AGENCY DAVID J. KEARS, Agency Director



R02795

ENVIRONMENTAL HEALTH SERVICES

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

May 13, 1998

ATTN: Sir Or Madam

Hayward Community Partner 1001 Parma Way Los Altos CA 94024

RE: Project # 3045A - Type M

at 23836 Saklan Rd in Hayward 94545

Dear Property Owner/Designee:

Our records indicate the deposit/refund account for the above project has fallen below the minimum deposit amount. To replenish the account, please submit an additional deposit of \$396.50, payable to Alameda County, Environmental Health Services, within two weeks of receipt of this letter.

It is expected that the amount requested will allow the project to be completed with a zero balance. Otherwise, more money will be requested or any unused monies will be refunded to you or your designee.

The deposit refund mechanism is authorized in Section 6.92.040L of the Alameda County Ordinance Code. Work on this project will be debited at the Ordinance specified rate, currently \$94 per hour.

Please be sure to write the following identifying information on your check: - project #

- type of project and

- site address

(see RE: line above).

If you have any questions, please contact Amir Gholami at (510) 567-6876.

Sincerely.

Tom Peacock, Manager

Environmental Protection

c: files

DEPARTMENT OF ENVIRONMENTAL HEALTH



Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 December 18, 1991 (415)

F. Rob Robles 175 Bernal Rd. Suite 230 CA 95119 San Jose

Remediation and Confirmatory Sampling Work Plan for RE:

23836 Saklan Avenue, Hayward 94545

Dear Mr. Robles:

I have reveiwed Resna's Work Plan for soil remediation at Saklan Av. with Dr. Ravi Arulanantham of this office. The consultant's proposal to till and blend contaminated surface soils with cleaner subsurface soils is acceptable to this office provided that final soil concentrations are found through sampling and analysis to be below levels of public health concern.

Dr. Arulanantham and I have identified the following concerns and issues regarding the Plan and have discussed them with Madhulla Logan of Resna:

- Resna must submit a revised confirmatory sampling plan showing the number and planned location of samples. As Dr. Arulanantham discussed with Ms. Logan, all soil samples will be discrete or a multiplying factor will be used for composited samples.
- Typographical errors were noted in the calculations presented in the Final Report (November 1991). Corrected equations must be submitted to this office.
- Please notify this office when soil remediation and testing is imminent so that either Dr. Arulanantham or I can be present.

You may call me with any questions at (510)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

Ravi Arulanantham, ACHCSA c: Madhulla Logan, Resna Hugh Murphy, City of Hayward October 29, 1991

John Barbour
Hayward Community Partners
1001 Parma Way
Los Altos CA 94024

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

RE: Draft Final Report for 23836 Saklan Av., Hayward

Dear Mr. Barbour:

At the request of Ms. Mahdulla Logan of Resna, I am summarizing in writing the remaining questions and concerns of this office regarding the risk assessment data submitted for your site. Ms. Logan stated that she would review and address these issues:

1. The Final Report dated October 22, 1991 describes an increased health risk for DDT residues as greater than 1 in 1 million. There are also other organochlorine pesticide residues found at the site for which individual risks have been calculated at less than 1:million, but which add to the cumulative risk. Nevertheless, Resna recommends no remediation be done at the site.

It is the policy of California Environmental Protection Agency, this office, and the City of Hayward that increased human health risks exceeding 1:million be mitigated. Therefore, we require that a remediation work plan to be submitted for the site.

- 2. The Report references the EPA Superfund Public Health Evaluation Manual, EPA/540/1-86/060, October; 1989. Health Risk Assessments must be prepared in accordance with EPA Risk Assessment Guidance for Superfund, Human Health Evaluation Manual, Part A; July, 1989.
- 3. Exposure must be calculated for children as well as for adults.
- 4. The Risk Assessment must not incorporate mitigation factors in calculating exposures. The figure of 809.3 square meters used in calculating inhalation exposure is derived using a mitigation factor described in the original Risk Assessment. The appropriate figure to be used in this calculation is 8093 square meters.
- 5. Use only Upper Confidence Level figures (95%) to calculate chemical concentrations for the Chronic Daily Intake

John Barbour Venture Properties October 29, 1991 Page 2 of 2

calculations. This office does not permit the use of chemical half life calculations in determining pesticide exposure risk. Use the attached formulas in calculating chronic daily intake. The attached sheets also contains standard default parameters to be used in calculating chronic daily intake.

You may call me with any questions or concerns at (510)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

Enclosures

C: Ravi Arulanantham, ACHCSA Mahdulla Logan, Resna Nalini Frush, Resna Hugh Murphy, City of Hayward

Dermal Contact with Chemicals in Soil

Absorbed Dose (mg/kg-day) =

$CS \times CF \times SA \times AF \times ABS \times EF \times ED$

BW × AT

Where:

CS = Chemical Concentration in Soil (mg/kg)

CF = Conversion Factor (10⁻⁶ kg/mg)

SA = Skin Surface Area Available for Contact (cm²/event)

AF = Soil-to-Skin Adherence Factor (mg/cm²)

ABS = Absorption Factor (unitless)

EF = Exposure Frequency (events/year)

ED = Exposure Duration (years)

BW = Body Weight (kg)

AT = Averaging Time (period over which exposure is averaged—days)

Variable Values:

CS: Site-specific measured values

CF: 10-5 kg/mg

SA:

50th Percentile Total Body Surface Area (m²) (EPA 1989d, 1985a)

Age (years)	Male	Female
3 < 6	0.728	0.711
6 < 9	0.931	0.919
9 < 12	1.16	1.16
12 < 15	1.49	1.48
15 < 18	1.75	1.60
Adult	1.94	1.69

50th Percentile Total Body Surface Area (m²) (EPA 1989d, 1985a)

Age (years)	Arms	· Hands	Legs
3 < 6	0.096	0.040	0.18
6 < 7	0.11	0.041	0.24
9 < 10	0.13	0.057	0.31
Adult	0.23	0.082	0.55

These standards are for review and comment only.

Dermal Contact with Chemicals in Soil

- AF: 1.45 mg/cm²--commercial potting soil (for hands; EPA 1989d, EPA 1988b)

 2.77 mg/cm²--kaolin clay (for hands; EPA 1989d, EPA
 - 2.77 mg/cm²-kaolin clay (for hands; EPA 1989d, EPA 1988b)
- ABS: Chemical-specific value (this value accounts for desorption of chemical from the soil matrix and absorption of chemical across the skin)
 - EF: Pathway-specific value (should consider local weather conditions [e.g., number of rain, snow and frost-free days] and age of potentially exposed population)
 - ED: 70 years (lifetime; by convention)
 30 years (national upper-bound time (90th percentile)
 at one residence; EPA 1989d)
 Nine years (national median time (50th percentile) at one residence; EPA 1989d)
- BW: 70 kg (standard adult); EPA 1989d)
 Age-specific values (EPA 1985a, 1989d)
- AT: Pathway-specific period of exposure for noncarcinogenic effects (i.e., ED x 365 days/year), and 70-year lifetime for carcinogenic effects (i.e., 70 years x 365 days/year)

Ingestion of Chemicals in Soil

Intake (mg/kg-day) =

$CS \times IR \times CF \times FI \times EF \times ED$

BW × AT

Where:

CS = Chemical Concentration in Soil (mg/kg)

IR = Ingestion Rate (mg soil/day)

CF = Conversion Factor (10* kg/mg)
FI = Fraction Ingested from Contaminated Source (unitless)

EF = Exposure Frequency (days/years)

ED = Exposure Duration (years)

BW = Body Weight (kg)

AT = Averaging Time (period over which exposure is averaged-days)

Variable Values:

CS: Site-specific measured value

iR: 200 mg/day (children 1 through 6 years old; EPA 1989g)100 mg/day (age groups greater than 6 years old; EPA 1989g)

NOTE: IR values are default values and could change based on site-specific or other information. Research is currently ongoing to better define ingestion rates. IR values do not apply to individuals with abnormally high soil ingestion rates (i.e., pica).

CF: 10-6 kg/mg

FI: Pathway-specific values (should consider contaminant location and population activity patterns)

EF: 365 days/year

ED: 70 years (lifetime; by convention)

30 years (national upper-bound time (90th percentile) at one residence; EPA 1989d)

Nine years (national median time (50th percentile) at one residence; EPA 1989d)

BW: 70 kg (standard adult; EPA 1989d)
16 kg (children 1 through 6 years old, 50th percentile; EPA 1985a)

AT: Pathway-specific period of exposure for noncarcinogenic effects (i.e., ED × 365 days/year), and 70-year lifetime for carcinogenic effects (i.e., 70 years × 365 days/year)

These standards are for review and comment only.

Inhalation of Airborne Chemicals

Intake (mg/kg-day) =

$CA \times IR \times ET \times EF \times ED$

BW × **AT**

Where:

CA = Contaminant Concentration in Air (mg/m³)

IR = Inhalation Rate (m³/hour)

ET = Exposure Time (hours/day)

EF = Exposure Frequency (days/year)

ED = Exposure Duration (years)

BW = Body Weight (kg)

AT = Averaging Time (period over which exposure is averaged-days)

Variable Values:

CA: Site-specific measured or modeled value

IR: 30 m³/day (adult, suggested upper bound value; EPA 1989d)

20 m³/day (adult, average; EPA 1989d)

Hourly rates (EPA 1989d)

Age-specific values (EPA 1985a)

Age-, sex-, and activity-based values (EPA 1985a)

0.6 m³/yr-showering (all age groups; EPA 1989d)

ET: Pathway-specific values (dependent on duration of exposure-related activities) 12 minutes—showering (90th percentile; EPA 1989d)

7 minutes-showering (50th percentile; EPA 1989d)

EF: Pathway-specific value (dependent on frequency of showering or other exposure-related activities)

ED: 70 years (lifetime; by convention)

30 years (national upper-bound time (90th percentile) at one residence; EPA 1989d)

Nine years (national median time (50th percentile) at one residence; EPA 1989d)

BW: 70 kg (standard adult; EPA 1989d) Age-specific values (EPA 1985a, 1989d)

AT: Pathway-specific period of exposure for noncarcinogenic effects (i.e., ED × 365 days/year), and 70-year lifetime for carcinogenic effects (i.e., 70 years × 265 days/year)

These standards are for review and comment only.

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

June 10, 1991

F. Rob Robles Venture Properties 9970-A Palm Court Morgan Hill CA 95037

RE: Risk Assessment and Addendum for 23836 Saklan Av., Hayward

Dear Mr. Robles:

I have reviewed the Revised Risk Assessment submitted by Exceltech for the site of your proposed residential development. This office will require clarification on the following issues prior to accepting the Risk Assessment:

- 1. The revision provided additional information concerning the inhalation hazard posed by each of the identified contaminants. However, the estimated exposure levels for inhalation have not been combined with the oral and dermal exposure levels to give a total exposure level for each contaminant. The Risk Assessment must include the **combined** estimated exposure levels for **each** contaminant for oral, dermal, and inhalation routes of exposure.
- 2. An issue that has been clarified recently with Exceltech is that of acceptable risk levels. It is the policy of the Department of Health Services, the City of Hayward, and this agency to use a 1:million increased health risk criteria for residential site remediations. The Risk Assessment must:
 - a) set forth soil concentrations that represent a 1:million increased risk level for each of the contaminants present;
 - b) specify the level at which each contaminant has been shown through soil analysis to be present:
 - c) calculate combined oral, dermal and inhalation estimated exposure levels.

Existing contaminant levels must be compared to soil levels that represent an increased health risk of 1:million. Further

F. Rob Robles Venture Properties June 10, 1991 Page 2 of 2

remediation at the site would be necessary if existing soil levels exceed those calculated to represent an increased health risk of 1:million.

The deposit submitted to this office for oversight of investigation and remediation activities has been exhausted. Please submit an additional deposit of \$1500.00 to cover past and future costs pertaining to this case. An accounting sheet detailing time spent is enclosed. You may call me with any questions or concerns at (415)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

Camela J. Evans

c: Jeff Willett, Exceltech
Norm Riley, DHS
Hugh Murphy, City of Hayward

AGENCY Pirector

DAVID J. KEARS, Agency Director

March 14, 1991

F. Rob Robles Venture Properties 9970-A Palm Court Morgan Hill CA 95037 DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

RE: Pesticide Containing Soils at 23836 Saklan Av., Hayward

Dear Mr. Robles:

I am writing to follow up on meetings and conversations I have had with Dan Mercer of Exceltech regarding the site of your proposed residential development. We have worked toward clarifying a number of issues over the past few weeks, and Mr. Mercer has been instrumental in obtaining useful background information.

In order for this agency to properly evaluate what risks, if any, are posed to public health by the pesticide levels on site, additional information will be needed. In my telephone conversation with Mr. Mercer today, I outlined the following requirements for investigation of pesticide contamination at the site:

- 1. You must provide a written description of the manner in which your soil sampling activities have met or will meet a 95% confidence level that the site has been sampled in a representative manner. Thus far, 4 discrete samples have been taken from the central portion of the property, where a greenhouse stood as of fall, 1990. These were followed by a set of 24 discrete samples combined into six composite samples. The second set was taken from an area that covered perhaps two thirds of the property.
- 2. A formal written health risk assessment must be prepared by a qualified person that addresses, at a minimum:
 - a. Routes of exposure to onsite contaminants, taking into consideration oral, dermal, and inhalation exposures to the soil for construction personnel, future residents, and other persons who might be affected by pesticide residues in soils at the site.

F: Rob Robles Venture Properties March 14, 1991 Page 2 of 2

Section 22-12705, Title 26 of the California Code of Regulations, specifies regulatory levels deemed to pose no significant health risk for number of chemicals, including some of those found to be present at your site. Where no regulatory level for a specific contaminant is listed in section 22-12705, the risk assessment must specify the level of no significant risk.

- b. The manner in which any significant health risks identified by the risk assessment will be mitigated.
- 3. The full lateral and vertical extent of contamination must be investigated and remediated to levels set within the accepted risk assessment.
- 4. You must provide complete information about any onsite wells. Please supply data concerning well age, construction and depth, and any available sampling results.

A few months ago, we discussed County versus Department of Health Services overview of your site investigation/remediation. At that time, I consulted with Martita Jeung of DHS, who advised that, regardless of which agency performs direct oversight, the course of your investigation should parallel the process outlined in the DHS publication titled Interim Guidance for Preparation of a Preliminary Endangerment Assessment Report dated June, 1990. I have provided you with a copy of the section of this document listing the elements that a Preliminary Endangerment Assessment Report should address.

The deposit submitted to this office for oversight of investigation and remediation activities has been exhausted. Please submit an additional deposit of \$500.00 to cover future costs pertaining to this case.

You may call me with any questions or concerns at (415)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

c: Dan Mercer, Exceltech Martita Jeung, DHS Hugh Murphy, City of Hayward Richard Hiett, Regional Water Quality Control Board

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

January 16, 1991

F. Rob Robles Venture Properties 9970-A Palm Court Morgan Hill CA 95037

RE: Remediation of Pesticide Contaminated Soils at 23836 Saklan Av., Hayward 94545

Dear Mr. Robles:

I am writing to follow up on the January 14, 1991 meeting involving myself, Hugh Murphy with the City of Hayward, and Tim Loeb, Jeff Willett, and Allen Lund of Exceltech. I presented the following items as requirements of this office for site investigation and remediation:

- 1. A risk assessment must be prepared for the site in order to determine remediation levels for any known contaminants on site. These levels must be based upon an increased human health risk of no greater than one per million.
- 2. Soils that exceed Title 22 Total Threshold Limit Concentrations will not be allowed to remain on site over 90 days unless they are undergoing remediation.
- 3. The full lateral and vertical extent of contamination must be investigated and remediated to levels set by the Risk Assessment.
- 4. Contaminated surface soil must be scraped, stockpiled, and tested to establish contaminant levels in order to determine proper disposal or treatment.
- 5. You must provide additional information about any onsite wells. Please supply data concerning well construction and depth, and any available sampling results.

You must submit a written work plan to this office describing any further investigation of the site, planned remediation steps, disposition of any contaminated soil to be removed from the site, and

F. Rob Robles Venture Properties January 16, 1991 Page 2 of 2

your timetable for completion of these activities. I will expect this work plan to be submitted by February 28, 1991. Your plan must be reviewed and accepted by this office before work begins. You may call me with any questions or concerns at (415)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

Juans

c: Richard Hiett, RWQCB Howard Hatayama, DHS Hugh Murphy, City of Hayward Timothy Loeb, Exceltech

DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621

(415)

November 16, 1990

F. Rob Robles Venture Properties 9970-A Palm Court Morgan Hill CA 95037

RE: 23836 Saklan Av., Hayward 94545

Dear Mr. Robles:

I have reviewed the soil sampling report (dated 10/30/90) and the proposed sampling plan (dated 11/8/90) by CHIPS Environmental Consultants. On November 8, we discussed the need for more complete soil sampling at the site. CHIPS then supplied the sampling plan and has proposed sampling today. I discussed the plan this morning with CHIPS, and specified the following changes and additions be made:

- 1. Clarify which discrete samples will be composited: I made pen and ink changes to the sampling map reflecting how individual samples will be grouped for analysis. I specified that all compositing must be done in the laboratory rather than in the field. I also explained that composite sample results are interpreted on a "worst case" basis; it is assumed that all of the contamination found among the discrete samples may have come from a single hot spot, rather than that the all discrete samples contain the same average value.
- 2. Samples must be taken within a 6 inch, driven brass tube beginning at a minimum soil depth of 4-6 inches. Soil would then be sampled from depths ranging from 4 to 12 inches.

I also have the following concerns and questions regarding the site and require that you address each of these concerns in writing:

1. The results of the first round of sampling indicate that the tested soil is contaminated above regulatory levels that designate a substance as hazardous waste. As Mark Chips recommended in his sampling report, this and any other similarly contaminated surface soil must be scraped, stockpiled, and retested. You must establish contaminant levels in this surface soil in order to determine proper disposal or treatment.

You are also required to take samples from the surface of the newly exposed soil beneath contaminated areas in order to either confirm that all contaminated soil has been removed or to begin

F. Rob Robles
Venture Properties
November 1990
Page 2 of 2

exploring the full depth and breadth of contamination. You will need to submit a written sampling plan to this office that includes the following information:

-number of samples to be taken

-proposed locations of samples

-description of sampling protocol

This plan must be reviewed and approved by this office before work begins.

2. I will need more information about the domestic well located a few feet to the east of the greenhouse, and any other onsite wells. Please provide information about well construction and depth, and any available sampling information.

In order to cover our costs for past and future review of this matter, please submit a check, payable to Alameda County, for \$500.00. The Trident Trucklines property account (23724 Saklan Av.) will be maintained separately unless you direct otherwise. You may call me with any questions or concerns at (415)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

wans

c: Richard Hiett, RWQCB Howard Hatayama, DHS Hugh Murphy, City of Hayward Mark Chips, CHIPS Environmental Consultants November 7, 1990

F. Rob Robles Venture Properties 9970-A Palm Court Morgan Hill CA 95037

RE: 23836 Saklan Av., Hayward 94545

Dear Mr. Robles:

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

I have reviewed the soil sampling results and report by CHIPS Environmental Consultants. As we discussed today, I have the following concerns and questions regarding the site and require that you address each of these concerns in writing:

- 1. Please provide additional site history information for the referenced address so that we can evaluate whether all potential contamination problems at the site are being looked into. The site history should include information about the past uses and activities at the site. Of particular interest in this case would be information about the number and location of all former greenhouses on the property, plants grown in the greenhouses, and types of pesticides used. It should include a description of land use previous to the time the greenhouses were erected, if such information is available. In the future, please submit site history information, along with a sampling plan, before beginning investigative work on any parcel to be developed.
- 2. The levels of DDT, DDE, and DDD and other contaminants indicate that the soil on the floor of the former greenhouse is contaminated above regulatory levels that designate a substance as hazardous waste. As Mark Chips recommended in his sampling report, this surface soil must be scraped, stockpiled, and retested. You must establish contaminant levels in this surface soil in order to determine proper disposal or treatment.

You are also required to take samples from the surface of the newly exposed soil in order to either confirm that all contaminated soil has been removed or to begin exploring the full depth and breadth of contamination. You will need to submit a written sampling plan to this office that includes the following information:

- -number of samples to be taken
- -proposed locations of samples
- -description of sampling protocol

F. Rob Robles Venture Properties November 7, 1990 Page 2 of 2

This plan must be submitted and reviewed by this office. As for your plans to do further sampling on November 8, it is difficult for me to gauge the value of this activity without complete site history information and a sampling plan. You may proceed, however, keep in mind that the value of any samples you take on November 8 may be limited.

3. I will need more information about the domestic well located a few feet to the east of the greenhouse, and any other onsite wells. Please provide information about well construction and depth, and any available sampling information.

In order to cover our costs for past and future review of this matter, please submit a check, payable to Alameda County, for \$500.00. The Trident Trucklines property account (23724 Saklan Av.) will be maintained separately. You may call me with any questions or concerns at (415)271-4320.

Sincerely,

Pamela J. Evans

Hazardous Materials Specialist

C: Richard Hiett, RWQCB Howard Hatayama, DHS Hugh Murphy, City of Hayward Mark Chips, CHIPS Environmental Consultants