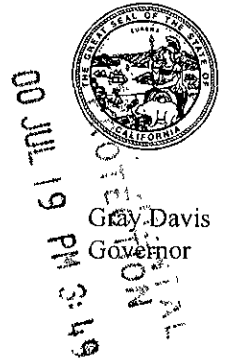




Department of Toxic Substances Control

Winston H. Hickox
Secretary for
Environmental
Protection

Edwin F. Lowry, Director
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, California 94710-2721



July 18, 2000

Mr. Hugh J. Murphy
City of Hayward Fire Department
777 B Street
Hayward, California 94541-5007

Dear Mr. Murphy:

The Department of Toxic Substances Control (DTSC) has completed its review of the soil samples and groundwater data gathered for the 3.4 acre property of the Hayward Area Recreation District (HARD). The data reviewed included "Phase II Environmental Site Assessment - 695 Industrial Parkway, Hayward, California dated June 17, 1991" ~~Results of Phase II Investigation - Hayward Area Recreational District Property~~ (Report) dated June 1, 2000, the June 9, 2000 letter from Geomatrix to the City of Hayward Fire Department summarizing groundwater conditions at the HARD property, and the July 6, 2000 letter from Geomatrix to DTSC clarifying some technical issues regarding soil sampling. The HARD reports addressed the 4.5 acre original total park area, and the 3.4 acre (total park area less 1.1 acre proposed for development as part of the Canterbury Residential Development) property which is planned for park development. This letter summarizes DTSC's comments on the data submitted.

Soil sampling analytical results from the HARD property showed benzo(a)pyrene in two of the samples. One of the samples (GMX-HRD7-1.0) showed PAHs above the US EPA Region IX's residential preliminary remediation goal (PRG). Current procedures require that benzo(a)pyrene equivalency be calculated if polynuclear aromatic hydrocarbons (PAHs) are present. This procedure was completed for the samples which showed the PAHs; calculated levels were found to be typical of what DTSC has seen as soil background levels. Based on these, DTSC has concluded that levels found are within background and that cleanup for PAHs affected soils is not warranted.

Total petroleum hydrocarbons (TPH) as motor oil were detected in one of the shallow soil samples (GMX-HRD6-1.0) at 130 parts per million (ppm). There are no state or federal adopted cancer potency factors or soil cleanup values for TPH other than the California Regional Water Quality Control Board (San Francisco Bay Region, June 21, 1994) value of 1,000 ppm for residential use. Review of the submitted data indicates that the levels found are within acceptable residential cleanup values and no further characterization or cleanup is required for TPH.



CITY OF
HAYWARD
HEART OF THE BAY

August 13, 2000

Mr. Steven Hill, Chief Toxics Cleanup Division
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

CO AUG 16 PM 3:01
LAWRENCE
PROTECTOR

Subject: Case Closure Canterbury Residential Development
Hayward, California

Dear Mr. Hill:

We have submitted the "Results of Phase II Investigation- Hayward Area Recreation District Property" (Geomatrix Consultants, Inc. [Geomatrix], June 1, 2000) to your office describing environmental characterization activities at the Hayward Area in Hayward, California prepared on behalf of the City of Hayward. We have also submitted "Summary of Groundwater Conditions- Hayward Area Recreation District Property" (Geomatrix, June 9, 2000), which summarizes groundwater data available for the site. This information is in addition to the other reports for the adjacent property (Canterbury Residential Development). Sample locations are shown on Figure 1, which now includes sample locations from the initial Phase II conducted by Earth Systems Environmental, Inc. (ESE) as well as Geomatrix's sample locations. The final copy of the ESE Phase II was just recently made available to us.

The site characterization report by Geomatrix indicated that surface soil (approximately 1 foot below ground surface [bgs]) at the site contained low concentrations of total petroleum hydrocarbons as motor oil (TPHmo) at one location, polycyclic aromatic hydrocarbons (PAHs) at three locations, acetone at five locations (possibly due to laboratory contamination), 2-butanone at two locations, isopropyltoluene at four locations, toluene at two locations, 4,4'-DDE at one location. None of the compounds analyzed (TPHmo, PAHs, VOCs, and pesticides) were detected in samples collected approximately 5 feet bgs. Where similar analyses were conducted by ESE in the initial Phase II, the results were consistent.

As indicated by the Department of Toxic Substances Control (DTSC) letter dated July 18, 2000, residual chemicals in soil at the site do not pose a risk to public health for future residential site use. A copy of the DTSC letter is attached. Also, a summary of groundwater data for the site prepared by Geomatrix Consultants, Inc. (letter to Hugh Murphy, City of Hayward Fire Department, June 9, 2000), indicates that the groundwater sample collected at the site and conditions in soil do not indicate the groundwater resource has been impacted by site conditions.

FIRE DEPARTMENT

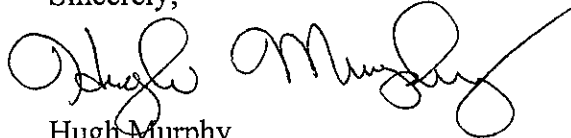
777 B STREET, HAYWARD, CA 94541-5007
TEL: 510/583-4900 • FAX: 510/583-3640 • TDD: 510/247-3340

Mr. Steven Hill
California Regional Water Quality Control Board
August 13, 2000
Page 2

Based on the review of site data and information provided to your office, we are requesting your concurrence, by signing below, that soil and groundwater impacts identified at the unoccupied lots at the site do not pose a significant threat to groundwater resources under current site conditions and that no further investigation, cleanup or monitoring in these areas is required.

If you have any questions, please contact me at (510)583-4924.

Sincerely,

A handwritten signature in black ink, appearing to read "Hugh Murphy", with a long, sweeping horizontal stroke extending to the right.

Hugh Murphy
Hazardous Materials Program Coordinator

Concurrence Signature: _____
Steven A. Hill, Chief Toxics Cleanup Division

Cc: ✓ Susan Hugo – Alameda County Health Care Services
 Denise Tsuji – Department of Toxic Substances Control
 Mark Beskind - SummerHill Homes
 Kim Brandt – LFR Levine*Fricke



Department of Toxic Substances Control



Winston H. Hickox
Secretary for
Environmental
Protection

Edwin F. Lowry, Director
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, California 94710-2721

Gray Davis
Governor

July 18, 2000

Mr. Hugh J. Murphy
City of Hayward Fire Department
777 B Street
Hayward, California 94541-5007

Dear Mr. Murphy:

The Department of Toxic Substances Control (DTSC) has completed its review of the soil samples and groundwater data gathered for the 3.4 acre property of the Hayward Area Recreation District (HARD). The data reviewed included "Phase II Environmental Site Assessment - 695 Industrial Parkway, Hayward, California dated June 17, 1991, "Results of Phase II Investigation - Hayward Area Recreational District Property" (Report) dated June 1, 2000, the June 9, 2000 letter from Geomatrix to the City of Hayward Fire Department summarizing groundwater conditions at the HARD property, and the July 6, 2000 letter from Geomatrix to DTSC clarifying some technical issues regarding soil sampling. The HARD reports addressed the 4.5 acre original total park area, and the 3.4 acre (total park area less 1.1 acre proposed for development as part of the Canterbury Residential Development) property which is planned for park development. This letter summarizes DTSC's comments on the data submitted.

Soil sampling analytical results from the HARD property showed benzo(a)pyrene in two of the samples. One of the samples (GMX-HRD7-1.0) showed PAHs above the US EPA Region IX's residential preliminary remediation goal (PRG). Current procedures require that benzo(a)pyrene equivalency be calculated if polynuclear aromatic hydrocarbons (PAHs) are present. This procedure was completed for the samples which showed the PAHs; calculated levels were found to be typical of what DTSC has seen as soil background levels. Based on these, DTSC has concluded that levels found are within background and that cleanup for PAHs affected soils is not warranted.

Total petroleum hydrocarbons (TPH) as motor oil were detected in one of the shallow soil samples (GMX-HRD6-1.0) at 130 parts per million (ppm). There are no state or federal adopted cancer potency factors or soil cleanup values for TPH other than the California Regional Water Quality Control Board (San Francisco Bay Region, June 21, 1994) value of 1,000 ppm for residential use. Review of the submitted data indicates that the levels found are within acceptable residential cleanup values and no further characterization or cleanup is required for TPH.



Mr. Murphy
July 18, 2000
Page Two

The pesticide 4,4-DDE was detected in one of the soil samples (GMX-HRD1-1.5) at 8.1 ppb which is below the residential PRG level of 1.7 ppm. As discussed in earlier letters from DTSC, Preliminary Remediation Goals (PRGs) are health based screening values established by US EPA's Region IX. If contaminant levels are found below PRG levels, exposure to these contaminants will not cause adverse health effects. Based on the contaminant level detected for the pesticide 4,4-DDE, no cleanup for this contaminant is required by DTSC.

Groundwater conditions at the HARD property were evaluated in the June 1991 report and is also summarized in the June 9 letter reviewed by DTSC. Groundwater at the site was encountered at a depth of 12 feet below ground surface. A groundwater sample collected from a monitoring well installed at the site was analyzed for the presence of TPH as gasoline and gasoline constituents (benzene, toluene, ethylbenzene and total xylenes (BTEX). All groundwater results were below detection limits. In addition, the San Francisco Regional Water Quality Control Board (SFRWQCB) has determined in a March 30, 2000 letter that no additional groundwater monitoring wells would be required.

Based on the soil and groundwater data summarized above for the HARD property, no further action is required by DTSC. Exposure of park visitors or maintenance workers to the soils will not result in adverse health effects.

If you have any questions, please call Annina Antonio at (510)540-3814.

Sincerely,



Barbara J. Cook, P.E., Chief
Northern California
Coastal Cleanup Operations Branch

cc: Susan L. Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 240
Alameda, California 94502-6577

Roger Brewer
San Francisco Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

2101 Webster Street
12th Floor
Oakland, CA 94612
(510) 863-4100 • FAX (510) 863-4141



June 9, 2000
Project 6262.000.0

Mr. Hugh J. Murphy
City of Hayward Fire Department
777 B Street
Hayward, California 94541-5007

Subject: Summary of Groundwater Conditions
Hayward Area Recreation District Property
Hayward, California

Dear Mr. Murphy:

As requested by the City of Hayward, Geomatrix Consultants, Inc. (Geomatrix) has prepared this letter to summarize available information on groundwater conditions at the Hayward Area Recreation District (HARD) property (Figure 1). The HARD property, located at 695 Industrial Parkway in Hayward, California, is approximately 4.5-acres. SummerHill Homes (SummerHill) is in the process of acquiring 1.1 acres of the property for additional residential development; groundwater conditions for this portion of the property were evaluated previously.¹ On HARD's behalf, SummerHill will develop the remaining 3.4 acres as a park (HARD park property). The results described herein address these 3.4 acres.

PREVIOUS ASSESSMENT

Geomatrix reviewed a draft Phase II conducted for 695 Industrial Parkway (the southern section of the subject site) by Earth Systems Environmental, Inc. (ESE) for Hayward Area Recreation Department completed on June 17, 1991. ESE noted the following storage activities at the Park property: 50 truck trailers, 20 roll-off bins (some containing debris), 20 junk cars, 30 junk industrial vehicles, several 55-gallon drums with probable used motor oil, and mounds of soil and household debris on the northeastern third of the property. Numerous areas of stained soil were also observed.

Based on observations and the previous Phase I performed by CERTIFIED, ESE installed three soil borings (TH-1, TH-2, and TH-3) where surface staining was observed along the western property boundary. One monitoring well was installed at the northeast corner of the property. The ESE report did not provide a figure to show the locations of these samples.

ESE sampled soil at 2.5, 5, 10, 15, and 20 feet below ground surface (bgs). Six samples collected in the upper 10 feet (two from each location) were submitted for analysis for total recoverable petroleum hydrocarbons (TRPH) (U.S. EPA Method 418.1). Three soil samples from the shallowest depth (approximately 2.5 feet bgs) at each location were analyzed for total chromium and total lead. Also, the shallowest soil sample from one of the borings

¹ Geomatrix, 2000, Final Soil Sampling Results-Unoccupied Residential Lots, Canterbury Residential Development, April 28.

Geomatrix Consultants, Inc.
Engineers, Geologists, and Environmental Scientists



Mr. Hugh J. Murphy
City of Hayward Fire Department
June 9, 2000
Page 2

(TH-1 at 2.5 feet bgs) was analyzed for the presence of solvents (U.S. EPA Method 8010). TPH was detected at two of the three shallow locations (40 and 80 mg/kg), but was not detected in any of the three deeper samples (approximately 10 feet bgs). Total lead and chromium were detected at concentrations representative of background. Solvents were not detected in the shallow soil sample analyzed. Results are provided in Table 1.

The monitoring well (MW-1) was drilled to a depth of 27 feet, and the well screen installed from 7 to 27 feet bgs (groundwater was encountered at 12 feet bgs). The groundwater sample was analyzed for the presence of TPH as gasoline (TPHg) and gasoline constituents (benzene, toluene, ethylbenzene and total xylenes [BTEX]). All groundwater results were below detection limits for these compounds; however, laboratory data sheets were not available to verify the detection limits. Records of well abandonment for this well were not identified; the well was not visible during the site visit or subsequent sampling activities by Geomatrix at the site.

SITE INVESTIGATION

On May 10, 2000, Geomatrix supervised the advancement of eight soil borings in accordance with the work plan developed for the project.² A 200-foot grid sampling approach was used to provide an aerial distribution of data across the site. Eight soil borings were advanced at the locations shown in Figure 2. Saturated clayey sand was observed at 5 of the 8 locations (GMX-HRD-3, GMX-HRD-4, GMX-HRD-6, GMX-HRD-7, and GMX-HRD-8) at approximately 6.5 to 7.5 feet bgs. Soil samples were collected for laboratory analyses (approximate depths of 1, 5, and 9 feet bgs). Samples from the 1- and 5-foot depth interval were analyzed for total petroleum hydrocarbons quantified as motor oil (TPHmo; U.S. EPA Method 8015 modified, after a silica gel cleanup), polycyclic aromatic hydrocarbons (PAHs; U.S. EPA Method 8270C SIM [selected ion mode]), volatile organic compounds (VOCs; U.S. EPA Method 8260), and organochlorine pesticides (U.S. EPA Method 8081). Samples from the 9-foot depth interval were placed on hold, pending shallow analysis results.

At least one PAH was detected in three of the 8 shallow samples, up to four VOCs were detected in five of the 8 shallow samples, and one pesticide was detected in one of the 8 shallow soil samples. None of the compounds analyzed were detected in the 5-foot depth interval samples; therefore, the 9-foot samples were not analyzed.

² Geomatrix, 2000, Results of Phase II Investigation, Hayward Area Recreation District Property, 695 Industrial Parkway, Hayward, California, June 1.




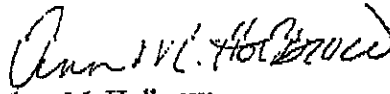
Mr. Hugh J. Murphy
City of Hayward Fire Department
June 9, 2000
Page 3

CONCLUSION

Based on these results, it is unlikely that activities at the HARD property have impacted groundwater.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.


Thomas H. Gavigan, R.G., C.H.G.
Project Hydrogeologist


Ann M. Holbrow
Senior Scientist

THG/AMH/pp
I:\Doc_Sa\6000s\6262\Groundwater Summary\GW Summ (HARD) 0600.doc

Attachments: Table 1 - ESE's Soil and Groundwater Analytical Results for the HARD Park Property

Table 2 - Geomatrix's Soil Analytical Results for Total Petroleum Hydrocarbons as Motor Oil, Pesticides, Volatile Organic Compounds, and Polycyclic Aromatic Hydrocarbons

Figure 1 - Site Vicinity Map

Figure 2 - Site Plan with Boring Locations

cc: Kimberly Brandt - LFR Levine-Fricke
Mark Beskind - SummerHill Homes
Susan Hugo - Alameda County Health Care Services
Denise Tsuji - Department of Toxic Substances Control
Roger Brewer - RWQCB, San Francisco Bay Region



TABLE 1

**ESE's SOIL AND GROUNDWATER ANALYTICAL RESULTS
FOR THE HARD PARK PROPERTY¹**

Cantorbury Residential Development
Hayward, California

SOIL RESULTS

(reported in milligrams per kilograms; mg/kg)

| Sample No. | Depth (feet bgs) | TPH _g | Total Concentration | TPH _h | HVOCs ² |
|------------|---------------------|------------------|------------------------|------------------|--------------------|
| TH-1 | 2.5' | 80 | 22.0 | 42.3 | <0.0005 |
| TH-1 | 10.5' | <20 | NA | NA | NA |
| TH-2 | 1' | 40 | 16.4 | 9.32 | NA |
| TH-2 | 10' | <20 | NA | NA | NA |
| TH-3 | 2.5' | <20 | 18.5 | 8.92 | NA |
| TH-3 | 10' | <20 | NA | NA | NA |

GROUNDWATER RESULTS²

(reported in micrograms per liter; µg/L)

| Sample No. | Depth to Water (feet bgs) | TPH _g | Benzene | Toluene | Ethyl- benzene | Total Xylenes |
|------------|---------------------------------|------------------|---------|---------|-------------------|------------------|
| TH-1 | 9.8 | ND | ND | ND | ND | ND |

Notes:

¹ Earth Systems Environmental Inc., 1991, "Phase II Environmental Site Assessment, 695 Industrial Parkway, Hayward, California," June 17.

² Laboratory data sheet not provided to specify detection limits.

NA – Not analyzed

ND – Not detected

HVOCs – Halogenated volatile organic compounds by U.S. EPA Method 8010.

TPH_g – Total petroleum hydrocarbons as gasoline.

TPH_h – Total recoverable petroleum hydrocarbons by U.S. Method 418.1.

TABLE 2

**GEOMATRIX[®] SOIL ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL,
PESTICIDES, VOLATILE ORGANIC COMPOUNDS, AND POLYCYCLIC AROMATIC HYDROCARBONS¹**
Canterbury Residential Development
Hayward, California

All concentrations are reported in micrograms per kilogram ($\mu\text{g/kg}$), except for TPHmo which is reported in milligrams per kilogram (mg/kg).

| All concentrations are reported in micrograms per kilogram (µg/kg), except for TPHmo which is reported in milligrams per kilogram (mg/kg). | | | | | | | | | | | | | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------|------------------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|----------------------|----------------------------------------------------------|--------------------------|--------------------------|------------------------------|--------------------|----------|-------------------------------|--------------|--------------------------------|--------------|--------|
| Sample ID | TPHmo EPA Method 8015M | 4,4'-DDE EPA Method 8081 | Volatile Organic Compounds EPA Method 8260B | | | | | Polycyclic Aromatic Hydrocarbons EPA Method 8270C SIM | | | | | | | | | | |
| | | | Acetone | 2-Butanone (MEK) | Methylene chloride | p-Isopropyl- toluene | Toluene | Benzo(a) anthracene | Benzo(b) fluoranthene | Benzo(k) fluoranthene | Benzo (g,h,i) perylene | Benzo(a) pyrene | Chrysene | Dibenz (a,h) anthracene | Fluoranthene | Indeno (1,2,3-cd) pyrene | Phenanthrene | Pyrene |
| | | | | | | | | | | | | | | | | | | |
| GMX-HRD1-1.0 | <50 ¹ | NA | 310 ² /278 ¹ | 55 ² /250 ¹ | <30 ² /250 ¹ | 21 ² /110 ¹ | 830/810 ¹ | <50 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD1-1.5 | NA | 8.1 | NA | NA | NA | NA | NA | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD1-5.0 | <50 | NA | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD1-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD2-1.0 | <50 | NA | 118 ² | <50 | <50 | 99 | <5 | 29 | 29 | 34 | 42 | 38 | 45 | 14 | 56 | 28 | 26 | 56 |
| GMX-HRD2-1.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD2-5.0 | <50 | NA | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD2-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD3-1.0 | <50 | NA | 60 ² | <50 | 59 ² | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD3-1.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD3-5.0 | <50 | NA | <50 | <50 | 67 ² | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD3-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD4-1.0 | <50 | NA | <50 | <50 | 73 ² | <5 | <5 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| GMX-HRD4-1.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD4-5.0 | <50 | NA | <50 | <50 | 78 ² | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD4-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD5-1.0 | <50 | NA | 36 ² | <50 | <50 | 7 | <5 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| GMX-HRD5-1.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD5-5.0 | <50 | NA | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD5-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD6-1.0 | 130 | NA | 300 ² | 66 | <50 | 26 ² | 12 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | 76 | <50 | <50 | 76 |
| GMX-HRD6-1.5 | NA | <20 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD6-5.0 | <50 | NA | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD6-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD7-1.0 | <50 | NA | <50 | <50 | 54 ² | <5 | <5 | <50 | 86 | <50 | 63 | 81 | <50 | <50 | <50 | 86 | <50 | <50 |
| GMX-HRD7-1.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRD7-5.0 | <50 | NA | <50 | <50 | 80 ² | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-HRD7-5.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2
GEOMATRIX'S SOIL ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL,
PESTICIDES, VOLATILE ORGANIC COMPOUNDS, AND POLYCYCLIC AROMATIC HYDROCARBONS¹
 Canterbury Residential Development
 Hayward, California

All concentrations are reported in micrograms per kilogram (µg/kg), except for TPHms which is reported in milligrams per kilogram (mg/kg).

| Sample ID | TPHms EPA Method 8015M | 4,4'-DDE EPA Method 8281 | Volatile Organic Compounds EPA Method 8240B | | | | | Polycyclic Aromatic Hydrocarbons EPA Method 8270C.SUM | | | | | | | | | | |
|--------------|---------------------------------|-----------------------------------|------------------------------------------------|---------------------|-----------------------|-------------------------|---------|----------------------------------------------------------|--------------------------|--------------------------|------------------------------|--------------------|----------|---------------------------|--------------|--------------------------------|-------------------------|-----------|
| | | | Acetone | 2-Butanone (MEK) | Methylene chloride | p-Isopropyl- toluene | Toluene | Benzo(a) anthracene | Benzo(b) fluoranthene | Benzo(k) fluoranthene | Benzo (g,h,i) perylene | Benzo(a) pyrene | Chrysene | Dibenz(a,h) anthracene | Fluoranthene | Indeno (1,2,3-cd) pyrene | Phenanthrene | Pyrene |
| | | | | | | | | | | | | | | | | | | |
| GMX-HRDS-1.0 | <SL | NA | <SL | <SL | SL ² | <SL | <SL | <SL | <SL | <SL | <SL | <SL | <SL | <SL | NA | NA | NA | NA |
| GMX-HRDS-1.3 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | <SL | <SL | <SL | <SL | <SL | <SL | <SL | <SL |
| GMX-HRDS-1.0 | <SL | NA | <SL | <SL | SL ² | <SL | <SL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GMX-HRDS-3.5 | NA | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PRGs | — ³ | 1700 | 1,600,000 | 7,300,000 | 8900 | — ² | 520,000 | 520 | 620 | 6200 | 1,700,000 ⁴ | 62 | 4100 | 62 | 2,300,000 | 620 | 12,000,000 ⁵ | 2,300,000 |

Notes:

¹ Only compounds detected are shown in table.

² < = Not detected above laboratory reporting limit indicated.

³ The analyte indicated was found in the blank. A small percentage of the material present may be due to laboratory contamination.

⁴ Sample was analyzed a second time after 10-fold dilution to bring toluene concentration within reporting limits. Results presented after " / " were from diluted sample.

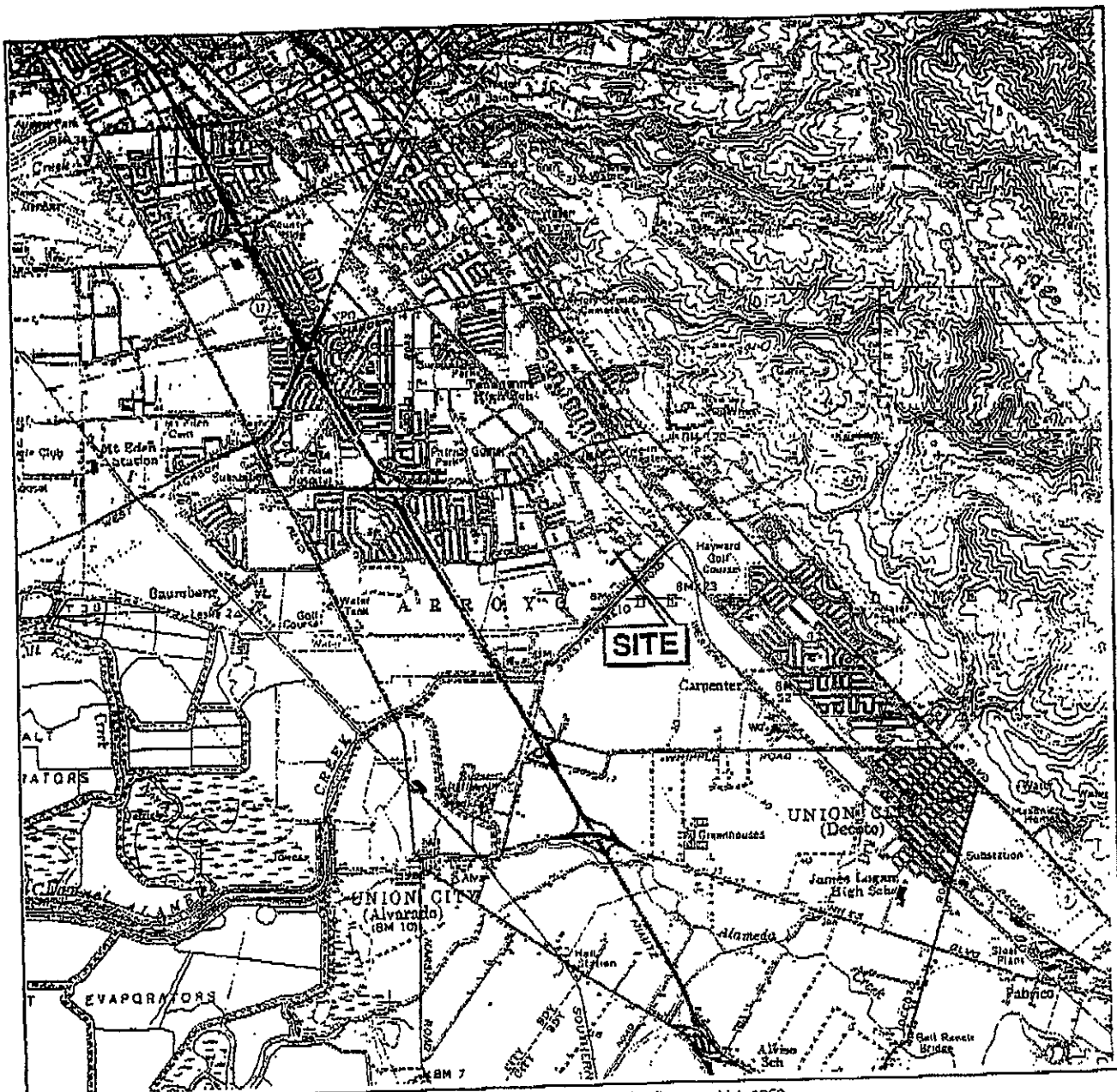
⁵ The analyte indicated was found in the blank. Its presence may be due to laboratory contamination.

⁶ The internal standard associated with the analyte is out of control limits. The reporting limit or reported concentration is an estimate.

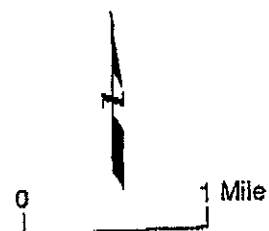
⁷ PRG not available.

⁸ A surrogate PRG was used because a PRG was not available for this compound. The surrogate was selected based on physico-chemical properties:

Acenaphthene for benzo(g,h,i)perylene
 Anthracene for phenanthrene



Base map from U.S. Geological Survey; Hayward Quadrangle (California), 15 Minute series (topographic), 1959.



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SITE VICINITY MAP
 Canterbury Residential Development
 Olympic Avenue
 Hayward, California

Project No.
 6262.000 7

Figure
 1



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