

SENT 10-22-99  
including epl

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

002706

ENVIRONMENTAL HEALTH SERVICES

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

October 19, 1999

Sue Shaffer  
Greystone Homes  
920 Hillview Court, Ste. 280  
Milpitas, CA 95035

STID: 6616

Re: Case Closure of Western Garden Nursery, located at 28191 Hesperian Blvd., Hayward, CA

Dear Ms. Shaffer,

This letter confirms closure certification for the above referenced site.

The site is a 4.1-acre parcel located on the eastern side of Hesperian Boulevard across from Catalpa Way at an elevation of 20 feet above mean sea level. The site is bounded on the north, west, and south by residential developments and on the east by Hesperian Boulevard. A high school, a small service station, and several residences are located on the eastern side of Hesperian Boulevard just opposite the subject site.

HARZA Engineering Company of California (HARZA) conducted a Phase I Preliminary Site Assessment for the site in February 1998. The Phase I assessment revealed that the site had been used for retail nursery operations and insecticide manufacturing from the 1960s to the 1970s. Prior to the nursery, a small dairy and associated barns were present on the southern portion of the site. The two greatest environmental and human health concerns at the site were the pesticide contamination, associated with the former insecticide manufacturing operations, and the petroleum contamination associated with the underground storage tank that was used to fuel equipment at the former dairy.

In February 1998, HARZA conducted a shallow soils investigation at the site to determine whether pesticide concentrations resided in the soil. Fourteen soil samples (S-1 through S-10 and PM-1 through PM-4) were collected from 1- and 3-feet below ground surface (bgs) across the site and analyzed for organochlorine pesticides, polychlorinated biphenyls, and arsenic, lead, and mercury. Analysis of the samples identified levels of dieldrin, chlordane, and DDT exceeding residential Preliminary Remediation Goals (PRGs) threshold values, established by Region IX United States Environmental Protection Agency.

In response to the observed pesticide contamination, additional soil samples were collected from the site on March 31, 1998. Twenty-four soil samples were collected from eight different locations (HA01 through HA08) from depths of 1-, 3-, and 5-feet bgs, and analyzed for organochlorine and organophosphorus pesticides and chlorophenoxy herbicides. Analysis of these samples identified dieldrin exceeding residential PRGs at all eight sampling locations; chlordane exceeding residential PRGs at five of the locations; and DDT exceeding residential PRGs at one of the sample locations.

Sue Shaffer  
Re: 28191 Hesperian Blvd.  
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Mitigation of this pesticide contaminated soil involved overexcavation and removal of soil in the areas containing the highest contaminant concentrations, as well as soil mixing to a depth of approximately 2.5-foot bgs in the western portion of the site. Between February 5, 1999 and May 10, 1999, overexcavation activities were conducted down to 3- to 6-foot bgs. Verification soil samples collected from the overexcavated areas identified some residual concentrations of dieldrin above PRG levels. The excavated soils were disposed of off site at Chemical Waste Management, Kettleman City, California in June 1999. Soil blending and mixing activities were conducted on the western portion of the subject site on April 16, 1999 and May 10, 1999. Subsequently, additional blending was conducted as part of construction grading activities which consisted of the transference of clean soil from the eastern section of the site and off site to the western section of the site. After the soil blending and grading activities, confirmatory soil samples were collected and analyzed for dieldrin and chlordane. The resulting site average of dieldrin was 0.033ppm and 0.109ppm for chlordane, which this office determined would not pose a threat to human health. It was also confirmed through a risk assessment, that the remaining pesticide concentrations would not pose a human-health threat during any future construction activities at the site.

In order to determine whether groundwater had been impacted by pesticides, two soil borings were installed at the site on August 12, 1999, and a "grab" groundwater sample was collected from each of these locations and analyzed for organochlorine pesticides. Analysis of these samples identified 0.68ppb dieldrin and 0.114ppb 4,4'-DDT. The dieldrin concentration exceeded the current California drinking water Maximum Contaminant Level (MCL) of 0.005ppb. There is no established MCL for DDT, however, the DDT concentrations did not exceed the PRGs threshold value of 0.2ppb for drinking water. Due to the levels of dieldrin in the groundwater, Alameda County requested that the site confirm whether the two nearby irrigation wells (located at 28302 Capitola St. and 2473 Cabrillo Drive) and one domestic well (located at 29821 Hesperian Blvd.) were currently in use. HARZA conducted a well survey, and determined that the two irrigation wells were no longer in use, and that it appeared that the domestic well had been destroyed during the construction of the new Kaiser Permanente medical office. Therefore, it is unlikely that groundwater will be used as drinking water and pose a threat to human health.

In May 1998, as part of investigations at the site, a magnetometer survey conducted in the southern portion of the site identified an underground storage tank (UST). Six borings (T-1 through T-6) were installed around the UST, which is thought to have been used to fuel equipment at the former dairy farm. Soil and groundwater samples were collected from these borings and analyzed for TPH as gasoline (TPHg), TPH as diesel (TPHd), Methyl Tertiary Butyl Ether (MTBE), total lead, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Analysis of the soil samples identified up to 76 parts per million (ppm) TPHg, 300ppm TPHd, 0.07ppm benzene, 0.005ppm toluene, 0.51ppm ethylbenzene, 0.53ppm total xylenes, and 14ppm total lead. Analysis of groundwater samples identified up to 11,000 parts per billion (ppb) TPHg, 1,400ppb TPHd, 110ppb benzene, 12ppb toluene, 800ppb ethylbenzene, and 320ppb total xylenes. No dissolved lead was identified in groundwater, and no MTBE was identified in either soil or groundwater samples. The benzene concentrations identified in soil and groundwater were

Sue Shaffer  
Re: 28191 Hesperian Blvd.  
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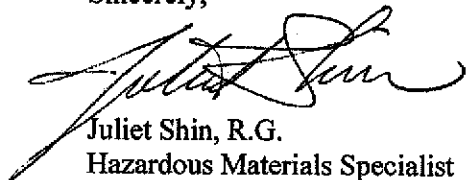
below the residential human-health protective threshold values for a 10-5 risk, given in the Tier 1 table of the American Society for Testing and Materials' Risk-Based Corrective Action guidelines (ASTM RBCA E 1739-95).

The 550-gallon UST was removed from the site on February 10, 1998. A small hole was noted in the north end of the tank during the removal. Analysis of one soil sample, TX-1, collected from below the UST identified TPHg, TPHd, BTEX, and MTBE. Consequently, on March 02, 1999, the tank pit was overexcavated to a depth of approximately 12-feet bgs, and up to 15-feet radially around the former UST. Upon completion of overexcavation activities, five confirmation soil samples were collected from the bottom and sidewalls of the excavation pit. These samples were analyzed for TPHg, Oil and Grease, BTEX, MTBE, chlorinated hydrocarbons, and total lead. Analysis of these samples did not identify any contaminants, other than low levels of Oil & Grease, and the extent of soil contamination associated with the former UST was considered to be remediated.

Considering the above information, the site does not currently appear to be posing a threat to human health or the environment. Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the pesticide contamination or the former underground storage tank is required.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin, R.G.  
Hazardous Materials Specialist

Cc: Mark Litzau  
Harza Engineering Company  
425 Roland Way  
Oakland, CA 94621

Hugh Murphy  
City of Hayward Fire Dept.  
777 B Street  
Hayward, CA 94541

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

R02706

ENVIRONMENTAL HEALTH SERVICES

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

September 22, 1999

Sue Shaffer  
Greystone Homes  
920 Hillview Court, Ste. 280  
Milpitas, CA 95035

STID: 6616

Re: Western Garden Nursery, located at 28191 Hesperian Blvd., Hayward, CA

Dear Ms. Shaffer,

This office has reviewed HARZA Engineering Company's (HARZA) August 20, 1999 Human Health Risk Assessment report, and the subsequent September 14, 1999 and September 21, 1999 revised Human Health Risk Assessment reports. This office has also reviewed the September 14, 1999 letter from HARZA summarizing information on the two irrigation wells and one domestic well located in the vicinity of the site. Based on HARZA's statements that these wells are no longer in use, the groundwater contamination below the above site does not appear to be a drinking water threat, and no groundwater samples will need to be collected from these wells.

Based on our review of the September 21, 1999 revised risk assessment, this office is requesting that a letter addendum to the report be submitted providing the parameters used to calculate the "NAFsamb" value, and an explanation as to why the particulate exposure pathway was not calculated. This revision should be submitted for our review within 30 days of the date of this letter (i.e., by October 20, 1999).

Lastly, our records indicate the deposit/refund account for the above project has fallen below the minimum deposit amount. Based on our file information, one check for \$1,000.00 was submitted to our office on August 11, 1999, \$100.00 of which automatically goes to administrative overhead. The remaining \$900.00 (i.e., equivalent to 9 hours) has gone to the following:

- My review of the files;
- Research into pesticide threshold values;
- Meeting with Christophe Collet, HARZA, on July 29, 1999;
- Writing the July 29, 1999 County letter;
- Review of HARZA's August 4, 1999 response to the County's July 29, 1999 letter;
- Meeting with Mark Litzua, HARZA, and Christophe Collet, HARZA, on August 5, 1999;
- Numerous discussions with Hugh Murphy, City of Hayward, and Derek Lee, San Francisco Bay-Regional Water Quality Control Board on August 04, 1999 through August 06, 1999 to establish acceptable requirements for closure of the site;
- Writing the August 5, 1999 County letter;

Sue Shaffer  
Re: Western Garden Nursery  
September 22, 1999  
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- Numerous phone conversations with Mark Litzua, HARZA, from July through September 1999, to discuss the required work and risk assessment issues;
- Writing the August 6, 1999 letter;
- Reviewing HARZA's August 12, 1999 and August 20, 1999 reports;
- Review of the August 20, 1999, September 14, 1999, and September 21, 1999 Human Health Risk Assessments and attached cover letters.

To replenish the account, please submit an additional deposit of \$700.00 (i.e., equivalent to 6 hours of oversight after 1 hour is subtracted for administrative overhead) to cover the preparation of this letter; my review of the addendum to the Human Health risk assessment, with time allotted to discuss any revisions with the HARZA consultants; and the preparation of a case closure 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.

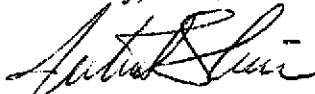
The deposit/refund mechanism is authorized in Section 6.92.040L of the Alameda County Ordinance Code. Work on this project will be debited at the Ordinance specified rate, currently \$100 per hour.

Please make the check payable to Alameda County, Environmental Health Services, and please be sure to write the following identifying information on your check:

project #6968A/ Stid #6616  
type of project (SLIC), and  
site address (28191 Hesperian Blvd., Hayward)

Thank you for your cooperation. If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin, R.G.  
Hazardous Materials Specialist

Cc: Mark Litzau, HARZA Engineering Company, 425 Roland Way, Oakland, CA 94621

Hugh Murphy, City of Hayward Fire Dept., 777 B Street, Hayward, CA 94541

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



HFD  
PO 2706

August 26, 1999

Sue Shaffer  
Greystone Homes  
920 Hillview Court, Ste. 280  
Milpitas, CA 95035

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

STID: 6616

Re: Groundwater sampling and risk assesement for Western Garden Nursery, located at  
28191 Hesperian Blvd., Hayward, CA

Dear Ms. Shaffer,

This office has reviewed Harza Engineering Company's (HARZA) August 20, 1999 Groundwater Sampling Results report providing the analytical results for the groundwater sample collected from the above site on August 12, 1999. Analysis of the groundwater sample identified 0.68 parts per billion (ppb) dieldrin and 0.114ppb 4,4-DDT. The dieldrin concentration exceeded the current California drinking water Maximum Contaminant Level (MCL) of 0.005ppb. There is no established MCL for DDT, however, the DDT concentrations did not exceed Region IX Environmental Protection Agency's Preliminary Remediation Goals (PRGs) for DDT in tap water of 0.2ppb.

Per the County's July 29, 1999 letter, the County's preliminary MapInfo database search identified two irrigation wells and one domestic wells in proximity to the site. The listed addresses of the two irrigation wells are: 1) 28302 Capitola Street; and 2) 2473 Cabrillo Drive. The listed address of the domestic well is 29821 Hesperian Blvd. Due to the fact that the dieldrin concentrations on site are exceeding drinking water standards, this office is requesting that you confirm the locations of these wells; determine whether they are located downgradient and/or close enough to the site to possibly be effected by these dieldrin concentrations; and confirm whether any of these wells are currently being used for drinking water purposes. This information should be submitted to this office for review. If wells located in proximity to the site's dieldrin contaminant plume are being used for drinking water, this office will require that these wells be sampled for dieldrin.

This office is currently in the process of reviewing HARZA's August 20, 1999 risk assessment addressing the Construction Worker scenario. I contacted Mark Litzau on August 26, 1999 with a list of comments and questions on the risk assessment, and am awaiting a written response.

Thank you for your cooperation. If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin, R.G.  
Hazardous Materials Specialist

ALAMEDA COUNTY  
HEALTH CARE SERVICES

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DAVID J. KEARS, Agency Director



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ENVIRONMENTAL HEALTH SERVICES

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

August 5, 1999

Sue Shaffer  
Greystone Homes  
920 Hillview Court, Ste 280  
Milpitas, CA 95035

STID: 6616

Re: Required investigations at Western Garden Nursery, located at 28191 Hesperian Blvd.,  
Hayward, CA

Dear Ms. Shaffer,

This office has read your response to our July 29, 1999 letter, which was prepared by HARZA Engineering Company (HARZA) and dated August 4, 1999. You have argued that it is not likely that the groundwater has been contaminated with pesticides at the above site due to the fact that groundwater is located at 7- to 9-feet below ground surface (bgs), and that the pesticide contamination is "limited to the top five feet of soil in the areas of highest pesticide contamination, and to the top three feet in the surrounding areas." However, the vertical extent of soil contamination in Borings S-1, S-3, S-5, S-6, S-7, S-8, and S-9 was never defined. These borings were only sampled down to 3-feet bgs, and the analytical results from these soil samples identified concentrations exceeding the Preliminary Remediation Goals (PRGs) of the Region 9 U.S. Environmental Protection Agency. I have spoken to a number of representatives from the San Francisco Bay-Regional Water Quality Control Board (RWQCB), which is the agency that oversees the protection of our States's groundwater, and they have agreed that at least one "grab" groundwater sample should be collected from downgradient of the observed contamination for the following reasons:

- The vertical extent of soil contamination throughout the site was not defined beyond 3-feet bgs in some areas, due to the fact that HARZA was initially solely addressing potential contact hazards;
- Groundwater at the site has been noted to be as shallow as 7-feet bgs;
- There is one irrigation well and one domestic well that were noted on our MapInfo Database within 500 feet of the site, and another irrigation well that was located ~800 feet northwest of the site. Additionally, this office has no information on whether the on-site water well was destroyed. If it was destroyed, you are required to submit a copy of the well destruction permit to this office; and
- The site was used for manufacturing insecticides between the early 1960s and early 1970s.

Although you state that a Risk Management Plan (RMP) is not required due to the fact that "site mitigation activities have effectively remediated all soil contamination at depths greater than 3 feet," the vertical extent of the observed pesticide contamination was not delineated throughout

Sue Shaffer  
Re: 28191 Hesperian Blvd.  
August 5, 1999  
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the site, as stated above. Due to the potential for contact with any residual contamination exceeding PRG levels at depth, this office is requiring that an RMP be prepared. This RMP does not have to be filed with the Deed, however, it will be filed in Alameda County's public records. The RMP must state that a Health and Safety Plan will be prepared when and if excavation is conducted at the site below 3-feet bgs.

HARZA has calculated the average concentrations for Dieldrin and Chlordane within the upper 3 feet of soil to be 0.033 parts per million (ppm) and 0.109ppm. These averages do not appear to present a contact hazard or an environmental hazard.

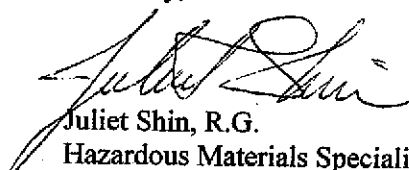
**A workplan addressing the above groundwater sampling should be submitted to this office within 30 days of the date of this letter (i.e., by September 2, 1999).** A report documenting this work and the analytical results shall be submitted to this office within 30 days after completing field activities. Additionally, the required RMP should be submitted with the final report.

Lastly, per the County's July 29, 1999 letter, an additional deposit of \$1,000.00 should be submitted to this office to cover our oversight costs and future closure processes. 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 of \$100.00 per hour. It is expected that the amount requested will allow the project to be completed with a zero balance. Any unused money will be refunded to you or your designee. Please make the check payable to Alameda County Environmental Health Services and be sure to write the following identifying information on your check:

Project #6968A/Stid #6616  
Type of project (SLIC), and  
Site address (28191 Hesperian Blvd., Hayward)

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

  
Juliet Shin, R.G.  
Hazardous Materials Specialist

Cc: Mark Litzau, HARZA Engineering Company, 425 Roland Way, Oakland, CA 94621  
Hugh Murphy, City of Hayward Fire Dept., 777 B Street, Hayward, CA 94541  
Derek Lee, RWQCB



ALAMEDA COUNTY  
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DAVID J. KEARS, Agency Director



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R02706

ENVIRONMENTAL HEALTH SERVICES

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

July 29, 1999

Sue Shaffer  
Greystone Homes  
920 Hillview Court, Ste 280  
Milpitas, CA 95035

STID: 6616

Re: Investigations at Western Garden Nursery, located at 28191 Hesperian Blvd., Hayward, CA

Dear Ms. Shaffer,

This office has reviewed HARZA Engineering Company's (HARZA) July 15, 1999 report providing the sample results for the four confirmatory soil samples, CC-1 through CC-4, collected at the site on July 2, 1999. It is our understanding that these samples were collected from 1-foot below ground surface (bgs) in the areas of former sample locations CS-1, CS-2, CS-5, and CS-6 to confirm the attenuation of Dieldrin concentrations after grading activities. Analysis of these samples identified 0.36ppm Dieldrin in Sample CC-1, and the other samples were NonDetect. These sample results must be averaged with the other soil samples that were collected from shallow soils (1- to 3-foot bgs), and not with deeper excavation soil samples, to determine whether the average exceeds the Region 9 Environmental Protection Agency's human health-protective Preliminary Remediation Goals (PRGs) of 0.028 parts per million (ppm).

Prior to averaging the shallow soil sample results, this office is requiring that at least one additional confirmatory shallow soil sample be collected from the area of S-5 to confirm that the "blending" in this area reduced the elevated pesticide levels initially identified in this composite sample. The results of this soil sample shall be averaged in with the other shallow soil samples to determine whether any remaining accessible soil contamination could pose a threat to future residents of the area.

Based on the shallow groundwater at the site, which was recorded to be between 7- and 9-feet bgs during the June 1998 Geoprobe sampling event, and the residual soil contamination at 5-foot bgs, this office and the San Francisco Bay-Regional Water Quality Control Board (RWQCB) is requiring that "grab" groundwater samples be collected from the site and analyzed for the pesticides of concern to determine whether groundwater has been impacted. Residual contamination at depth (i.e., 5-foot bgs) was evidenced by the analytical results of Samples HA01 through HA08. Although the bulk of this soil contamination was excavated down to varying depths ranging from 1.5- to 6-feet bgs, levels of Dieldrin exceeding the PRGs remains at

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RO# 2706

October 28, 1998]

**Tacia Miller**  
HARZA Consulting  
425 Roland Way  
Oakland, CA - 94621

ENVIRONMENTAL HEALTH SERVICES

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

**Ref: Western Garden Nursery, 28191 Hesperian Boulevard, Hayward, CA**

Dear Ms. Miller:

I am in receipt of the reports, "Additional Soil Quality Investigation", dated April 14, 1998 and Site Remediation Work Plan, dated June 30, 1998 prepared by Harza Engineering for the above referenced site.

Previous investigations conducted on the property identified the presence of chlorinated-pesticides in the surface soils at depths of one to three feet below ground surface. Based on the results of the investigation, the recent work plan includes a proposal to excavate soils with significant contamination and perform soil blending in other areas. Also, according to the work plan, subsequent to soil excavation/ soil blending, confirmation soil samples will be collected on site to determine compliance with the EPA Region 9, Preliminary Remediation Goals (PRGs).

Based on the information submitted to this Department, the work plan is acceptable. However, prior to initiating any field work, this Department should be notified. If you have any questions, you can reach me at (510) 567-6764

Sincerely,

Madhulla Logan  
Hazardous Material Specialist

C: *Hugh Murphy, City of Hayward Fire Department, 777 B Street,  
Hayward, CA - 94541*  
*Greystone Homes, 920 Hillview Court, Suite 280 Milipitas, CA - 95035*