	--
SP-01	SP-01-02-S	2	--	--	ND	ND	ND	ND	--
	SP-01-08-S	8	--	--	ND	ND	ND	ND	--
SP-02	SP-02-02-S	2	--	--	5.1	ND	ND	ND	--
	SP-02-08-S	8	--	--	ND	ND	ND	ND	--
SP-03	SP-03-02-S	2	--	--	ND	ND	ND	ND	--
	SP-03-08-S	8	--	--	5.2	ND	ND	ND	--
SP-04	SP-04-02-S	2	--	--	ND	ND	ND	ND	--
	SP-04-08-S	8	--	--	ND	ND	ND	ND	--
SP-05	SP-05-02-S	2	--	--	64	ND	ND	ND	--
	SP-05-08-S	8	--	--	12	ND	ND	ND	--
SP-06	SP-06-02-S	2	--	--	41	ND	ND	ND	--
	SP-06-08-S	8	--	--	13	ND	ND	ND	--
SP-07	SP-07-02-S	2	--	--	7.7	ND	ND	ND	--
	SP-07-08-S	8	--	--	ND	ND	ND	ND	--
SP-08	SP-08-02-S	2	--	--	ND	ND	ND	ND	--
	SP-08-08-S	8	--	--	ND	ND	ND	ND	--
SP-09	SP-09-02-S	2	--	--	ND	ND	ND	ND	--
	SP-09-08-S	8	--	--	ND	ND	ND	ND	--

Table 1
Summary of Laboratory Analysis Data for Soil
Mayhew Center Site and Vicinity
Pleasant Hill, California

Boring Number	Sample ID	Depth (ft bgs)	Elevations (feet, msl)		Concentration of VOCs				
			Top of boring	Sample	PCE	TCE	DCE	Vinyl Chloride	PID (ppmv)
SP-10	SP-10-02-S	2	--	--	ND	ND	ND	ND	--
	SP-10-08-S	8	--	--	ND	ND	ND	ND	--
SP-11	SP-11-02-S	2	--	--	ND	ND	ND	ND	--
	SP-11-08-S	8	--	--	ND	ND	ND	ND	--
SP-12	SP-12-02-S	2	--	--	ND	ND	ND	ND	--
	SP-12-08-S	8	--	--	ND	ND	ND	ND	--

Notes:

-- = not analyzed or not reported

bgs = below ground surface

DCE = dichloroethene

ND = not reported above laboratory detection limits

PCE = tetrachloroethene

PID = photoionization detector

ppmv = parts per million volume

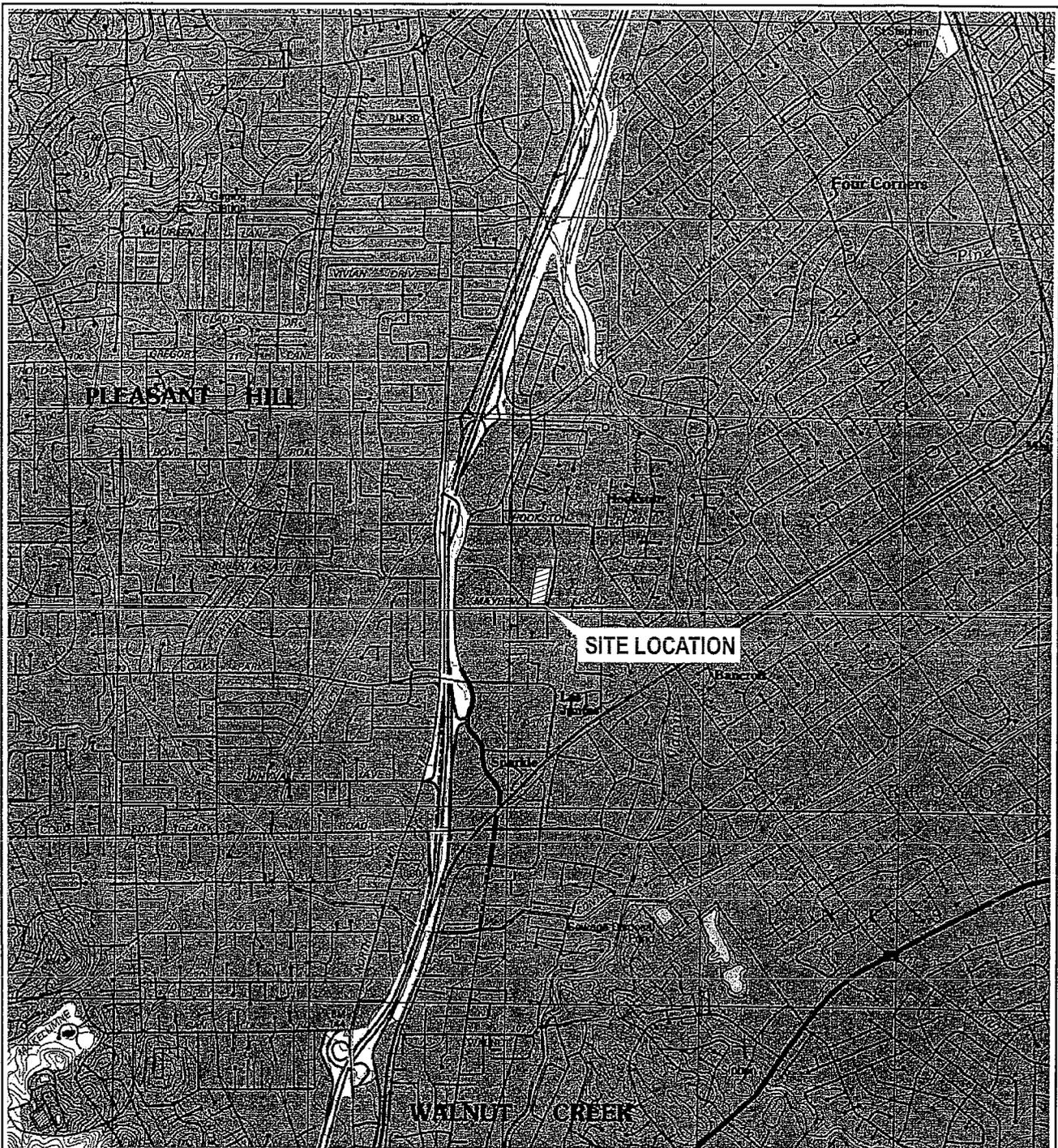
TCE = trichloroethene

VOC = volatile organic compound

Table 2
Summary of Laboratory Analysis Data for Groundwater
Mayhew Center Site and Vicinity
Pleasant Hill, California

Boring	Sample ID	VOC Concentration (µg/l)				
		PCE	TCE	Methylene Chloride	Freon	DCE
B1	B1-WA	ND	ND	1.9	ND	ND
	B1-WB	ND	ND	ND	ND	ND
B2	B2-WA	ND	ND	ND	2.4	ND
	B2-WB	ND	ND	ND	ND	ND
B3	B3-WA	ND	ND	ND	2.3	ND
	B3-WB	ND	ND	ND	ND	ND
B4	B4-WA	10	13	ND	ND	ND
	B4-WB	ND	ND	ND	ND	ND
B5	B5-WA	ND	ND	ND	ND	ND
	B5-WB	ND	ND	ND	ND	ND
B6	B6-WA	120	ND	ND	ND	ND
	B6-WB	ND	ND	ND	ND	ND
B7	B7-WA	1,200	ND	ND	ND	ND
	B7-WB	9.4	ND	ND	ND	ND
B8	B8-WA	ND	ND	ND	ND	ND
	B8-WB	ND	ND	ND	ND	ND
B9	B9-WA	ND	ND	ND	ND	ND
	B9-WB	ND	ND	ND	ND	ND
B10	B10-WA	ND	ND	ND	ND	ND
B11	B11-WA	ND	ND	ND	ND	ND
	B11-WB	ND	ND	ND	ND	ND
SP-01	SP-01-W	240	15	ND	ND	ND
SP-02	SP-02-W	220	11	ND	ND	12
SP-03	SP-03-W	180	6.7	ND	ND	7.5
SP-04	SP-04-W	51	--	ND	ND	ND
SP-05	SP-05-W	130	4.1	ND	ND	ND
SP-06	SP-06-W	740	ND	ND	ND	ND
SP-07	SP-07-W	12	ND	ND	220	ND
SP-08	SP-08-W	0.92	ND	ND	28	ND
SP-09	SP-09-W	ND	ND	ND	ND	ND
SP-10	SP-10-W	ND	ND	ND	ND	ND
SP-11	SP-11-W	ND	ND	ND	ND	ND
SP-12	SP-12-W	320	17	ND	9.2	ND

Figures



J:\Illustrator\Mayhew\Mayhew_Fig1: Site_Location.ai 012507



0 2000 FEET

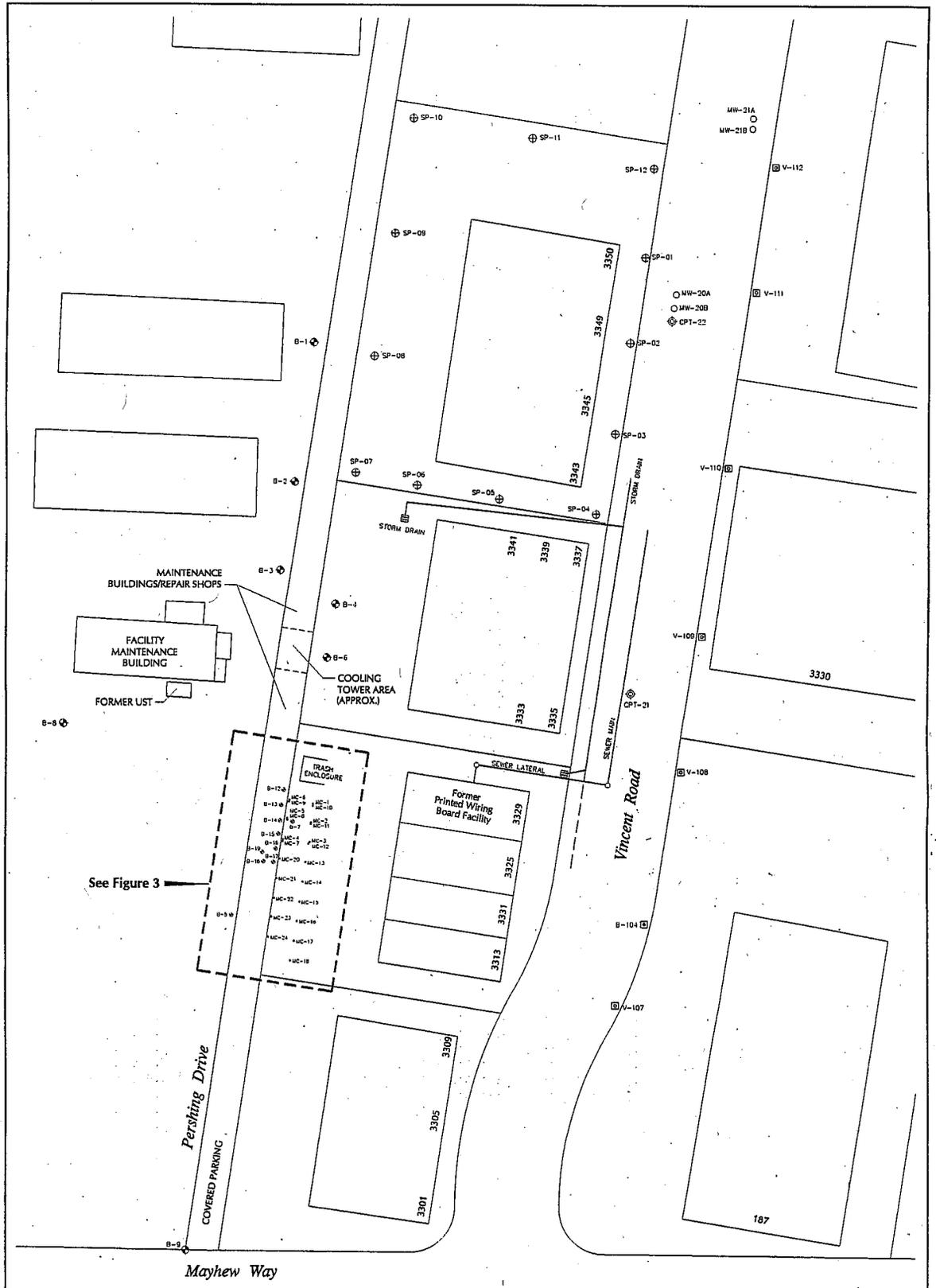
SOURCE: USGS Topographic Map, PLEASANT HILL, CA.

Site Location Map

Mayhew Center, Pleasant Hill, California



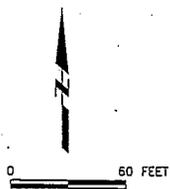
Figure 1



See Figure 3

LEGEND

- MW-21A GROUNDWATER MONITORING WELL
- MC-10 SOIL BORING ADVANCED BY MAYHEW CENTER
- ⊕ B-8 SOIL BORING ADVANCED BY WALNUT CREEK MANOR
- ⊕ SP-09 SOIL BORING ADVANCED BY CUFF PROPERTIES
- ⊠ V-107 PASSIVE SOIL GAS SAMPLING POINT BY ERM
- ⊠ B-104 SOIL BORING BY ERM
- ⊕ CPT-21 CONE PENETROMETER TEST BORING BY ERM



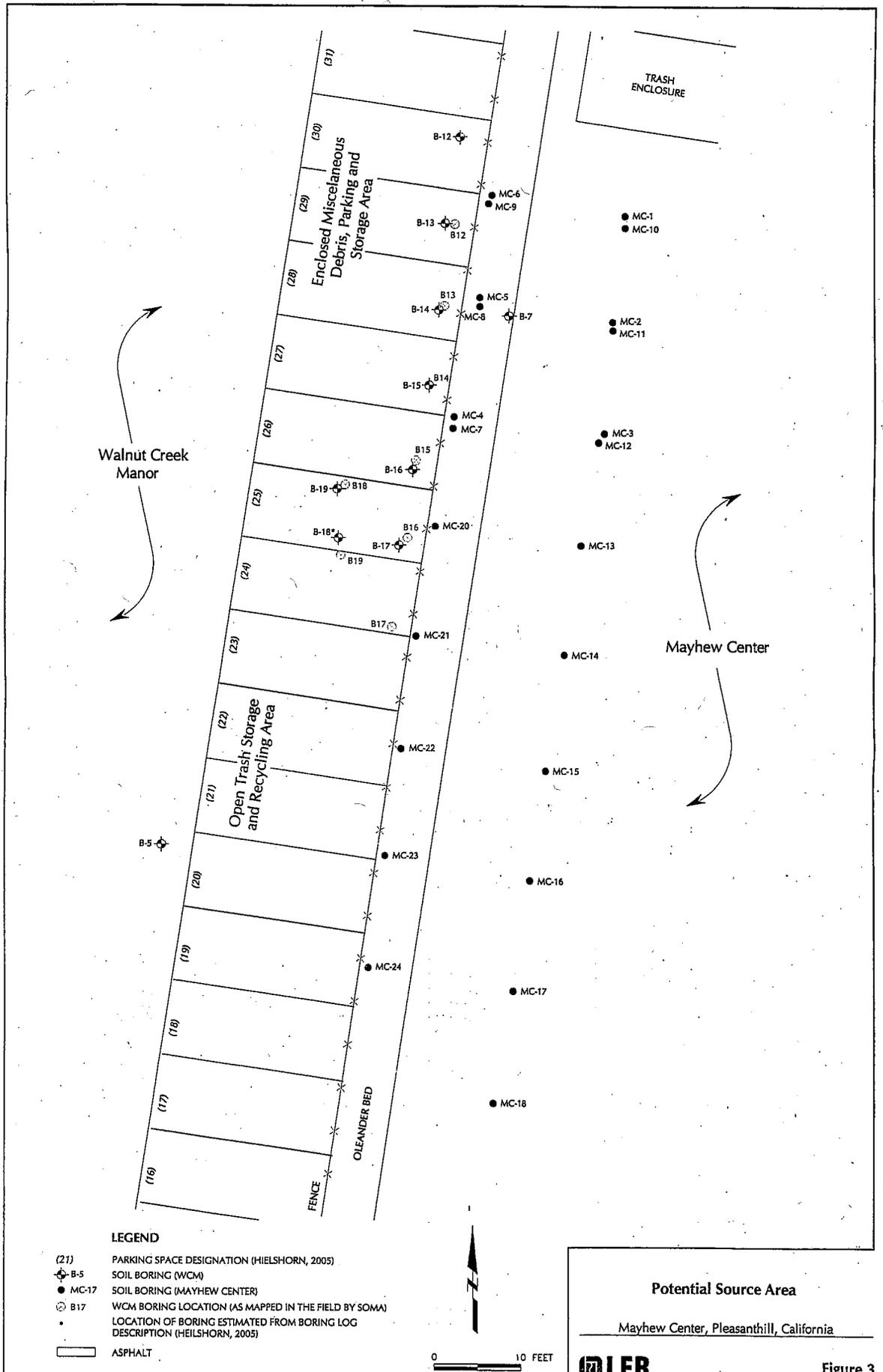
SOURCE: ERM 2004
Survey data from Kier & Wright 2007

Site Plan

Mayhem Center, Pleasant Hill, California

LFR

Figure 2



LEGEND

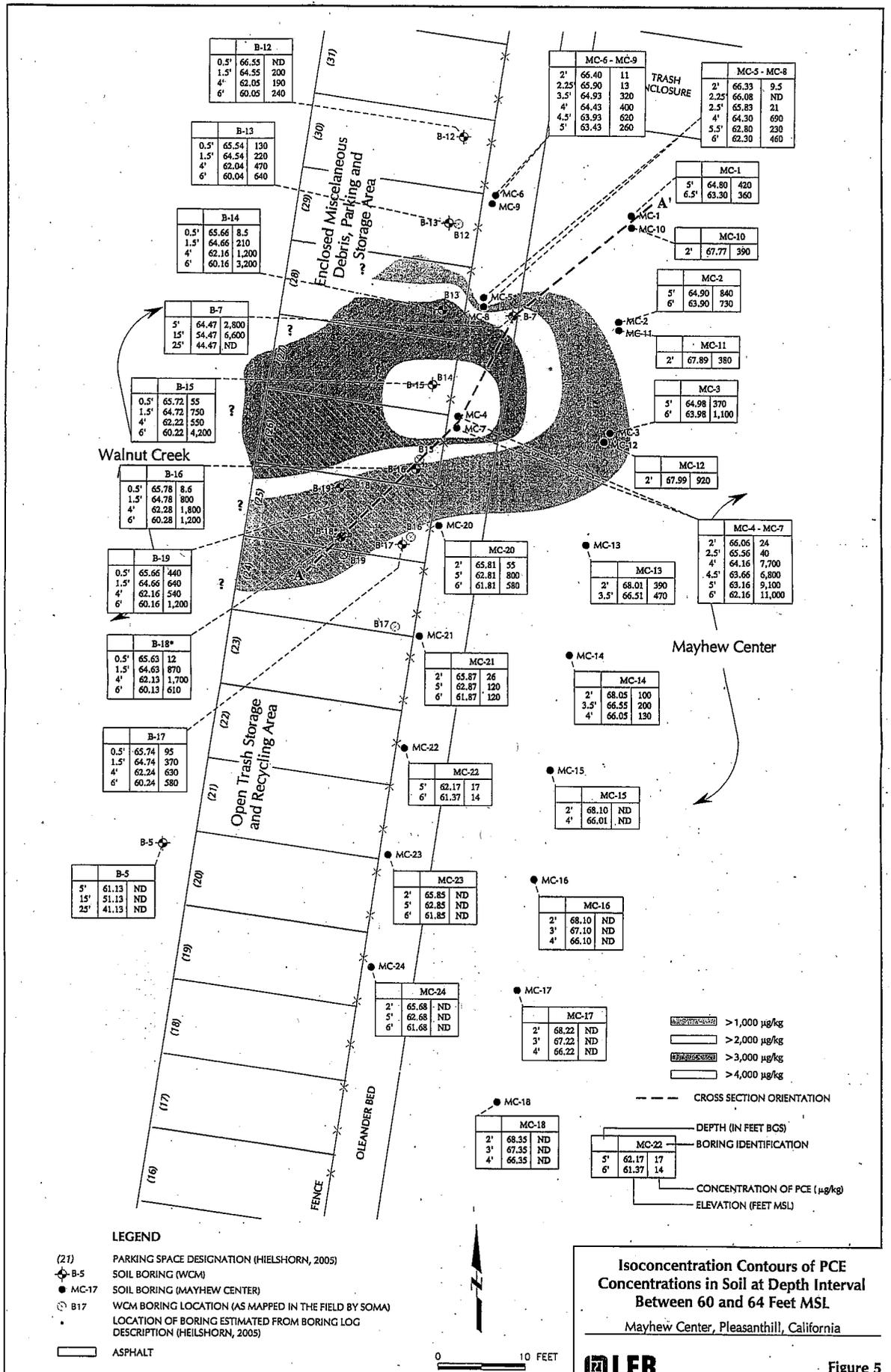
- (21) PARKING SPACE DESIGNATION (HIELSHORN, 2005)
- ⊕ B-5 SOIL BORING (WCM)
- MC-17 SOIL BORING (MAYHEW CENTER)
- ⊙ B-17 WCM BORING LOCATION (AS MAPPED IN THE FIELD BY SOMA)
- LOCATION OF BORING ESTIMATED FROM BORING LOG DESCRIPTION (HIELSHORN, 2005)
- ▭ ASPHALT

Potential Source Area

Mayhew Center, Pleasant Hill, California



Figure 3



Isoconcentration Contours of PCE Concentrations in Soil at Depth Interval Between 60 and 64 Feet MSL

Mayhew Center, Pleasant Hill, California



Figure 5

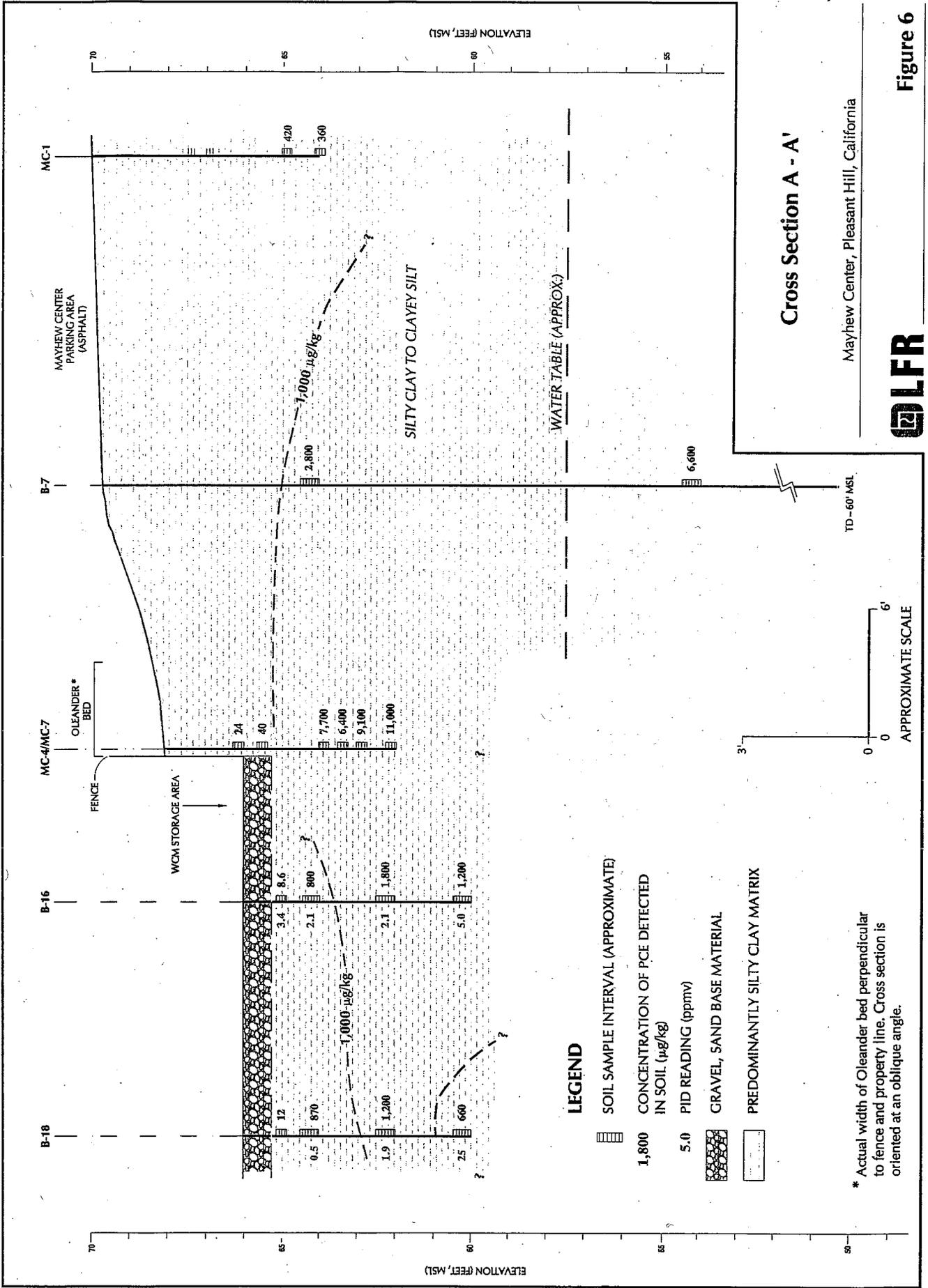
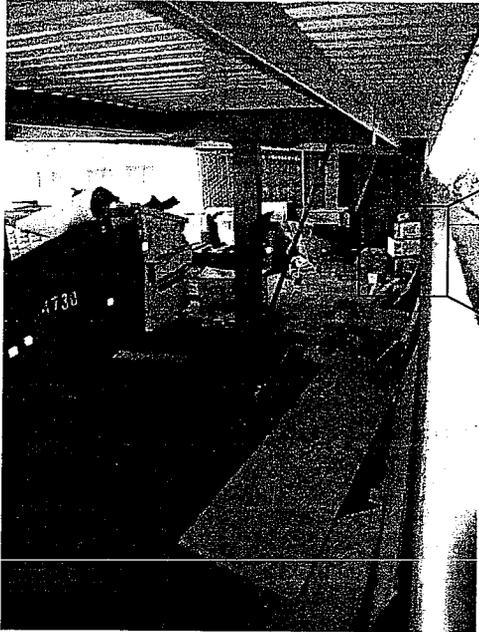


Figure 6

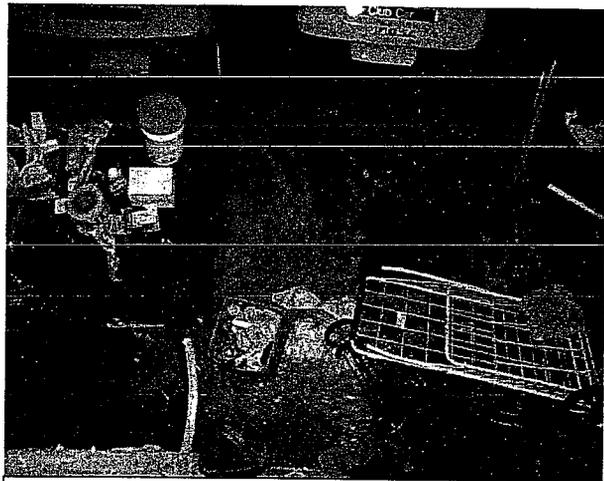
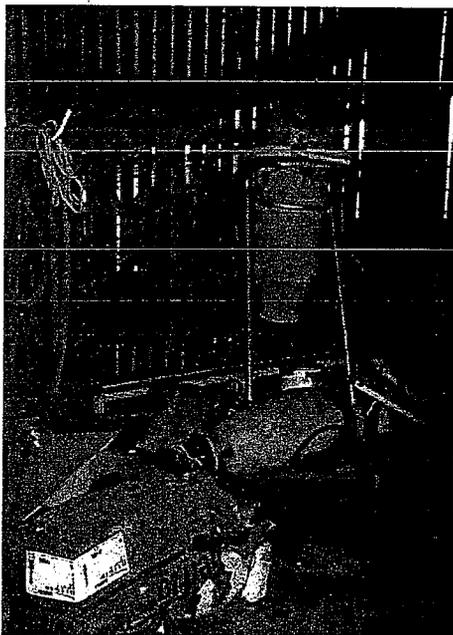
Appendix A

Photographic Log

Photographs of Walnut Creek Manor Storage Area Taken from Mayhew Center



Open portion of WCM storage area looking north, with Mayhew Center on right. Dirt subgrade is visible to the right of the plastic vessel containing black liquid.



Closed portion of WCM storage area. Miscellaneous debris, liquids, equipment and staining are present in this storage area.

Appendix B

Partitioning Analysis

EQUILIBRIUM PARTIONING ANALYSIS FOR PCE IN SOIL

An equilibrium partitioning evaluation was conducted to assess what concentrations of PCE in soil could be reasonably attributed to the off-gassing, migration, and subsequent partitioning of PCE from higher concentrations located beneath or lateral to the subject soil. This evaluation was conducted by assuming an initial concentration of PCE in shallow groundwater of 1,200 micrograms per liter ($\mu\text{g/l}$), and assessing potential PCE concentrations in soil overlying that groundwater from the off-gas, transport, and equilibration of that vapor-phase PCE into overlying soils assuming equilibrium partitioning relationships.

Calculation of Total Soil Concentration from Concentration in Soil Gas

The following abbreviations and units are used:

C_t = total concentration in soil sample (from laboratory analysis, micrograms per kilogram [$\mu\text{g/kg}$])

C_s = concentration of chemical on sorbed phase ($\mu\text{g/kg}$)

C_w = concentration of chemical dissolved into water ($\mu\text{g/l}$)

C_a = concentration of chemical in soil gas ($\mu\text{g/l}$)

The following input parameter values were used in this evaluation:

Parameter	Symbol	Units	Value	Rationale/Source
Total porosity	θ_t	cm^3/cm^3	0.48	average literature value for silty clay (Maidment 1999)
Dry bulk density	ρ_{dry}	g/cm^3	1.36	calculated using: $\theta_t = 1 - \frac{\rho_{dry}}{\rho_s}$
Density of solids	ρ_s	g/cm^3	2.6	literature value
Moisture content	θ_w	cm^3/cm^3	0.24	based on assumption that soil is 50% saturated
Wet bulk density	ρ_{wet}	g/cm^3	1.7	calculated using: $\rho_w = \rho_{dry}(1 + \theta_w)$
Air filled porosity	θ_a	cm^3/cm^3	0.24	calculated from: $\theta_a = \theta_t - \theta_w$
Sorption coefficient for PCE	K_{oc}	cm^3/g	364	Montgomery and Welkom (1990)
Fraction of organic carbon	f_{oc}	unitless	0.005	lower range of reported values for this soil of 0-4%
Soil/water partition coefficient	K_d	cm^3/g	1.8	calculated from: $K_d = K_{oc} f_{oc}$
Henry's Law Constant for PCE	H	unitless	1.21	Weidemer 1999
Concentration of PCE in groundwater near source area	C_w	$\mu\text{g/l}$	1,200	based on data from B-7
Concentration of PCE in soil gas from offgassing of groundwater	C_a	$\mu\text{g/l}$	725	Taken as half of the concentration that would be expected to be in equilibrium with groundwater from: $C_a = 0.5(C_w * H)$

Using the assumption of equilibrium partitioning:

$$C_w = C_a / H \quad (1)$$

$$C_s = K_d C_w \quad (2)$$

$$C_t = \frac{C_s \rho_{bdry} + C_w n_w + C_a n_a}{\rho_{bwet}} \quad (3)$$

Using the input values presented in the preceding table:

$$C_w = \frac{(725)}{(1.2)} = 604 \mu\text{g} / \text{L}$$

$$C_s = (1.8)(604) = 1,090 \mu\text{g} / \text{Kg}$$

Finally, the total concentration can be calculated using:

$$C_t = \frac{(1090)(1.36) + (604)(0.24) + (725)(0.24)}{1.7} = 1,060 \mu\text{g} / \text{kg} \approx 1,000 \mu\text{g} / \text{kg}$$

These data indicate that vapor-phase PCE that could offgas from groundwater with a PCE concentration of 1,200 $\mu\text{g}/\text{l}$ could be expected to result in a total soil PCE concentration of approximately 1,000 $\mu\text{g}/\text{kg}$ in overlying soil.

REFERENCES

- Maidment, D. 1999. *Handbook of Hydrology*. McGraw Hill Inc. New York.
- Montgomery and Welkom. 1990. *Groundwater Chemicals Desk Reference*. Lewis, Chelsea Michigan.
- Weidmier. 1999. *Natural Attenuation of Fuels and Chlorinated Solvents in the Subsurface*. John Wiley & Sons, Inc. New York.

EXHIBIT G



California Regional Water Quality Control Board

San Francisco Bay Region



Linda S. Adams
Secretary for
Environmental
Protection

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(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>

Arnold Schwarzenegger
Governor

Date: DEC 14 2006
File No: 07S0183 (MRC)

Walnut Creek Manor, LLC
Attn: Ms. Marilyn Boswell
1686 Union Street Suite #306
San Francisco, CA 94123

Walnut Creek Manor, LLC
Attn: Mr. Milt Eberle
Wgidinc@aol.com
5709 Marconi Avenue, Suite D
Carmichael, CA 95608

SUBJECT: Property at 81 Mayhew Way, Walnut Creek, Contra Costa County – Order
Requiring Report on Soil and Groundwater Characterization and Site History
Pursuant to Water Code Section 13267

Dear Ms. Boswell and Mr. Eberle:

This Order requires that Walnut Creek Manor, LLC (hereafter referred to as "you") submit a report on soil and groundwater characterization and site history for your property, known as Walnut Creek Manor and located at 81 Mayhew Way in Walnut Creek, California. As explained below, this information will help Board staff to determine the nature and extent of soil and groundwater contamination beneath your property, which can then be used to design remedial activities if appropriate.

Background

Investigations regarding the contamination of soil and groundwater at the Hookston Station site, located at 228 Hookston Road, have been conducted since 1989. These investigations discovered the presence of chlorinated solvents (which are commonly used as degreasers) in the soil and groundwater at the site. Because of their chemical characteristics, when chlorinated solvents are released into the environment via, e.g., spills on the ground or leaks from underground tanks or piping, they migrate downward, eventually encountering groundwater. The solvents dissolve into groundwater and then are carried along with the flow of the groundwater. Solvents can also be washed across the ground surface before migrating downward. This can sometimes lead to offsite contamination of shallow soil and groundwater.

Most solvents are relatively dense (specific gravity greater than 1.0) and tend to migrate downward through the soil column over time. If a release of solvents occurred several years ago, it is likely that the solvents have migrated downward and may be present at higher concentrations at greater depth. Further, most solvents have a tendency to evaporate readily (vapor pressure substantially less than that of water at 760 mm), and concentrations detected in shallow soil are not expected to be indicative of the absence of a historic release.

Depending on the length of time that has elapsed since a solvent release occurred, it is possible for the released solvent to have migrated through the unsaturated soil column and to have accumulated below the ground water in a zone underlain by fine-grained deposits. Therefore, groundwater sampling is a necessary component of any solvent source area investigation to conclusively determine the absence or presence of a solvent source.

In October-November 2001, a passive soil vapor survey was conducted for the Hookston Station remedial investigation as a screening tool to identify the approximate limits of soil and ground water impacted with Hookston-related chlorinated solvents. During that investigation, elevated concentrations of the chlorinated solvent tetrachloroethene (PCE) and associated breakdown products were found in soil vapor samples collected along Vincent Road, near your property at 81 Mayhew Way. Subsequent investigation and monitoring activities identified concentrations of PCE in groundwater as high as 7,200 micrograms per liter ($\mu\text{g/L}$) in monitoring wells installed in Vincent Road. PCE has not been identified as a solvent that was used at the Hookston Station site. Ground water monitoring data indicate that the chemical impacts from PCE may originate from an off-site (i.e., non-Hookston) source area that appears to be located west (upgradient) of Hookston Station. Based on groundwater monitoring data for the Hookston Station site (e.g., *Third Quarter 2006 Monitoring Report*; ERM, October 31, 2006), it appears that an upgradient source may have merged with the Hookston Station groundwater impacts, and the mixed ground water plume has migrated further downgradient beneath a residential neighborhood.

Subsurface investigation on the eastern portion and close to the eastern boundary of your property (Heilshorn Environmental Engineering; May 20, 2005, and December 16, 2005) indicates the presence of PCE in soil up to 4.2 milligrams per kilogram (mg/kg) at a depth of six feet below ground surface. This concentration exceeds the California Regional Water Quality Control Board, San Francisco Bay Region, Environmental Screening Level (ESL) of 0.24 mg/kg for commercial land use. Groundwater sampling on your property (Heilshorn Environmental Engineering; May 20, 2005) indicates shallow groundwater is encountered at about 8 to 14 feet below ground surface. The May 2005 sampling did not detect PCE above laboratory reporting limits in groundwater beneath your property; however no groundwater samples were obtained from locations directly beneath locations on your property where PCE was detected in soil. Groundwater was also sampled from a boring advanced on the adjacent downgradient property, in order to evaluate potential contamination from historic storage and maintenance activities on your property, close to the property boundary. The sampling was conducted on the downgradient property due to limited access beneath the existing structures (carports). That sample indicated the presence of PCE in groundwater up to 1,200 micrograms per liter ($\mu\text{g/l}$), which exceeds the drinking water standard of 5 $\mu\text{g/l}$ and exceeds the ESL of 120 $\mu\text{g/l}$ for groundwater that is not a source of drinking water.

Your property is a suspected source of PCE because it has been detected in soil beneath your property. Further, historic activities that occurred on your property in the area of interest included fuel and chemical storage, equipment maintenance, and fabrication of items for use on site.

Results of soil investigations near the boundary between your property and Mayhew Center are inconclusive as to the precise location of the PCE source. To define the horizontal and vertical distribution of PCE in the subsurface, we require chemical analysis of soil samples from the ground surface through the unsaturated zone, to the first occurrence of groundwater. We also require measurement of depth to groundwater and systematic sampling and analysis of groundwater that occurs in one or more discrete hydrostratigraphic units beneath areas where soil is impacted, as well as laterally to characterize the extent of the groundwater plume. It is necessary to use available technology (e.g., low-clearance drilling or direct-push equipment) to obtain groundwater samples beneath the area where PCE was detected in soil to fully describe the horizontal and vertical distribution of PCE in soil and groundwater. This information will assist in identifying a source area and may also be used to determine the responsible party for the release to the environment.

In addition to PCE impacts to soil and groundwater cited above, it came to light in 2005 that a 5,000-gallon underground diesel tank was present on the property from 1963 until 1998. It is possible that the tank or any portion of the tank system could have been used for disposal of wastes between the time the diesel-fueled chiller was removed in 1984 and the removal of the tank in 1998. This was not investigated by the two soil samples from each end of the tank excavation that were analyzed for gasoline-range volatile hydrocarbons, methyl tert-butyl ether, benzene, toluene, ethyl benzene, and xylenes at the time the tank was removed. Further, your previous submittals regarding site history (February 15, 2005; December 30, 2005; and January 20, 2006) rely largely on public documents, and do not cite historic corporate records and/or interviews with personnel who are knowledgeable about site operations prior to 1992.

Contamination Impacts

The contamination on your property threatens to adversely affect the beneficial uses of groundwater, which include municipal and domestic supply, industrial process and service water supply, and agricultural supply. In addition, this contamination threatens to adversely affect Walnut Creek, the surface water body closest to your property. This contamination threatens to cause a condition of pollution in waters of the State, and should be fully delineated and abated in the shortest reasonable period of time. Further, it is possible that PCE on your site is contributing to downgradient contamination beneath a residential neighborhood.

Requirement to Submit a Workplan and Additional Site History Information

This Order is directed to you as the owner of property at which the Water Board suspects a discharge of waste is occurring or may have occurred that could affect the quality of waters of the state. It is necessary to sample soil and groundwater beneath your property to determine the horizontal and vertical distribution of PCE in the subsurface. This information will assist in identifying a source area near the property boundary and may also be used to determine the

responsible party for the release to the environment. The information may also provide a basis for decisions regarding subsequent cleanup and abatement action.

You are required to submit a report containing the following information by January 26, 2007:

1. A workplan designed to characterize the soil and groundwater on and beneath your property in an area extending from the eastern property boundary to a line 200 feet west of the eastern property boundary, and between 200 and 500 feet north of Mayhew Way. This information shall be used to develop a better conceptual understanding of the nature and extent of the contamination and to supplement visual observation and two soil samples taken when the fuel oil tank was removed in 1998. The workplan shall propose to obtain data to define source areas of contamination, the vertical and lateral extent of contamination, the potential pathways of migration, and the potential receptors that might be at risk from the contamination. The data will be used to determine whether, and to what extent, a threat to human health or the environment exists and to develop and evaluate remedial alternatives (including the no-action alternative). The workplan shall include the following elements:
 - Analysis and summary of the site background and physical setting
 - Presentation of the conceptual site model, including an analysis and summary of the nature and extent of contamination and the additional data needed to complete the site characterization and evaluation of remedial alternative (if needed).
 - Sampling program based on known information such as locations of utilities and structures, historic activities, and existing analytical data. The sampling program shall be designed to document concentration gradients in soil and groundwater and identify source areas, and shall include deep borings to groundwater within five feet west of the eastern boundary retaining wall.
 - Sampling objectives, with sample location, frequency, and designation. The objective of the soil and groundwater sampling is to gain an understanding of the three-dimensional extent and concentrations of PCE (and its environmental breakdown products) in the subsurface, and an understanding of the geologic and hydrologic factors that control the migration of PCE. The workplan shall depict proposed locations on a scaled map and include provisions for surveying sample locations by a licensed professional land surveyor.
 - Sampling equipment and procedures. Appropriate site characterization shall include soil samples from the surface to groundwater and grab-groundwater samples at multiple depths. Soil boring logs shall include location and designation and specific information including depth of borehole, percent recovery, sample depths, depth to groundwater, and geologic observations such as color and texture (Unified Soil Classification System), moisture content, odor, and presence of suspected contaminants. The workplan shall clearly state how soil samples will be selected and what length of soil core will be cut, sealed, and preserved for analysis. It is common practice to select portions of the continuous soil core for analysis that show the greatest field evidence for chemical impact (i.e., have an odor or unusual staining, or have elevated photoionization detector (PID) readings). It is also common practice to collect groundwater samples from zones with sufficient

- groundwater flow from each hydrostratigraphic interval. Exact sample depths shall be determined in the field, based on observation.
 - Sample handling and analysis
 - Quality assurance objectives and procedures
 - Project Schedule with corresponding time to complete individual tasks
2. Additional site history information that is based on historic corporate records and knowledge of personnel with experience dating back to the early years of Walnut Creek Manor. This shall include information and knowledge related to (1) locations and past practices involving the use and storage of chemicals including, in particular, PCE; (2) locations and past practices involving the generation, management, and disposal of hazardous wastes; (3) use of an underground storage tank that was installed in 1963 and removed in 1998 (including maintenance and control of tank system components); and (4) modifications, replacements, and removals of storm drain lines, or other excavation other than minor pavement repairs, within the study area. Site history information shall also include knowledge of persons which include personnel with duties supervising maintenance activities; personnel with grounds, building, appliance repair, and vehicle maintenance responsibilities; and personnel with maintenance supply purchasing responsibilities.

The foregoing information is needed to address the ongoing water quality threat posed by PCE in shallow groundwater. The workplan and site history information required by this Order will help Board staff determine the horizontal and vertical distribution of PCE in the subsurface and evaluate remedial measures, if appropriate. To date, the source area for the release appears to straddle the boundary between your property and Mayhew Center. This information will assist in identifying a source area and may also be used to determine the responsible party for the release to the environment. More detailed information is available in the Regional Water Board's public file on this matter.

Based on Board experience with hundreds of groundwater investigation sites, I expect this workplan to cost less than \$10,000. This cost is reasonable in light of the need to understand the nature and extent of the area contaminated in order to determine what degree of remediation is necessary to protect water quality and public health. The Workplan may propose a phased investigation, such as including a soil-vapor investigation to identify hot-spots for follow-up sampling, and may be prepared by a third party. Because the site characterization process is dynamic and iterative, additional workplans may be needed in the future to incorporate new information and refined objectives for the site. Please consult the Geotracker website (<http://geotracker.waterboards.ca.gov>) for information regarding electronic data submittal. The Global ID Number is SL0601341185. Please submit a paper copy report for staff review and reference file number 07S0183 on all correspondence and reports.

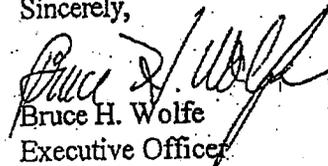
This Order requiring submittal of a report is made pursuant to Water Code Section 13267, which allows the Board to require technical or monitoring program reports from any person who has discharged, discharges, proposes to discharge, or is suspected of discharging waste that could affect water quality. The enclosure provides additional information about Section 13267 requirements. Any extension in the above deadline must be confirmed in writing by Board staff.

Walnut Creek Manor Requirement for Technical Report

6

If you have any questions, please contact Mary Rose Cassa of my staff at (510) 622-2447 [e-mail mcassa@waterboards.ca.gov].

Sincerely,



Bruce H. Wolfe
Executive Officer

Enclosure: California Water Code Section 13267 Fact Sheet



Linda S. Adams
Secretary for
Environmental
Protection

California Regional Water Quality Control Board

San Francisco Bay Region

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Arnold Schwarzenegger
Governor

Fact Sheet – Requirements for Submitting Technical Reports Under Section 13267 of the California Water Code

What does it mean when the regional water board requires a technical report?

Section 13267¹ of the California Water Code provides that "...the regional board may require that any person who has discharged, discharges, or who is suspected of having discharged or discharging, or who proposes to discharge waste...that could affect the quality of waters...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires."

This requirement for a technical report seems to mean that I am guilty of something, or at least responsible for cleaning something up. What if that is not so?

The requirement for a technical report is a tool the regional water board uses to investigate water quality issues or problems. The information provided can be used by the regional water board to clarify whether a given party has responsibility.

Are there limits to what the regional water board can ask for?

Yes. The information required must relate to an actual or suspected or proposed discharge of waste (including discharges of waste where the initial discharge occurred many years ago), and the burden of compliance must bear a reasonable relationship to the need for the report and the benefits obtained. The regional water board is required to explain the reasons for its request.

What if I can provide the information, but not by the date specified?

A time extension may be given for good cause. Your request should be promptly submitted in writing, giving reasons.

Are there penalties if I don't comply?

Depending on the situation, the regional water board can impose a fine of up to \$5,000 per day, and a court can impose fines of up to \$25,000 per day as well as criminal penalties. A person who submits false information or fails to comply with a requirement to submit a technical report may be found guilty of a misdemeanor. For some reports, submission of false information may be a felony.

Do I have to use a consultant or attorney to comply?

There is no legal requirement for this, but as a practical matter, in most cases the specialized nature of the information required makes use of a consultant and/or attorney advisable.

What if I disagree with the 13267 requirements and the regional water board staff will not change the requirement and/or date to comply?

You may ask that the regional water board reconsider the requirement, and/or submit a petition to the State Water Resources Control Board. See California Water Code sections 13320 and 13321 for details. A request for reconsideration to the regional water board does not affect the 30-day deadline within which to file a petition to the State Water Resources Control Board.

If I have more questions, whom do I ask?

Requirements for technical reports indicate the name, telephone number, and email address of the regional water board staff contact.

¹ All code sections referenced herein can be found by going to www.leginfo.ca.gov.

EXHIBIT H



ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

October 12, 2007

Walnut Creek Manor, LLC
Attn: Mr. Milt Eberle
5709 Marconi Avenue, Suite D
Carmichael, CA 95608

Walnut Creek Manor, LLC
Attn: Ms. Marilyn Boswell
1686 Union Street # 306
San Francisco, CA 94123

Subject: Request for Property Access – Walnut Creek Manor Property

Mr. Eberle and Ms. Boswell:

On behalf of Mayhew Center, LLC (“Mayhew Center”), this letter requests permission to access portions of the Walnut Creek Manor property located at 81 Mayhew Way in Pleasant Hill, California. Mayhew Center is requesting this access to enable implementation of a work plan to conduct soil and groundwater investigations pursuant to requirements set forth by the San Francisco Bay Region of the California Regional Water Quality Control Board (SFRWQCB).

The SFRWQCB issued an Order to Mayhew Center on December 14, 2006 that required Mayhew Center to submit a work plan to conduct investigations to further assess the distribution of tetrachloroethylene (PCE) that has been detected in soil and groundwater. In response to that Order, Mayhew Center submitted the: “Scope of Work to Address Data Gaps at the 3301-3341 Vincent Road Property in Pleasant Hill, California,” dated May 30, 2007; and the “Supplement to Scope of Work to Address Data Gaps at the 3301-3341 Vincent Road Property in Pleasant Hill, California,” dated August 31, 2007 (collectively “the Work Plan” [attached]).

The SRWQCB approved the scope of work presented in the Work Plan in a letter to Mayhew Center dated October 3, 2007(also attached). In that letter, the SFRWQCB required Mayhew to submit a report presenting the results of the investigation proposed in the Work Plan.

Implementation of the scope of work in the approved Work Plan will require collection of samples from locations on Walnut Creek Manor property (see attached Work Plan). As a first step to implement the approved Work Plan, Mayhew Center is requesting access to those portions of the Walnut Creek Manor property that will allow for collection of the samples proposed in the Work Plan.

4190 Douglas Boulevard, Suite 200
Granite Bay, California 95746-5964
Offices Nationwide

916.786.0320 m
916.786.0366 f
www.lfr.com



Attached to this letter please find an access agreement form that we have used to facilitate these types of property access agreements. If the attached access agreement is acceptable to you, please indicate your approval by signing both copies, and returning one original signed copy to me.

Please feel free to call me (916) 786-0342 if you have any questions or comments regarding this letter.

Sincerely,

A handwritten signature in cursive script, appearing to read 'J. Scott Seyfried'.

J. Scott Seyfried, P.G., C.HG.
Principal Hydrogeologist
(CA P.G. 7374, CH.G 734)

cc: Katherine Wagner, Downey Brand
Dean Dunivan, Mayhew Center
Elizabeth Allen, SFRWQCB



ATTACHMENT #1

WORK PLAN



ATTACHEMENT #2

ACCESS AGREEMENT



PERMISSION TO ACCESS PROPERTY

The undersigned property owner, or authorized representative of the property owner, _____ ("Owner"), hereby gives permission to the _____ ("the Permittee") and to enter the Owner's property ("the Property") located at:

1. This permission is specifically limited to the performance of certain environmental investigation activities on the Property by Permittee's consultant, LFR Inc. ("Consultant"); a description of which will be provided to the Owner upon written request.

2. The granting of this permission by the Owner is not intended, nor should it be construed, as an admission of responsibility on the part of the Owner for any contamination that may discovered on the Property as a result of these investigation activities.

3. The Permittee or its Consultant and lower-tier subcontractors may enter the Property during normal business hours or at other times upon approval of the Owner. The Permittee and its Consultant agree to not interfere with any ongoing operations of the Owner on the Property.

4. The Consultant will not store any equipment or materials on the Property without Owner's permission. The Property shall be maintained in a neat and orderly manner at all times during access. Upon completion of its investigative services, the Consultant will restore the Property to its original condition to the extent reasonably possible.

5. The Permittee and Consultant will comply with applicable federal, state and local laws and regulations.

6. The Consultant will carry workers compensation, general liability and auto liability insurance at all times during access to the Property. The Permittee, its Consultant and lower-tier subcontractors will be liable for any injury, damage, or loss on the Property caused by their respective negligence or willful misconduct.

Signed by:

Property Owner

Permittee

Consultant



LETTER OF TRANSMITTAL

October 26, 2007

Re: Request for Property Access

The following items are sent via overnight mail service

Description:	No. of Copies
Property access request letter dated October 12, 2007.	1

The item(s) are transmitted:

At your request

For your action

For your review/comment

For your files

For your approval

For your information

Comments:

We have not heard from you regarding our previous request for access, sent to you via U.S. mail on October 12, 2007. As a reminder, attached please find a copy of that original letter.

Thank You.

Sincerely,



Scott Seyfried
Principal Hydrogeologist

cc: Dean Dunivan
Katherine Wagner

EXHIBIT I

Broderick, Gregory

From: Kelly, Brian A. [BAKelly@duanemorris.com]
Sent: Thursday, August 02, 2007 5:18 PM
To: Broderick, Gregory
Cc: Elizabeth Allen; Lloyd, Andrew Thomas
Subject: RE: WCM/Mayhew Center PCE Testing

Dear Mr. Broderick,

Walnut Creek Manor is unable to consider your request to perform work at their property until the Mayhew Center has conducted a proper site investigation of its own property. As you are fully aware, the results of several nearby and proper site investigations have clearly demonstrated it is critical that Mayhew Center conduct an investigation necessary to allow for characterization of Mayhew Center, which despite several formal requests dating to 2004 and a notice of violation has not yet been conducted. Accordingly, Mayhew Center should not delay performing work at its own site through requests to schedule work at Walnut Creek Manor. Once the Mayhew Center site has been characterized by a proper site investigation, Walnut Creek Manor will be in a position to consider any reasonable and necessary requests you may develop after fully evaluating the results of Mayhew Center site investigation.

Brian



Brian A. Kelly
Partner

Duane Morris LLP
One Market, Spear Tower
San Francisco, CA 94105-1104
P: 415.957.3213
F: 415.957.3001

- BIO
- E-MAIL
- WEB SITE
- VCARD

From: Broderick, Gregory [mailto:gbroderick@downeybrand.com]
Sent: Wednesday, August 01, 2007 2:23 PM
To: Kelly, Brian A.
Cc: Elizabeth Allen; Lloyd, Andrew Thomas; Broderick, Gregory
Subject: WCM/Mayhew Center PCE Testing

Dear Mr. Kelly,

Attached is a letter regarding testing. We would appreciate a response as soon as is feasible.

Thanks,

Greg Broderick

Gregory T. Broderick
DOWNEY BRAND
555 Capitol Mall, 10th Floor
Sacramento, CA 95814
P: 916/444-1000
F: 916/444-2100
gbroderick@downeybrand.com
www.downeybrand.com

<<8 1 07 Letter to Brian Kelly_v1.PDF>>

CONFIDENTIALITY NOTICE: This communication and any accompanying document(s) are confidential and privileged. They are intended for the sole use of the addressee. If you receive this transmission in error, you are advised that any disclosure, copying, distribution, or the taking of any action in reliance upon the communication is strictly prohibited. Moreover, any such inadvertent disclosure shall not compromise or waive the attorney-client privilege as to this communication or otherwise. **If you have received this communication in error**, please contact our IS Department at its Internet email address (is@downeybrand.com), or by telephone at (916)444-1000 x6325. Thank you.

Confidentiality Notice: This electronic mail transmission is privileged and confidential and is intended only for the review of the party to whom it is addressed. If you have received this transmission in error, please immediately return it to the sender. Unintended transmission shall not constitute waiver of the attorney-client or any other privilege.

Gregory T. Braderick
gbroderick@downeybrand.com

August 1, 2007

VIA ELECTRONIC MAIL AND U.S. MAIL

Brian A. Kelly
Duane Morris LLP
One Market, Spear Tower, Suite 2000
San Francisco, CA 94105-1104
Email: BAKelly@duanemorris.com

Re: Schedule of Testing for Walnut Creek Manor/Mayhew Center PCE Investigation

Dear Mr. Kelly:

As you are well aware, preliminary investigations have discovered apparent PCE contamination near the border between Walnut Creek Manor's ("WCM") property and Mayhew Center's property. On December 14, 2006, the Regional Water Quality Control Board for the San Francisco Bay Region ("Regional Board") ordered each of our clients to, among other things, submit a report containing a "workplan designed to characterize the soil and groundwater on and beneath" each of our clients' respective properties.

Our client paid several thousand dollars to LFR Environmental Management and Consulting Engineers ("LFR"), and submitted a plan for an environmental investigation on January 26, 2007. The Regional Board accepted Mayhew Center's plan in a letter dated March 21, 2007, and requested a work plan including sampling "designed to determine the most likely source" of the PCE.

LFR submitted that report, on behalf of Mayhew Center, on May 30, 2007, and both you and I have been in communication with the Regional Board about the merits of that report. The workplan is rather detailed, but it essentially proposes phased work, beginning with passive soil vapor testing on each side of the property line. As noted in the report, the proposed testing must take place at the same time on each side of the property line to be effective.

Elizabeth Allen, the Regional Board staff person assigned to our matter, has indicated to each of us in prior communications that she is nearing a decision on whether to approve the workplan that LFR submitted on behalf of Mayhew Center. At 5:42 p.m. on the evening of July 31, 2007, I received an e-mail from Ms. Allen stating:

If a passive soil vapor is proposed, I need to have a schedule of when it will be conducted, when the Water Board will receive the results, and when we will have a proposal for the next step in the investigation.

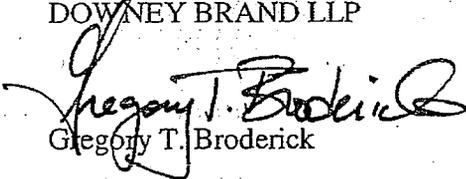
Because we have proposed passive soil vapor testing, and because such testing must take place on each side of the property line as simultaneously as is feasible, we need to coordinate with your client before complying with Ms. Allen's request for a schedule. It is our understanding that testing will take approximately 2-3 consecutive days. Please identify three acceptable dates for when testing can be conducted on your client's property:

August 15-17	September 4-6	September 25-27
August 20-22	September 5-7	September 26-28
August 21-23	September 10-12	
August 22-24	September 11-13	
August 27-29	September 12-14	
August 28-30	September 17-19	
August 29-31	September 24-26	

We would appreciate a response at the earliest possible time, as the Regional Board appears to be awaiting this proposed schedule. We are eager to get through this phase of the investigation and move forward on this matter.

Sincerely,

DOWNEY BRAND LLP


Gregory T. Broderick

867963.1

EXHIBIT J

BRIAN A. KELLY
 DIRECT DIAL: 415.957.3213
 E-MAIL: bakelly@duanemorris.com

www.duanemorris.com

May 5, 2006

VIA EMAIL

Bruce H. Wolfe
 (bwolfe@waterboards.ca.gov.)
 Mary Rose Cassa, R.G.
 (mcassa@waterboards.ca.gov.)
 California Regional Water Quality Control Board
 1515 Clay Street, Suite 1400
 Oakland, CA 94612

NEW YORK
 LONDON
 LOS ANGELES
 CHICAGO
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 PHILADELPHIA
 SAN DIEGO
 SAN FRANCISCO
 BOSTON
 WASHINGTON, DC
 LAS VEGAS
 ATLANTA
 MIAMI
 PITTSBURGH
 NEWARK
 ALLENTOWN
 WILMINGTON
 HARRISBURG
 PRINCETON
 LAKE TAHOE

Re: Vincent Road/Hookston Station—Objections and Comments to April 19, 2006 ERM/UPRR Workplan for Passive Soil Vapor Survey and April 25, 2006 Conditional Approval

Dear Mr. Wolfe and Ms. Cassa:

Walnut Creek Manor can not participate in or allow access to its property to a potentially adverse party, as requested in the April 19, 2006 Work Plan for Off-Site Vapor Survey (Vincent Road Properties) proposed by ERM on behalf of Union Pacific Railroad Company ("ERM/UPRR Work Plan"), which was conditionally approved by your agency on April 25, 2006, before notice to any affected property owner. This letter primarily documents procedural and substantive difficulties that Walnut Creek Manor continues to experience in its dealings with your agency. In sum, your agency routinely fails to provide proper notice, ignores available data and often regulates through knee-jerk reaction, rather than following a cohesive and logical plan of investigation. A separate letter from Walnut Creek Manor's consultant, Dr. Joseph Odencrantz, will be provided that outlines specific technical shortcomings with the ERM/UPRR Work Plan.

At considerable cost, burden and disruption to the senior residents, Walnut Creek Manor has complied with *all* requests for information pursuant to Water Code § 13267. There are no outstanding requests from the Regional Board staff for technical reports that are directed to Walnut Creek Manor, a fact that was confirmed during our February 3, 2006 meeting at your office. Nor is there any rational basis for a responsible regulatory agency to request yet a third round of investigatory activity at the Walnut Creek Manor located at 81 Mayhew Way in Walnut Creek. Walnut Creek Manor will not be bullied by misguided regulatory conduct and will protect its property and constitutional rights to the fullest extent, particularly when the

Bruce H. Wolfe
Mary Rose Cassa, R.G.
May 5, 2006
Page 2

overwhelming and compelling data and historical evidence all points to former electronic manufacturing operations at Mayhew Center as the identified source of PCE contamination in the area of Vincent Road. (See January 13, 2006 Tri-S Report on PCE sources). Moreover, Walnut Creek Manor will seek legal recourse against all responsible parties at the appropriate time.

Walnut Creek Manor has conducted extensive and costly investigations pursuant to 2 Work Plans that were approved by your agency. In addition to approving the Work Plans, your agency was involved in directing the specific locations for the consultant to obtain soil and groundwater sampling. As you know, the investigatory activity conducted by Walnut Creek Manor has included multiple groundwater (at 2 aquifer levels) and soil sampling and analysis. *No contaminants* have been found in the groundwater beneath the Walnut Creek Manor property. Only a small number of shallow soil samples at the property have detected contaminants, and all of the elevated soil sample locations were in close hydrogeologic proximity to the industrial site of a former microprocessor manufacturing operation at Mayhew Center, along the eastern boundary/fence line of Walnut Creek Manor. Consequently, Walnut Creek Manor is not interested in having Union Pacific Railroad "advance the costs" for its paid consultants to employ a "gore-sorbers" vapor "screening tool for identifying the *approximate* limits and relative concentrations of VOCs in soil and ground water." Despite the unsubstantiated claims regarding the value of a "gore-sorbers" vapor probes to determine the presence of contaminants, the Work Plan and your agency ignore that soil and groundwater sampling and analysis already has been conducted at Walnut Creek Manor.¹ The proposed vapor screening adds no useful or relevant data to the existing data from the Walnut Creek Manor investigation.

Moreover, your agency has ignored overwhelming and compelling evidence that the PCE contamination originated from the properties along Vincent Road and not at Walnut Creek Manor. It is undisputed that a former electronic manufacturing plant operated at the precise location where PCE contaminated soil and groundwater has been detected. Moreover, historical documents relating to this plant depict "solvent" tanks and a "waste water collection" sump at the former electronics manufacturing facility. Finally, it is well known that PCE was widely used in the manufacture of microprocessors during the 1970s. (See Tri-S Report Dated January 13, 2006.) Despite this, neither the ERM/UPRR Work Plan nor the Agency's

¹ The ERM/UPRR's Work Plan wrongly implies that use of a screening vapor "gore-sorbers" is somehow warranted because Walnut Creek Manor has refused to comply with Water Board directives. (Specifically, ERM/UPRR Work Plan states that "The Water Board's efforts to require the owners of these various properties, which appear to be the potential source(s) of the PCE, have not been successful (sic)." (at page 2)) The inference that Walnut Creek Manor has not complied with regulatory directives is irresponsible and it is incorrect. In a recent telephone conversation, ERM's consultant confided that he had not carefully reviewed the January 13, 2006 Tri-S report, which concludes that "Walnut Creek Manor is not a source of PCE."

Bruce H. Wolfe
Mary Rose Cassa, R.G.
May 5, 2006
Page 3

Conditional Approval references the former solvent using electronics manufacturing operations or proposes to locate a single soil vapor probe around the perimeter of the former electronics plant, even though historical documents show solvent tanks and a sump along the north and east walls of the building located at 3313-3329 Vincent Road.

It is Walnut Creek Manor's view that further regulatory action directed at Walnut Creek Manor, based upon the current record, would rise to the level of selective and over-zealous regulatory conduct that may be unlawful. Walnut Creek Manor has cooperated and to date has complied with far-reaching regulatory action, which has been and continues to be disproportionately directed toward it. In contrast, there has been no regulatory-approved or other reasonable investigation at the Mayhew Center property (3301-3341 Vincent Road, Pleasant Hill), at which historical electronic manufacturing operations were conducted. Indeed, the owner of Mayhew Center has without consequence ignored your agency's September 27, 2005 Notice of Violation for failure to submit a "workplan to investigate soil and groundwater" at its property.

Walnut Creek Manor has numerous additional objections to the arbitrary, capricious and haphazard manner your agency has conducted itself in connection with the investigation regarding the PCE contamination. The following are but a few recent examples:

(1) Your agency conditionally approved the ERM/UPRR Work Plan relating to activity on private property without any advance notice to the affected property owners. Moreover, despite the publicly available "geotracker" system, which staff repeatedly has described as a filing system to provide the interested public with prompt access to and input regarding investigation activities, the offending ERM/UPRR April 19, 2006 Work Plan was not posted to geotracker until *after* the Work Plan was conditionally approved on April 25, 2006. That your agency approved this Work Plan in only 3 business days is highly unusual. In fact, your agency's conditional approval is dated the same day that Mr. Milt Eberle received via U.S. Mail a copy of the ERM/UPRR Work Plan. (The Work Plan is dated April 19, but the copy to Mr. Eberle was not postmarked until two days later on April 21 and did not arrive until April 25.) It is counter-productive and lacking in due process for a regulatory agency to approve action affecting third party property owners without notice and a reasonable opportunity to be heard.

(2) Your agency has refused to avail itself to enforcement tools with respect to the recalcitrant owner of the former electronics manufacturing industrial complex located at 3301-3341 Vincent Road, currently known as Mayhew Center. Despite assuring representatives of Walnut Creek Manor that an enforcement action regarding Mayhew Center would be on the February 2006 Board agenda if a satisfactory work plan had not been implemented, no action has been taken with respect to the September 27, 2005 Notice of Violation. (See also March 6, 2006 Requirements for Revised Work Plan from Bruce Wolfe to Dean Dunivan.)

Bruce H. Wolfe
Mary Rose Cassa, R.G.
May 5, 2006
Page 4

(3) Your agency previously refused to approve Mayhew Center's February 14, 2006 Work Plan, which proposed minimal soil investigation activity and expressly stated that a revised plan must include groundwater sampling activity in order to satisfy your agency's July 29, 2005 demand that Mayhew Center "investigate soil and groundwater." (See, RWQCB's March 6, 2006 correspondence to Mayhew Center regarding requirements for a revised work plan.) Yet your agency's recent conditionally approved work plan does not include a single soil or groundwater sample. Staff's determination in March 2006 that shallow soil sampling alone at the Mayhew Center was inadequate to answer the numerous questions about soil and groundwater PCE contamination at the Mayhew Center applies equally to the soil vapor proposal articulated by the responsible party at the Hookston Station site (ERM/UPRR). It is critical that prompt action be taken to investigate and characterize the soil and groundwater conditions throughout the Mayhew Center.

(4) This agency has shown a repeated practice of taking action without due notice (or any notice) to affected property owners. For example, in addition to the current issue, on March 6, 2006, your agency responded to Mayhew Center's February 14, 2006 Work Plan, prior to any public notice or posting to geotracker of the proposed work plan. At the earliest possible time after receiving notice, Walnut Creek Manor objected to the process and identified obvious omissions from the agency's outline for a revised work plan. (See March 9, 2006 letter and attachments from this office.) In particular, we noted that the staff demands that Mayhew Center conduct ground water sampling in addition to soil sampling was a step in the right direction, but still was inadequate to properly characterize the scope of environmental impact from historical operations at the Mayhew Center. As documented in the referenced March 9, 2006 letter, the January 13, 2006 Tri-S Report and discussed at length with staff during a February 3, 2006 meeting, historical documents clearly depict solvent tanks and a waste sump at the former electronic manufacturing plant located at 3313-3329 Vincent Road. Despite this evidence, the Mayhew Center work plan proposed no investigation in the area of either the solvent tanks or the waste sump. In telephone conversations, staff acknowledged this shortcoming, but justified ignoring a complete investigation of the entire property in order to obtain preliminary soil and groundwater analysis at Mayhew Center. Regardless of whether failing to locate any sampling activity in the vicinity of historic solvent tanks and a sump was a simple oversight in early March, repeating the same oversight in April in the conditional approval of the ERM/UPRR proposal is highly suspicious. That staff fail to provide adequate notice and ignore key evidence in directing the Vincent Road investigation is most troubling.

(5) The ERM/UPRR conditionally approved work plan demonstrates clear agency bias against Walnut Creek Manor. As discussed above, the agency-endorsed work plan neglects to consider hot historical locations at Mayhew Center; despite this obvious omission, the ERM/UPRR work plan improperly focuses on additional soil vapor locations surrounding the Walnut Creek Manor maintenance building, ostensibly because there had previously been an

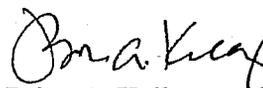
Bruce H. Wolfe
Mary Rose Cassa, R.G.
May 5, 2006
Page 5

underground diesel storage tank located near this building. Nowhere, however, in the ERM/UPRR work plan or staff's April 25, 2006 conditional approval is there an explanation for further sampling activity at a location where prior groundwater (aquifer zones A and B) and soil sample analysis detected no contaminants either upgradient (B-8) or downgradient (B-3 and B-2) of the maintenance building. More troubling, Figure 1 to the ERM/UPRR work plan conceals the fact that the upgradient (B-8) soil and groundwater samplings were clean. Ignoring existing data, the ERM/UPRR Work Plan proposes to place 11 soil vapor sample locations around the maintenance building; in contrast, at Mayhew Center where there are no reliable data, there are exactly 0 sample locations proposed in the vicinity of the solvent tanks or sump locations at the former electronic manufacturing site. This is highly unusual and inconsistent with the work plan's stated purpose of conducting preliminary screening activity to assist in determining impact to groundwater. Your agency's conditional approval of such a disproportionately focused investigation can not be reconciled with the facts.²

(6) Finally, the Tri-S Report dated January 13, 2006, at pages 8-10, identified numerous commercial and light industrial operations with known and/or suspected solvent use in the immediate vicinity of the Vincent Road properties. Although these operations were also in the area upgradient to the Hookston station, the ERM/UPRR Work Plan ignores this data and fails to propose "screening" soil vapor sampling at these other locations, despite the fact that all are upgradient of the Hookston Station. In context, ERM/UPRR's suggestion that the work plan data are necessary to complete the Feasibility Study for the Hookston station site rings false.

In conclusion, Walnut Creek Manor again demands that staff take reasonable and appropriate steps to effectuate a focused investigation to determine soil and groundwater impacts in the vicinity of the former electronics manufacturing operations (primarily at and surrounding 3313-3329 Vincent Road) and other properties at which solvent use is documented and/or likely. Any further efforts to fabricate a basis to suspect that a senior citizen residential area is the source of the PCE contaminants found in the groundwater beneath various former industrial manufacturing operations will not be tolerated.

Sincerely,


Brian A. Kelly

² In addition, missing from consideration is the fact that the UST located near the maintenance building contained only diesel fuel and at no time contained any solvent. Moreover, the UST was properly removed with all necessary regulatory approval and data associated with the removal of the diesel fuel UST confirm that no contamination was present. (See, December 30, 2005 Tri-S report.)

Duane Morris

Bruce H. Wolfe
Mary Rose Cassa, R.G.
May 5, 2006
Page 6

BAK/cwc

cc: Milt Eberle (Via Email: Wgidinc@aol.com)
Brian Bjorklund (Via Email: Brian.Bjorklund@erm.com)
Michael Grant (Via Email: MJGrant@up.com)
Dean Dunivan (Via Email: gizmo94523@yahoo.com)

DM1V630242.1

EXHIBIT K



California Regional Water Quality Control Board

San Francisco Bay Region



Linda S. Adams
Secretary for
Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>

Arnold Schwarzenegger
Governor

Date: **MAR 21 2007**
File No. 07S183 (EA)

Walnut Creek Manor, LLC
Attn: Ms. Marilyn Boswell
1686 Union Street, Suite 306
San Francisco, CA 94123

Walnut Creek Manor, LLC
Attn: Mr. Milt Eberle
Wgidinc@aol.com
5709 Marconi Avenue, Suite D
Carmichael, CA 95608

SUBJECT: Review of Technical Report *Soil and Groundwater Report/Workplan, Walnut Creek Manor, 81 Mayhew Way, Walnut Creek, Contra Costa County* by Tri-S Environmental

Dear Ms. Boswell and Mr. Eberle:

Water Board staff has reviewed the technical report submitted by Walnut Creek Manor, LLC (WCM) on January 26, 2007, titled *Soil and Groundwater Report/Workplan, Walnut Creek Manor, 81 Mayhew Way, Walnut Creek, Contra Costa County*, prepared by Tri-S Environmental. As explained below, I must reject this work plan in its present condition.

WCM was required to submit by January 26, 2007, a work plan to characterize the three-dimensional extent of tetrachloroethene (perchloroethene, or PCE) and its environmental degradation products in soil and groundwater on and beneath your property in an area extending from the eastern property boundary to a line 200 feet west of the eastern property boundary, and between 200 and 500 feet north of Mayhew Way. Based on historical corporate records and knowledge of personnel, the following additional site history information was also required: locations and past practices regarding the use and storage of chemicals and past practices involving the generation, management, and disposal of hazardous wastes.

The work plan was required to contain the following information

- Analysis and summary of site background and physical setting.

Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years

- Conceptual site model and the additional data needed to complete the site characterization.
- A sampling program designed to document concentration gradients in soil and groundwater, including deep borings to groundwater within five feet west of the eastern boundary retaining wall.
- Sampling objectives, sample locations, frequency, and designation.
- Sampling equipment and procedures.
- Sample handling and analysis.
- Quality assurance procedures and objectives.
- Project schedule with corresponding time to complete the individual tasks.

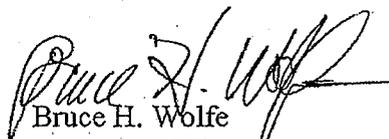
A work plan prepared by Tri-S Environmental was submitted by the required January 26, 2007, date. While the work plan does contain an analysis and summary of the site setting, it does not propose collection of additional soil and groundwater samples within an area extending from the eastern property boundary to a line 200 feet west of the eastern property boundary, and between 200 and 500 feet north of Mayhew Way. Results of previous investigations near the boundary between WCM and Mayhew Center are inconclusive as to the precise location of the PCE source in this area. The required soil and groundwater sampling on WCM property is necessary to assist in identifying the location of the source and to determine the party responsible for the release to the environment.

A separate submittal regarding the additional site history information was provided on January 26, 2007. Water Board staff has reviewed this information, and pending the results of the information to be obtained via the additional soil and groundwater sampling, no additional information is required at this time.

You are in violation of my Section 13267 order dated December 14, 2006. Water Code Section 13268 allows the Board to impose administrative civil liability of up to \$1,000 per violation day for such violations. I urge you to come into compliance as soon as possible.

If you have any questions, please contact Elizabeth Allen of my staff at (510) 622-2332 [e-mail eallen@waterboards.ca.gov].

Sincerely,


Bruce H. Wolfe
Executive Officer

cc: see next page

cc (by email only):

Brian A. Kelly
BAKelly@DuaneMorris.com
Duane Morris LLP
One Market, Spear Tower, Suite 2000
San Francisco, CA 94105-1104

Union Pacific Railroad Company
Attn: Michael J. Grant
mjgrant@up.com
1408 Middle Harbor Road
Oakland CA 94607

Katharine Wagner
kwagner@downeybrand.com
DOWNEY BRAND
555 Capitol Mall, 10th Floor
Sacramento, CA 95814

Mayhew Center, LLC
Attn: Dean Dunivan
3317 Vincent Road
Pleasant Hill, CA 94523
rddunivan@yahoo.com

Paul Andrews
CCCHSD
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4333 Pacheco Boulevard
Martinez, CA 94553

Dan Helix
dc.helix@netvista.net
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Erik Spiess, SWRCB
ESpiess@waterboards.ca.gov

Dorothy Dickey, SWRCB
DDickey@waterboards.ca.gov

Betsy Jennings, SWRCB
BJennings@waterboards.ca.gov