ALAMEDA HIGH SCHOOL SOFTBALL FIELD HUMAN HEALTH RISK ASSESSMENT

ALAMEDA HIGH SCHOOL
2200 CENTRAL AVENUE
ALAMEDA, CALIFORNIA, 94501
CPS CASE NO. RO0003666

PREPARED FOR:

ALAMEDA UNIFIED SCHOOL DISTRICT
2060 CHALLENGER DRIVE
ALAMEDA CALIFORNIA, 94501

KLEINFELDER PROJECT # 25002610.001A
August 18, 2025

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A Report Prepared for:

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ALAMEDA CALIFORNIA, 94501

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ALAMEDA, CALIFORNIA

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1 INTRODUCTION

Kleinfelder has developed this Human Health Risk Assessment (HHRA) for the Alameda Unified School District (AUSD) to evaluate potential pre-mitigation human health risks associated with sub-surface environmental impacts on the softball field at Alameda High School (AHS). The AHS campus, located at 2200 Central Avenue in Alameda, California, spans approximately 13 acres and is under the environmental oversight of the Alameda County Environmental Health Department (GeoTracker Case T10000022988). AHS is in a mixed residential/commercial area bordered by Central Ave, Oak St, Encinal Ave, and Walnut St.

1.1 SITE BACKGROUND

The AHS softball field (Site) is located on the southern portion of the AHS campus in West Central Alameda, California. The Site is bounded by Encinal Avenue to the south and adjacent to the Emma Hood Swim Center to the east; the softball field occupies land formerly associated with the Porter Elementary School, which was destroyed by fire in 1973. Following the fire, the site was incorporated into the AHS campus during its 1978 expansion. Historical documentation and soil sampling indicate that construction debris from the former school may have been buried beneath the softball field.

During construction activities associated with the Emma Hood Swim Center Modernization project, soils impacted with lead were observed in non-native fill present in the top three feet of soils in the swim center (Kleinfelder, 2025). To evaluate whether this non-native fill extended beyond the boundaries of the swim center, sampling in the softball field was initiated.

Soil conditions observed during investigations at the softball field indicate the presence of topsoil in the upper 0.5 feet, consisting primarily of silt with very fine-grained sand, trace amounts of subangular gravel up to 0.5 inches in diameter, and organics such as roots. This is followed by approximately 2 to 3 feet of poorly graded sand, yellowish brown to pale olive in color, moist, loose, and containing trace amounts of silt, clay, and subangular gravel up to 2 inches in diameter. Sporadic construction or demolition debris (including brick fragments) was encountered at depths between approximately 3.5 and 8 feet below ground surface (bgs). At deeper levels (6.5 to 8 feet), native silty sands with low plasticity, dark brown coloration, and medium dense to dense consistency were observed.

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1.2 RISK ASSESSMENT APPROACH

The Human Health Risk Assessment (HHRA) was conducted in accordance with guidelines from the United States Environmental Protection Agency (USEPA, 1989) and the California Environmental Protection Agency (Cal-EPA) Office of Environmental Health Hazard Assessment (OEHHA, 2004), specifically tailored for evaluating school-based exposures and risks.

This HHRA focuses on evaluating potential health risks associated with chemical concentrations detected in soil at the AHS softball field. The assessment process includes identifying chemicals of potential concern (COPCs) in soil, analyzing relevant exposure pathways (e.g., direct contact, inhalation of dust), and assessing the toxicity of those chemicals. Estimated health risks are derived by calculating the potential dose based on soil contact rates, exposure frequency and duration for student and staff receptors and integrating these values with chemical-specific toxicity criteria, including reference doses (for evaluating noncancerous health effects) and cancer slope factors (for estimating cancer risk).

1.3 REPORT ORGANIZATION

The rest of this report is structured as follows:

- Section 2, "*Data Collected*," describes the site investigation activities and the process used to identify COPCs.
- Section 3, "*Exposure Assessment*," identifies populations that may be exposed to COPCs at the softball field, considering both current and proposed future land uses.
- Section 4, "*Toxicity Assessment*," examines the relationship between the level of exposure to COPCs and the potential for adverse health effects in exposed populations.
- Section 5, "*Risk Characterization*," integrates the findings from the exposure and toxicity assessments to quantify potential health risks associated with COPCs at the softball field.
- Section 6, *"Uncertainty Analysis*," addresses and evaluates the uncertainties linked to each component of the HHRA results.
- Section 7 presents the Conclusion of this HHRA.
- Section 8 provides a list of References utilized in this HHRA.

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2 DATA COLLECTED

Data collected from the Site investigation (Kleinfelder, 2025) was evaluated for use in this risk assessment. COPCs identified for consideration in this risk assessment are any COPCs detected at least once in Site soils during investigation activities. Comprehensive soil analytical data from the Site investigation activities are included as Attachment A. The investigation locations for the Softball Field are shown on Figure 2.

The maximum concentrations for each detected COPC were utilized in this HHRA to evaluate human health risks. The maximum concentrations used in this assessment are provided on Table 3-1. Laboratory results reported as not detected are not considered in this assessment.

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3 EXPOSURE ASSESSMENT

The objective of the exposure assessment is to estimate the frequency, duration, and magnitude of potential exposures to the COPCs. To accomplish this objective, an exposure pathways analysis was prepared to predict the means by which a human population (receptor group) may be exposed to the COPCs. The exposure assessment was based on the assumption that if exposure does not occur, then there is no hazard. Thus, certain exposure pathways can be eliminated from consideration in the HHRA if such pathways are not complete, i.e., if a receptor is not likely to come into contact with a COPC by a given pathway. For exposure pathways considered complete, estimates of the intake (dose) that a receptor may receive under specific exposure conditions were developed for use in the risk characterization section of this HHRA.

A complete exposure pathway has five elements:

1. A source,
2. A mechanism for release,
3. An environmental transport medium,
4. An exposure point and a receptor, and
5. A route of exposure.

An exposure pathway is complete (i.e., there is exposure) if a receptor ingests or inhales a constituent, or if the constituent is absorbed through the skin. Exposure to a constituent in a particular medium cannot occur unless the exposure pathway is complete (therefore, there is no potential for adverse health affects due to the presence of that constituent in that medium).

The exposure assessment section of the HHRA report consists of the following:

- Identification of COPCs – a discussion of the chemicals present at the subject site in, for example, soil, air, or water, to which receptors may be exposed.
- Identification of Exposure Pathways – a discussion of the conceptual site model describing the sources, release mechanisms, fate and transport mechanisms, exposure routes, and potential receptors.

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- Estimation of Exposure Point Concentrations (EPC) – a description of the method used to develop estimates of soil and groundwater concentrations of the COPCs to which potential receptors may be exposed.
- Quantification of Exposure (Constituent Intake) – a discussion of the assumptions and equations used to estimate exposure to the COPCs. Exposure is quantified as a daily intake of a constituent by each exposure pathway

3.1 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN

Based on the data described in Section 2, the COPCs were identified as any chemical detected at least once in the soil depth interval from ground surface to a depth of 8 feet, the maximum depth of soil borings in the investigation. The COPCs (and their corresponding chemical abstracts service number [CAS]) to which receptors may be exposed for the softball field are listed on Table 3-1 below.

Table 3-1

Chemicals of Potential Concern

CAS	Chemical Name	Maximum Concentration (mg/kg)
7440382	Arsenic	7.6
12789036	Chlordane	0.09
608731	delta-HCH	0.03
72559	4,4'-DDE	0.24
50293	4,4'-DDT	0.28
7440360	Antimony	1.10
7440393	Barium	180
7440439	Cadmium	0.55
16065831	Chromium 3+	72
18540299	Chromium 6+	0.54
7440484	Cobalt	9.70
7440508	Copper	18
7439921	Lead	240
7439976	Mercury	0.78
7440020	Nickel	49
7440622	Vanadium	40
7440666	Zinc	79

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3.2 IDENTIFICATION OF EXPOSURE PATHWAYS

An exposure pathway describes the connection between a chemical in an environmental medium (e.g., soil, groundwater, or air) and the manner in which a receptor comes into contact with that chemical. For the softball site, COPCs present in soil are the focus of the HHRA. Receptors evaluated in this HHRA include:

- Adult employees of the school district including school staff and maintenance personnel, and
- Students (ages 15-18) attending the school.

These receptor groups may be exposed to COPCs in the soil by the following mechanisms:

- Ingestion of soil incidental to activities on the softball field;
- Dermal contact with COPCs in the soil; and
- Inhalation of soil dust that enters the breathing zone due to wind or mechanical erosion.

Health protective exposure scenarios were developed for each receptor:

- Adult employees are assumed to work at the high school for 8 hours per day, 180 days per year, at the location with the highest reported chemical concentrations on the softball field.
- Students are assumed to attend the school for four years, spending 4 hours per day, 180 days per year, at the same high-concentration location.

3.3 ESTIMATION OF EXPOSURE POINT CONCENTRATIONS

EPCs represent the concentration of the COPCs in soil to which the receptors may be exposed. EPCs for this HHRA were calculated from the maximum reported concentration of each COPC and default exposure assumptions (Tables 3-2 and 3-3) recommended in guidance from the Cal/EPA Department of Toxic Substances Control (DTSC, 2025a).

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Table 3-2
Exposure Assumptions for Adult Receptor Group

Exposure Route	Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
ALL	EFa	Exposure Frequency – adult	days/year	180	Site-specific
	EDa	Exposure Duration – adult	years	25	DTSC (2019)
	ETa	Exposure Time – adult	hours/day	0.33	Site-specific
	BWa	Body Weight – adult	kg	70	DTSC (2019)
	ATc	Averaging Time – cancer	days	25550	DTSC (2019)
	ATn	Averaging Time – noncancer	days	9125	DTSC (2019)
Ingestion	SIRa	Soil Ingestion Rate – adult	mg/day	100	DTSC (2019)
	CFsi	Conversion Factor (soil ingestion)	kg/mg	0.000001	---
Inhalation	AIRa	Inhalation Rate – adult	m3/day	20	DTSC (2019)
	PEF	Particulate Emission Factor	m3/kg	1.32E+09	DTSC (2019)
Dermal	SAa	Skin Surface Area Exposed – adult	cm2	6032	DTSC (2019)
	AFa	Soil Adherence Factor	mg/cm2	0.07	DTSC (2019)
	ABS	Absorption factor	unitless	chemical specific	EPA (2024)
	CFdc	Conversion Factor (dermal contact)	kg/mg	0.000001	---

Table 3-3
Exposure Assumptions for Student Receptor Group

Exposure Route	Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
ALL	EFc	Exposure Frequency	days/year	180	Site-specific
	EDc	Exposure Duration	years	4	Site-specific
	ETc	Exposure Time	hours/day	0.17	Site-specific
	BWc	Body Weight	kg	60	EPA (2011)
	ATcc	Averaging Time - cancer	days	25550	DTSC (2019)
	ATnc	Averaging Time - noncancer	days	1460	DTSC (2019)
Ingestion	SIRc	Soil Ingestion Rate	mg/day	200	DTSC (2019)
	CFsi	Conversion Factor (soil ingestion)	kg/mg	0.000001	---
Inhalation	AIRc	Inhalation Rate	m3/day	20	DTSC (2019)
Dermal	SAc	Skin Surface Area Exposed	cm2	6032	DTSC (2019)
	AFc	Soil Adherence Factor	mg/cm2	0.2	DTSC (2019)

3.4 QUANTIFICATION OF EXPOSURE

Estimates of the daily dose of each COPC that individuals in the adult and student receptor groups might receive by the ingestion, dermal contact, and dust inhalation pathways were calculated using the following equations:

Chronic daily intake (CDI) due to soil ingestion was estimated from the following equation:

$$CDI\ (mg/kg\text{-}day) = (C_s \times IR \times EF \times ED \times CF)/(BW \times AT)$$

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where:

C_s = soil concentration (mg/kg)
IR_{soil} = soil ingestion rate (mg/day)
EF = exposure frequency (days/year)
ED = exposure duration (years)
CF = conversion factor (10^{-6} kg/mg)
BW = average body weight (kg)
AT = averaging time (days)

Chronic daily intake due to dermal contact was estimated from the following equation:

$$CDI\ (mg/kg\text{-}day) = (C_s \times SA \times AF \times ABS \times EF \times ED \times CF)/(BW \times AT)$$

where:

C_s = soil concentration (mg/kg)
SA = skin surface area exposed (cm^2)
AF = soil-to-skin adherence factor (mg/cm^2-day)
ABS = absorption factor (unitless)
EF = exposure frequency (days/year)
ED = exposure duration (years)
CF = conversion factor (10^{-6} kg/mg)
BW = average body weight (kg)
AT = averaging time (days)

Absorption factors are chemical-specific. Values from EPA (2024) and DTSC (2015) were referenced and the highest absorption factor will be chosen for chemicals with absorption factors available in both references.

Chronic daily intake due to dust inhalation was estimated from the following equation:

$$CDI\ (mg/kg\text{-}day) = (C_s \times IR_{air} \times EF \times ED)/(PEF \times BW \times AT)$$

where:

C_s = soil concentration (mg/kg)
IR_{air} = air inhalation rate (m^3/day)

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EF	=	exposure frequency (days/year)
ED	=	exposure duration (years)
PEF	=	particulate emission factor (m^3/kg)
BW	=	average body weight (kg)
AT	=	averaging time (days)

The particulate emission factor (PEF) relates the chemical concentration in soil to the concentration of respirable particles in the air due to fugitive dust emissions. A default PEF of 1.32×10^9 cubic meters per kilogram (m^3/kg) was applied in the to represent a continuous emission of soil particles over an extended period of time (DTSC, 2025a).

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4 TOXICITY ASSESSMENT

The purpose of the toxicity assessment is to present the toxicity values that will be used in the risk assessment. The toxicity values identified in this section are integrated with the chemical intake information developed (as described in Section 3) to quantify the cancer risk and noncancer hazard that may be associated with exposure to the chemicals detected in soil at the softball field.

Two primary sources of critical toxicity values were used for this risk assessment *HHRA HERO Note 10 – Toxicity Criteria* (DTSC, 2025b), and EPA's *Regional Screening Levels* (EPA, 2024).

For assessing human health risks, health effects are divided into two broad groups – noncancer and cancer effects. This division is based on the different mechanisms of action currently associated with each category. For this assessment, the noncancerous effects of the COPCs are evaluated independently from the carcinogenicity.

Inhalation unit risk factors were converted to inhalation slope factors to evaluate the carcinogenicity, and inhalation reference concentrations were converted to inhalation reference doses evaluate the noncancerous effects of the chemicals of potential concern.

Oral cancer slope factors were used to evaluate the carcinogenicity, and oral reference doses were used to evaluate the noncancerous effects of the chemicals of potential concern. The toxicity values used in this risk assessment are presented in Table 4-1.

Table 4-1
Toxicity Values Used to Calculate Cancer Risk and Noncancer Hazard

CAS No.	COPC	Oral Reference Dose (mg/kg-d)	Inhalation Reference Dose (mg/kg-d)	Oral Slope Factor (mg/kg-d)-1	Inhalation Slope Factor (mg/kg-d)-1
12789036	Chlordane	5.0E-04	2.0E-04	3.5E-01	3.5E-01
72559	4,4'-DDE	5.0E-04	5.7E-04	3.4E-01	3.4E-01
50293	4,4'-DDT	5.0E-04	--	3.4E-01	3.4E-01
608731	delta-HCH	6.0E-08	--	4.0E+00	3.9E+00
7440360	Antimony	4.0E-04	8.57E-05	--	--
7440393	Barium	2.0E-01	1.4E-04	--	--
7440439	Cadmium	1.0E-04	2.9E-06	--	1.5E+01
16065831	Chromium 3+	1.5E+00	--	--	--

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18540299	Chromium 6+	9.0E-04	8.6E-06	5.0E-01	5.3E+02
7440484	Cobalt	3.0E-04	1.7E-06	--	3.2E+01
7440508	Copper	4.0E-02	--	--	--
7439976	Mercury	1.7E-11	8.6E-06	--	--
7440020	Nickel	1.1E-02	4.0E-06	--	9.1E-01
7440622	Vanadium	5.0E-03	2.9E-05	--	--
7440666	Zinc	3.0E-01	--	--	--

Toxicity values are not available for petroleum hydrocarbons, therefore, potential health hazards for these compounds were evaluated by comparison to San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Environmental Screening Levels (ESLs) (SFBRWQCB, 2025). Additionally, since toxicity values for petroleum hydrocarbons are not available, compound-specific volatile organic compound (VOC) data were evaluated as an alternate method of evaluating risk due to exposure to petroleum hydrocarbons; VOC results were not detected for all analyzed compounds.

Finally, as toxicity values are not available for lead, potential health hazards for lead is evaluated by comparison to SFBRWQCB ESLs; see discussion on Risk Characterization Results below.

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5 RISK CHARACTERIZATION

Risk characterization is the final step in the risk assessment process. The purpose of the risk characterization is to quantify the potential health risk associated with chemicals detected at the site. Based on the exposure pathways presented in Section 3, the potential health hazards for each complete exposure pathway were estimated for the softball field. Toxicity values for the COPCs were used in conjunction with the estimates of the chronic daily intake to calculate the cancer risk and noncancerous health hazards for the commercial worker and the utility/construction worker.

5.1 CANCER RISK

Cancer risk is defined as the upper bound incremental probability of an individual developing cancer over a lifetime as a result of exposure to a potential carcinogen. Assuming the linearized multistage model for carcinogenesis, the numerical estimate of incremental lifetime cancer risk is calculated by multiplying the average daily chemical intake by the cancer slope factor, as indicated below:

$$Risk = SF \times CDI$$

Where:

Risk	=	the probability of an individual developing cancer (unitless)
CDI	=	chronic daily chemical intake (mg/kg-day)
SF	=	cancer slope factor $(mg/kg/day)^{-1}$

DTSC policy was used to interpret the significance of cancer risk and noncancer hazard estimates (DTSC 2022). Pursuant to DTSC policy, the basis for risk management decisions is a target cancer risk of 1×10^{-6}; therefore, where the cumulative cancer risk estimated on a given site is less than 1×10^{-6}, further investigation, mitigation, or remediation is generally not warranted. Similarly, where the noncancer HI is less than or equal to 1, further investigation, mitigation, or remediation is generally not warranted. Estimates of cancer risk are rounded to one significant figure (EPA, 1989). Similarly, EPA policy may be considered when interpreting the significance of cancer risk estimates. In the National Contingency Plan (NCP) (40 CFR Part 300), the EPA states that, "... for known or suspected carcinogens, acceptable exposure levels are generally concentration levels that represent an excess upper-bound lifetime cancer risk to an individual of between 1×10^{-4} to 1×10^{-6}." Risks less than 1×10^{-6} are insignificant.

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EPA guidance for the evaluation of cancer risk associated with simultaneous exposure to multiple carcinogens assumes that incremental cancer risks are additive (EPA, 1989). However, EPA cautions against assuming that a chemical is carcinogenic through the inhalation route if only the oral route has been shown to be carcinogenic. The same analysis applies to extrapolation for the inhalation route to the oral route of exposure (Denit, 1993). If these assumptions are incorrect, then over- or under-estimation of the actual risk could result (EPA, 1989). The total cancer risk is estimated as follows:

$$Risk_T = \sum Risk_i$$

Where:

$Risk_T$	=	total cancer risk
$Risk_i$	=	the cancer risk estimate for the *i*th toxicant

When a given receptor may be exposed to a chemical of concern via multiple pathways (e.g., ingestion, dermal contact, and inhalation), the risk from each pathway is also summed.

5.2 NONCANCER HAZARD

Noncancerous effects of the COPCs are evaluated by dividing the estimated daily chemical intake by the RfD for that chemical. The resulting value is referred to as the "hazard quotient," as indicated below:

$$NHQ = CDI/RfD$$

Where:

NHQ	=	Noncancer Hazard Quotient
CDI	=	Daily Chemical Intake
RfD	=	Reference Dose

The RfD is an estimate of a daily human intake per unit body weight likely to be without an appreciable noncarcinogenic hazard of deleterious effects during a lifetime or a portion of a lifetime (EPA, 1989). If the chemical intake exceeds the RfD, the hazard quotient will exceed unity (1.0). This is an indication that the estimated intake may represent a level of concern. The hazard quotient, however, is not a measure of the probability of a health effect occurring. Because of the conservatism or uncertainty inherent in the RfD, a hazard quotient greater than 1.0 does not necessarily mean that an adverse effect will occur.

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To evaluate potential noncancerous health hazards posed by simultaneous exposure to multiple chemicals, the hazard quotients for each chemical of concern within a given exposure pathway are summed. The resulting value is referred to as the hazard index (HI) for that pathway. The summation of hazard quotients to obtain the HI assumes additivity of toxic effects and is appropriate only for chemicals with similar toxic endpoints (e.g., liver toxicity) and those that have no antagonistic or synergistic effects between or among them. In this risk assessment, hazard quotients for all chemicals with noncancer effects were summed to ensure a health protective analysis. The HI is expressed as follows:

$$HI = E_1/RfD_1 + E_2/RfD_2 + \ldots\ldots + E_i/RfD_i$$

Where:

E_i = chemical intake for the ith toxicant (mg/kg-day)

RfD_i = reference dose for the ith toxicant (mg/kg-day)

When a given receptor may be exposed to COPCs via multiple pathways (e.g., ingestions, dermal contact, and inhalation), the HIs from each pathway are also summed. EPA cautions against assuming the validity of summing across pathways in the absence of biological evidence or mechanism of action (Denit, 1993). If the cumulative HI is less than 1.0, adverse noncancerous health effects are not expected. If the sum is greater than 1.0, additional evaluation of potential noncancerous health hazards may be warranted.

5.3 RISK CHARACTERIZATION RESULTS

Cancer risk and noncancer hazards that may be associated with soil ingestion, dermal contact with soil, and inhalation of soil dust were estimated for adult and student receptor groups based on use of the softball field.

The risk characterization results are presented below in Tables 5-1 through 5-4. The comprehensive analytical data used to calculate estimates of cancer risk and noncancer hazard are presented in Attachment A. Risk calculation tables are presented in Attachment B.

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Table 5-1
Estimated Cancer Risk Based on Soil Ingestion, Dermal Contact with Soil, and Dust Inhalation: Adult Receptor Group

CAS No.	COPC	Total Cancer Risk
12789036	Chlordane	3E-09
72559	4,4'-DDE	6E-10
50293	4,4'-DDT	8E-10
608731	delta-HCH	1E-08
7440360	Antimony	NA
7440393	Barium	NA
7440439	Cadmium	NA
16065831	Chromium 3+	NA
18540299	Chromium 6+	2E-08
7440484	Cobalt	NA
7440508	Copper	NA
7439976	Mercury	NA
7440020	Nickel	NA
7440622	Vanadium	NA
7440666	Zinc	NA
Total Cancer Risk from All Pathways		4E-08

Table 5-2
Estimated Cancer Risk Based on Soil Ingestion, Dermal Contact with Soil, and Dust Inhalation: Student Receptor Group

CAS No.	COPC	Total Cancer Risk
12789036	Chlordane	9E-10
72559	4,4'-DDE	1E-10
50293	4,4'-DDT	2E-10
608731	delta-HCH	5E-09
7440360	Antimony	NA
7440393	Barium	NA
7440439	Cadmium	NA
16065831	Chromium 3+	NA
18540299	Chromium 6+	5E-09
7440484	Cobalt	NA
7440508	Copper	NA
7440020	Nickel	NA
7439976	Mercury	NA
7440622	Vanadium	NA
7440666	Zinc	NA
Total Cancer Risk from All Pathways		1E-08

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Table 5-3
Noncancer Hazard Based on Soil Ingestion, Dermal Contact with Soil, and Dust Inhalation: Adult Receptor Group

CAS No.	COPC	Total Hazard Index
12789036	Chlordane	4.47E-05
72559	4,4'-DDE	9.77E-06
50293	4,4'-DDT	1.35E-05
608731	delta-HCH	1.37E-01
7440360	Antimony	5.60E-04
7440393	Barium	2.22E-04
7440439	Cadmium	1.13E-03
16065831	Chromium 3+	9.76E-06
18540299	Chromium 6+	1.24E-04
7440484	Cobalt	6.75E-03
7440508	Copper	9.15E-05
7439976	Mercury	9.95E-04
7440020	Nickel	1.28E-03
7440622	Vanadium	1.67E-03
7440666	Zinc	5.36E-05
Noncancer Hazard Index from All Pathways		1.50E-01

Table 5-4
Noncancer Hazard Based on Soil Ingestion, Dermal Contact with Soil, and Dust Inhalation: Student Receptor Group

CAS No.	COPC	Total Hazard Index
12789036	Chlordane	6.11E-05
72559	4,4'-DDE	1.34E-05
50293	4,4'-DDT	1.85E-05
608731	delta-HCH	1.87E-01
7440360	Antimony	7.69E-04
7440393	Barium	2.78E-04
7440439	Cadmium	1.55E-03
16065831	Chromium 3+	1.34E-05
18540299	Chromium 6+	1.69E-04
7440484	Cobalt	9.16E-03
7440508	Copper	1.26E-04
7439976	Mercury	1.36E-03
7440020	Nickel	1.50E-03
7440622	Vanadium	2.27E-03
7440666	Zinc	7.36E-05
Noncancer Hazard Index from All Pathways		2.04E-01

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As presented in this section, the cancer risk for adults and students is well below the 1 x 10^{-6} acceptable cancer risk (Tables 5-1 and 5-2), and the noncancer hazard index for both receptor groups is well below 1.0 (Table 5-3 and 5-4). Therefore, further investigation, mitigation, or remediation is not warranted to protect the health of adults and students using the softball field under the conditions described in this report.

DTSC recognizes that arsenic naturally occurs in California soils at concentrations that exceed health-based DTSC-SLs (Cal/EPA DTSC, 2020); in some cases, the Southern California Ambient Arsenic Screening Level of 12 mg/kg (Cal/EPA DTSC, 2020) is used. However, arsenic concentrations in the Bay Area are typically compared to the Duvergé arsenic background study *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region* (Duvergé, 2011). Accordingly, a background value of 11 mg/kg for arsenic was applied in the HHSE. Arsenic was not present in any soil sample at a concentration that exceeded the background concentration of 11 mg/kg for arsenic published by Duvergé (2011).

Lead in the upper 2.5 feet of soils were evaluated by comparison of soil concentrations to the SFBRWQCB ESL (SFBRWQCB, 2025) for residential land use, at 80 mg/kg; no detections were observed in the upper 2.5 feet of soils at a concentration greater than the residential ESL. Lead concentrations in soils between 2.5 feet and 8 feet were evaluated by comparison of soil concentrations to the SFBRWQCB ESL for commercial land use, at 500 mg/kg; no detections were observed that exceed the commercial ESL.

Diesel-range (TPH-DRO) and motor oil-range (TPH-ORO) hydrocarbons were evaluated by comparison of soil concentrations to the SFBRWQCB ESLs for commercial land use: 940 mg/kg and 180,000 mg/kg, respectively. Neither TPH-DRO nor TPH-ORO were present in any soil sample at a concentration greater than the corresponding ESL.

5.4 RISK CHARACTERIZATION DISCUSSION

A human health risk assessment was performed to estimate the health hazards that may be associated with the chemicals in soil at the softball field. This was achieved through the following steps:

- Chemicals to be included in the risk assessments were identified from available site investigation data;
- The magnitude, frequency, duration, and pathways of potential exposures to the chemicals included in the risk assessments were evaluated;

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- Toxicity values for each chemical included in the risk assessment were identified from appropriate state and federal sources;
- Estimates of cancer risk and noncancer hazard were developed based on assumed exposure conditions, exposure pathways, and the toxicity of each chemical.

The quantitative assessment criteria applied in a human health risk assessment are based on the probability that cancer will develop in an exposed population or the likelihood that noncancerous effects will develop in that population as a result of exposure to chemicals. For the development of cancer, the USEPA has recommended that a cancer risk range of 1×10^{-6} to 1×10^{-4} be used for making decisions about whether further investigation or remediation is warranted (EPA, 1986). Thus, when the cumulative cancer risk for a given site is within or below the 1×10^{-6} to 1×10^{-4} range, further investigation and remediation are generally not warranted. A cumulative cancer risk of 1×10^{-6} means that there is a 1 in 1,000,000 chance that cancer will develop in an exposed individual at some time in their life as a result of exposure to the chemicals.

For noncancer hazards, the USEPA has recommended a hazard quotient of 1.0 for any chemical as the point of departure for making decisions about further investigation or remediation. The hazard quotient is the result of dividing an estimated intake of a chemical through soil ingestion, inhalation, or dermal contact, or all three by a daily dose of a chemical that is expected to be without harm, the reference dose. When total intake exceeds the reference dose, the hazard quotient is greater than 1.0 and there is an increased likelihood that noncancerous adverse health effects will develop in the exposed population.

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6 UNCERTAINTY ANALYSIS

A number of uncertainties are inherent in the estimates of potential cancer risks and non-cancer health hazards that are presented in a HHRA. These uncertainties are generally associated with the sampling strategy and site characterization process, or the assumptions and models that make up the risk assessment process. Possible uncertainties associated with sampling and analysis, exposure assumptions, toxicity values, and risk characterization are discussed in the following sections. Uncertainties associated with sampling and analysis include the inherent variability [standard error] in the analysis, representativeness of the samples, sampling errors, and heterogeneity of the sample matrix. While the quality assurance and quality control program used to conduct the sampling and analysis serves to reduce errors, it cannot eliminate all uncertainty associated with sampling and analysis. In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the COPCs identified and the EPCs calculated are considered representative of potential releases.

The estimation of exposure requires many assumptions to describe potential exposure situations. There are uncertainties regarding the likelihood of exposure, frequency of contact with contaminated media, the concentration of COPCs at exposure points, and the period of exposure. In general, these assumptions are upper-bound assumptions, intended to be conservative, and yield an overestimate of the true risk or hazard. Future soil EPCs were assumed to be equal to existing concentrations. This assumption does not account for fate and transport processes likely to occur in the future, however, the impact on the risk assessment is negligible given the characteristics of metals in soil (i.e., limited degradation or migration) and organochlorine pesticides (i.e., long half-life in the environment).

There are uncertainties associated with the toxicological database. USEPA has outlined some of the sources of uncertainty in the Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A (Interim Final) (EPA, 1989). These sources might include or result from any or all the following:

- Extrapolation of toxicities from high to low doses and from animals to humans
- Species, gender, age, and strain differences in a toxin’s uptake
- Metabolism, organ distribution, and target site susceptibility

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- Variability of the human population with respect to diet, environment, activity patterns, and cultural factors.

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7 CONCLUSION

This HHRA indicates that the maximum COPC concentrations observed within the Softball Field do not exceed the de minimis risk levels for the faculty, staff, students, or other users of the field.

The cumulative cancer risk and the non-cancer hazard index for exposure to the maximum detected COPC concentrations were evaluated using the relevant guidance from Cal-EPA, USEPA, and SFBRWQCB. Accordingly, the cumulative cancer risk for staff and students is found to be below the 10^-6 threshold, and the non-cancer hazards are below the hazard index of 1.

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8 REFERENCES

American Cancer Society. 2025. Cancer Facts and Figures. Atlanta, GA. Available on-line at https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2025/2025-cancer-facts-and-figures-acs.pdf (August 14, 2025).

Denit J. 1993. Implementation of Exposure Assessment Guidance for RCRA Hazardous Waste Combustion Facilities. U.S. Environmental Protection Agency, Office of Solid Waste, Washington DC. September 24, 1993.

DTSC. 2009. Arsenic Strategies: Determination of Arsenic Remediation, Development of Arsenic Cleanup Goals. Human and Ecological Risk Division, Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, California. January 16.

DTSC. 2015. Preliminary Endangerment Assessment Guidance Manual. State of California, Environmental Protection Agency, Department of Toxic Substances Control, Sacramento, California. January 1994 (Interim Final – Revised October 2015).

DTSC. 2022. Human Health Risk Assessment (HHRA) Note 4 – Guidance for Screening Level Human Health Risk Assessments. Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, California. March 29.

DTSC. 2025a. Human Health Risk Assessment (HHRA) Note 1 – Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities. Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, California. April.

DTSC. 2025b. Human Health Risk Assessment (HHRA) Note 10 – Toxicity Criteria. Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, California. April.

Duvergé, Dylan Jacques, 2011. *Establishing Background Arsenic In Soil of The Urbanized San Francisco Bay Region,* Master of Science in Geosciences Thesis, San Francisco State University. December.

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EPA. 1986. Cancer Risk Assessment Guidelines. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, DC. Federal Register 51(185):33992–3400351.

EPA. 2011. Exposure Factors Handbook: 2011 Edition. Office of Research and Development, National Center for Environmental Assessment, U.S. Environmental Protection Agency, Washington DC. EPA/600/R-090/052F. September.

EPA. 2024. Regional Screening Levels (RSLs) – Generic Tables (November 2024). Available at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables. [Accessed August 14, 2025]

Kleinfelder, 2025. *Site Characterization Report,* Alameda High School Swim Center Modernization, 2200 Central Avenue, Alameda, CA 94501. CPS Case No. RO0003666. May 27.

San Francisco Regional Water Quality Control Board (SFBRWQCB) 2025. *Environmental Screening Levels Workbook and Summary Tables 2025, Revision 1.* July 22.

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FIGURES

PLOTTED: 8/15/2025, KHagan



KLEINFELDER Bright People. Right Solutions.	PROJECT: 25002610.001A	**SITE VICINITY MAP**	FIGURE **1**
	DRAWN: AUG 2025		
	DRAWN BY: K. HAGAN	ALAMEDA HIGH SCHOOL SOFTBALL FIELD HUMAN HEALTH RISK ASSESSMENT 2200 CENTRAL AVENUE ALAMEDA, CALIFORNA	
	CHECKED BY: J. SCOTT		
	FILE NAME: HHRA_F1.pagx		

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8/15/2025

0 20 40
Feet
Locations are Approximate

World Imagery (Wayback 2022-10-12)
(WB_2022_R13):

SW-SC-01
SB-SF-22
SW-SC-15
SB-SF-27
SW-SC-05
SB-SF-24
SB-SF-23
SB-SF-26
SB-SF-21
SB-SF-25
SW-SC-11
SB-SF-20
SB-SF-28

ENCINAL AVENUE

Note:
Explorations SW-SC-01, SW-SC-05, SW-SC-11, SW-SC-15 were drilled and sampled during the initial site characterization event on February 27 and March 11, 2025.

Explanation
- Surface Soil Sampling Location
- Sampling Transect
- Softball Field

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DRAWN:	AUG 2025
DRAWN BY:	K. HAGAN
CHECKED BY:	J. SCOTT
FILE NAME:	HHRA_F2.pagx

SOFTBALL FIELD
SOIL SAMPLING LOCATIONS

ALAMEDA HIGH SCHOOL SOFTBALL FIELD
HUMAN HEALTH RISK ASSESSMENT
2200 CENTRAL AVENUE
ALAMEDA, CALIFORNA

FIGURE
2

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ATTACHMENTS

Attachment A - Table A-1 - Comprehensive Soil Analytical Results - Metals
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

Analyte						Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium VI	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
CAS Number						7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-43-9	7440-47-3	18540-29-9	7440-48-4	7440-50-8	7439-92-1	7439-97-6	7439-98-7	7440-02-0	7782-49-2	7440-22-4	7440-28-0	7440-62-2	7440-66-6
USEPA Laboratory Analytical Method						SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW7199	SW6020	SW6020	SW6020	SW7471A	SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6020
Unit						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil						**31**	**0.032**	**15,000**	**16**	**7.8**	**--**	**0.3**	**23**	**3,100**	**80**	**0.67**	**390**	**820**	**390**	**390**	**0.78**	**390**	**23,000**
SFBRWQCB-ESL for Construction Workers						**130**	**0.14**	**2,200**	**22**	**19**	**--**	**2.1**	**22**	**14,000**	**140**	**2.8**	**1,500**	**63**	**1,700**	**1,800**	**3.5**	**370**	**110,000**
Duverge Arsenic Background Level for Soil[1]						**--**	**11**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.16)	NA	NA	12	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-21	Softball Field	SB-SF-21-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.21)	NA	NA	8.8	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-22	Softball Field	SB-SF-22-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.20)	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-23	Softball Field	SB-SF-23-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	**0.36 J**	NA	NA	5.8	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-24	Softball Field	SB-SF-24-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.21)	NA	NA	54	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-25	Softball Field	SB-SF-25-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.20)	NA	NA	9.0	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-26	Softball Field	SB-SF-26-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	**0.30 J**	NA	NA	4.5	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-27	Softball Field	SB-SF-27-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	0.19 J	NA	NA	4.8	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-28	Softball Field	SB-SF-28-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.19)	NA	NA	11	NA	NA	NA	NA	NA	NA	NA	NA
SW-SC-01	Softball Field	SW-SC-01-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.24)	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA
SW-SC-05	Softball Field	SW-SC-05-0.0-0.5	0	0.5	7/15/2025	NA	NA	NA	NA	NA	NA	ND (< 0.19)	NA	NA	9.3	NA	NA	NA	NA	NA	NA	NA	NA
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.96)	**2.7**	61	ND (< 0.15)	ND (< 0.15)	48	**0.46**	7.2	11	4.4	ND (< 0.057)	ND (< 0.58)	47	ND (< 1.8)	ND (< 0.38)	ND (< 0.37)	31	29
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.96)	**3.3**	57	ND (< 0.15)	ND (< 0.15)	46	**0.35 J**	6.8	13	5.8	ND (< 0.060)	ND (< 0.58)	47	ND (< 1.8)	ND (< 0.38)	ND (< 0.37)	29	36
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.97)	**3.0**	63	ND (< 0.15)	ND (< 0.15)	48	0.26 J	6.6	12	4.2	ND (< 0.058)	ND (< 0.58)	46	ND (< 1.8)	ND (< 0.38)	ND (< 0.37)	33	31
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 1.0)	**3.1**	110	ND (< 0.15)	ND (< 0.16)	42	**0.39 J**	6.4	12	9.5	ND (< 0.060)	ND (< 0.61)	39	ND (< 1.8)	ND (< 0.40)	ND (< 0.39)	29	41
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.97)	**7.0**	70	ND (< 0.15)	ND (< 0.15)	72	**0.60**	6.9	16	64	ND (< 0.062)	ND (< 0.59)	39	ND (< 1.8)	ND (< 0.38)	ND (< 0.38)	32	72
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.99)	**2.7**	58	ND (< 0.15)	ND (< 0.15)	48	**0.33 J**	7.2	12	4.4	ND (< 0.059)	ND (< 0.60)	49	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	33	34
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 1.0)	**3.0**	61	ND (< 0.39)	ND (< 0.16)	36	NA	6.0	11	5.9	ND (< 0.063)	ND (< 0.61)	36	ND (< 1.8)	ND (< 0.39)	ND (< 0.39)	25	31
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	1.1	**2.9**	61	ND (< 0.38)	ND (< 0.15)	43	NA	7.0	10	3.8	ND (< 0.064)	ND (< 0.59)	48	ND (< 1.8)	ND (< 0.38)	ND (< 0.38)	28	28
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.99)	**2.7**	68	ND (< 0.38)	ND (< 0.15)	42	NA	6.1	12	4.1	ND (< 0.066)	ND (< 0.60)	43	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	28	28
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 1.0)	**2.2**	63	ND (< 0.39)	ND (< 0.16)	39	NA	5.7	8.3	3.6	ND (< 0.064)	ND (< 0.62)	36	ND (< 1.9)	ND (< 0.40)	ND (< 0.40)	25	23
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 1.0)	**6.7**	150	ND (< 0.40)	ND (< 0.16)	43	0.14 J	8.5	18	9.4	ND (< 0.0083)	ND (< 0.62)	47	ND (< 1.9)	ND (< 0.40)	ND (< 0.40)	40	79
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.99)	**2.7**	65	ND (< 0.38)	ND (< 0.15)	47	0.23 J	6.8	11	4.2	ND (< 0.0075)	ND (< 0.60)	46	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	32	29
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 1.0)	**2.7**	54	ND (< 0.15)	ND (< 0.32)	43	**0.34 J**	6.3	10	4.9	ND (< 0.063)	ND (< 0.62)	42	ND (< 1.6)	ND (< 0.31)	ND (< 0.39)	28	29
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 1.1)	**3.1**	72	ND (< 0.42)	ND (< 0.34)	38	**0.35 J**	9.7	17	24	ND (< 0.065)	ND (< 0.67)	37	ND (< 1.8)	ND (< 0.33)	ND (< 0.42)	37	56
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 1.0)	**2.6**	63	ND (< 0.15)	ND (< 0.16)	44	0.23 J	6.1	10	3.5	ND (< 0.057)	ND (< 0.61)	40	ND (< 1.8)	ND (< 0.39)	ND (< 0.39)	29	27
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.99)	**2.4**	51	ND (< 0.15)	ND (< 0.15)	43	**0.34 J**	6.4	9.5	3.3	ND (< 0.067)	ND (< 0.60)	43	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	28	25
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.99)	**2.3**	58	ND (< 0.15)	ND (< 0.15)	41	**0.30 J**	6.0	9.4	3.5	ND (< 0.065)	ND (< 0.60)	40	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	28	26
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.99)	**3.2**	92	ND (< 0.15)	ND (< 0.15)	48	**0.42 J**	7.2	13	15	ND (< 0.065)	ND (< 0.60)	40	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	32	42
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 1.0)	**6.2**	80	ND (< 0.16)	ND (< 0.16)	45	**0.44**	9.1	17	43	0.43	ND (< 0.62)	31	ND (< 1.9)	ND (< 0.40)	ND (< 0.40)	40	71
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.97)	**2.4**	52	ND (< 0.15)	ND (< 0.15)	45	0.27 J	6.3	9.8	3.6	ND (< 0.066)	ND (< 0.59)	43	ND (< 1.8)	ND (< 0.38)	ND (< 0.38)	29	28
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 1.0)	**7.6**	88	ND (< 0.39)	ND (< 0.32)	24	0.26 J	5.6	10	9.8	ND (< 0.066)	ND (< 0.62)	22	ND (< 1.6)	ND (< 0.31)	ND (< 0.39)	29	59
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.99)	**5.0**	180	ND (< 0.38)	0.55	40	**0.54**	6.2	19	**240**	**0.78**	ND (< 0.60)	32	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	30	190
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 1.1)	**2.2**	86	ND (< 0.16)	ND (< 0.34)	38	**0.47 J**	5.0	8.9	13	ND (< 0.070)	ND (< 0.65)	22	ND (< 1.7)	ND (< 0.33)	ND (< 0.41)	25	32
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 1.0)	**2.6**	67	ND (< 0.39)	ND (< 0.16)	40	**0.39 BJ**	5.6	9.9	27	ND (< 0.0085)	ND (< 0.61)	29	ND (< 1.8)	ND (< 0.39)	ND (< 0.39)	33	40
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 0.99)	**3.4**	77	ND (< 0.38)	ND (< 0.15)	38	**0.35 BJ**	5.4	13	43	ND (< 0.0080)	ND (< 0.60)	23	ND (< 1.8)	ND (< 0.39)	ND (< 0.38)	29	69

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
NA	Not analyzed for listed analyte.
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.
[1]	Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. Duverge. December 2011.
B	Contamination found in associated Method Blank.
H	Holding time was exceeded.
J	Estimated value

Attachment A - Table A-2 - Comprehensive Soil Analytical Results - Total Petroleum Hydrocarbons
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

						TPH-GRO (Total Hydrocarbons C8-C10/ Gasoline Calibration Standard)	TPH-DRO (Total Hydrocarbons C10-C28)	TPH-ORO (Total Hydrocarbons C28-C44)
					Analyte			
					CAS Number	PHCC8C10/ 8006-61-9	PHCC10C28	PHCC28C44
					USEPA Laboratory Analytical Method	SW8015M/ SW8260	SW8015M	SW8015M
					Unit	mg/kg	mg/kg	mg/kg
					SFBRWQCB-ESL for Residential Soil	**460**	**200**	**12,000**
					SFBRWQCB-ESL for Construction Workers	**1,900**	**850**	**54,000**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.082)	ND (< 3.8)	ND (< 3.8)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.078)	ND (< 3.8)	ND (< 3.8)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.081)	ND (< 3.9)	ND (< 3.9)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.081)	ND (< 3.9)	ND (< 3.9)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.08)	48	160
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.08)	ND (< 3.8)	ND (< 3.8)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 40)	**280**	610
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 3.9)	ND (< 3.9)	ND (< 3.9)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 3.9)	ND (< 3.9)	ND (< 3.9)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 4.3)	ND (< 4.3)	ND (< 4.3)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 4.0)	ND (< 4.0)	ND (< 4.0)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 4.1)	ND (< 4.1)	ND (< 4.1)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.083)	ND (< 3.8)	ND (< 3.8)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.08)	ND (< 3.9)	ND (< 3.9)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.083)	ND (< 3.9)	ND (< 3.9)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.079)	100	200
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.084)	ND (< 3.9)	ND (< 3.9)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.081)	ND (< 3.8)	ND (< 3.8)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 0.1)	54	200
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 0.1)	**200**	500

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Detection limits for TPH-DRO vary by laboratory test method utilized.

Attachment A - Table A-3 - Organochlorine Pesticides
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-HCH (BHC)	beta-HCH (BHC)	Chlordane	delta-HCH (BHC)	Dieldrin	Endosulfan I	Endosulfan II
					CAS Number	72-54-8	72-55-9	50-29-3	309-00-2	319-84-6	319-85-7	57-74-9	319-86-8	60-57-1	959-98-8	33213-65-9
					USEPA Laboratory Analytical Method	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soi		**SFBRWQCB-SO-RES-MIN_2019_R2**			**SFBRWQCB-S**	**2.3**	**2**	**1.9**	**0.039**	**--**	**--**	**1.7**	**--**	**0.034**	**--**	**--**
SFBRWQCB-ESL for Construction Workers						**77**	**71**	**65**	**1.4**	**--**	**--**	**61**	**--**	**1.2**	**--**	**--**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0034)	ND (< 0.0024)	ND (< 0.0022)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0034)	ND (< 0.0024)	ND (< 0.0022)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0018)	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0026)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.043)	ND (< 0.0027)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0023)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0021)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0033)	ND (< 0.0024)	ND (< 0.0022)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.0034)	ND (< 0.0069)	ND (< 0.0044)	ND (< 0.0050)	ND (< 0.0043)	ND (< 0.0042)	ND (< 0.084)	ND (< 0.0052)	ND (< 0.0066)	ND (< 0.0048)	ND (< 0.0044)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0018)	ND (< 0.0035)	ND (< 0.0023)	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.043)	ND (< 0.0026)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0022)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 0.018)	ND (< 0.035)	ND (< 0.023)	ND (< 0.025)	ND (< 0.022)	ND (< 0.022)	ND (< 0.43)	ND (< 0.027)	ND (< 0.034)	ND (< 0.025)	ND (< 0.022)
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0017)	ND (< 0.0034)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0021)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0033)	ND (< 0.0024)	ND (< 0.0022)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0021)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0033)	ND (< 0.0024)	ND (< 0.0022)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0018)	ND (< 0.0037)	ND (< 0.0024)	ND (< 0.0027)	ND (< 0.0023)	ND (< 0.0023)	ND (< 0.045)	ND (< 0.0028)	ND (< 0.0036)	ND (< 0.0026)	ND (< 0.0024)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 0.034)	ND (< 0.069)	ND (< 0.044)	**ND (< 0.05)**	ND (< 0.043)	ND (< 0.042)	ND (< 0.84)	ND (< 0.052)	**ND (< 0.067)**	ND (< 0.049)	ND (< 0.044)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0018)	ND (< 0.0035)	ND (< 0.0023)	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.043)	ND (< 0.0026)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0022)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0018)	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0026)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.044)	0.025	ND (< 0.0035)	ND (< 0.0025)	ND (< 0.0023)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0019)	ND (< 0.0038)	ND (< 0.0024)	ND (< 0.0027)	ND (< 0.0024)	ND (< 0.0023)	ND (< 0.046)	0.0064	ND (< 0.0037)	ND (< 0.0027)	ND (< 0.0024)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0022)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0018)	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0026)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.043)	ND (< 0.0027)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0023)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0018)	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0026)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.043)	ND (< 0.0027)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0023)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0085)	ND (< 0.017)	ND (< 0.011)	ND (< 0.012)	ND (< 0.011)	ND (< 0.01)	ND (< 0.21)	ND (< 0.013)	ND (< 0.016)	ND (< 0.012)	ND (< 0.011)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.0018)	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0026)	ND (< 0.0022)	ND (< 0.0022)	0.088	ND (< 0.0027)	ND (< 0.0035)	ND (< 0.0025)	ND (< 0.0023)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0022)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.0086)	ND (< 0.017)	ND (< 0.011)	ND (< 0.012)	ND (< 0.011)	ND (< 0.011)	ND (< 0.21)	ND (< 0.013)	ND (< 0.017)	ND (< 0.012)	ND (< 0.011)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0017)	0.024	0.028 #	ND (< 0.0025)	ND (< 0.0022)	ND (< 0.0021)	ND (< 0.042)	0.0097	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0022)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0018)	ND (< 0.0037)	ND (< 0.0024)	ND (< 0.0027)	ND (< 0.0023)	ND (< 0.0023)	ND (< 0.045)	0.0078	ND (< 0.0036)	ND (< 0.0026)	ND (< 0.0024)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 0.0018)	0.0068	ND (< 0.0023)	ND (< 0.0026)	ND (< 0.0022)	ND (< 0.0022)	ND (< 0.043)	ND (< 0.0027)	ND (< 0.0034)	ND (< 0.0025)	ND (< 0.0023)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 0.0017)	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0021)	ND (< 0.0021)	ND (< 0.042)	ND (< 0.0026)	ND (< 0.0033)	ND (< 0.0024)	ND (< 0.0022)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.
#	

Attachment A - Table A-3 - Organochlorine Pesticides
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-HCH (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
					CAS Number	1031-07-8	72-20-8	7421-93-4	53494-70-5	58-89-9	76-44-8	1024-57-3	72-43-5	8001-35-2
					USEPA Laboratory Analytical Method	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A	SW8081A
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soi		**SFBRWQCB-SO-RES-MIN_2019_R2**			**SFBRWQCB-S**	**--**	**19**	**--**	**--**	**0.057**	**0.13**	**0.07**	**320**	**0.45**
SFBRWQCB-ESL for Construction Workers						**--**	**80**	**--**	**--**	**0.25**	**5.1**	**2.6**	**1,300**	**15**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.096)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.096)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0022)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.098)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0022)	ND (< 0.0018)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0041)	ND (< 0.095)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.0070)	ND (< 0.0044)	ND (< 0.0077)	ND (< 0.0045)	ND (< 0.0037)	ND (< 0.0042)	ND (< 0.0046)	ND (< 0.0082)	ND (< 0.19)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0036)	ND (< 0.0022)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.097)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 0.036)	ND (< 0.022)	ND (< 0.04)	ND (< 0.023)	ND (< 0.019)	ND (< 0.021)	ND (< 0.023)	ND (< 0.042)	**ND (< 0.97)**
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0038)	ND (< 0.0022)	ND (< 0.0018)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0041)	ND (< 0.094)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0022)	ND (< 0.0018)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0041)	ND (< 0.095)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0037)	ND (< 0.0023)	ND (< 0.0041)	ND (< 0.0024)	ND (< 0.0020)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0044)	ND (< 0.1)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 0.07)	ND (< 0.044)	ND (< 0.078)	ND (< 0.045)	ND (< 0.037)	ND (< 0.042)	ND (< 0.046)	ND (< 0.083)	**ND (< 1.9)**
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0036)	ND (< 0.0022)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.097)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0022)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.099)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0038)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.0025)	ND (< 0.0020)	ND (< 0.0023)	ND (< 0.0025)	ND (< 0.0046)	ND (< 0.1)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.096)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0022)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.098)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0022)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.098)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.017)	ND (< 0.011)	ND (< 0.019)	ND (< 0.011)	ND (< 0.0091)	ND (< 0.01)	ND (< 0.011)	ND (< 0.02)	**ND (< 0.47)**
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0022)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.099)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.096)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.017)	ND (< 0.011)	ND (< 0.019)	ND (< 0.011)	ND (< 0.0092)	ND (< 0.01)	ND (< 0.011)	ND (< 0.021)	**ND (< 0.47)**
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0042)	ND (< 0.096)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0037)	ND (< 0.0024)	ND (< 0.0041)	ND (< 0.0024)	ND (< 0.0020)	ND (< 0.0022)	ND (< 0.0025)	ND (< 0.0044)	ND (< 0.1)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 0.0036)	ND (< 0.0023)	ND (< 0.0040)	ND (< 0.0023)	ND (< 0.0019)	ND (< 0.0022)	ND (< 0.0024)	ND (< 0.0043)	ND (< 0.098)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 0.0035)	ND (< 0.0022)	ND (< 0.0039)	ND (< 0.0022)	ND (< 0.0018)	ND (< 0.0021)	ND (< 0.0023)	ND (< 0.0041)	ND (< 0.095)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 20
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.
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Attachment A - Table A-4 - Comprehensive Soil Analytical Results - Polychlorinated Biphenyls
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
					CAS Number	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4
					USEPA Laboratory Analytical Method	SW8082	SW8082	SW8082	SW8082	SW8082	SW8082	SW8082	SW8082	SW8082
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					SFBRWQCB-ESL for Residential Soil	**0.23***	**0.23***	**0.23***	**0.23***	**0.23***	**0.23***	**0.23***	**0.23***	**0.23***
					SFBRWQCB-ESL for Construction Workers	**8.2***	**8.2***	**8.2***	**8.2***	**8.2***	**8.2***	**8.2***	**8.2***	**8.2***
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.029)	ND (< 0.038)	ND (< 0.041)	ND (< 0.03)	ND (< 0.027)	ND (< 0.034)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.029)	ND (< 0.038)	ND (< 0.041)	ND (< 0.03)	ND (< 0.027)	ND (< 0.034)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.027)	ND (< 0.027)	ND (< 0.023)	ND (< 0.029)	ND (< 0.039)	ND (< 0.042)	ND (< 0.03)	ND (< 0.028)	ND (< 0.035)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.028)	ND (< 0.038)	ND (< 0.04)	ND (< 0.029)	ND (< 0.027)	ND (< 0.034)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.052)	ND (< 0.052)	ND (< 0.044)	ND (< 0.057)	ND (< 0.076)	ND (< 0.08)	ND (< 0.059)	ND (< 0.054)	ND (< 0.067)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.026)	ND (< 0.027)	ND (< 0.023)	ND (< 0.029)	ND (< 0.039)	ND (< 0.041)	ND (< 0.03)	ND (< 0.028)	ND (< 0.034)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 0.13)	ND (< 0.13)	ND (< 0.11)	ND (< 0.15)	ND (< 0.19)	ND (< 0.21)	ND (< 0.15)	ND (< 0.14)	ND (< 0.17)
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.028)	ND (< 0.038)	ND (< 0.04)	ND (< 0.029)	ND (< 0.027)	ND (< 0.033)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.028)	ND (< 0.038)	ND (< 0.04)	ND (< 0.029)	ND (< 0.027)	ND (< 0.034)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 0.028)	ND (< 0.028)	ND (< 0.024)	ND (< 0.03)	ND (< 0.041)	ND (< 0.043)	ND (< 0.032)	ND (< 0.029)	ND (< 0.036)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 0.13)	ND (< 0.13)	ND (< 0.11)	ND (< 0.14)	ND (< 0.19)	ND (< 0.2)	ND (< 0.15)	ND (< 0.14)	ND (< 0.17)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.026)	ND (< 0.027)	ND (< 0.023)	ND (< 0.029)	ND (< 0.039)	ND (< 0.041)	ND (< 0.03)	ND (< 0.028)	ND (< 0.034)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.027)	ND (< 0.027)	ND (< 0.023)	ND (< 0.03)	ND (< 0.04)	ND (< 0.042)	ND (< 0.031)	ND (< 0.028)	ND (< 0.035)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.029)	ND (< 0.029)	ND (< 0.024)	ND (< 0.031)	ND (< 0.042)	ND (< 0.045)	ND (< 0.033)	ND (< 0.03)	ND (< 0.037)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.029)	ND (< 0.038)	ND (< 0.041)	ND (< 0.03)	ND (< 0.027)	ND (< 0.034)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.027)	ND (< 0.027)	ND (< 0.023)	ND (< 0.029)	ND (< 0.039)	ND (< 0.042)	ND (< 0.03)	ND (< 0.028)	ND (< 0.035)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.027)	ND (< 0.027)	ND (< 0.023)	ND (< 0.029)	ND (< 0.039)	ND (< 0.042)	ND (< 0.03)	ND (< 0.028)	ND (< 0.035)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.051)	ND (< 0.052)	ND (< 0.044)	ND (< 0.056)	ND (< 0.075)	ND (< 0.08)	ND (< 0.058)	ND (< 0.054)	ND (< 0.066)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.027)	ND (< 0.027)	ND (< 0.023)	ND (< 0.03)	ND (< 0.04)	ND (< 0.042)	ND (< 0.031)	ND (< 0.028)	ND (< 0.035)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.029)	ND (< 0.038)	ND (< 0.041)	ND (< 0.03)	ND (< 0.027)	ND (< 0.034)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.052)	ND (< 0.052)	ND (< 0.044)	ND (< 0.057)	ND (< 0.076)	ND (< 0.081)	ND (< 0.059)	ND (< 0.054)	ND (< 0.067)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.029)	ND (< 0.038)	ND (< 0.041)	ND (< 0.03)	ND (< 0.027)	ND (< 0.034)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.028)	ND (< 0.028)	ND (< 0.024)	ND (< 0.03)	ND (< 0.041)	ND (< 0.043)	ND (< 0.032)	ND (< 0.029)	ND (< 0.036)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 0.027)	ND (< 0.027)	ND (< 0.023)	ND (< 0.029)	ND (< 0.039)	ND (< 0.042)	ND (< 0.03)	ND (< 0.028)	ND (< 0.035)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 0.026)	ND (< 0.026)	ND (< 0.022)	ND (< 0.028)	ND (< 0.038)	ND (< 0.04)	ND (< 0.029)	ND (< 0.027)	ND (< 0.034)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.
*	Level is for total PCBs.

Attachment A - Table A-5 - Semi-Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1-Methylnaphthalene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene
					CAS Number	120-82-1	95-50-1	541-73-1	106-46-7	90-12-0	95-95-4	88-06-2	120-83-2	105-67-9	51-28-5	121-14-2	606-20-2	91-58-7	95-57-8	91-57-6
					USEPA Laboratory Analytical Method	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**	**SFBRWQCB**		**24**	**1,800**	--	**2.6**	--	**6,300**	**7.8**	**190**	**1,300**	**130**	**1.7**	--	--	**390**	**240**
SFBRWQCB-ESL for Construction Workers						**240**	**7,700**	--	**270**	--	**27,000**	**260**	**800**	**5,400**	**540**	**59**	--	--	**1,800**	**1,000**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.1)	ND (< 0.088)	ND (< 0.093)	ND (< 0.11)	ND (< 0.085)	ND (< 0.079)	ND (< 0.082)	ND (< 0.092)	ND (< 0.12)	ND (< 0.51)	ND (< 0.11)	ND (< 0.097)	ND (< 0.086)	ND (< 0.091)	ND (< 0.085)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.1)	ND (< 0.089)	ND (< 0.094)	ND (< 0.11)	ND (< 0.086)	ND (< 0.079)	ND (< 0.083)	ND (< 0.093)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.098)	ND (< 0.087)	ND (< 0.092)	ND (< 0.086)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.1)	ND (< 0.09)	ND (< 0.095)	ND (< 0.11)	ND (< 0.087)	ND (< 0.08)	ND (< 0.083)	ND (< 0.094)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.099)	ND (< 0.088)	ND (< 0.093)	ND (< 0.087)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.1)	ND (< 0.09)	ND (< 0.095)	ND (< 0.11)	ND (< 0.087)	ND (< 0.08)	ND (< 0.083)	ND (< 0.094)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.099)	ND (< 0.088)	ND (< 0.093)	ND (< 0.087)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.99)	ND (< 0.87)	ND (< 0.92)	ND (< 1)	ND (< 0.84)	ND (< 0.77)	ND (< 0.81)	ND (< 0.91)	ND (< 1.2)	ND (< 5)	ND (< 1.1)	ND (< 0.96)	ND (< 0.85)	ND (< 0.9)	ND (< 0.84)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.1)	ND (< 0.089)	ND (< 0.094)	ND (< 0.11)	ND (< 0.086)	ND (< 0.079)	ND (< 0.083)	ND (< 0.093)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.098)	ND (< 0.087)	ND (< 0.092)	ND (< 0.086)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 13)	ND (< 12)	ND (< 12)	**ND (< 14)**	ND (< 11)	ND (< 10)	**ND (< 11)**	ND (< 12)	ND (< 16)	ND (< 67)	**ND (< 15)**	ND (< 13)	ND (< 11)	ND (< 12)	ND (< 11)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.1)	ND (< 0.091)	ND (< 0.096)	ND (< 0.11)	ND (< 0.088)	ND (< 0.081)	ND (< 0.084)	ND (< 0.095)	ND (< 0.12)	ND (< 0.53)	ND (< 0.12)	ND (< 0.1)	ND (< 0.089)	ND (< 0.094)	ND (< 0.087)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 5.2)	ND (< 4.5)	ND (< 4.8)	**ND (< 5.5)**	ND (< 4.4)	ND (< 4)	ND (< 4.2)	ND (< 4.7)	ND (< 6.2)	ND (< 26)	**ND (< 5.8)**	ND (< 5)	ND (< 4.4)	ND (< 4.7)	ND (< 4.4)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.1)	ND (< 0.089)	ND (< 0.094)	ND (< 0.11)	ND (< 0.086)	ND (< 0.079)	ND (< 0.083)	ND (< 0.093)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.098)	ND (< 0.087)	ND (< 0.092)	ND (< 0.086)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.1)	ND (< 0.091)	ND (< 0.096)	ND (< 0.11)	ND (< 0.088)	ND (< 0.081)	ND (< 0.084)	ND (< 0.095)	ND (< 0.12)	ND (< 0.53)	ND (< 0.12)	ND (< 0.1)	ND (< 0.089)	ND (< 0.094)	ND (< 0.088)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.11)	ND (< 0.097)	ND (< 0.1)	ND (< 0.12)	ND (< 0.094)	ND (< 0.086)	ND (< 0.09)	ND (< 0.1)	ND (< 0.13)	ND (< 0.56)	ND (< 0.12)	ND (< 0.11)	ND (< 0.095)	ND (< 0.1)	ND (< 0.094)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.1)	ND (< 0.088)	ND (< 0.093)	ND (< 0.11)	ND (< 0.085)	ND (< 0.078)	ND (< 0.082)	ND (< 0.092)	ND (< 0.12)	ND (< 0.51)	ND (< 0.11)	ND (< 0.097)	ND (< 0.086)	ND (< 0.091)	ND (< 0.085)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.1)	ND (< 0.092)	ND (< 0.097)	ND (< 0.11)	ND (< 0.089)	ND (< 0.082)	ND (< 0.085)	ND (< 0.096)	ND (< 0.12)	ND (< 0.53)	ND (< 0.12)	ND (< 0.1)	ND (< 0.09)	ND (< 0.095)	ND (< 0.088)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.1)	ND (< 0.089)	ND (< 0.094)	ND (< 0.11)	ND (< 0.086)	ND (< 0.079)	ND (< 0.083)	ND (< 0.093)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.098)	ND (< 0.087)	ND (< 0.092)	ND (< 0.086)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 1)	ND (< 0.9)	ND (< 0.95)	ND (< 1.1)	ND (< 0.87)	ND (< 0.8)	ND (< 0.84)	ND (< 0.94)	ND (< 1.2)	ND (< 5.2)	ND (< 1.1)	ND (< 0.99)	ND (< 0.88)	ND (< 0.93)	ND (< 0.87)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.1)	ND (< 0.092)	ND (< 0.097)	ND (< 0.11)	ND (< 0.089)	ND (< 0.082)	ND (< 0.085)	ND (< 0.096)	ND (< 0.12)	ND (< 0.53)	ND (< 0.12)	ND (< 0.1)	ND (< 0.09)	ND (< 0.095)	ND (< 0.088)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.1)	ND (< 0.09)	ND (< 0.095)	ND (< 0.11)	ND (< 0.087)	ND (< 0.08)	ND (< 0.083)	ND (< 0.094)	ND (< 0.12)	ND (< 0.52)	ND (< 0.11)	ND (< 0.099)	ND (< 0.088)	ND (< 0.092)	ND (< 0.086)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 1)	ND (< 0.89)	ND (< 0.94)	ND (< 1.1)	ND (< 0.86)	ND (< 0.79)	ND (< 0.83)	ND (< 0.93)	ND (< 1.2)	ND (< 5.2)	ND (< 1.1)	ND (< 0.98)	ND (< 0.87)	ND (< 0.92)	ND (< 0.86)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.52)	ND (< 0.45)	ND (< 0.48)	ND (< 0.55)	ND (< 0.44)	ND (< 0.4)	ND (< 0.42)	ND (< 0.47)	ND (< 0.62)	ND (< 2.6)	ND (< 0.58)	ND (< 0.5)	ND (< 0.44)	ND (< 0.47)	ND (< 0.44)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.11)	ND (< 0.096)	ND (< 0.1)	ND (< 0.12)	ND (< 0.093)	ND (< 0.086)	ND (< 0.089)	ND (< 0.1)	ND (< 0.13)	ND (< 0.56)	ND (< 0.12)	ND (< 0.11)	ND (< 0.094)	ND (< 0.099)	ND (< 0.093)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 2.6)	ND (< 2.2)	ND (< 2.4)	**ND (< 2.7)**	ND (< 2.2)	ND (< 2)	ND (< 2.1)	ND (< 2.3)	ND (< 3)	ND (< 13)	**ND (< 2.9)**	ND (< 2.5)	ND (< 2.2)	ND (< 2.3)	ND (< 2.2)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 2.6)	ND (< 2.2)	ND (< 2.4)	**ND (< 2.7)**	ND (< 2.2)	ND (< 2)	ND (< 2.1)	ND (< 2.3)	ND (< 3)	ND (< 13)	**ND (< 2.9)**	ND (< 2.5)	ND (< 2.2)	ND (< 2.3)	ND (< 2.2)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-5 - Semi-Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3,3-Dichlorobenzidine	3+4-Methylphenols	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene
					CAS Number	95-48-7	88-74-4	88-75-5	91-94-1	65794-96-9	99-09-2	534-52-1	101-55-3	59-50-7	106-47-8	7005-72-3	100-01-6	100-02-7	83-32-9	208-96-8
					USEPA Laboratory Analytical Method	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**	**SFBRWQCB**		--	--	--	**0.45**	--	--	--	--	--	**2.7**	--	--	--	**3,600**	--
SFBRWQCB-ESL for Construction Workers						--	--	--	**15**	--	--	--	--	--	**94**	--	--	--	**15,000**	--
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.092)	ND (< 0.097)	ND (< 0.09)	ND (< 0.12)	ND (< 0.097)	ND (< 0.1)	ND (< 0.25)	ND (< 0.089)	ND (< 0.073)	ND (< 0.088)	ND (< 0.089)	ND (< 0.11)	ND (< 0.47)	ND (< 0.079)	ND (< 0.11)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.093)	ND (< 0.097)	ND (< 0.09)	ND (< 0.12)	ND (< 0.097)	ND (< 0.11)	ND (< 0.25)	ND (< 0.089)	ND (< 0.074)	ND (< 0.088)	ND (< 0.09)	ND (< 0.11)	ND (< 0.47)	ND (< 0.079)	ND (< 0.11)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.094)	ND (< 0.098)	ND (< 0.091)	ND (< 0.12)	ND (< 0.098)	ND (< 0.11)	ND (< 0.25)	ND (< 0.09)	ND (< 0.075)	ND (< 0.089)	ND (< 0.091)	ND (< 0.11)	ND (< 0.48)	ND (< 0.08)	ND (< 0.11)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.094)	ND (< 0.098)	ND (< 0.091)	ND (< 0.12)	ND (< 0.098)	ND (< 0.11)	ND (< 0.25)	ND (< 0.09)	ND (< 0.075)	ND (< 0.089)	ND (< 0.091)	ND (< 0.11)	ND (< 0.48)	ND (< 0.08)	ND (< 0.11)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.91)	ND (< 0.95)	ND (< 0.88)	**ND (< 1.1)**	ND (< 0.95)	ND (< 1)	ND (< 2.5)	ND (< 0.87)	ND (< 0.72)	ND (< 0.86)	ND (< 0.88)	ND (< 1.1)	ND (< 4.6)	ND (< 0.77)	ND (< 1.1)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.093)	ND (< 0.097)	ND (< 0.09)	ND (< 0.12)	ND (< 0.097)	ND (< 0.11)	ND (< 0.25)	ND (< 0.089)	ND (< 0.074)	ND (< 0.088)	ND (< 0.09)	ND (< 0.11)	ND (< 0.47)	ND (< 0.079)	ND (< 0.11)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 12)	ND (< 13)	ND (< 12)	**ND (< 15)**	ND (< 13)	ND (< 14)	ND (< 33)	ND (< 12)	ND (< 9.6)	**ND (< 11)**	ND (< 12)	ND (< 14)	ND (< 62)	ND (< 10)	ND (< 14)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.095)	ND (< 0.099)	ND (< 0.092)	ND (< 0.12)	ND (< 0.099)	ND (< 0.11)	ND (< 0.26)	ND (< 0.091)	ND (< 0.075)	ND (< 0.09)	ND (< 0.092)	ND (< 0.11)	ND (< 0.48)	ND (< 0.081)	ND (< 0.11)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 4.7)	ND (< 5)	ND (< 4.6)	**ND (< 6)**	ND (< 5)	ND (< 5.4)	ND (< 13)	ND (< 4.6)	ND (< 3.8)	**ND (< 4.5)**	ND (< 4.6)	ND (< 5.5)	ND (< 24)	ND (< 4)	ND (< 5.7)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.093)	ND (< 0.097)	ND (< 0.091)	ND (< 0.12)	ND (< 0.097)	ND (< 0.11)	ND (< 0.25)	ND (< 0.089)	ND (< 0.074)	ND (< 0.088)	ND (< 0.09)	ND (< 0.11)	ND (< 0.47)	ND (< 0.079)	ND (< 0.11)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.095)	ND (< 0.1)	ND (< 0.092)	ND (< 0.12)	ND (< 0.1)	ND (< 0.11)	ND (< 0.26)	ND (< 0.091)	ND (< 0.076)	ND (< 0.09)	ND (< 0.092)	ND (< 0.11)	ND (< 0.48)	ND (< 0.081)	ND (< 0.11)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.1)	ND (< 0.11)	ND (< 0.099)	ND (< 0.13)	ND (< 0.11)	ND (< 0.12)	ND (< 0.27)	ND (< 0.098)	ND (< 0.081)	ND (< 0.097)	ND (< 0.098)	ND (< 0.12)	ND (< 0.52)	ND (< 0.087)	ND (< 0.12)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.092)	ND (< 0.096)	ND (< 0.09)	ND (< 0.12)	ND (< 0.096)	ND (< 0.1)	ND (< 0.25)	ND (< 0.088)	ND (< 0.073)	ND (< 0.087)	ND (< 0.089)	ND (< 0.11)	ND (< 0.47)	ND (< 0.078)	ND (< 0.11)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.096)	ND (< 0.1)	ND (< 0.093)	ND (< 0.12)	ND (< 0.1)	ND (< 0.11)	ND (< 0.26)	ND (< 0.092)	ND (< 0.076)	ND (< 0.091)	ND (< 0.093)	ND (< 0.11)	ND (< 0.49)	ND (< 0.082)	ND (< 0.11)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.093)	ND (< 0.097)	ND (< 0.09)	ND (< 0.12)	ND (< 0.097)	ND (< 0.11)	ND (< 0.25)	ND (< 0.089)	ND (< 0.074)	ND (< 0.088)	ND (< 0.09)	ND (< 0.11)	ND (< 0.47)	ND (< 0.079)	ND (< 0.11)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.94)	ND (< 0.99)	ND (< 0.92)	**ND (< 1.2)**	ND (< 0.99)	ND (< 1.1)	ND (< 2.6)	ND (< 0.91)	ND (< 0.75)	ND (< 0.9)	ND (< 0.91)	ND (< 1.1)	ND (< 4.8)	ND (< 0.8)	ND (< 1.1)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.096)	ND (< 0.1)	ND (< 0.093)	ND (< 0.12)	ND (< 0.1)	ND (< 0.11)	ND (< 0.26)	ND (< 0.092)	ND (< 0.076)	ND (< 0.091)	ND (< 0.093)	ND (< 0.11)	ND (< 0.49)	ND (< 0.082)	ND (< 0.11)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.094)	ND (< 0.098)	ND (< 0.091)	ND (< 0.12)	ND (< 0.098)	ND (< 0.11)	ND (< 0.25)	ND (< 0.09)	ND (< 0.075)	ND (< 0.089)	ND (< 0.091)	ND (< 0.11)	ND (< 0.48)	ND (< 0.08)	ND (< 0.11)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.93)	ND (< 0.97)	ND (< 0.9)	**ND (< 1.2)**	ND (< 0.97)	ND (< 1.1)	ND (< 2.5)	ND (< 0.89)	ND (< 0.74)	ND (< 0.88)	ND (< 0.9)	ND (< 1.1)	ND (< 4.7)	ND (< 0.79)	ND (< 1.1)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.47)	ND (< 0.5)	ND (< 0.46)	**ND (< 0.6)**	ND (< 0.5)	ND (< 0.54)	ND (< 1.3)	ND (< 0.46)	ND (< 0.38)	ND (< 0.45)	ND (< 0.46)	ND (< 0.55)	ND (< 2.4)	ND (< 0.4)	ND (< 0.57)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.1)	ND (< 0.11)	ND (< 0.098)	ND (< 0.13)	ND (< 0.11)	ND (< 0.11)	ND (< 0.27)	ND (< 0.097)	ND (< 0.08)	ND (< 0.096)	ND (< 0.097)	ND (< 0.12)	ND (< 0.51)	ND (< 0.086)	ND (< 0.12)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 2.3)	ND (< 2.5)	ND (< 2.3)	**ND (< 2.9)**	ND (< 2.5)	ND (< 2.7)	ND (< 6.3)	ND (< 2.3)	ND (< 1.9)	ND (< 2.2)	ND (< 2.3)	ND (< 2.7)	ND (< 12)	ND (< 2)	ND (< 2.8)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 2.3)	ND (< 2.5)	ND (< 2.3)	**ND (< 2.9)**	ND (< 2.5)	ND (< 2.7)	ND (< 6.3)	ND (< 2.3)	ND (< 1.9)	ND (< 2.2)	ND (< 2.3)	ND (< 2.7)	ND (< 12)	ND (< 2)	ND (< 2.8)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection li
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-5 - Semi-Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

Analyte						Aniline	Anthracene	Azobenzene	Benzidine	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Carbazole
CAS Number						62-53-3	120-12-7	103-33-3	92-87-5	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	65-85-0	100-51-6	111-91-1	111-44-4	117-81-7	85-68-7	86-74-8
USEPA Laboratory Analytical Method						SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C
Unit						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil					**SFBRWQCB-SO-RES-M**	**SFBRWQCB**	**18,000**	--	--	**1.1**	**0.11**	**1.1**	--	**11**	--	--	--	**0.1**	**39**	--	--
SFBRWQCB-ESL for Construction Workers						--	**75,000**	--	--	**160**	**8.2**	**170**	--	**1,100**	--	--	--	**6.3**	**1,300**	--	--
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.052)	ND (< 0.098)	ND (< 0.094)	ND (< 0.33)	ND (< 0.11)	ND (< 0.099)	ND (< 0.098)	ND (< 0.13)	ND (< 0.11)	ND (< 0.78)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.052)	ND (< 0.099)	ND (< 0.095)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.099)	ND (< 0.13)	ND (< 0.11)	ND (< 0.79)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.053)	ND (< 0.1)	ND (< 0.096)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.8)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.053)	ND (< 0.1)	ND (< 0.096)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.8)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.51)	ND (< 0.97)	ND (< 0.93)	ND (< 3.3)	ND (< 1.1)	**ND (< 0.98)**	ND (< 0.97)	ND (< 1.3)	ND (< 1.1)	ND (< 7.7)	ND (< 1.1)	ND (< 1.1)	**ND (< 1.1)**	ND (< 1.3)	ND (< 1.7)	ND (< 1.1)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.052)	ND (< 0.099)	ND (< 0.095)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.099)	ND (< 0.13)	ND (< 0.11)	ND (< 0.79)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 6.8)	ND (< 13)	ND (< 12)	ND (< 44)	**ND (< 15)**	**ND (< 13)**	**ND (< 13)**	ND (< 17)	**ND (< 14)**	ND (< 100)	ND (< 15)	ND (< 14)	**ND (< 14)**	ND (< 17)	ND (< 22)	ND (< 14)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.054)	ND (< 0.1)	ND (< 0.097)	ND (< 0.34)	ND (< 0.12)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.81)	ND (< 0.12)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.18)	ND (< 0.11)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 2.7)	ND (< 5)	ND (< 4.8)	ND (< 17)	**ND (< 5.8)**	**ND (< 5.1)**	**ND (< 5)**	ND (< 6.7)	ND (< 5.5)	ND (< 40)	ND (< 5.8)	ND (< 5.5)	**ND (< 5.6)**	ND (< 6.7)	ND (< 8.8)	ND (< 5.6)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.052)	ND (< 0.099)	ND (< 0.095)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.099)	ND (< 0.13)	ND (< 0.11)	ND (< 0.79)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.054)	ND (< 0.1)	ND (< 0.097)	ND (< 0.34)	ND (< 0.12)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.81)	ND (< 0.12)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.18)	ND (< 0.11)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.057)	ND (< 0.11)	ND (< 0.1)	ND (< 0.37)	ND (< 0.12)	ND (< 0.11)	ND (< 0.11)	ND (< 0.14)	ND (< 0.12)	ND (< 0.86)	ND (< 0.12)	ND (< 0.12)	**ND (< 0.12)**	ND (< 0.14)	ND (< 0.19)	ND (< 0.12)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.052)	ND (< 0.098)	ND (< 0.094)	ND (< 0.33)	ND (< 0.11)	ND (< 0.099)	ND (< 0.098)	ND (< 0.13)	ND (< 0.11)	ND (< 0.78)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.054)	ND (< 0.1)	ND (< 0.098)	ND (< 0.35)	ND (< 0.12)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.81)	ND (< 0.12)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.14)	ND (< 0.18)	ND (< 0.11)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.052)	ND (< 0.099)	ND (< 0.095)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.099)	ND (< 0.13)	ND (< 0.11)	ND (< 0.79)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.53)	ND (< 1)	ND (< 0.96)	ND (< 3.4)	ND (< 1.1)	**ND (< 1)**	ND (< 1)	ND (< 1.3)	ND (< 1.1)	ND (< 8)	ND (< 1.1)	ND (< 1.1)	**ND (< 1.1)**	ND (< 1.3)	ND (< 1.7)	ND (< 1.1)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.054)	ND (< 0.1)	ND (< 0.098)	ND (< 0.35)	ND (< 0.12)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.81)	ND (< 0.12)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.14)	ND (< 0.18)	ND (< 0.11)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.053)	ND (< 0.1)	ND (< 0.096)	ND (< 0.34)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.13)	ND (< 0.11)	ND (< 0.8)	ND (< 0.11)	ND (< 0.11)	**ND (< 0.11)**	ND (< 0.13)	ND (< 0.17)	ND (< 0.11)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.52)	ND (< 0.99)	ND (< 0.95)	ND (< 3.4)	ND (< 1.1)	**ND (< 1)**	ND (< 0.99)	ND (< 1.3)	ND (< 1.1)	ND (< 7.9)	ND (< 1.1)	ND (< 1.1)	**ND (< 1.1)**	ND (< 1.3)	ND (< 1.7)	ND (< 1.1)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.27)	ND (< 0.5)	ND (< 0.48)	ND (< 1.7)	ND (< 0.58)	**ND (< 0.51)**	ND (< 0.5)	ND (< 0.67)	ND (< 0.55)	ND (< 4)	ND (< 0.58)	ND (< 0.55)	**ND (< 0.56)**	ND (< 0.67)	ND (< 0.88)	ND (< 0.56)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.057)	ND (< 0.11)	ND (< 0.1)	ND (< 0.36)	ND (< 0.12)	ND (< 0.11)	ND (< 0.11)	ND (< 0.14)	ND (< 0.12)	ND (< 0.85)	ND (< 0.12)	ND (< 0.12)	**ND (< 0.12)**	ND (< 0.14)	ND (< 0.19)	ND (< 0.12)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 1.3)	ND (< 2.5)	ND (< 2.4)	ND (< 8.5)	**ND (< 2.9)**	**ND (< 2.5)**	**ND (< 2.5)**	ND (< 3.3)	ND (< 2.7)	ND (< 20)	ND (< 2.8)	ND (< 2.7)	**ND (< 2.8)**	ND (< 3.3)	ND (< 4.3)	ND (< 2.8)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 1.3)	ND (< 2.5)	ND (< 2.4)	ND (< 8.5)	**ND (< 2.9)**	**ND (< 2.5)**	**ND (< 2.5)**	ND (< 3.3)	ND (< 2.7)	ND (< 20)	ND (< 2.8)	ND (< 2.7)	**ND (< 2.8)**	ND (< 3.3)	ND (< 4.3)	ND (< 2.8)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection li
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-5 - Semi-Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

Analyte						Chrysene	Dibenz[a,h]anthracene	Dibenzofuran	Dichlorodiisopropyl ether	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno[1,2,3-c,d]pyrene
CAS Number						218-01-9	53-70-3	132-64-9	108-60-1	84-66-2	131-11-3	84-74-2	117-84-0	206-44-0	86-73-7	118-74-1	87-68-3	77-47-4	67-72-1	193-39-5
USEPA Laboratory Analytical Method						SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C
Unit						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**		**SFBRWQCB**	**110**	**0.028**	**--**	**3,100**	**51,000**	**--**	**--**	**--**	**2,400**	**2,400**	**0.19**	**1.2**	**--**	**1.8**	**1.1**
SFBRWQCB-ESL for Construction Workers						**11,000**	**4.2**	**--**	**14,000**	**210,000**	**--**	**--**	**--**	**10,000**	**10,000**	**3.5**	**100**	**--**	**160**	**170**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.088)	ND (< 0.11)	ND (< 0.1)	ND (< 0.099)	ND (< 0.098)	ND (< 0.14)	ND (< 0.11)	ND (< 0.084)	ND (< 0.092)	ND (< 0.073)	ND (< 0.39)	ND (< 0.095)	ND (< 0.13)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.089)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.099)	ND (< 0.14)	ND (< 0.11)	ND (< 0.084)	ND (< 0.093)	ND (< 0.073)	ND (< 0.39)	ND (< 0.096)	ND (< 0.13)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.09)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.085)	ND (< 0.094)	ND (< 0.074)	ND (< 0.4)	ND (< 0.097)	ND (< 0.13)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.09)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.085)	ND (< 0.094)	ND (< 0.074)	ND (< 0.4)	ND (< 0.097)	ND (< 0.13)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 1.1)	**ND (< 1.3)**	ND (< 0.87)	ND (< 1.1)	ND (< 0.98)	ND (< 0.98)	ND (< 0.97)	ND (< 1.4)	ND (< 1)	ND (< 0.83)	**ND (< 0.91)**	ND (< 0.71)	ND (< 3.9)	ND (< 0.94)	**ND (< 1.3)**
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.089)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.099)	ND (< 0.14)	ND (< 0.11)	ND (< 0.084)	ND (< 0.093)	ND (< 0.073)	ND (< 0.4)	ND (< 0.096)	ND (< 0.13)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 15)	**ND (< 18)**	ND (< 12)	ND (< 14)	ND (< 13)	ND (< 13)	ND (< 13)	ND (< 19)	ND (< 14)	ND (< 11)	**ND (< 12)**	**ND (< 9.5)**	ND (< 51)	**ND (< 12)**	**ND (< 17)**
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.12)	**ND (< 0.14)**	ND (< 0.09)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.086)	ND (< 0.095)	ND (< 0.075)	ND (< 0.4)	ND (< 0.098)	ND (< 0.13)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 5.8)	**ND (< 7)**	ND (< 4.5)	ND (< 5.7)	ND (< 5.1)	ND (< 5.1)	ND (< 5.1)	ND (< 7.4)	ND (< 5.4)	ND (< 4.3)	**ND (< 4.8)**	**ND (< 3.7)**	ND (< 20)	**ND (< 4.9)**	**ND (< 6.7)**
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.089)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.099)	ND (< 0.14)	ND (< 0.11)	ND (< 0.084)	ND (< 0.093)	ND (< 0.073)	ND (< 0.4)	ND (< 0.096)	ND (< 0.13)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.12)	**ND (< 0.14)**	ND (< 0.091)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.086)	ND (< 0.095)	ND (< 0.075)	ND (< 0.4)	ND (< 0.098)	ND (< 0.13)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.12)	**ND (< 0.15)**	ND (< 0.097)	ND (< 0.12)	ND (< 0.11)	ND (< 0.11)	ND (< 0.11)	ND (< 0.16)	ND (< 0.12)	ND (< 0.092)	ND (< 0.1)	ND (< 0.08)	ND (< 0.43)	ND (< 0.1)	ND (< 0.14)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.088)	ND (< 0.11)	ND (< 0.099)	ND (< 0.099)	ND (< 0.098)	ND (< 0.14)	ND (< 0.11)	ND (< 0.084)	ND (< 0.092)	ND (< 0.072)	ND (< 0.39)	ND (< 0.095)	ND (< 0.13)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.12)	**ND (< 0.14)**	ND (< 0.091)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.087)	ND (< 0.096)	ND (< 0.075)	ND (< 0.41)	ND (< 0.099)	ND (< 0.14)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.089)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.099)	ND (< 0.14)	ND (< 0.11)	ND (< 0.084)	ND (< 0.093)	ND (< 0.073)	ND (< 0.4)	ND (< 0.096)	ND (< 0.13)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 1.1)	**ND (< 1.4)**	ND (< 0.9)	ND (< 1.1)	ND (< 1)	ND (< 1)	ND (< 1)	ND (< 1.5)	ND (< 1.1)	ND (< 0.86)	**ND (< 0.94)**	ND (< 0.74)	ND (< 4)	ND (< 0.97)	**ND (< 1.3)**
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.12)	**ND (< 0.14)**	ND (< 0.091)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.087)	ND (< 0.096)	ND (< 0.075)	ND (< 0.41)	ND (< 0.099)	ND (< 0.14)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.11)	**ND (< 0.14)**	ND (< 0.089)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.1)	ND (< 0.15)	ND (< 0.11)	ND (< 0.085)	ND (< 0.094)	ND (< 0.074)	ND (< 0.4)	ND (< 0.097)	ND (< 0.13)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 1.1)	**ND (< 1.4)**	ND (< 0.89)	ND (< 1.1)	ND (< 1)	ND (< 1)	ND (< 0.99)	ND (< 1.4)	ND (< 1.1)	ND (< 0.84)	**ND (< 0.93)**	ND (< 0.73)	ND (< 4)	ND (< 0.96)	**ND (< 1.3)**
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.58)	**ND (< 0.7)**	ND (< 0.45)	ND (< 0.57)	ND (< 0.51)	ND (< 0.51)	ND (< 0.51)	ND (< 0.74)	ND (< 0.54)	ND (< 0.43)	**ND (< 0.48)**	ND (< 0.37)	ND (< 2)	ND (< 0.49)	ND (< 0.67)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.12)	**ND (< 0.15)**	ND (< 0.096)	ND (< 0.12)	ND (< 0.11)	ND (< 0.11)	ND (< 0.11)	ND (< 0.16)	ND (< 0.12)	ND (< 0.091)	ND (< 0.1)	ND (< 0.079)	ND (< 0.43)	ND (< 0.1)	ND (< 0.14)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 2.9)	**ND (< 3.5)**	ND (< 2.2)	ND (< 2.8)	ND (< 2.5)	ND (< 2.5)	ND (< 2.5)	ND (< 3.6)	ND (< 2.7)	ND (< 2.1)	**ND (< 2.4)**	**ND (< 1.8)**	ND (< 10)	**ND (< 2.4)**	**ND (< 3.3)**
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 2.9)	**ND (< 3.5)**	ND (< 2.2)	ND (< 2.8)	ND (< 2.5)	ND (< 2.5)	ND (< 2.5)	ND (< 3.6)	ND (< 2.7)	ND (< 2.1)	**ND (< 2.4)**	**ND (< 1.8)**	ND (< 10)	**ND (< 2.4)**	**ND (< 3.3)**

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection li
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-5 - Semi-Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	Isophorone	Naphthalene	Nitrobenzene	n-Nitrosodimethylamine	n-Nitrosodi-n-propylamine	n-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
					CAS Number	78-59-1	91-20-3	98-95-3	62-75-9	621-64-7	86-30-6	87-86-5	85-01-8	108-95-2	129-00-0	110-86-1
					USEPA Laboratory Analytical Method	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C	SW8270C
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**	**SFBRWQCB**		--	**2**	--	--	--	--	**1**	--	**19,000**	**1,800**	--
SFBRWQCB-ESL for Construction Workers						--	**110**	--	--	--	--	**34**	--	**74,000**	**7,500**	--
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.086)	ND (< 0.082)	ND (< 0.33)	ND (< 0.088)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.025)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.086)	ND (< 0.082)	ND (< 0.33)	ND (< 0.088)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.025)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.087)	ND (< 0.083)	ND (< 0.33)	ND (< 0.089)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.11)	ND (< 0.1)	ND (< 0.025)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.087)	ND (< 0.083)	ND (< 0.33)	ND (< 0.089)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.11)	ND (< 0.1)	ND (< 0.025)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.85)	ND (< 0.81)	ND (< 3.2)	ND (< 0.86)	ND (< 1)	ND (< 1)	**ND (< 2.5)**	ND (< 1.1)	ND (< 1)	ND (< 1)	ND (< 0.25)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.086)	ND (< 0.082)	ND (< 0.33)	ND (< 0.088)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.025)
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 11)	**ND (< 11)**	ND (< 43)	ND (< 11)	ND (< 13)	ND (< 13)	**ND (< 33)**	ND (< 14)	ND (< 14)	ND (< 13)	ND (< 3.3)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.088)	ND (< 0.084)	ND (< 0.34)	ND (< 0.09)	ND (< 0.1)	ND (< 0.11)	ND (< 0.26)	ND (< 0.11)	ND (< 0.11)	ND (< 0.1)	ND (< 0.026)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 4.4)	**ND (< 4.2)**	ND (< 17)	ND (< 4.5)	ND (< 5.2)	ND (< 5.3)	**ND (< 13)**	ND (< 5.7)	ND (< 5.3)	ND (< 5.3)	ND (< 1.3)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.086)	ND (< 0.083)	ND (< 0.33)	ND (< 0.088)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.025)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.088)	ND (< 0.084)	ND (< 0.34)	ND (< 0.09)	ND (< 0.1)	ND (< 0.11)	ND (< 0.26)	ND (< 0.11)	ND (< 0.11)	ND (< 0.11)	ND (< 0.026)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.094)	ND (< 0.09)	ND (< 0.36)	ND (< 0.096)	ND (< 0.11)	ND (< 0.11)	ND (< 0.28)	ND (< 0.12)	ND (< 0.11)	ND (< 0.11)	ND (< 0.027)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.086)	ND (< 0.082)	ND (< 0.33)	ND (< 0.087)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.025)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.089)	ND (< 0.085)	ND (< 0.34)	ND (< 0.091)	ND (< 0.11)	ND (< 0.11)	ND (< 0.26)	ND (< 0.11)	ND (< 0.11)	ND (< 0.11)	ND (< 0.026)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.086)	ND (< 0.083)	ND (< 0.33)	ND (< 0.088)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.1)	ND (< 0.1)	ND (< 0.025)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.88)	ND (< 0.84)	ND (< 3.3)	ND (< 0.9)	ND (< 1)	ND (< 1.1)	**ND (< 2.6)**	ND (< 1.1)	ND (< 1.1)	ND (< 1)	ND (< 0.26)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.089)	ND (< 0.085)	ND (< 0.34)	ND (< 0.091)	ND (< 0.11)	ND (< 0.11)	ND (< 0.26)	ND (< 0.11)	ND (< 0.11)	ND (< 0.11)	ND (< 0.026)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.087)	ND (< 0.083)	ND (< 0.33)	ND (< 0.089)	ND (< 0.1)	ND (< 0.1)	ND (< 0.25)	ND (< 0.11)	ND (< 0.11)	ND (< 0.1)	ND (< 0.025)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.86)	ND (< 0.83)	ND (< 3.3)	ND (< 0.88)	ND (< 1)	ND (< 1)	**ND (< 2.5)**	ND (< 1.1)	ND (< 1)	ND (< 1)	ND (< 0.25)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.44)	ND (< 0.42)	ND (< 1.7)	ND (< 0.45)	ND (< 0.52)	ND (< 0.53)	**ND (< 1.3)**	ND (< 0.57)	ND (< 0.53)	ND (< 0.53)	ND (< 0.13)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.093)	ND (< 0.089)	ND (< 0.36)	ND (< 0.095)	ND (< 0.11)	ND (< 0.11)	ND (< 0.27)	ND (< 0.12)	ND (< 0.11)	ND (< 0.11)	ND (< 0.027)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 2.2)	**ND (< 2.1)**	ND (< 8.3)	ND (< 2.2)	ND (< 2.6)	ND (< 2.6)	**ND (< 6.4)**	ND (< 2.8)	ND (< 2.6)	ND (< 2.6)	ND (< 0.63)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 2.2)	**ND (< 2.1)**	ND (< 8.3)	ND (< 2.2)	ND (< 2.6)	ND (< 2.6)	**ND (< 6.4)**	ND (< 2.8)	ND (< 2.6)	ND (< 2.6)	ND (< 0.63)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection li
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-6 - Comprehensive Soil Analytical Results - Polycyclic Aromatic Hydrocarbons
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene
					CAS Number	90-12-0	91-57-6	83-32-9	208-96-8	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2
					USEPA Laboratory Analytical Method	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					SFBRWQCB-ESL for Residential Soil	--	**240**	**3,600**	--	**18,000**	**1.1**	**0.11**	**1.1**	--
					SFBRWQCB-ESL for Construction Workers	--	**1,000**	**15,000**	--	**75,000**	**160**	**8.2**	**170**	--
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0012)	ND (< 0.0015)	ND (< 0.00081)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00084)	ND (< 0.0016)	ND (< 0.00095)	ND (< 0.0014)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00082)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00085)	ND (< 0.0016)	ND (< 0.00095)	ND (< 0.0014)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00083)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00086)	ND (< 0.0017)	ND (< 0.00096)	ND (< 0.0014)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00083)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00086)	ND (< 0.0017)	ND (< 0.00096)	ND (< 0.0014)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	ND (< 0.012)	ND (< 0.015)	ND (< 0.0080)	ND (< 0.012)	ND (< 0.011)	ND (< 0.0083)	ND (< 0.016)	ND (< 0.0093)	ND (< 0.013)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00082)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00085)	ND (< 0.0016)	ND (< 0.00095)	ND (< 0.0014)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0012)	ND (< 0.0015)	ND (< 0.00081)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00084)	ND (< 0.0016)	ND (< 0.00094)	ND (< 0.0013)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00084)	ND (< 0.0013)	ND (< 0.0011)	ND (< 0.00088)	ND (< 0.0017)	ND (< 0.00098)	ND (< 0.0014)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00082)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00085)	ND (< 0.0016)	ND (< 0.00095)	ND (< 0.0014)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	ND (< 0.012)	ND (< 0.016)	ND (< 0.0083)	ND (< 0.012)	ND (< 0.011)	ND (< 0.0086)	ND (< 0.017)	ND (< 0.0097)	ND (< 0.014)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00084)	ND (< 0.0013)	ND (< 0.0011)	ND (< 0.00088)	ND (< 0.0017)	ND (< 0.00098)	ND (< 0.0014)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	ND (< 0.0012)	ND (< 0.0016)	ND (< 0.00083)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.00086)	ND (< 0.0017)	ND (< 0.00096)	ND (< 0.0014)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025	ND (< 0.041)	ND (< 0.052)	ND (< 0.041)	ND (< 0.041)	ND (< 0.072)	ND (< 0.03)	ND (< 0.03)	ND (< 0.03)	ND (< 0.073)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025	ND (< 0.041)	ND (< 0.052)	ND (< 0.041)	ND (< 0.041)	ND (< 0.072)	ND (< 0.03)	ND (< 0.03)	ND (< 0.03)	ND (< 0.073)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-6 - Comprehensive Soil Analytical Results - Polycyclic Aromatic Hydrocarbons
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

						Analyte	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-c,d]pyrene	Naphthalene	Phenanthrene	Pyrene
						CAS Number	207-08-9	218-01-9	53-70-3	206-44-0	86-73-7	193-39-5	91-20-3	85-01-8	129-00-0
						USEPA Laboratory Analytical Method	SW8270C_SIM	SW8270C_SIM	SW8270C_SIM	W8270C_SI	W8270C_SI	W8270C_SI	W8270C_SI	W8270C_SI	W8270C_SI
						Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					SFBRWQCB-ESL for Residential Soil		**11**	**110**	**0.028**	**2,400**	**2,400**	**1.1**	**2**	**--**	**1,800**
					SFBRWQCB-ESL for Construction Workers		**1,100**	**11,000**	**4.2**	**10,000**	**10,000**	**170**	**110**	**--**	**7,500**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025		ND (< 0.0014)	ND (< 0.00071)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0010	D (< 0.0017	D (< 0.0018	(< 0.0035)
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025		ND (< 0.0015)	ND (< 0.00071)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0010	D (< 0.0017	D (< 0.0018	(< 0.0035)
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025		ND (< 0.0015)	ND (< 0.00072)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0011	D (< 0.0017	D (< 0.0018	(< 0.0036)
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025		ND (< 0.0015)	ND (< 0.00072)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0011	D (< 0.0017	D (< 0.0018	(< 0.0036)
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025		ND (< 0.014)	ND (< 0.0070)	ND (< 0.011)	ND (< 0.015	D (< 0.0090	ND (< 0.01)	ND (< 0.017	ND (< 0.018	D (< 0.035)
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025		ND (< 0.0015)	ND (< 0.00071)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0010	D (< 0.0017	D (< 0.0018	(< 0.0035)
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025		ND (< 0.0014)	ND (< 0.00071)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0010	D (< 0.0017	D (< 0.0018	(< 0.0035)
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025		ND (< 0.0015)	ND (< 0.00074)	ND (< 0.0012)	D (< 0.0016	D (< 0.0009	D (< 0.0011	D (< 0.0018	D (< 0.0019	(< 0.0037)
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025		ND (< 0.0015)	ND (< 0.00071)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0011	D (< 0.0017	D (< 0.0018	(< 0.0036)
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025		ND (< 0.015)	ND (< 0.0072)	ND (< 0.011)	ND (< 0.016	D (< 0.0093	ND (< 0.011	ND (< 0.018	ND (< 0.018	D (< 0.036)
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025		ND (< 0.0015)	ND (< 0.00074)	ND (< 0.0012)	D (< 0.0016	D (< 0.0009	D (< 0.0011	D (< 0.0018	D (< 0.0019	(< 0.0037)
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025		ND (< 0.0015)	ND (< 0.00072)	ND (< 0.0011)	D (< 0.0016	D (< 0.0009	D (< 0.0011	D (< 0.0017	D (< 0.0018	(< 0.0036)
SB-SF-22	Softball Field	SB-SF-22-6.5-7.5	6.5	7.5	4/10/2025		ND (< 0.045)	ND (< 0.027)	**ND (< 0.077)**	ND (< 0.039	ND (< 0.035	ND (< 0.065	ND (< 0.044	ND (< 0.048	D (< 0.091)
SB-SF-25	Softball Field	SB-SF-25-7.5-8.0	7.5	8	4/10/2025		ND (< 0.045)	ND (< 0.027)	**ND (< 0.077)**	ND (< 0.039	ND (< 0.035	ND (< 0.065	ND (< 0.044	ND (< 0.048	D (< 0.091)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-7 - Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

						Analyte	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
						CAS Number	630-20-6	71-55-6	79-34-5	76-13-1	79-00-5	75-34-3	75-35-4	563-58-6	87-61-6	96-18-4	120-82-1	95-63-6	96-12-8	106-93-4	95-50-1	107-06-2	78-87-5
						USEPA Laboratory Analytical Method	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260
						Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**		**SFBRWQCB**		**2**	**1,700**	**0.6**	**--**	**1.1**	**3.6**	**4.8**	**--**	**--**	**0.0051**	**24**	**--**	**0.0043**	**0.036**	**1,800**	**0.46**	**2.5**
SFBRWQCB-ESL for Construction Workers							**190**	**7,100**	**48**	**--**	**6.3**	**370**	**20**	**--**	**--**	**0.83**	**240**	**--**	**1.1**	**3.2**	**7,700**	**45**	**66**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025		ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0009)	ND (< 0.0008)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0003)	ND (< 0.0006)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0005)
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025		ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0007)	ND (< 0.0003)	ND (< 0.0004)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0006)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025		ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0010)	ND (< 0.0009)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0007)	ND (< 0.0003)	ND (< 0.0003)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0006)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025		ND (< 0.0007)	ND (< 0.0004)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0007)	ND (< 0.0003)	ND (< 0.0003)	ND (< 0.0007)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0006)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025		ND (< 0.0010)	ND (< 0.0008)	ND (< 0.0005)	ND (< 0.0013)	ND (< 0.0005)	ND (< 0.0013)	ND (< 0.0014)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0010)	ND (< 0.0013)	ND (< 0.0008)	ND (< 0.0018)	ND (< 0.0006)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0012)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025		ND (< 0.0010)	ND (< 0.0008)	ND (< 0.0005)	ND (< 0.0013)	ND (< 0.0005)	ND (< 0.0014)	ND (< 0.0014)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0010)	ND (< 0.0013)	ND (< 0.0008)	ND (< 0.0018)	ND (< 0.0006)	ND (< 0.0008)	ND (< 0.0007)	ND (< 0.0012)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025		ND (< 0.0009)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0011)	ND (< 0.0004)	ND (< 0.0012)	ND (< 0.0012)	ND (< 0.0009)	ND (< 0.0010)	ND (< 0.0009)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0016)	ND (< 0.0005)	ND (< 0.0007)	ND (< 0.0006)	ND (< 0.0010)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025		ND (< 0.0010)	ND (< 0.0008)	ND (< 0.0005)	ND (< 0.0013)	ND (< 0.0005)	ND (< 0.0013)	ND (< 0.0014)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0010)	ND (< 0.0013)	ND (< 0.0008)	ND (< 0.0018)	ND (< 0.0006)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0012)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025		ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0012)	ND (< 0.0005)	ND (< 0.0012)	ND (< 0.0013)	ND (< 0.0009)	ND (< 0.0010)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.0008)	ND (< 0.0017)	ND (< 0.0006)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0011)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025		ND (< 0.0010)	ND (< 0.0008)	ND (< 0.0005)	ND (< 0.0013)	ND (< 0.0005)	ND (< 0.0014)	ND (< 0.0014)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0010)	ND (< 0.0013)	ND (< 0.0008)	ND (< 0.0018)	ND (< 0.0006)	ND (< 0.0008)	ND (< 0.0007)	ND (< 0.0012)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025		ND (< 0.0012)	ND (< 0.0015)	ND (< 0.0022)	ND (< 0.0007)	ND (< 0.0014)	ND (< 0.0015)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0013)	ND (< 0.0012)	ND (< 0.0008)	ND (< 0.0014)	ND (< 0.0014)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0017)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2025 Revision 1, July, 2025.
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method detection limit.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-7 - Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform
					CAS Number	108-67-8	541-73-1	142-28-9	106-46-7	594-20-7	78-93-3	95-49-8	106-43-4	99-87-6	108-10-1	67-64-1	107-05-1	71-43-2	108-86-1	74-97-5	75-27-4	75-25-2
					USEPA Laboratory Analytical Method	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**		**SFBRWQCB**	--	--	--	**2.6**	--	**27,000**	--	--	--	**33,000**	**61,000**	--	**0.33**	--	--	**0.29**	**19**
SFBRWQCB-ESL for Construction Workers						--	--	--	**270**	--	**120,000**	--	--	--	**140,000**	**180,000**	--	**32**	--	--	**30**	**1,400**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0011)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0007)	ND (< 0.011)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0007)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0013)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0008)	ND (< 0.013)	ND (< 0.0007)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0005)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0012)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0007)	ND (< 0.012)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0005)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0012)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0007)	ND (< 0.012)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0005)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0073)	ND (< 0.0009)	ND (< 0.0008)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.045)	ND (< 0.0012)	ND (< 0.0009)	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0012)	ND (< 0.0008)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0074)	ND (< 0.0009)	ND (< 0.0008)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.045)	ND (< 0.0012)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0012)	ND (< 0.0009)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0009)	ND (< 0.0007)	ND (< 0.0004)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0065)	ND (< 0.0008)	ND (< 0.0007)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.04)	ND (< 0.0010)	ND (< 0.0008)	ND (< 0.0009)	ND (< 0.0006)	ND (< 0.0011)	ND (< 0.0008)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0074)	ND (< 0.0009)	ND (< 0.0008)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.045)	ND (< 0.0012)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0012)	ND (< 0.0009)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.0009)	ND (< 0.0007)	ND (< 0.0004)	ND (< 0.0007)	ND (< 0.0008)	ND (< 0.0068)	ND (< 0.0009)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.042)	ND (< 0.0011)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0006)	ND (< 0.0011)	ND (< 0.0008)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0074)	ND (< 0.0009)	ND (< 0.0008)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.045)	ND (< 0.0012)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0012)	ND (< 0.0009)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0010)	ND (< 0.0012)	ND (< 0.0012)	ND (< 0.0013)	ND (< 0.0029)	ND (< 0.0052)	ND (< 0.0015)	ND (< 0.0013)	ND (< 0.0008)	ND (< 0.0012)	ND (< 0.077)	ND (< 0.0015)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.0011)	ND (< 0.0009)	ND (< 0.0013)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method dete
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-7 - Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	cis-1,4-Dichloro-2-butene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methyl tert-butyl ether
					CAS Number	74-83-9	56-23-5	108-90-7	75-00-3	67-66-3	74-87-3	156-59-2	10061-01-5	1476-11-5	124-48-1	74-95-3	75-71-8	100-41-4	87-68-3	98-82-8	179601-23-1	1634-04-4
					USEPA Laboratory Analytical Method	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**		**SFBRWQCB**	**6.8**	**0.65**	**280**	**5,400**	**0.32**	**110**	**63**	**--**	**--**	**8.3**	**--**	**--**	**5.8**	**1.2**	**--**	**--**	**47**
SFBRWQCB-ESL for Construction Workers						**29**	**63**	**1,200**	**23,000**	**22**	**460**	**270**	**--**	**--**	**290**	**--**	**--**	**530**	**100**	**--**	**--**	**4,100**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0008)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0008)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0011)	ND (< 0.0004)	ND (< 0.0003)	ND (< 0.0002)
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0009)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0009)	ND (< 0.0005)	ND (< 0.0007)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0007)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0012)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0003)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0009)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0008)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0011)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0003)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0008)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0008)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0003)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0011)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0002)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0022)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.0038)	ND (< 0.0007)	ND (< 0.0035)	ND (< 0.0012)	ND (< 0.0018)	ND (< 0.0014)	ND (< 0.0011)	ND (< 0.0011)	ND (< 0.0026)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0020)	ND (< 0.0011)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0022)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.0038)	ND (< 0.0007)	ND (< 0.0036)	ND (< 0.0012)	ND (< 0.0019)	ND (< 0.0014)	ND (< 0.0011)	ND (< 0.0011)	ND (< 0.0026)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0020)	ND (< 0.0011)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0020)	ND (< 0.0007)	ND (< 0.0010)	ND (< 0.0034)	ND (< 0.0006)	ND (< 0.0031)	ND (< 0.0011)	ND (< 0.0016)	ND (< 0.0013)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0023)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0018)	ND (< 0.0010)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0022)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.0038)	ND (< 0.0007)	ND (< 0.0035)	ND (< 0.0012)	ND (< 0.0019)	ND (< 0.0014)	ND (< 0.0011)	ND (< 0.0011)	ND (< 0.0026)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0020)	ND (< 0.0011)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.0021)	ND (< 0.0008)	ND (< 0.0010)	ND (< 0.0035)	ND (< 0.0006)	ND (< 0.0033)	ND (< 0.0011)	ND (< 0.0017)	ND (< 0.0013)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0024)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0018)	ND (< 0.0010)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0022)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.0038)	ND (< 0.0007)	ND (< 0.0036)	ND (< 0.0012)	ND (< 0.0019)	ND (< 0.0014)	ND (< 0.0011)	ND (< 0.0011)	ND (< 0.0026)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0010)	ND (< 0.0020)	ND (< 0.0011)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0018)	ND (< 0.0013)	ND (< 0.0008)	ND (< 0.0013)	ND (< 0.0012)	ND (< 0.0022)	ND (< 0.0018)	ND (< 0.0014)	ND (< 0.0039)	ND (< 0.0013)	ND (< 0.0014)	ND (< 0.0018)	ND (< 0.0007)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0006)	ND (< 0.0007)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method dete
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-7 - Volatile Organic Compounds
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	Methylene chloride	Naphthalene	n-Butylbenzene	o-Xylene	Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethylene	Trichlorofluoromethane	Vinyl chloride	Xylenes, total
					CAS Number	75-09-2	91-20-3	104-51-8	95-47-6	103-65-1	135-98-8	100-42-5	98-06-6	127-18-4	108-88-3	156-60-5	10061-02-6	110-57-6	79-01-6	75-69-4	75-01-4	1330-20-7
					USEPA Laboratory Analytical Method	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260	SW8260
					Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB-ESL for Residential Soil			**SFBRWQCB-SO-RES-M**		**SFBRWQCB**	**2.2**	**2**	**--**	**--**	**--**	**--**	**5,600**	**--**	**0.59**	**1,400**	**70**	**--**	**--**	**0.94**	**--**	**0.0082**	**580**
SFBRWQCB-ESL for Construction Workers						**640**	**110**	**--**	**--**	**--**	**--**	**24,000**	**--**	**33**	**6,100**	**290**	**--**	**--**	**17**	**--**	**3.4**	**2,400**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
SW-SC-01	Softball Field	SW-SC-01-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0037)	ND (< 0.0003)	ND (< 0.0002)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0047)
SW-SC-05	Softball Field	SW-SC-05-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0044)	ND (< 0.0004)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0012)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0056)
SW-SC-11	Softball Field	SW-SC-11-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0041)	ND (< 0.0004)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0052)
SW-SC-15	Softball Field	SW-SC-15-1.0-1.5	1	1.5	3/11/2025	ND (< 0.0039)	ND (< 0.0004)	ND (< 0.0002)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0005)	ND (< 0.0006)	ND (< 0.0004)	ND (< 0.0005)	ND (< 0.0004)	ND (< 0.0003)	ND (< 0.0005)	ND (< 0.0003)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0007)	ND (< 0.0050)
SW-SC-01	Softball Field	SW-SC-01-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0047)	ND (< 0.0011)	ND (< 0.0010)	ND (< 0.0006)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0009)	ND (< 0.0013)	ND (< 0.0009)	ND (< 0.0016)	ND (< 0.0010)	ND (< 0.0016)	ND (< 0.0008)	ND (< 0.0032)	ND (< 0.0036)	ND (< 0.0049)
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0048)	ND (< 0.0012)	ND (< 0.0010)	ND (< 0.0006)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0009)	ND (< 0.0013)	ND (< 0.0009)	ND (< 0.0017)	ND (< 0.0010)	ND (< 0.0016)	ND (< 0.0009)	ND (< 0.0032)	ND (< 0.0036)	ND (< 0.0050)
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0042)	ND (< 0.0010)	ND (< 0.0009)	ND (< 0.0006)	ND (< 0.0009)	ND (< 0.0009)	ND (< 0.0007)	ND (< 0.0008)	ND (< 0.0011)	ND (< 0.0008)	ND (< 0.0015)	ND (< 0.0009)	ND (< 0.0015)	ND (< 0.0008)	ND (< 0.0028)	ND (< 0.0032)	ND (< 0.0044)
SW-SC-15	Softball Field	SW-SC-15-2.0-2.5	2	2.5	2/27/2025	ND (< 0.0048)	ND (< 0.0011)	ND (< 0.0010)	ND (< 0.0006)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0009)	ND (< 0.0013)	ND (< 0.0009)	ND (< 0.0017)	ND (< 0.0010)	ND (< 0.0016)	ND (< 0.0009)	ND (< 0.0032)	ND (< 0.0036)	ND (< 0.0050)
SW-SC-15	Softball Field	SW-SC-15-3.0-3.5	3	3.5	2/27/2025	ND (< 0.0044)	ND (< 0.0011)	ND (< 0.0009)	ND (< 0.0006)	ND (< 0.0009)	ND (< 0.0010)	ND (< 0.0007)	ND (< 0.0008)	ND (< 0.0012)	ND (< 0.0008)	ND (< 0.0015)	ND (< 0.0009)	ND (< 0.0015)	ND (< 0.0008)	ND (< 0.0030)	ND (< 0.0033)	ND (< 0.0046)
SW-SC-05	Softball Field	SW-SC-05-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0048)	ND (< 0.0012)	ND (< 0.0010)	ND (< 0.0006)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0007)	ND (< 0.0009)	ND (< 0.0013)	ND (< 0.0009)	ND (< 0.0017)	ND (< 0.0010)	ND (< 0.0016)	ND (< 0.0009)	ND (< 0.0032)	ND (< 0.0036)	ND (< 0.0050)
SW-SC-11	Softball Field	SW-SC-11-4.0-4.5	4	4.5	2/27/2025	ND (< 0.0079)	ND (< 0.0019)	ND (< 0.0010)	ND (< 0.0009)	ND (< 0.0012)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0008)	ND (< 0.0009)	ND (< 0.0010)	ND (< 0.0011)	ND (< 0.0013)	ND (< 0.0024)	ND (< 0.0009)	ND (< 0.0010)	ND (< 0.0012)	ND (< 0.0054)

Notes:

AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary
mg/kg	milligrams per kilogram
ND (< #)	Analyte not detected at a concentration at or above the method dete
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment A - Table A-8 - Comprehensive Soil Analytical Results - Asbestos
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

					Analyte	**Asbestos**
					USEPA Laboratory Analytical Method	CARB 435
					Unit	%
					SFBRWQCB-ESL for Residential Soil	**--**
					SFBRWQCB-ESL for Construction Workers	**--**
Sample Location	**Area**	**Sample ID**	**Start Depth (feet bgs)**	**End Depth (feet bgs)**	**Sample Date**	**Result**
SB-SF-20	Softball Field	SB-SF-20-1.0-1.5	1	1.5	4/10/2025	0
SB-SF-21	Softball Field	SB-SF-21-1.0-1.5	1	1.5	4/10/2025	0
SB-SF-22	Softball Field	SB-SF-22-1.0-1.5	1	1.5	4/10/2025	0
SB-SF-23	Softball Field	SB-SF-23-1.0-1.5	1	1.5	4/10/2025	0
SB-SF-24	Softball Field	SB-SF-24-1.0-1.5	1	1.5	4/9/2025	0
SB-SF-25	Softball Field	SB-SF-25-1.0-1.5	1	1.5	4/10/2025	0
SW-SC-05	Softball Field	SW-SC-05-2.0-2.5	2	2.5	2/27/2025	0
SW-SC-11	Softball Field	SW-SC-11-2.0-2.5	2	2.5	2/27/2025	0
SB-SF-20	Softball Field	SB-SF-20-2.5-3.0	2.5	3	4/10/2025	0
SB-SF-21	Softball Field	SB-SF-21-2.5-3.0	2.5	3	4/10/2025	0
SB-SF-22	Softball Field	SB-SF-22-2.5-3.0	2.5	3	4/10/2025	0
SB-SF-23	Softball Field	SB-SF-23-2.5-3.0	2.5	3	4/10/2025	0
SB-SF-24	Softball Field	SB-SF-24-2.5-3.0	2.5	3	4/9/2025	0
SB-SF-25	Softball Field	SB-SF-25-2.5-3.0	2.5	3	4/10/2025	0

Notes:

%	percent
AMSL	above mean sea level
bgs	below ground surface
ESL	SFBRWQCB Environmental Screening Levels Workbook and Summary Tables 2019 Revision 2, July 25, 2019.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
USEPA	United States Environmental Protection Agency
--	Analyte has no published value.

Attachment B - Table B.1 - Non-Cancer Hazard Estimates: Adult Receptor Group
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

CAS No.	Chemical of Concern	EPC (mg/kg)	CDI Ingestion (mg/kg-d)	CDI Dermal (mg/kg-d)	CDI Dust Inhalation (mg/kg-d)	Oral Reference Dose (mg/kg-d)	Oral/Dermal Hazard Quotient	Inhalation Reference Dose (mg/kg-d)	Inhalation Hazard Quotient	Total Hazard Index
12789036	Chlordane	8.80E-02	1.8E-08	4.5E-09	2.7E-12	5.0E-04	4.47E-05	2.0E-04	1.36E-08	4.47E-05
72559	4,4'-DDE	2.40E-02	4.9E-09	--	7.4E-13	5.0E-04	9.76E-06	5.7E-04	1.29E-09	9.77E-06
50293	4,4'-DDT	2.80E-02	5.7E-09	1.1E-09	8.6E-13	5.0E-04	1.35E-05	--	NA	1.35E-05
608731	delta-HCH	2.50E-02	5.1E-09	3.2E-09	7.7E-13	6.0E-08	1.37E-01	--	NA	1.37E-01
7440360	Antimony	1.10E+00	2.2E-07	--	3.4E-11	4.0E-04	5.59E-04	8.6E-05	3.96E-07	5.60E-04
7440393	Barium	1.80E+02	3.7E-05	--	5.5E-09	2.0E-01	1.83E-04	1.4E-04	3.88E-05	2.22E-04
7440439	Cadmium	5.50E-01	1.1E-07	7.0E-10	1.7E-11	1.0E-04	1.13E-03	2.9E-06	5.93E-06	1.13E-03
16065831	Chromium 3+	7.20E+01	1.5E-05	--	2.2E-09	1.5E+00	9.76E-06	--	NA	9.76E-06
18540299	Chromium 6+	5.40E-01	1.1E-07	--	1.7E-11	9.0E-04	1.22E-04	8.6E-06	1.94E-06	1.24E-04
7440484	Cobalt	9.70E+00	2.0E-06	--	3.0E-10	3.0E-04	6.58E-03	1.7E-06	1.74E-04	6.75E-03
7440508	Copper	1.80E+01	3.7E-06	--	5.5E-10	4.0E-02	9.15E-05	--	NA	9.15E-05
7439976	Mercury	7.80E-01	1.6E-07	--	2.4E-11	1.6E-04	9.92E-04	8.6E-06	2.80E-06	9.95E-04
7440020	Nickel	4.90E+01	1.0E-05	--	1.5E-09	1.1E-02	9.06E-04	4.0E-06	3.78E-04	1.28E-03
7440622	Vanadium	4.00E+01	8.1E-06	--	1.2E-09	5.0E-03	1.63E-03	2.9E-05	4.32E-05	1.67E-03
7440666	Zinc	7.90E+01	1.6E-05	--	2.4E-09	3.0E-01	5.36E-05	--	NA	5.36E-05
						Total Hazard Index Across All Exposure Routes/Pathways				1.50E-01

Scenario Timeframe:	Current
Medium:	Soil
Exposure Medium:	Soil
Exposure Point:	Soil
Exposure Route	Ingestion/Dermal/Inhalation
Receptor Population:	Softball Field
Toxicity End Point:	Noncancer Hazard
Receptor Age:	Adult

Notes:	
CAS No.	Chemical Abstracts Service Number
mg/kg	milligrams per kilogram
mg/kg-d	milligrams per kilogram per day
EPC	Exposure Point Concentration
CDI	Chronic Daily Intake

Attachment B - Table B.2 - Non-Cancer Hazard Estimates: Student Receptor Group
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

CAS No.	Chemical of Concern	EPC (mg/kg)	CDI Ingestion (mg/kg-d)	CDI Dermal (mg/kg-d)	CDI Dust Inhalation (mg/kg-d)	Oral Reference Dose (mg/kg-d)	Oral/Dermal Hazard Quotient	Inhalation Reference Dose (mg/kg-d)	Inhalation Hazard Quotient	Total Hazard Index
12789036	Chlordane	8.80E-02	2.5E-08	5.9E-09	1.9E-12	5.0E-04	6.11E-05	2.0E-04	9.32E-09	6.11E-05
72559	4,4'-DDE	2.40E-02	6.7E-09	--	5.1E-13	5.0E-04	1.34E-05	5.7E-04	8.89E-10	1.34E-05
50293	4,4'-DDT	2.80E-02	7.8E-09	1.4E-09	5.9E-13	5.0E-04	1.85E-05	--	NA	1.85E-05
608731	delta-HCH	2.50E-02	7.0E-09	4.2E-09	5.3E-13	6.0E-08	1.87E-01	--	NA	1.87E-01
7440360	Antimony	1.10E+00	3.1E-07	--	2.3E-11	4.0E-04	7.68E-04	8.6E-05	2.72E-07	7.69E-04
7440393	Barium	1.80E+02	5.0E-05	--	3.8E-09	2.0E-01	2.52E-04	1.4E-04	2.67E-05	2.78E-04
7440439	Cadmium	5.50E-01	1.5E-07	9.3E-10	1.2E-11	1.0E-04	1.55E-03	2.9E-06	4.08E-06	1.55E-03
16065831	Chromium 3+	7.20E+01	2.0E-05	--	1.5E-09	1.5E+00	1.34E-05	--	NA	1.34E-05
18540299	Chromium 6+	5.40E-01	1.5E-07	--	1.1E-11	9.0E-04	1.68E-04	8.6E-06	1.33E-06	1.69E-04
7440484	Cobalt	9.70E+00	2.7E-06	--	2.1E-10	3.0E-04	9.04E-03	1.7E-06	1.20E-04	9.16E-03
7440508	Copper	1.80E+01	5.0E-06	--	3.8E-10	4.0E-02	1.26E-04	--	NA	1.26E-04
7439976	Mercury	7.80E-01	2.2E-07	--	1.7E-11	1.6E-04	1.36E-03	8.6E-06	1.93E-06	1.36E-03
7440020	Nickel	4.90E+01	1.4E-05	--	1.0E-09	1.1E-02	1.24E-03	4.0E-06	2.59E-04	1.50E-03
7440622	Vanadium	4.00E+01	1.1E-05	--	8.5E-10	5.0E-03	2.24E-03	2.9E-05	2.96E-05	2.27E-03
7440666	Zinc	7.90E+01	2.2E-05	--	1.7E-09	3.0E-01	7.36E-05	--	NA	7.36E-05
					Total Hazard Index Across All Exposure Routes/Pathways					2.04E-01

Scenario Timeframe:	Current
Medium:	Soil
Exposure Medium:	Soil
Exposure Point:	Soil
Exposure Route	Ingestion/Dermal/Inhalation
Toxicity End Point:	Noncancer Hazard
Receptor Population:	Softball Field
Receptor Age:	Student (15-18)

Notes:	
CAS No.	Chemical Abstracts Service Number
mg/kg	milligrams per kilogram
mg/kg-d	milligrams per kilogram per day
EPC	Exposure Point Concentration
CDI	Chronic Daily Intake

Attachment B - Table B.3 - Cancer Risk Estimates: Adult Receptor Group
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

CAS No.	Chemical of Concern	EPC (mg/kg)	CDI Ingestion (mg/kg-d)	CDI Dermal (mg/kg-d)	CDI Dust Inhalation (mg/kg-d)	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Oral/Dermal Cancer Risk	Inhalation Slope Factor $(mg/kg\text{-}d)^{-1}$	Inhalation Cancer Risk	Total Cancer Risk
12789036	Chlordane	8.80E-02	6.4E-09	1.1E-09	9.7E-13	3.5E-01	2.62E-09	3.5E-01	3.39E-13	3E-09
72559	4,4'-DDE	2.40E-02	1.7E-09	--	2.6E-13	3.4E-01	5.93E-10	3.4E-01	8.97E-14	6E-10
50293	4,4'-DDT	2.80E-02	2.0E-09	2.6E-10	3.1E-13	3.4E-01	7.79E-10	3.4E-01	1.05E-13	8E-10
608731	delta-HCH	2.50E-02	1.8E-09	7.7E-10	2.8E-13	4.0E+00	1.03E-08	3.9E+00	1.06E-12	1E-08
7440360	Antimony	1.10E+00	8.0E-08	--	1.2E-11	--	NA	--	NA	NA
7440393	Barium	1.80E+02	1.3E-05	--	2.0E-09	--	NA	--	NA	NA
7440439	Cadmium	5.50E-01	4.0E-08	1.7E-10	6.1E-12	--	NA	1.5E+01	8.90E-11	NA
16065831	Chromium 3+	7.20E+01	5.2E-06	--	7.9E-10	--	NA	--	NA	NA
18540299	Chromium 6+	5.40E-01	3.9E-08	--	5.9E-12	5.0E-01	1.96E-08	5.3E+02	3.12E-09	2E-08
7440484	Cobalt	9.70E+00	7.0E-07	--	1.1E-10	--	NA	3.2E+01	3.36E-09	NA
7440508	Copper	1.80E+01	1.3E-06	--	2.0E-10	--	NA	--	NA	NA
7439976	Mercury	7.80E-01	5.7E-08	--	8.6E-12	--	NA	--	NA	NA
7440020	Nickel	4.90E+01	3.6E-06	--	5.4E-10	--	NA	9.1E-01	4.91E-10	NA
7440622	Vanadium	4.00E+01	2.9E-06	--	4.4E-10	--	NA	--	NA	NA
7440666	Zinc	7.90E+01	5.7E-06	--	8.7E-10	--	NA	--	NA	NA
					Total Hazard Index Across All Exposure Routes/Pathways					4E-08

Scenario Timeframe:	Current
Medium:	Soil
Exposure Medium:	Soil
Exposure Point:	Soil
Exposure Route	Ingestion/Dermal/Inhalation
Toxicity End Point:	Cancer Risk
Receptor Population:	Softball Field
Receptor Age:	Adult

Notes:

CAS No.	Chemical Abstracts Service Number
mg/kg	milligrams per kilogram
mg/kg-d	milligrams per kilogram per day
EPC	Exposure Point Concentration
CDI	Chronic Daily Intake

Attachment B - Table B.4 - Cancer Risk Estimates: Student Receptor Group
Human Health Risk Assessment Alameda High School Softball Field
2200 Central Avenue, Alameda, California

CAS No.	Chemical of Concern	EPC (mg/kg)	CDI Ingestion (mg/kg-d)	CDI Dermal (mg/kg-d)	CDI Dust Inhalation (mg/kg-d)	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Oral/Dermal Cancer Risk	Inhalation Slope Factor $(mg/kg\text{-}d)^{-1}$	Inhalation Cancer Risk	Total Cancer Risk
12789036	Chlordane	8.80E-02	1.4E-09	1.1E-09	1.1E-13	3.5E-01	8.70E-10	3.5E-01	3.73E-14	9E-10
72559	4,4'-DDE	2.40E-02	3.8E-10	--	2.9E-14	3.4E-01	1.30E-10	3.4E-01	9.86E-15	1E-10
50293	4,4'-DDT	2.80E-02	4.5E-10	2.6E-10	3.4E-14	3.4E-01	2.40E-10	3.4E-01	1.15E-14	2E-10
608731	delta-HCH	2.50E-02	4.0E-10	7.7E-10	3.0E-14	4.0E+00	4.66E-09	3.9E+00	1.16E-13	5E-09
7440360	Antimony	1.10E+00	1.8E-08	--	1.3E-12	--	NA	--	NA	NA
7440393	Barium	1.80E+02	2.9E-06	--	2.2E-10	--	NA	--	NA	NA
7440439	Cadmium	5.50E-01	8.8E-09	1.7E-10	6.7E-13	--	NA	1.5E+01	9.78E-12	NA
16065831	Chromium 3+	7.20E+01	1.1E-06	--	8.7E-11	--	NA	--	NA	NA
18540299	Chromium 6+	5.40E-01	8.6E-09	--	6.5E-13	5.0E-01	4.31E-09	5.3E+02	3.43E-10	5E-09
7440484	Cobalt	9.70E+00	1.5E-07	--	1.2E-11	--	NA	3.2E+01	3.70E-10	NA
7440508	Copper	1.80E+01	2.9E-07	--	2.2E-11	--	NA	--	NA	NA
7439976	Mercury	7.80E-01	1.2E-08	--	9.4E-13	--	NA	--	NA	NA
7440020	Nickel	4.90E+01	7.8E-07	--	5.9E-11	--	NA	9.1E-01	5.39E-11	NA
7440622	Vanadium	4.00E+01	6.4E-07	--	4.8E-11	--	NA	--	NA	NA
7440666	Zinc	7.90E+01	1.3E-06	--	9.6E-11	--	NA	--	NA	NA
					Total Hazard Index Across All Exposure Routes/Pathways					1E-08

Scenario Timeframe:	Current
Medium:	Soil
Exposure Medium:	Soil
Exposure Point:	Soil
Exposure Route	Ingestion/Dermal/Inhalation
Toxicity End Point:	Cancer Risk
Receptor Population:	Softball Field
Receptor Age:	Student (15-18)

Notes:

CAS No.	Chemical Abstracts Service Number
mg/kg	milligrams per kilogram
mg/kg-d	milligrams per kilogram per day
EPC	Exposure Point Concentration
CDI	Chronic Daily Intake