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**Soil
Remediation
Plan/Community
Health and
Safety Plan**

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SOIL REMEDIATION PLAN

**1190 ISLAND VIEW LANE
AND 1220-1240 MELBA ROAD
ENCINITAS, CALIFORNIA**



GEOCON
INCORPORATED

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR
**TORREY PACIFIC CORPORATION
ENCINITAS, CALIFORNIA**

**OCTOBER 26, 2021
REVISED JANUARY 28, 2022
PROJECT NO. G2438-62-02**



Project No. G2438-62-02
October 26, 2021
Revised January 28, 2022

Torrey Pacific Corporation
171 Saxony Road, Suite 109
Encinitas, California 92024

Attention: Brian Staver

Subject: SOIL REMEDIATION PLAN
1190 ISLAND VIEW LANE AND 1220-1240 MELBA ROAD
ENCINITAS, CALIFORNIA

Dear Mr. Staver:

In accordance with your authorization and our change order request dated May 19, 2021, we have prepared this Soil Remediation Plan (SRP) for the subject properties located in Encinitas, California. We have revised this SRP to address County of San Diego- Department of Environmental Health (DEH) review comments.

The purpose of the remedial action described in this SRP is to mitigate the potential exposure of future site users (residents and workers) to elevated concentrations of pesticides identified at the 1190 Island View Lane property. The remediation would be performed in accordance with the requirements and guidelines of the DEH.

We appreciate the opportunity to assist you on this project. Please call us if you have any questions regarding the enclosed SRP or if we can be of further assistance.

Very truly yours,

GEOCON INCORPORATED

Troy K. Reist

Troy K. Reist, CEG, MBA
Senior Geologist

TKR:arm

(e-mail) Addressee



TABLE OF CONTENTS

SOIL REMEDIATION PLAN.....	PAGE
1. INTRODUCTION.....	1
2. REMEDIAL ACTION OBJECTIVE.....	1
3. BACKGROUND INFORMATION.....	2
3.1 Site Location and Description	2
3.2 Previous Site Assessments	2
4. NATURE, SOURCE AND EXTENT OF CONTAMINANTS.....	3
5. CLEANUP GOALS	3
6. REMEDIAL CLEANUP PROCEDURES.....	4
6.1 Public Notification	4
6.2 Community Health and Safety Plan	4
6.3 Storm Water Protection	4
6.4 Impacted and Decontamination Areas.....	4
6.5 Dust Control	5
6.6 Airborne Dust Monitoring and Sampling.....	5
6.7 Offsite Disposal of Chlordane-Impacted Soil Exceeding 10,000 µg/kg	5
6.8 Onsite Encapsulation of Non-Hazardous Pesticide-Impacted Soil	6
6.9 Confirmation Sampling	7
7. SOIL REMEDIATION REPORT	7
8. REFERENCES.....	8

FIGURE

1. Soil Sample Location Map and Chlordane Analytical Results
2. Overall Remediation and Encapsulation Plan

TABLE

1. Summary of Soil Analytical Data- Pesticides and Arsenic
2. UCL Statistics of Soil Samples (Chlordane < 10,000 µg/kg)

APPENDICES

- A. Community Health and Safety Plan

SOIL REMEDIATION PLAN

1. INTRODUCTION

We have prepared this Soil Remediation Plan (SRP) on behalf of Torrey Pacific Corporation for the remediation of pesticide-impacted soil identified on the property located at 1190 Island View Lane located in Encinitas, California (Figure 1). The overall project encompasses the properties at 1190 Island View Lane and 1220-1240 Melba Road (the Site), which are planned to be redeveloped with 30 residential homes. Therefore, the pesticide-impacted soil identified within the shallow soils on 1190 Island View property that exceed the regulatory health risk-based screening levels will need to be addressed to accommodate the residential planned uses for the overall project.

This SRP summarizes site background information for the Site, identifies the specific contaminants of concern, the remedial action objective (RAO) and project action levels (PALs) for pesticides in soil to meet the RAO, and outlines the procedures for remediation in a manner that is protective of public health and safety and the environment. The remediation of pesticide-impacted soil identified at 1190 Island View Lane would be performed under the oversight of the DEH through Voluntary Assistance Programs (VAP) Case No. DEH2021-LSAM-000674. Once approved by the DEH, this SRP should be incorporated into the plans for development of the Site.

2. REMEDIAL ACTION OBJECTIVE

The RAO for the Site is to mitigate future site users' potential exposure to pesticide-impacted soil, which includes chlordane, dieldrin, DDE, and heptachlor epoxide at concentrations that could be a threat to human health. This would be accomplished by excavating soil from the identified areas of the Site that contain pesticides at concentrations exceeding their respective PALs (discussed further in *Section 5*) and encapsulate the impacted soil beneath a clean soil cover to eliminate the direct-contact, ingestion, and inhalation exposure pathways for future site users or dispose of the impacted soil at an appropriate waste disposal facility.

Following successful completion and documentation of the remediation, we would request that the DEH provide a "no further action" or "concurrence" letter indicating that the remedial action has been completed and that onsite conditions do not pose an unacceptable risk to future site users.

3. BACKGROUND INFORMATION

This section summarizes background information for the Site including location and physical characteristics, former and existing uses and improvements, the environmental condition based on the findings of our site investigations, and the proposed development.

3.1 Site Location and Description

The overall project consists of 6.646-acres located at 1190 Island View Lane and 1220 – 1240 Melba Road in Encinitas, California (Figure 1), which is further identified by San Diego County Assessor's Parcel Numbers (APNs) 259-180-09, -10, -16, -33 and 259-181-02 through -04. The Site is developed with single-family residences, and the surrounding vicinity consist of single-family residences, churches, a horse stable, and a middle school.

3.2 Previous Site Assessments

An initial Phase I ESA and Limited Soil Sampling report for the 1190 Island View Lane property was performed by SCS Engineers in June 2019. SCS identified the property as having been used for agricultural purposes between 1947 to 1953, which was occupied with greenhouses from approximately 1980 to 1991. SCS concluded that the former agricultural use could suggest that pesticides and associated metals could be present in shallow soil. SCS also stated that there was a potential for pesticides to be present in soil adjacent to the residential structures from potential previous applications of termiticides and for lead to be in soil from deteriorating lead-based paint around the structures. SCS collected soil samples from six locations and had the samples analyzed for lead, arsenic, and organochlorine pesticides. Laboratory analysis of the soil samples indicated that the pesticides, chlordane and dieldrin, were present in soil adjacent to the residence at concentrations exceeding regulatory health-based screening levels for residential soil. SCS recommended collecting additional soil samples to delineate pesticide impacts around the residence. Lead was below the respective screening level for residential soil and arsenic was within the normal background concentration for California soils.

Geocon performed an additional assessment of the overall project, which is discussed in our *Phase I and II Environmental Site Assessment Report, 1190 Island View Lane and 1220 – 1240 Melba Road, Encinitas, California*, dated March 15, 2021. Our scope included the collection and analysis of 112 soil samples within the former agricultural and greenhouse areas of the Site to delineate the horizontal limits of soil that may contain concentrations of pesticides and arsenic that exceed regulatory health-based screening levels for residential soil. The soil samples collected around former agricultural and greenhouse areas had detected concentrations of DDT, DDE, heptachlor

epoxide, alpha-BHC, and chlordane, but were less than their respective San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) for residential soil. Arsenic was detected in each of the samples but was within the normal background concentration for California soils. However, chlordane, dieldrin, DDE, and heptachlor epoxide were detected at concentrations exceeding their respective ESLs for residential soil adjacent to only the structures at 1190 Island View Lane. Therefore, we recommended that an SRP be prepared and submitted to the DEH under the VAP for review and approval to remediate the pesticide-impacted soil in order to mitigate future site users' potential exposure to these pesticides.

In October 2021, the Site was enrolled in the VAP and our initial SRP was submitted to the DEH for review and comment. At the request of the DEH, we collected an additional 115 soil samples on November 16 and 17, 2021 for analytical testing to delineate the vertical limits of the pesticide-impacted soil due to the high concentrations (over 10,000 µg/kg) of **chlordane** identified around the structures at 1190 Island View Lane and along the northern project boundary adjacent to the middle school. The summary of the previous and recent analytical laboratory results of the soil samples (Table 1) and sample location map (Figure 1) are attached. The concentrations of **chlordane** detected in the soil samples, (the main contaminant of concern for the Site), are also shown on Figure 1 for reference.

4. NATURE, SOURCE AND EXTENT OF CONTAMINANTS

Based on our recent findings approximately 1,000 cubic yards of soil is estimated to be impacted with pesticides (primarily **chlordane**) at concentrations exceeding their respective residential ESLs soils around the structures at 1190 Island View Lane. The majority of the impacted soil is present within the upper 1-foot of soil including a few isolated areas that extend to a depth of 2 to 3 feet as shown on Figure 1.

The higher concentrations of **chlordane**, which exceeds 10,000 µg/kg, was identified only within the previous flower bed areas around the main house and garage (shown in pink on Figure 1). It is our understanding that the source of the pesticides was applied legally by the previous property owner who maintained flowers year-round at the Site.

5. CLEANUP GOALS

The cleanup standards discussed herein were derived from applicable regulatory and health risk-based screening levels. The PALs for the Site are the ESLs for chlordane, dieldrin, DDE, and heptachlor epoxide in residential soil, which are presented below in Table 5. These thresholds are conservative and protective of human health and the environment.

TABLE 5
SUMMARY OF PESTICIDE-IMPACTED SOIL

Pesticide	ESL Residential Screening Level
Chlordane	480 µg/kg
Dieldrin	37 µg/kg
DDE	1,800 µg/kg
Heptachlor epoxide	62 µg/kg

The PALs will be considered to have been achieved when the pesticide concentrations in confirmation soil samples collected from the base of the excavations and determined through laboratory analysis indicate that concentrations are below the ESL screening levels listed above.

6. REMEDIAL CLEANUP PROCEDURES

6.1 Public Notification

The DEH requires that a public notice be provided to the properties adjacent to (within line of sight of) the Site a minimum of 5 days prior to excavating the pesticide-impacted soil. The notice should also be posted at the Site informing the community of the soil remediation and include contact information for the environmental consultant performing the work, developer, and DEH case worker. Example public notices are included in the Community Health & Safety Plan (CHSP) in *Appendix A*.

6.2 Community Health and Safety Plan

The CHSP in *Appendix A* was prepared for the remedial action in accordance with current health and safety standards as specified by Federal and California Occupational Safety and Health Administration (OSHA). The CHSP is a compilation of health and safety measures, and/or performance protocols that, when exercised, are intended to minimize the potential for injury and exposure to the nearby sensitive receptors during the remediation activities at the Site.

6.3 Storm Water Protection

Storm water best management practices (BMPs) should be implemented to reduce or eliminate sediment and other pollutants from entering existing storm water drains in adjacent streets.

6.4 Impacted and Decontamination Areas

Entry into impacted areas should be limited to authorized personnel and equipment to avoid unnecessary exposure and related transfer of contaminants. These areas should be marked (as exclusion

zones) in the field using stakes, ribbon and/or high visibility paint. Equipment and trucks that are used for excavating and transporting soil should be decontaminated in a designated area before leaving the Site. Following completion of the excavations, equipment should be dry-decontaminated with brooms, brushes, and/or towels on top of plastic sheeting at a designated decontamination area onsite. Soil removed from equipment during decontamination should be added to the pesticide-impacted soil stockpiles or placed in the encapsulation area. The contractor is responsible for setting up the decontamination areas and cleaning their equipment to ensure that pesticide-impacted soil is not transferred to clean areas on the Site or offsite.

6.5 Dust Control

The contractor should use water to effectively minimize generation of airborne dust during soil excavation, handling, disposal and/or encapsulation. Water should be sprayed prior to daily work activities, during excavation, handling, disposal and/or encapsulation; temporarily stockpiled soil should be sprayed and then covered with Visqueen or a 1-foot clean soil cap. Consideration should be made to pre-watering the excavation areas prior to excavation to minimize generation of airborne dust.

Remediation should be halted during high wind conditions where the use of engineering controls (i.e. wet methods) cannot effectively maintain dust at levels less than the Fence Line Action Levels specified in the CHSP.

6.6 Airborne Dust Monitoring and Sampling

As described in the CHSP (*Appendix A*), airborne dust monitoring and sampling will be performed during excavation and handling of pesticide-impacted soil.

6.7 Offsite Disposal of Chlordane-Impacted Soil Exceeding 10,000 µg/kg

The estimated 200 cubic yards of pesticide-impacted soil present within the upper 1-foot of the former flower beds adjacent to the main house and garage at 1190 Island View Lane, which exceeds 10,000 µg/kg for **chlordane** (areas shown in pink on Figure 1), will require disposal at an appropriate offsite waste disposal facility. The impacted soil should be excavated and temporarily stockpiled to be characterized for waste disposal. The excavated soil should be temporarily stockpiled at a designated staging area on Visqueen and then covered with Visqueen to minimize potential sediment in storm water run-off and airborne dust generation. Following acceptance at a waste disposal facility, the impacted soil should be transported to the disposal facility by a licensed Class A-HAZ subcontractor for disposal.

6.8 Onsite Encapsulation of Non-Hazardous Pesticide-Impacted Soil

The estimated 800 cubic yards of non-hazardous (see discussion below), pesticide-impacted soil identified around the structures at 1190 Island View Lane can be excavated and encapsulated onsite beneath a clean soil cover to mitigate potential health risks to future site occupants. The horizontal and lateral extent of the remedial excavations including the encapsulation area are shown on Figures 1 and 2. The proposed encapsulation area was selected by Pasco Laret Suiter & Associates, the project Civil Engineer, based on the volume of the impacted soil, criteria listed below and low likelihood of encountering the impacted soil during future site improvements (landscaping, underground utilities, etc.). If additional pesticide-impacted soil is identified during excavation and/or through confirmation sampling, the encapsulation area may need to be increased to accommodate the additional volume of soil to maintain the requirements described below.

Encapsulation of the pesticide-impacted soil will require the following:

- The impacted soil should be placed a minimum of 7 feet below finish grade and face of slopes, including 3 feet below the deepest utility. A clean soil cap should be placed above the impacted soil which does not contain pesticides at concentrations exceeding their respective PALs.
- The impacted soil should be placed a minimum of 5 feet above groundwater or any engineered drainage structures. Groundwater was not encountered during our previous geotechnical investigation and is anticipated to be deeper than 50 feet below existing grade.
- The bottom and top of the encapsulation area should be surveyed to document the lateral and vertical limits of the encapsulated impacted soil.
- A visual barrier (i.e. Visqueen, geotextile fabric) should be placed on top of the impacted soil prior to capping with clean soil.
- Confirmation soil sampling and analysis would be conducted to verify that the PALs have been met in the excavation bottoms as described in *Section 6.9*.

Non-Hazardous Material Classification

The California Code of Regulations (CCR) Title 22 hazardous waste trigger level (i.e., a Total Threshold Limit Concentration [TTLC] and/or a Soluble Threshold Limit Concentration [STLC]) for **chlordane** is 2,500 µg/kg. If concentrations exceed the TTLC or STLC level, the impacted soil would be characterized as California-hazardous waste, and if concentrations exceed the Toxicity Characteristic Leaching Procedure (TCLP) it would be classified as federal or “RCRA”-hazardous waste. Therefore, a statistical analysis of the remaining soil samples, which did not exceed 10,000 µg/kg for **chlordane**, was performed using the United States Environmental Protection Agency’s (EPA) ProUCL- Suggested UCLs to calculate the 95%

upper confidence limit (UCL) for **chlordan**. UCLs are a standard value for addressing uncertainties of a distribution mean. The UCL of the arithmetic mean concentration is calculated to represent the mean concentration because it's not possible to know the true mean to the essentially infinite number of soil samples that could be collected from an area/volume of soil being excavated. The calculated 95% UCL for the remaining soil samples (which did not exceed 10,000 µg/kg for **chlordan**) that detected **chlordan** for the Site is **1,133 µg/kg** (see Table 2), which does not exceed the CCR Title 22 hazardous waste trigger level of 2,500 µg/kg and is therefore classified as non-hazardous.

6.9 Confirmation Sampling

Confirmation soil samples would be collected from the base and sidewalls (where appropriate) within the pesticide-impacted soil excavations. Confirmation samples would also be collected at 3 feet below Sample S22 and along the northern perimeter adjacent to the school as specifically requested by the DEH.

The samples would be collected using a decontaminated trowel or hand auger and placed directly into laboratory-provided sampling jars, properly labeled, and placed in a chilled cooler for transport to a State-certified laboratory under chain-of-custody protocol. The samples will be analyzed for pesticides by USEPA Test Method 8081A.

If pesticides are detected in the confirmation soil samples at concentrations exceeding their respective PALs, then additional excavation and confirmation sampling would be required until the PAL is met. Additional grading (i.e. fill placement) within the impacted area should not be performed until test results from the confirmation sampling have been received.

7. SOIL REMEDIATION REPORT

A Soil Remediation Report documenting that the remedial work was conducted pursuant with this SRP would be prepared upon remediation of the pesticide-impacted soil identified on the Site. The SRP would be submitted to the DEH for review and a request for case closure for the Site.

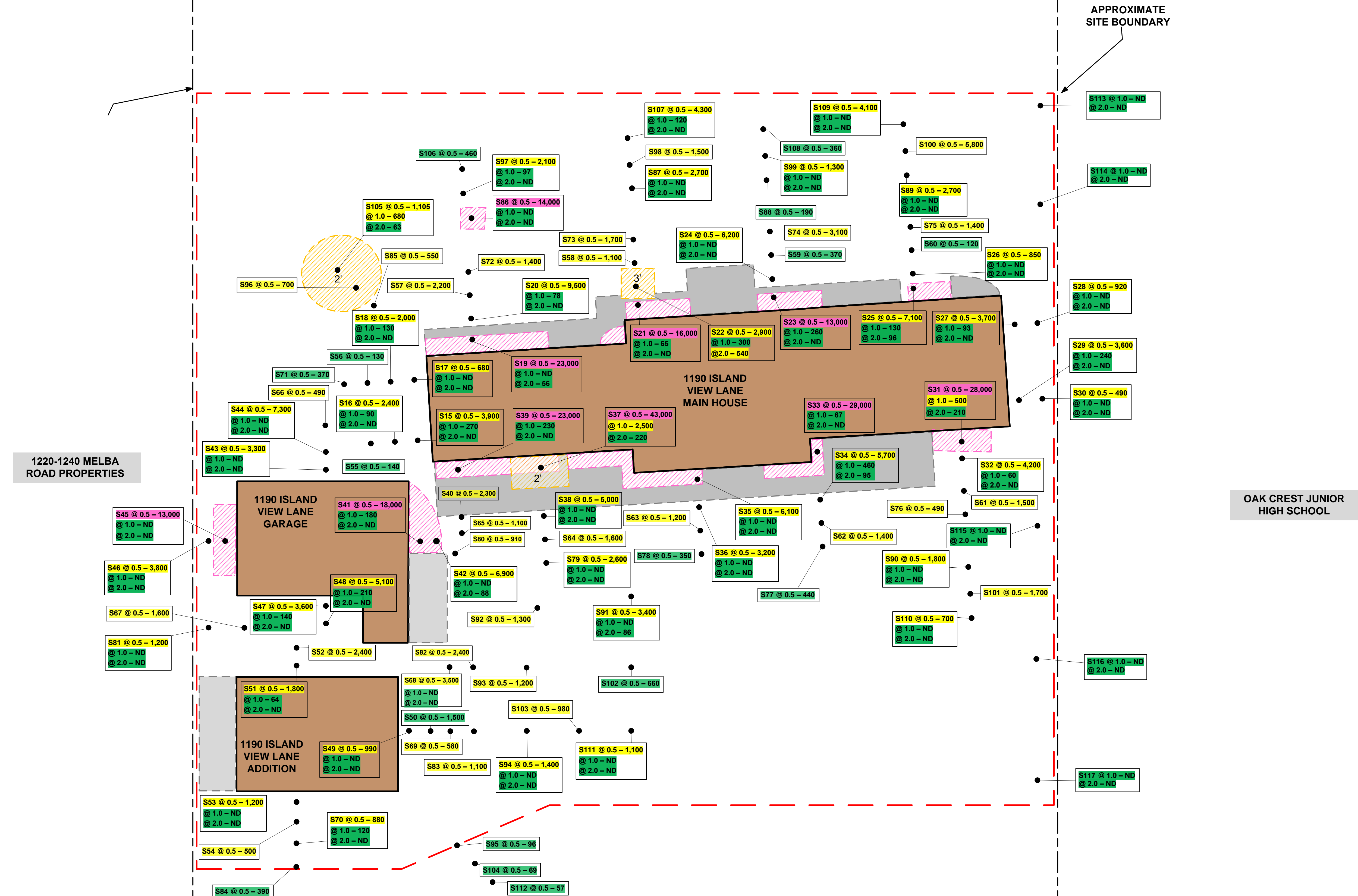
8. REFERENCES

Geocon Incorporated, *Limited Geotechnical Investigation, Staver Property, 1220-1240 Melba Road, Encinitas, California*, dated January 8, 2021. (Geocon Project No. G2438-52-01).

Geocon Incorporated, *Phase I and II Environmental Site Assessment Report, 1190 Island View Lane and 1220 – 1240 Melba Road, Encinitas, California*, dated March 15, 2021. (Geocon Project No. G2438-62-02).

SCS Engineers, *Phase I Environmental Site Assessment and Limited Soil Sampling, Assessor's Parcel Numbers 259-181-02, -03, & -04, 1190 Island View Lane, Encinitas, California*, dated June 14, 2019.

San Francisco Bay Regional Water Quality Control Board, *Environmental Screening Levels*. Last Modified 2019. Website database, https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html.



GEOCON LEGEND

● S117 @ 2.0 - APPROXIMATE LOCATION OF SOIL SAMPLE SHOWING CONCENTRATION OF CHLORDANE IN $\mu\text{g/kg}$ AND DEPTH SAMPLE WAS COLLECTED

- APPROXIMATE AREA OF CHLORDANE IMPACTED SOIL REQUIRING 1 FOOT REMOVALS AND ENCAPSULATION ON SITE

- APPROXIMATE AREA OF CHLORDANE IMPACTED SOIL REQUIRING 2-3 FOOT REMOVALS AND ENCAPSULATION ON SITE

- APPROXIMATE AREA OF CHLORDANE IMPACTED SOIL THAT WILL REQUIRE OFFSITE DISPOSAL OF UPPER 1 FOOT OF SOIL

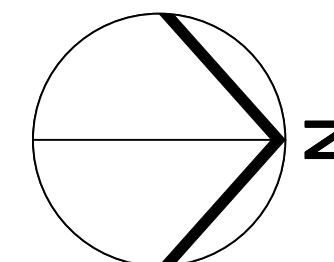
- APPROXIMATE AREA COVERED BY CONCRETE

- NOTES CHLORDANE CONCENTRATIONS THAT DID NOT EXCEED $480 \mu\text{g/kg}$

- NOTES CHLORDANE CONCENTRATIONS THAT EXCEEDED $480 \mu\text{g/kg}$

- NOTES CHLORDANE CONCENTRATIONS THAT EXCEEDED $10,000 \mu\text{g/kg}$

0' 10'
1" = 10' on 36" x 24"

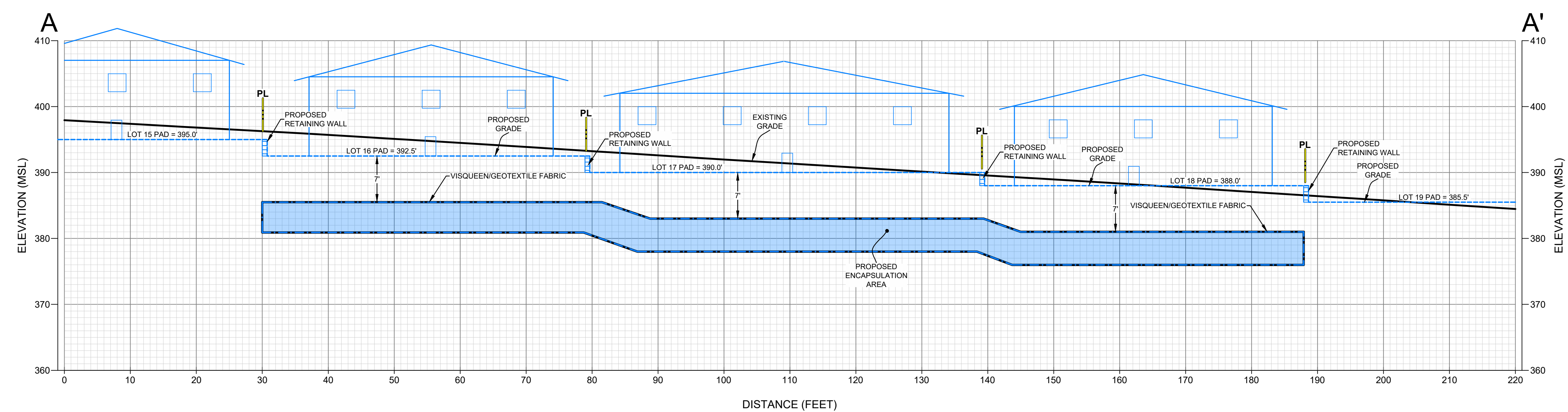


SOIL SAMPLE LOCATION MAP AND CHLORDANE ANALYTICAL RESULTS

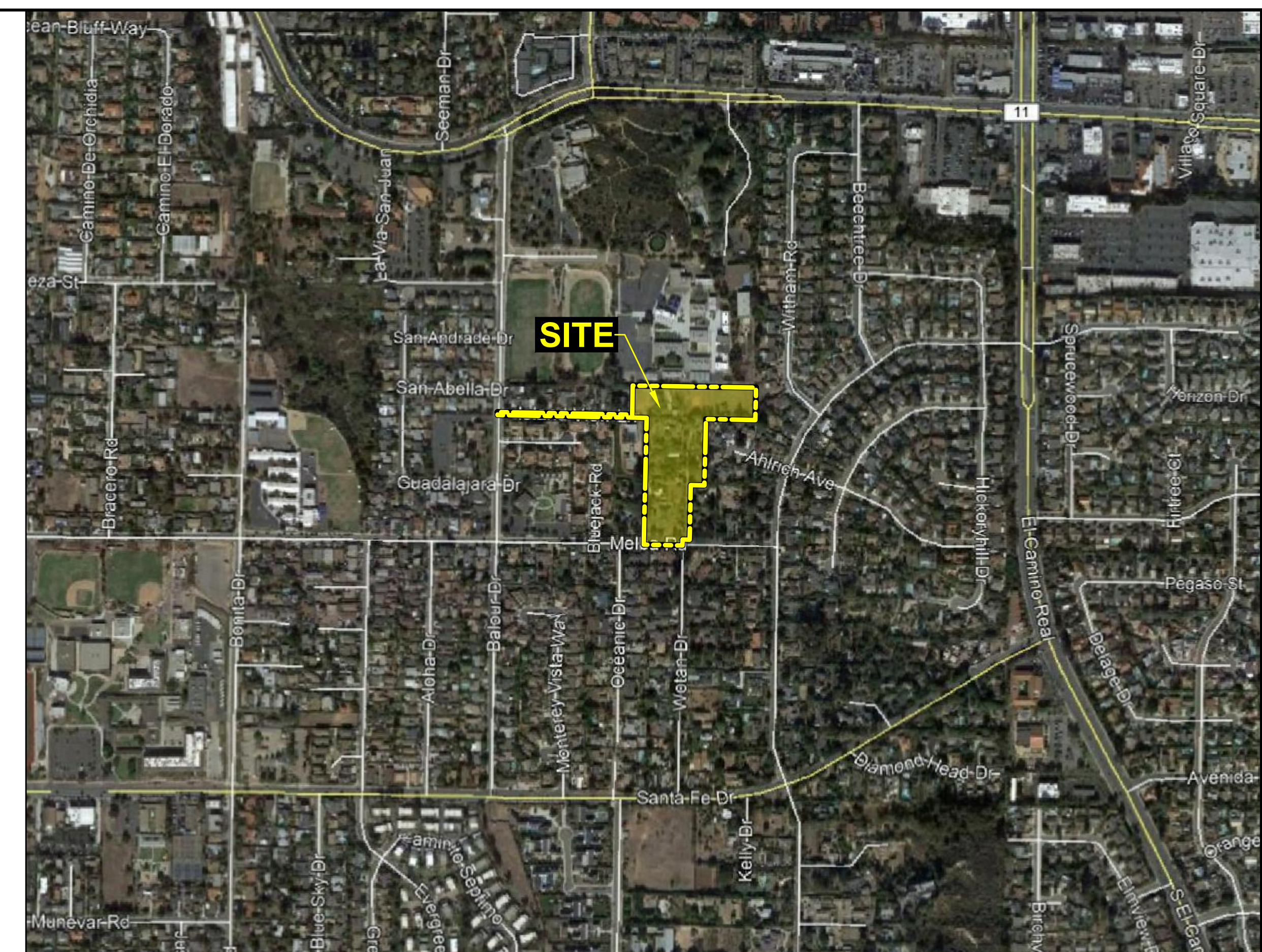
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GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS
6960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858 558-6900 - FAX 558-6159
PROJECT NO. G2438-62-02
FIGURE 1
DATE JANUARY 2022



GEOLOGIC CROSS-SECTION A-A'
SCALE: 1" = 10' (Vert. = Horiz.)



VICINITY MAP

SCALE: 1" = 500'

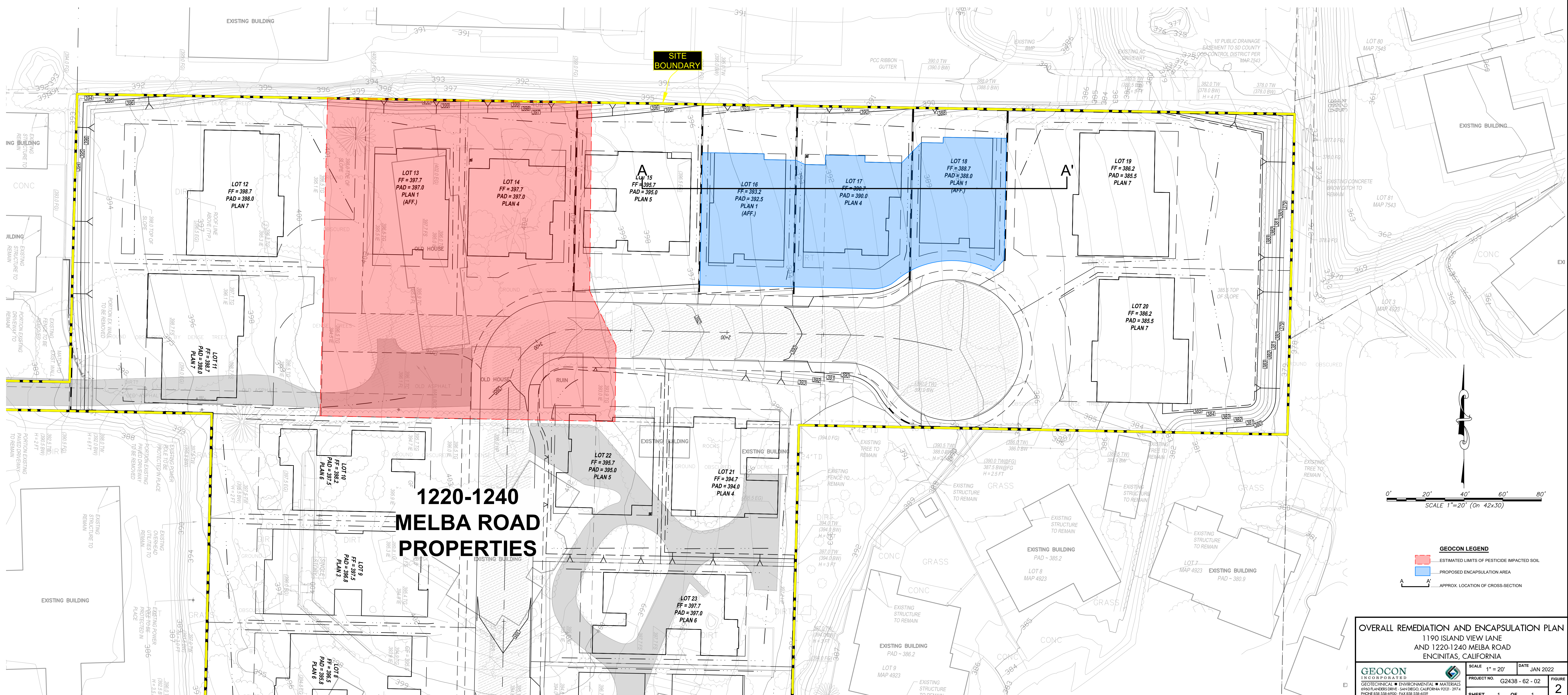


TABLE I
SUMMARY OF SOIL ANALYTICAL DATA - PESTICIDES AND ARSENIC
THE FARM
POWAY, CALIFORNIA

SAMPLE ID	SAMPLE DATE	APPROX DEPTH (feet)	Atrazine (mg/kg)	Organochlorine Pesticides (µg/kg)											Other Pesticides
				Chlordane	Delta-BHC	DDT	DDE	DDD	Dieldrin	Heptachlor	Heptachlor Epoxide	Endrin Ketone	Endosulfan Sulfate	Methoxychlor	
S1	12/21/2020	0.5	1.5	180	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S2	12/21/2020	0.5	2.0	120	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S3	12/21/2020	0.5	1.4	110	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S4	12/21/2020	0.5	1.1	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S5	12/21/2020	0.5	1.2	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S6	12/21/2020	0.5	0.99	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S7	12/21/2020	0.5	1.7	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S8	12/21/2020	0.5	1.4	<250	<25	<25	<25	<25	<25	<25	<25	<25	<25	<49	ND
S9	12/21/2020	0.5	3.1	<240	<24	<24	<24	<24	<24	<24	<24	<24	<24	<49	ND
S10	12/21/2020	0.5	2.3	<250	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S11	12/21/2020	0.5	2.6	<250	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S12	12/21/2020	0.5	1.8	<49	<4.9	20	44	<25	9.6	<4.9	<4.9	<4.9	<25	<9.8	ND
S13	12/21/2020	0.5	2.3	<50	<5.0	20	33	<5.0	10	<5.0	<5.0	<5.0	<5.0	<10	ND
S14	12/21/2020	0.5	1.8	<49	<4.9	<4.9	15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S15	1/13/2021	0.5	-	3,900	<10	50	150	<10	<10	<10	18	10	<10	<20	ND
S15	1/17/2021	1	-	270	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S15	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S16	1/13/2021	0.5	-	2,400	<10	19	39	<10	<10	<10	<10	<10	<10	<20	ND
S16	11/17/2021	1	-	90	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S16	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S17	1/13/2021	0.5	-	680	<10	<10	36	<10	<10	<10	<10	<10	<10	<20	ND
S17	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S17	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S18	1/13/2021	0.5	-	2,000	35	17	60	<10	<10	<10	<10	<10	<10	<20	ND
S18	11/17/2021	1	-	130	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S18	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S19	1/13/2021	0.5	-	23,000	<10	110	710	<10	270	120	150	<10	<10	28	ND
S19	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S19	11/17/2021	2	-	56	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S20	1/13/2021	0.5	-	9,500	<10	180	700	<10	140	<10	67	<10	<10	33	ND
S20	11/17/2021	1	-	78	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S20	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S21	1/13/2021	0.5	-	16,000	<10	53	770	<10	<10	<10	78	<10	<10	25	ND
S21	11/17/2021	1	-	65	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S21	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S22	1/13/2021	0.5	-	2,900	<10	14	130	<10	<10	<10	31	<10	<10	<20	ND
S22	11/17/2021	1	-	300	<5.0	<5.0	9.4	<5.0	15	<5.0	13	<5.0	<5.0	<10	ND
S22	11/17/2021	2	-	540	<5.0	6.3	33	<5.0	14	<5.0	13	<5.0	<5.0	<10	ND
S23	1/13/2021	0.5	-	13,000	<10	120	52	<10	<10	11	98	22	<10	<20	ND
S23	11/17/2021	1	-	260	<5.0	<5.0	25	<5.0	<5.0	<5.0	6.1	<5.0	<5.0	<10	ND
S23	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S24	1/13/2021	0.5	-	6,200	<5.0	130	330	<5.0	160	<5.0	92	<5.0	<5.0	27	ND
S24	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S24	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S25	1/13/2021	0.5	-	7,100	12	290	450	<10	<10	<10	42	<10	<10	22	ND
S25	11/17/2021	1	-	130	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S25	11/17/2021	2	-	96	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S26	1/13/2021	0.5	-	850	<10	42	79	<10	21	<10	20	<10	<10	<20	ND
S26	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S26	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	9.2	8.2	<5.0	<5.0	11	ND
S27	1/13/2021	0.5	-	3,700	<10	200	74	<10	40	<10	<10	<10	<10	<20	ND
S27	11/17/2021	1	-	93	<5.0	<5.0	5.9	<5.0	6.6	<5.0	<5.0	<5.0	<5.0	<10	ND
S27	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S28	1/13/2021	0.5	-	920	<10	40	12	<10	<10	<10	<10	<10	<10	<20	ND
S28	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S28	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S29	1/13/2021	0.5	-	3,600	<10	170	130	<10	21	<10	<10	<10	<10	<20	ND
S29	11/17/2021	1	-	240	<5.0	<5.0	<5.0	<5.0	5.4	<5.0	<5.0	<5.0	<5.0	<10	ND
S29	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S30	1/13/2021	0.5	-	490	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	ND
S30	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S30	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S31	1/13/2021	0.5	-	28,000	<10	460	710	<10	240	<10	100	<10	<10	20	ND
S31	11/17/2021	1	-	500	<5.0	<5.0	<5.0	<5.0	7.9	<5.0	<5.0	<5.0	<5.0	<10	ND
S31	11/17/2021	2	-	210	<5.0	<5.0	<5.0	<5.0	5.4	<5.0	<5.0	<5.0	<5.0	<10	ND
S32	1/13/2021	0.5	-	4,200	<10	110	230	<10	110	<10	62	<10	<10	<20	ND
S32	11/17/2021	1	-	60	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S32	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	10	9.1	<5.0	<5.0	10	ND
S33	1/13/2021	0.5	-	29,000	<10	740	2,000	<10	<10	29	160	<10	<10	<20	ND
S33	11/17/2021	1	-	67	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S33	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S34	1/13/2021	0.5	-	5,700	<5.0	150	190	<5.0	<5.0	9.5	39	<5.0	<5.0	<10	ND
S34	11/17/2021	1	-	460	<5.0	6.9	16	<5.0	<5.0	<5.0	8.5	<5.0	<5.0	<10	ND
S34	11/17/2021	2	-	95	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S35	1/13/2021	0.5	-	6,100	<10	41	140	<10	<10	<10	17	<10	<10	<20	ND
S35	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S35	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S36	1/13/2021	0.5	-	3,200	<10	<10	71	<10	<10	<10	13	<10	<10	<20	ND
S36	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S36	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S37	1/13/2021	0.5	-	43,000	<10	180	11,000	94	<10	<10	71	<10	24	<20	ND
S37	11/17/2021	1	-	2,500	<5.0	<5.0	550	<5.0	10	<5.0	<5.0	<5.0	<5.0	<10	ND
S37	11/17/2021	2	-	220	<5.0	<5.0	54	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S38	1/13/2021	0.5													

TABLE I
SUMMARY OF SOIL ANALYTICAL DATA - PESTICIDES AND ARSENIC
THE FARM
POWAY, CALIFORNIA

SAMPLE ID	SAMPLE DATE	APPROX DEPTH (feet)	Arsenic (mg/kg)	Organochlorine Pesticides (µg/kg)											Other Pesticides
				Chlordane	Delta-BHC	DDT	DDE	DDD	Dieldrin	Heptachlor	Heptachlor Epoxide	Endrin Ketone	Endosulfan Sulfate	Methoxychlor	
S38	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S39	1/13/2021	0.5	-	23,000	<5.0	550	5,700	<250	<10	<10	<10	<10	<10	<20	ND
S39	11/17/2021	1	-	230	<5.0	<5.0	21	<5.0	<5.0	<5.0	7.2	<5.0	<5.0	<10	ND
S39	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S40	1/13/2021	0.5	-	2,300	<10	<10	91	<10	<10	<10	29	<10	<10	<20	ND
S41	1/13/2021	0.5	-	18,000	<25	160	410	<25	<25	<25	84	<25	<25	<50	ND
S41	11/17/2021	1	-	180	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.7	<5.0	<5.0	<10	ND
S41	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S42	1/13/2021	0.5	-	6,900	<25	63	260	<25	55	<25	34	<25	<25	<50	ND
S42	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S42	11/17/2021	2	-	88	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S43	1/13/2021	0.5	-	3,300	<25	<25	<25	<25	52	<25	<25	<25	<25	<50	ND
S43	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S43	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S44	1/13/2021	0.5	-	7,300	<25	<25	<25	<25	70	<25	<25	<25	<25	<50	ND
S44	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S44	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S45	1/13/2021	0.5	-	13,000	<25	230	150	<25	<25	<25	52	<25	<25	<50	ND
S45	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S45	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S46	1/13/2021	0.5	-	3,800	<25	36	<25	<25	<25	<25	<25	<25	<25	<50	ND
S46	11/17/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S46	11/17/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	Nd
S47	1/13/2021	0.5	-	3,600	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S47	11/18/2021	1	-	140	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S47	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S48	1/13/2021	0.5	-	5,100	<25	36	<25	<25	<25	<25	<25	<25	<25	<50	ND
S48	11/18/2021	1	-	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S48	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S49	1/13/2021	0.5	-	990	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S49	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S49	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S50	1/13/2021	0.5	-	1,500	<25	<25	25	<25	<25	<25	<25	<25	<25	<50	ND
S51	1/13/2021	0.5	-	1,800	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S51	11/18/2021	1	-	64	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S51	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S52	1/13/2021	0.5	-	2,400	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S53	1/13/2021	0.5	-	1,200	560	29	39	<25	<25	<25	<25	<25	<25	<50	ND
S53	11/18/2021	1	-	<50	6.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S53	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S54	1/13/2021	0.5	-	500	600	<25	30	<25	<25	<25	<25	<25	<25	<50	ND
S55	1/28/2021	0.5	-	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S56	1/28/2021	0.5	-	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S57	1/28/2021	0.5	-	2,200	ND	14	75	ND	38	ND	24	ND	ND	ND	ND
S58	1/28/2021	0.5	-	1,100	ND	ND	20	ND	10	ND	ND	ND	ND	ND	ND
S59	1/28/2021	0.5	-	370	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S60	1/28/2021	0.5	-	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S61	1/28/2021	0.5	-	1,500	ND	9.4	55	ND	8.5	ND	18	ND	ND	ND	ND
S62	1/28/2021	0.5	-	1,400	ND	17	45	ND	ND	ND	13	ND	ND	ND	ND
S63	1/28/2021	0.5	-	1,200	ND	ND	19	ND	ND	ND	19	ND	ND	ND	ND
S64	1/28/2021	0.5	-	1,600	ND	ND	42	ND	14	ND	10	ND	ND	ND	ND
S65	1/28/2021	0.5	-	1,100	ND	6.9	21	ND	9.5	ND	7.4	ND	ND	ND	ND
S66	1/28/2021	0.5	-	490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S67	1/28/2021	0.5	-	1,600	ND	74	30	ND	ND	ND	ND	ND	ND	ND	ND
S68	1/28/2021	0.5	-	3,500	ND	ND	17	ND	24	ND	ND	ND	ND	ND	ND
S68	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S68	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S69	1/28/2021	0.5	-	580	ND	ND	17	ND	ND	ND	ND	ND	ND	ND	ND
S70	1/28/2021	0.5	-	880	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND
S70	11/18/2021	1	-	120	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S70	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S71	1/28/2021	0.5	-	370	6.1	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND
S72	1/28/2021	0.5	-	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S73	1/28/2021	0.5	-	1,700	ND	5.9	ND	ND	ND	ND	8.6	ND	ND	ND	ND
S74	1/28/2021	0.5	-	3,100	ND	29	17	ND	ND	ND	ND	5.9	ND	ND	ND
S75	1/28/2021	0.5	-	1,400	ND	5.0	ND	ND	ND	ND	10	ND	ND	ND	ND
S76	1/28/2021	0.5	-	490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S77	1/28/2021	0.5	-	440	ND	80	44	ND	ND	ND	ND	ND	ND	ND	ND
S78	1/28/2021	0.5	-	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S79	1/28/2021	0.5	-	2,600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S79	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S79	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S80	1/28/2021	0.5	-	910	ND	6.0	10	ND	12	ND	7.9	ND	ND	ND	ND
S81	1/28/2021	0.5	-	1,200	ND	28	15	ND	ND	ND	11	ND	ND	ND	ND
S81	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S81	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S82	1/28/2021	0.5	-	2,400	ND	7.9	5.3	ND	27	ND	15	ND	ND	ND	ND
S83	1/28/2021	0.5	-	1,100	ND	ND	16	ND	ND	ND	10	ND	ND	ND	ND
S84	1/28/2021	0.5	-	390	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S85	2/23/2021	0.5	-	550	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S86	2/23/2021	0.5	-	14,000	ND	53	26	ND	ND	ND	ND	ND	ND	ND	ND
S86	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S86	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S87	2/23/2021	0.5	-	2,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S87	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND

TABLE I
SUMMARY OF SOIL ANALYTICAL DATA - PESTICIDES AND ARSENIC
THE FARM
POWAY, CALIFORNIA

SAMPLE ID	SAMPLE DATE	APPROX. DEPTH (feet)	Arsenic (mg/kg)	Organochlorine Pesticides (µg/kg)											
				Chlordane	Delta-BHC	DDT	DDE	DDD	Dieldrin	Heptachlor	Heptachlor Epoxide	Endrin Ketone	Endosulfan Sulfate	Methoxychlor	Other Pesticides
S87	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S88	2/23/2021	0.5	-	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S89	2/23/2021	0.5	-	2,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S89	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S89	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S90	2/23/2021	0.5	-	1,800	ND	ND	72	ND	120	ND	31	ND	ND	ND	ND
S90	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S90	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S91	2/23/2021	0.5	-	3,400	ND	31	160	ND	ND	42	ND	ND	ND	ND	ND
S91	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S91	11/18/2021	2	-	86	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S92	2/23/2021	0.5	-	1,300	ND	ND	81	ND	45	ND	ND	ND	ND	ND	ND
S93	2/23/2021	0.5	-	1,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S94	2/23/2021	0.5	-	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S94	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S94	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S95	2/23/2021	0.5	-	96	25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S96	2/23/2021	0.5	-	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S97	2/23/2021	0.5	-	2,100	<5.0	<5.0	<5.0	<5.0	<5.0	14	<5.0	<5.0	<5.0	<10	ND
S97	11/18/2021	1	-	97	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S97	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S98	2/23/2021	0.5	-	1,500	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S99	2/23/2021	0.5	-	1,300	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S99	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S99	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S100	2/23/2021	0.5	-	5,800	<25	11	<25	<25	<25	<25	5.6	<25	<25	<50	ND
S101	2/23/2021	0.5	-	1,700	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S102	2/23/2021	0.5	-	660	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S103	2/23/2021	0.5	-	980	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S104	2/23/2021	0.5	-	69	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S105	2/23/2021	0.5	-	1,100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S105	11/18/2021	1	-	680	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S105	11/18/2021	2	-	63	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S106	2/23/2021	0.5	-	460	<5.0	<5.0	<5.0	<5.0	<5.0	5.1	<5.0	6.8	<5.0	<10	ND
S107	2/23/2021	0.5	-	4,300	5.1	20	<5.0	<5.0	<5.0	<5.0	25	<5.0	<5.0	<10	ND
S107	11/18/221	1	-	120	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S108	2/23/2021	0.5	-	360	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S109	2/23/2021	0.5	-	4,100	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S109	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S109	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S110	2/23/2021	0.5	-	700	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S110	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S110	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S111	2/23/2021	0.5	-	1,100	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	ND
S111	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S111	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S112	2/23/2021	0.5	-	57	14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S113	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S113	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S114	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S114	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S115	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S115	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S116	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S116	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S117	11/18/2021	1	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
S117	11/18/2021	2	-	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
Residential ESLs			0.067	480	N/A	1,900	1,800	2,700	37	120	62	N/A	N/A	350,000	Various
Regional Background Levels			12 ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

* = collected as part of Geocon's 2017 Phase II ESA

< = Less than laboratory reporting limit specified

ND = Not detected above or equal to the laboratory reporting limit

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Level, May 2019

(1) Based upon the report prepared by the Department of Toxic Substances Control titled *Determination of a Southern California Regional Background Arsenic Concentration in Soil*, dated March 2008

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics of Soil Samples (Chlordane < 10,000 µg/kg)											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.11/24/2022 12:28:18 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10	Chlorodane											
11												
12	General Statistics											
13	Total Number of Observations				217		Number of Distinct Observations				93	
14	Number of Detects				125		Number of Non-Detects				92	
15	Number of Distinct Detects				89		Number of Distinct Non-Detects				5	
16	Minimum Detect				56		Minimum Non-Detect				40	
17	Maximum Detect				9500		Maximum Non-Detect				250	
18	Variance Detects				3495197		Percent Non-Detects				42.4%	
19	Mean Detects				1571		SD Detects				1870	
20	Median Detects				910		CV Detects				1.19	
21	Skewness Detects				1.788		Kurtosis Detects				3.205	
22	Mean of Logged Detects				6.554		SD of Logged Detects				1.416	
23												
24	Normal GOF Test on Detects Only											
25	Shapiro Wilk Test Statistic				0.776		Normal GOF Test on Detected Observations Only					
26	5% Shapiro Wilk P Value				0		Detected Data Not Normal at 5% Significance Level					
27	Lilliefors Test Statistic				0.209		Lilliefors GOF Test					
28	5% Lilliefors Critical Value				0.0796		Detected Data Not Normal at 5% Significance Level					
29	Detected Data Not Normal at 5% Significance Level											
30												
31	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs											
32	KM Mean				922.3		KM Standard Error of Mean				109.2	
33	KM SD				1603		95% KM (BCA) UCL				1121	
34	95% KM (t) UCL				1103		95% KM (Percentile Bootstrap) UCL				1108	
35	95% KM (z) UCL				1102		95% KM Bootstrap t UCL				1135	
36	90% KM Chebyshev UCL				1250		95% KM Chebyshev UCL				1398	
37	97.5% KM Chebyshev UCL				1604		99% KM Chebyshev UCL				2009	
38												
39	Gamma GOF Tests on Detected Observations Only											
40	A-D Test Statistic				1.361		Anderson-Darling GOF Test					
41	5% A-D Critical Value				0.796		Detected Data Not Gamma Distributed at 5% Significance Level					
42	K-S Test Statistic				0.0819		Kolmogorov-Smirnov GOF					
43	5% K-S Critical Value				0.0863		Detected data appear Gamma Distributed at 5% Significance Level					
44	Detected data follow Appr. Gamma Distribution at 5% Significance Level											
45												
46	Gamma Statistics on Detected Data Only											
47	k hat (MLE)				0.744		k star (bias corrected MLE)				0.731	
48	Theta hat (MLE)				2112		Theta star (bias corrected MLE)				2148	
49	nu hat (MLE)				186		nu star (bias corrected)				182.8	
50	Mean (detects)				1571							

	A	B	C	D	E	F	G	H	I	J	K	L
51												
52	Gamma ROS Statistics using Imputed Non-Detects											
53	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
54	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
55	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
56	This is especially true when the sample size is small.											
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
58	Minimum					0.01	Mean					904.9
59	Maximum					9500	Median					97
60	SD					1616	CV					1.786
61	k hat (MLE)					0.154	k star (bias corrected MLE)					0.155
62	Theta hat (MLE)					5890	Theta star (bias corrected MLE)					5854
63	nu hat (MLE)					66.68	nu star (bias corrected)					67.09
64	Adjusted Level of Significance (β)					0.0489						
65	Approximate Chi Square Value (67.09, α)					49.24	Adjusted Chi Square Value (67.09, β)					49.14
66	95% Gamma Approximate UCL (use when n>=50)					1233	95% Gamma Adjusted UCL (use when n<50)					1235
67												
68	Estimates of Gamma Parameters using KM Estimates											
69	Mean (KM)					922.3	SD (KM)					1603
70	Variance (KM)					2568881	SE of Mean (KM)					109.2
71	k hat (KM)					0.331	k star (KM)					0.33
72	nu hat (KM)					143.7	nu star (KM)					143.1
73	theta hat (KM)					2785	theta star (KM)					2798
74	80% gamma percentile (KM)					1444	90% gamma percentile (KM)					2687
75	95% gamma percentile (KM)					4092	99% gamma percentile (KM)					7701
76												
77	Gamma Kaplan-Meier (KM) Statistics											
78	Approximate Chi Square Value (143.05, α)					116.4	Adjusted Chi Square Value (143.05, β)					116.3
79	95% Gamma Approximate KM-UCL (use when n>=50)					1133	95% Gamma Adjusted KM-UCL (use when n<50)					1135
80												
81	Lognormal GOF Test on Detected Observations Only											
82	Shapiro Wilk Approximate Test Statistic					0.932	Shapiro Wilk GOF Test					
83	5% Shapiro Wilk P Value					1.3945E-6	Detected Data Not Lognormal at 5% Significance Level					
84	Lilliefors Test Statistic					0.0965	Lilliefors GOF Test					
85	5% Lilliefors Critical Value					0.0796	Detected Data Not Lognormal at 5% Significance Level					
86	Detected Data Not Lognormal at 5% Significance Level											
87												
88	Lognormal ROS Statistics Using Imputed Non-Detects											
89	Mean in Original Scale					920.6	Mean in Log Scale					5.109
90	SD in Original Scale					1608	SD in Log Scale					2.135
91	95% t UCL (assumes normality of ROS data)					1101	95% Percentile Bootstrap UCL					1105
92	95% BCA Bootstrap UCL					1126	95% Bootstrap t UCL					1143
93	95% H-UCL (Log ROS)					2618						
94												
95	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution											
96	KM Mean (logged)					5.345	KM Geo Mean					209.5
97	KM SD (logged)					1.771	95% Critical H Value (KM-Log)					2.905
98	KM Standard Error of Mean (logged)					0.121	95% H-UCL (KM -Log)					1428
99	KM SD (logged)					1.771	95% Critical H Value (KM-Log)					2.905
100	KM Standard Error of Mean (logged)					0.121						

	A	B	C	D	E	F	G	H	I	J	K	L
101												
102	DL/2 Statistics											
103	DL/2 Normal						DL/2 Log-Transformed					
104	Mean in Original Scale					917.3	Mean in Log Scale					5.168
105	SD in Original Scale					1609	SD in Log Scale					1.954
106	95% t UCL (Assumes normality)					1098	95% H-Stat UCL					1789
107	DL/2 is not a recommended method, provided for comparisons and historical reasons											
108												
109	Nonparametric Distribution Free UCL Statistics											
110	Detected Data appear Approximate Gamma Distributed at 5% Significance Level											
111												
112	Suggested UCL to Use											
113	95% KM Approximate Gamma UCL					1133						
114												
115	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
116	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
117												
118	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
119	Recommendations are based upon data size, data distribution, and skewness.											
120	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
121	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
122												

APPENDIX

A

COMMUNITY HEALTH AND SAFETY PLAN

**1190 ISLAND VIEW LANE AND
1220-1240 MELBA ROAD
ENCINITAS, CALIFORNIA**



GEOCON
INCORPORATED

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR

**TORREY PACIFIC CORPORATION
ENCINITAS, CALIFORNIA**

**JANUARY 28, 2022
PROJECT NO. G2438-62-02**

TABLE OF CONTENTS

	Page
COMMUNITY HEALTH AND SAFETY PLAN SUMMARY	i
1. INTRODUCTION	1
1.1 Project Location and Description	1
1.2 Project Purpose and Objectives	1
1.3 Schedule	1
1.4 Public Notification.....	2
2. ADMINISTRATIVE REQUIREMENTS/CONTROLS	2
2.1 Personnel	2
2.1.1 Project Manager/Safety Officer (PM/SSO).....	2
2.1.2 Project Field Staff.....	2
2.2 Personnel Training.....	3
2.2.1 General Site Employees	3
3. POTENTIAL SOIL HAZARDS AND PREVENTION MEASURES	3
3.1 Site Preparation and Security Measures	4
3.2 Storm Water Protection	4
3.3 Decontamination Area.....	4
3.4 Airborne Dust Control.....	4
4. PERIMETER AIR MONITORING.....	5
Chlordane FLAL Calculation	5
4.1 Airborne Dust Monitoring Procedures	5
5. PLAN APPROVAL.....	6

FIGURES

1. Vicinity Map

ATTACHMENTS

- A. Public Notices
- B. San Diego Air Pollution Control District Rule 55

COMMUNITY HEALTH AND SAFETY PLAN SUMMARY

Site Name: 1190 Island View Lane and 1220 – 1240 Melba Road

Site Location/Former Address: 1190 Island View Lane and 1220 – 1240 Melba Road, Encinitas, San Diego, California (Figure 1)

APNs: 259-180-09, -10, -16, -33, and 259-181-02 through -04

Property Owner - Developer: Torrey Pacific Corporation
171 Saxony Road, Suite 109
Encinitas, California 92024

Environmental Consultant: Geocon Incorporated
San Diego, California

Project Representatives:

- Project Manager/
Safety Officer: **Troy Reist** (858) 558-6900
Geocon Incorporated
- Owner Representative: **Brian Staver** (760) 942-6095
Torrey Pacific Corporation

Regulatory Agency: County of San Diego – Department of Environmental Health (DEH) under the Voluntary Assistance Program (VAP)

- Agency Representative: **Ewan Moffat** (858) 505-6856
DEH Representative

Planned Activities: Observe the excavation, encapsulation and/or disposal of pesticide-impacted soil that exceeded residential health risk-based screening levels. Confirmation soil sampling and testing will also be performed during the remediation activities.

Chemicals of Concern: Pesticides (chlordane, dieldrin, DDE, heptachlor epoxide)

Emergency Assistance: Fire/Police/Medical Assistance: **911**

1. INTRODUCTION

This Community Health and Safety Plan (CHSP) has been prepared for the remediation of pesticide-impacted soil at the properties located at 1190 Island View Lane and 1220 – 1240 Melba Road (the Site) in Encinitas, California (Figure 1). The CHSP is a compilation of health and safety measures, and/or performance protocols that, when exercised, are intended to minimize the potential for exposure to pesticides during disturbance of pesticide-impacted soil at the Site.

Torrey Pacific Corporation, the site owner, plans to redevelop the Site with 30 residential homes. Therefore, the pesticide-impacted soil identified in the onsite soil that exceeded the regulatory health risk-based screening levels will need to be addressed to accommodate the residential planned uses. The pesticides, chlordane, dieldrin, DDE, and heptachlor epoxide, were detected adjacent to the structures at 1190 Island View Lane at concentrations that exceeded the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESLs) for residential soil.

1.1 Project Location and Description

The overall project consists of 6.646-acres located at 1190 Island View Lane and 1220 - 1240 Melba Road in Encinitas, California (Figure 1). The Site consists of several single-family residences located in a residential neighborhood. The surrounding vicinity includes single-family residences, churches, a horse stable, and a middle school.

1.2 Project Purpose and Objectives

The purpose of the remediation is to mitigate future site users' (residents and workers) exposure to pesticides from site soil. The objective of the remediation is to excavate soil containing pesticides at concentrations exceeding regulatory health risk-based screening levels for residential soil and encapsulate it onsite beneath a clean soil cover, which would act as a barrier to potential exposure prior to redevelopment or dispose of the pesticide-impacted soil at an appropriate waste disposal facility. This CHSP is not intended to replace a worker and health safety plan, therefore, contractors and other subconsultants should implement their own health and safety plan, which takes into consideration the potential exposure to the pesticides discussed herein.

1.3 Schedule

Soil remediation is anticipated to commence sometime in 2022, which is estimated to take approximately five to ten days to complete.

1.4 Public Notification

The DEH requires that a public notice be provided to the properties adjacent to (within line of sight of) the Site a minimum of five days prior to excavating the pesticide-impacted soil. The notice should also be posted at the Site informing the community of the proposed soil removal and include contact information for the environmental consultant performing the work, developer, and DEH case worker. Example public notices are included in Appendix A.

2. ADMINISTRATIVE REQUIREMENTS/CONTROLS

2.1 Personnel

Personnel responsible for implementing the provisions of the CHSP include the Project Manager (PM), who would also function as Site Safety Officer (SSO), and participating project personnel.

2.1.1 Project Manager/Safety Officer (PM/SSO)

The PM/SSO has ultimate authority and responsibility for project health and safety during removal of the pesticide-impacted soil. Accordingly, he/she has the responsibility to develop the CHSP (or assign its development); audit compliance with the provisions of this CHSP; suspend project activities or modify service practices for health and safety reasons; and, to dismiss any individual whose onsite conduct either endangers the health and/or safety of others or is judged not to comply with the provisions of the CHSP.

The PM/SSO is responsible for implementing the provisions of the CHSP and any applicable addenda. Implementation includes:

- Reviewing the CHSP requirements (if prepared by another project member);
- Presenting an overview of the provisions of the CHSP with project participants at a pre-construction meeting; and
- Enforcing the provisions of this CHSP.

The PM/SSO has the authority to suspend project activities any time he/she determines that the provisions of the CHSP are inadequate to provide a service/project environment conducive to employee safety.

2.1.2 Project Field Staff

Project field staff are responsible for:

- Complying with the provisions of this CHSP;
- Performing services in a manner that is consistent with good health and safety practice; and
- Reading and being knowledgeable of the contents of this CHSP.

2.2 Personnel Training

Applicable training recommended for project field staff includes attending project orientations, familiarization with the requirements of the CHSP, and hazardous waste operations and emergency response standards as described below.

2.2.1 General Site Employees

Site employees should attend the pre-construction meeting prior to starting the project. The meeting would review the elements of the CHSP, including the location of potential health and safety hazards on the Site and requirements of the CHSP. It is the responsibility of the owner or their representative to ensure that the project personnel working on the project be invited to the pre-construction meeting or be provided a copy of the CHSP and be familiar with its contents prior to working on the project.

The soil removal tasks performed under this CHSP are considered Hazardous Waste Operations as defined by T8 CCR §5192 “Hazardous Waste Operations and Emergency Response.” We recommend project personnel complete the applicable training requirements outlined in T8 CCR §5192(e) - Training (24-hour Certificate and current annual Refresher Training).

3. POTENTIAL SOIL HAZARDS AND PREVENTION MEASURES

The pesticide-impacted soil identified at 1190 Island View Lane that exceed their respective ESLs consists of chlordane, dieldrin, DDE and heptachlor epoxide.

Exposures to the pesticide-impacted soil identified above can occur through one or more of the following ways: inhalation, ingestion, or through skin and/or eye contact. Further details and information regarding the physical description of the pesticides listed above including health hazards, routes of entry into the body, signs and symptoms of exposure, and target organs, chemical and physical properties can be found at the National Institute for Occupational Safety and Health (NIOSH) website (<https://www.cdc.gov/niosh/npg/mobilepocketguide.html>).

To reduce potential exposure to pesticides, site employees working directly with or handling pesticide-impacted soil should use safe work practices that include proper personal protective equipment (gloves, eye wear, boots, proper clothing), personal hygiene practices (i.e. hand washing), and the use of water to allay potential airborne dust should be implemented. As mentioned previously, contractors

and other subconsultants should implement their own health and safety plan, which takes into consideration the potential exposure to the pesticides listed above.

3.1 Site Preparation and Security Measures

Prior to equipment mobilization for the proposed remedial activities, site preparation may include site inspections, surveying, boundary staking, sampling, utility connections or disconnections, and fencing installation. Formal work (regulated) zones should be established at the Site prior to the start of soil excavation.

3.2 Storm Water Protection

Storm water best management practices should be implemented to reduce or eliminate sediment and other pollutants from entering existing storm water drains in adjacent streets.

3.3 Decontamination Area

Entry into pesticide-impacted areas should be limited to authorized personnel and equipment to avoid unnecessary exposure and related transfer of contaminants. Equipment and trucks that are used for excavating and transporting soil should be decontaminated in a designated area before leaving the Site. Following completion of excavation, equipment should be dry-decontaminated with brooms, brushes, and/or towels on top of plastic sheeting at a designated decontamination area onsite. Soil removed from equipment during decontamination activities should be added to the pesticide-impacted soil encapsulation area or disposal stockpile. The contractor is responsible for setting up the decontamination areas and cleaning their equipment to ensure that pesticide-impacted soil is not transferred to clean areas on the Site or offsite.

3.4 Airborne Dust Control

Procedures including the use of water as a dust suppressant to minimize dust generation during the soil removal activities should be implemented to adhere with San Diego Air Pollution Control District Rule 55 for fugitive dust control (see Attachment B). Water should be sprayed prior to daily work activities, during excavation/loading and placement activities. Watering equipment should be continuously available to provide proper dust control. Water should be applied in sufficient quantities to prevent visible dust emissions but not heavy enough to create runoff or soil erosion, which could spread pesticide-impacted soil to other portions of the Site or offsite. Remedial operations should not be performed during periods of high winds where the use of engineering controls are ineffective in maintaining dust levels. If visible dust is observed, the remediation work will be halted until the use of engineering controls (i.e. wet methods) can effectively prevent fugitive dust emissions.

4. PERIMETER AIR MONITORING

Perimeter air monitoring should be performed during site activities in which pesticide-impacted soil is being disturbed or handled. The purpose of real-time monitoring for airborne dust is to ensure that “wet methods” utilized during remedial activities are effective in mitigating potential offsite transport of airborne dust from the Site.

Perimeter air monitoring includes active monitoring of upwind (background) and downwind perimeter (“fence line”) dust levels closest to the nearest residences or receptors. The fence line dust action level (FLAL) for chlordane was calculated below, which had the highest concentration of the other pesticides detected on Site.

Chlordane FLAL Calculation

The United States Environmental Protection Agency Region 9 Regional Screening Levels (RSL) for chlordane in residential air is 0.028 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) or 2.8×10^{-5} milligrams per cubic meter (mg/m^3). However, this is a conservative value since it assumes continuous exposure and does not account for the potential short-term exposure that could occur during the remediation of pesticide-impacted soil. The maximum chlordane concentration detected in soil at the Site during our assessment was 43,000 $\mu\text{g}/\text{kg}$ (43 mg/kg), which was utilized as a “worst case” value in the following equation:

$\text{FLAL (mg/m}^3\text{)} = \frac{(\text{RSL for chlordane of } 2.8 \times 10^{-5} \text{ mg/m}^3) \times (1.0 \times 10^6 \text{ mg/kg})}{\text{chlordane concentration of 43 mg/kg}}$
--

The calculated FLAL for chlordane is 0.65 mg/m^3 . However, this exceeds the *Permissible Exposure Limits (PEL) for Chemical Contaminants* standards of 0.5 mg/m^3 published by Cal/OSHA in Title 8 California Code of Regulations (T8 CCR) §5155 Table AC-1. Therefore, we have applied a 50 percent “safety factor” for additional protection to public health to be more conservative. Thus, the recommended FLAL for the ambient real-time air monitoring will be 0.325 mg/m^3 during remedial activities for pesticide-impacted soil.

4.1 Airborne Dust Monitoring Procedures

Perimeter airborne dust monitoring during the remediation activities shall include one upwind (background) location and two downwind locations, including an additional monitor along the northern perimeter adjacent to Oak Crest Middle School. Wind direction data recorded at the weather station at Carlsbad McClellan-Palomar Airport (KCRQ) approximately 6 miles north of the Site, (<http://w1.weather.gov/data/obhistory/KCRQ.html>) indicates the predominant wind direction in the site vicinity is from the west.

Ambient air monitoring would be performed during excavation and handling of the pesticide-impacted soil on Site. The real-time monitors would be zeroed according to the manufacturer's instructions, calibrated to the appropriate flow rate, and programmed to log total dust levels every 60 seconds. Air sampling would also be performed concurrently during the real time air monitoring. Air samples would be collected prior and during the excavation activities of pesticide-impacted soil on the Site. Sampling would consist of pumping air over a filter/solid sorbent tube, which will be analyzed for pesticides in general accordance with National Institute of Occupational Safety and Health (NIOSH) Method 5600 on an expedited turnaround time.

The most conservative calculated FLAL discussed previously was chlordane (0.325 mg/m^3), which is the level the audible alarms on the air monitors downwind would be set to during the remediation activities. If a downwind real-time monitor alarms, the level recorded would be compared to the ambient upwind monitor. Real-time measurements will also be compared to the FLAL to ensure that engineering controls (water spray) utilized during remediation are effective. If the FLAL is met or exceeded, then remedial operations would be stopped until engineering controls (water spray) are increased to effectively lower the FLAL.

Remedial operations should not be performed during periods of high winds where the use of engineering controls (i.e. wet methods) are ineffective in maintaining dust levels below the FLAL. Areas of disturbed impacted soil should be moisture-conditioned or temporarily covered with plastic sheeting until such time that onsite dust conditions allow work to resume. During non-working hours (i.e. evenings and weekends) a water truck should remain onsite and personnel available on-call if high winds are forecasted.

5. PLAN APPROVAL

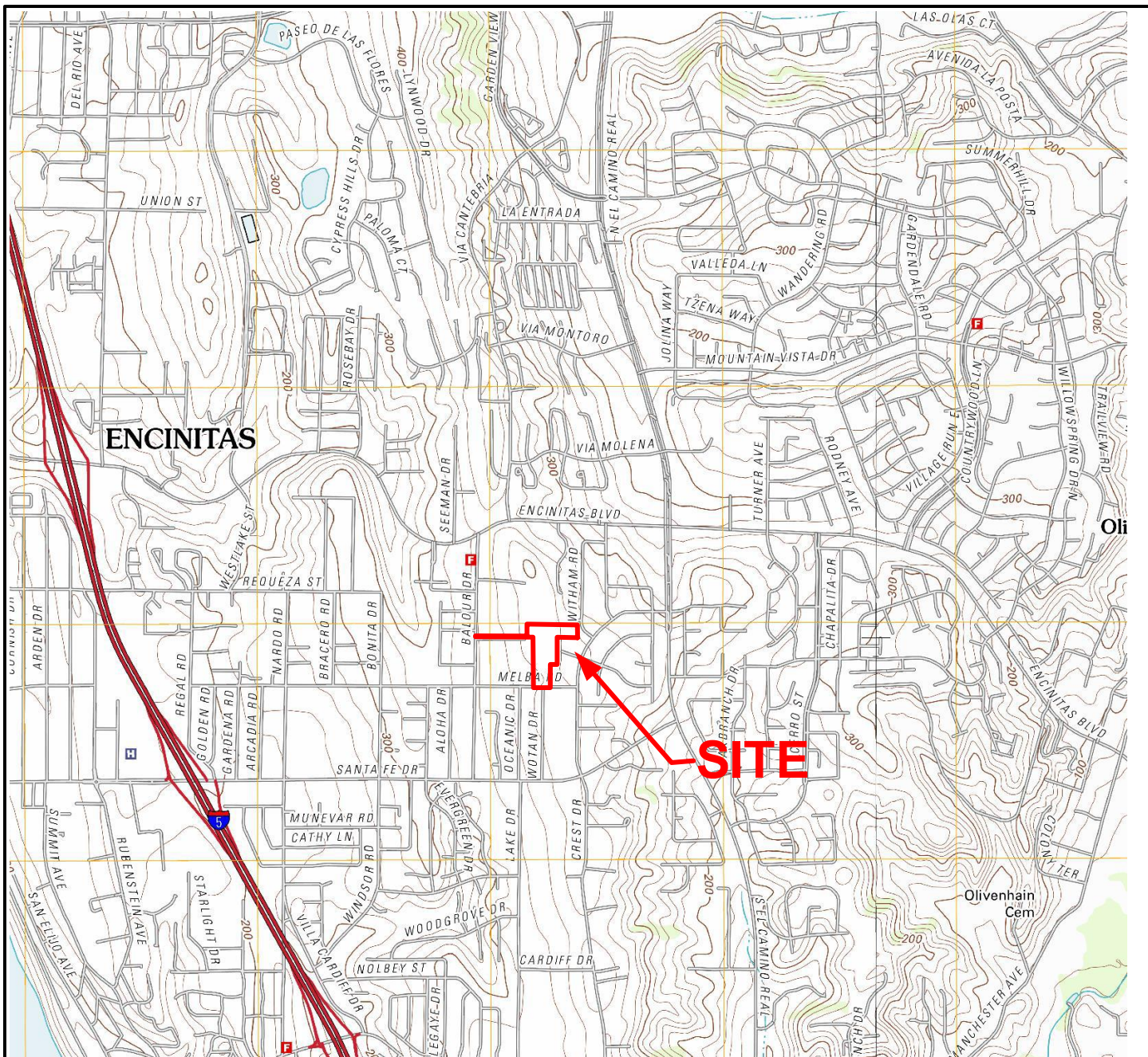
The undersigned has reviewed and approved this Community Health and Safety Plan prepared for the excavation of pesticide-impacted soil for the Site, as described herein.

Troy K. Reist

Troy K. Reist, CEG, MBA
Senior Geologist



January 28, 2022
Date



Base Map:
USGS Topographic Map, 7.5-minute Series
Encinitas, CA



VICINITY MAP

GEOCON
INCORPORATED



GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS
6960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858 558-6900 - FAX 558-6159

MHW

1190 ISLAND VIEW LANE AND
1220 - 1240 MELBA ROAD
ENCINITAS, CALIFORNIA

JANUARY 2022

PROJECT NO. G2438-62-02

FIG. 1

APPENDIX

A

NOTICE

Remediation activities are to be conducted within the Site boundaries at 1190 Island View Lane and 1220 – 1240 Melba Road, Encinitas, California to soil impacted with pesticides (chlordan, dieldrin, DDE, heptachlor epoxide) associated with past site usage.

Dust suppression methods will be used during the handling of pesticide-impacted soil to minimize airborne dust and mitigate the potential release of fugitive contaminants beyond the boundaries of the site.

The remediation activities are anticipated to commence sometime in 2022 between 7:00AM and 5:00PM Monday through Saturday. It is not expected that work will take place on Sunday or holidays and no street closures will be necessary.

If you have any questions concerning this notice, please contact any of the following:

- Mr. Troy Reist, Geocon Incorporated, Project Manager – (858) 558-6960

- Mr. Brian Staver, Torrey Pacific Corporation, Developer – (760) 942-6095

- Mr. Ewan Moffat, Department of Environmental Health – (858) 505-6856

PROPOSITION 65 WARNING

This area contains a chemical known to the State of California to cause cancer.

1190 Island View Lane and 1220 – 1240 Melba Road

Remedial Activity Notification

To: Adjacent Property Owners to 1190 Island View Lane and 1220 – 1240 Melba Road, Encinitas, San Diego, California.

From: Geocon Incorporated

Subject: Soil Remediation Activity

This notification has been prepared by Geocon Incorporated on behalf of the owner of the subject properties, to inform the adjacent property owners, as requested by the County of San Diego Department of Environmental Health, Site Assessment and Mitigation Division of the following:

- Soil remediation activities are to be conducted within the site boundaries to soil impacted with pesticides (chlordane, dieldrin, DDE, heptachlor epoxide) associated with past site usage. These pesticides are known by the State of California to cause cancer and birth defects or other reproductive harm.
- The planned activities are anticipated to commence sometime in 2022 between 7:00AM and 5:00PM Monday through Saturday. It is not expected that work will take place on Sunday or holidays and no street closures will be necessary.
- Access to the property will be restricted to key personnel and workers during the remediation activities. Water spray will be used during the remediation of pesticide-impacted soil to minimize airborne dust and mitigate the potential release of fugitive contaminants beyond the boundaries of the project site.

If you have any questions concerning this notice, please contact any of the following:

- Mr. Troy Reist, Geocon Incorporated, Project Manager – (858) 558-6960
- Mr. Brian Staver, Torrey Pacific Corporation, Developer – (760) 942-6095
- Mr. Ewan Moffat, Department of Environmental Health – (858) 505-6856

APPENDIX

B

RULE 55 FUGITIVE DUST CONTROL

(Adopted June 24, 2009; Effective December 24, 2009)

(a) APPLICABILITY

Except as provided in Section (b), the provisions of this rule shall apply to any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas. Activities subject to this regulation are also subject to the applicable requirements of Rule 50 (Visible Emissions) and Rule 51 (Nuisance).

(b) EXEMPTIONS

The provisions of this rule shall not apply to the following:

- (1) Noncommercial construction or demolition activities in support of any structure designed for and used exclusively as a dwelling for not more than four families;
- (2) Emergency operations conducted during and in response to life-threatening situations, or in conjunction with any officially declared disaster or state of emergency;
- (3) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and/or sewer during periods of unplanned service outages and emergency disruptions;
- (4) Any active operation, open storage pile, or inactive disturbed area for which the owner/operator can demonstrate that necessary fugitive dust preventive or mitigating actions are in conflict with the California or federal Endangered Species Acts, or a local, state, or federal water quality requirement;
- (5) Explosive blasting operations. However, any other activities capable of generating fugitive dust emissions and performed in conjunction with explosive blasting, such as vehicle transport of materials produced by blasting operations, are not exempt from complying with the provisions of this rule or other applicable rules;
- (6) Abrasive blasting operations regulated by Rule 71 (Abrasive Blasting);
- (7) Activities subject to an Air Pollution Control District permit to operate;
- (8) Permanent unpaved roads.

(c) DEFINITIONS

For the purpose of this rule, the following definitions shall apply:

(1) **“Active Operation”** means any construction or demolition activity capable of generating fugitive dust. This includes but is not limited to, earth-moving activities, and heavy- and light-duty vehicular movement on disturbed surface areas or on unpaved roads.

(2) **“Bulk Materials”** means any material which can emit fugitive dust when stored, disturbed, or handled, and is un-packaged. Bulk material includes, but is not limited to, sand, gravel, soil, aggregate material, and other organic or inorganic particulate matter.

(3) **“Commercial”** means work conducted for financial compensation by other than a tenant or property owner.

(4) **“Construction or Demolition Activity”** means any on-site activity preparatory to or for the purpose of building, altering, rehabilitating, raising, tearing down, breaking into pieces, or improving property, including, but not limited to, the following activities: grading, excavation, loading, transporting, crushing, cutting, planing, shaping or ground breaking.

(5) **“Dust”** means minute solid particles released into the air by natural forces or by mechanical processes including, but not limited to: crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, and sweeping.

(6) **“Earth-moving Activities”** means activities that include, but are not limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing bulk materials from open storage piles, or soil mulching.

(7) **“Emergency”** means an immediate threat to human health or property.

(8) **“Erosion”** means the movement and deposition of land surface materials by water or wind primarily as a result of human activities.

(9) **“Inactive Disturbed Area”** means a portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emissions of fugitive dust. This definition excludes those areas that have:

(i) Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

(ii) Been paved or otherwise covered by a permanent structure; or

(iii) Established a vegetative ground cover equivalent to at least 70% percent of the background coverage for nearby undisturbed areas.

(10) **“Open Storage Pile”** means any accumulation of bulk material with five percent or greater silt content which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more

square feet. Silt content level is assumed to be five percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136 or other equivalent method approved in writing by the California Air Resources Board, that the silt content is less than five percent.

(11) “**Owner/operator**” means any person who owns, leases, operates, controls, or supervises any activity subject to this rule or any person who owns, leases, operates, controls, or supervises the site at which any activity subject to this rule occurs, or both.

(12) “**Particulate Matter**” means any finely divided material which exists as a solid or liquid at standard conditions, excluding uncombined water.

(13) “**Paved Road**” means an improved street, highway, alley, public way, or easement that is covered by concrete, asphaltic concrete, fresh or recycled asphalt, or rubberized asphalt, excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic.

(14) “**Permanent Unpaved Road**” means any unsealed or dirt roadway that is not covered by concrete, asphaltic concrete, fresh or recycled asphalt, or rubberized asphalt, and which is designed and intended to remain unsealed and uncovered indefinitely. This definition excludes public or private roads undergoing construction or resurfacing.

(15) “**Person**” means any individual, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local government agency or public district and any officer or employee thereof, or the federal government and any officers or employees thereof to the extent authorized by federal law, or any other entity whatsoever which is recognized by law as the subject of rights and duties.

(16) “**Property Line**” means the boundaries of an area in which either a person causing the fugitive dust emissions or a person allowing such emissions has the legal control or possession. This may include all or portions of a legal parcel or parcels as defined by the San Diego County Assessor.

(17) “**Track-Out/Carry-Out**” means any bulk materials that adhere to and agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires), or are inadvertently carried out, and that fall onto a paved road, creating visible roadway dust.

(18) “**Visible Dust Emissions**” means any solid particulate matter that is visually detectable in the air without the aid of instruments other than corrective lenses.

(19) “**Visible Roadway Dust**” means any sand, soil, dirt, or other solid particulate matter which is visible upon paved public road surfaces and which can be removed by a vacuum sweeper, or a wet sweeper under normal operating conditions.

(d) **STANDARDS**

(1) **Airborne Dust Beyond the Property Line:** No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60 minute period.

(2) **Track-Out/Carry-Out:** Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:

(i) be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation: track-out grates or gravel beds at each egress point, wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks: using secured tarps or cargo covering, watering, or treating of transported material; and

(ii) be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM10-efficient street sweepers certified to meet the most current South Coast Air Quality Management District Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

The following personnel, including client representatives and subcontractors involved with the project activities have reviewed, or received a copy of this CHSP and Attachments, and agree to follow the community health and safety procedures described herein.

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