Site Cleanup Plan

Former Little Lake Industries Mill
Arcata, California
Case No. 1NHU018

Prepared for:

City of Arcata

December 2020

018022.040

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Reference: 018022.040

December 30, 2020

Paul Nelson
North Coast Regional Water Quality Control Board
5550 Skylane Blvd., Suite "A"
Santa Rosa, CA 95403

Subject: Site Cleanup Plan, Former Little Lakes Industries Mill, Arcata California, Case #1NHU018

Dear Paul Nelson:

Enclosed is the Site Cleanup Plan for the former Little Lake Industries Mill site located on South "I" Street, in Arcata, California. This plan includes a description of current conditions, proposed cleanup goals, a brief evaluation of remedial options, and a work plan for site remediation. SHN has prepared this work on behalf of the City of Arcata under Brownfields grant funding from the United States Environmental Protection Agency.

Respectfully submitted,

SHN

Erik J. Nielsen, PG, CHG
Project Manager

EJN:MLC:lam

Enclosures: Report and Work Plan

Site Cleanup Plan

Former Little Lake Industries Mill
Arcata, California
Case No. 1NHU018

Prepared for:

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Prepared by:

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QA/QC: EJN ejn

Reference: 018022.040

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Table of Contents

List of Illustrations

Abbreviations and Acronyms

Units of Measure

pg/g	picograms per gram

Additional Terms

APN	Assessor's parcel number
BGS	below ground surface
BMPs	best management practices
DOT	Department of Transportation
DTSC	Department of Toxic Substance Control
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
FES	Freshwater Environmental Services
HASP	health and safety plan
HHRA	Human Health Risk Assessment
ITSI	Innovative Technical Solutions, Inc.
LLI	Little Lake Industries Mill Site
PCP	pentachlorophenol
QAPP	quality assurance project plan
RWQCB	North Coast Regional Water Quality Control Board
SAP	sampling and analysis plan
SCP	Site Cleanup Plan
STLC	soluble threshold limit concentration
SWRQB	California State Water Resources Control Board
TBA	targeted Brownfields assessment
TCLP	toxicity characteristic leaching procedure
TEQ	total toxicity equivalence
TPHD	total petroleum hydrocarbons as diesel
TCDD	tetrachlorobenzeno-p-dioxin
TP	test pit
TPHMO	total petroleum hydrocarbons as motor oil
UST	underground storage tanks
W&K	Winzler and Kelly

1.0 Introduction

On behalf of the City of Arcata, SHN has prepared this site cleanup plan (SCP) for remediation activities at the former Little Lake Industries Mill Site (LLI), in Arcata, California (Figure 1). Previous investigation activities conducted at the site to assess contamination associated with historical use have identified dioxins at concentrations above permissible thresholds in the former kiln area. This SCP summarizes current conditions and outlines methods planned for implementation during site cleanup activities. This work is funded by a U.S. Environmental Protection Agency (EPA) Brownfields grant. The City intends to redevelop this site for mixed public/private use.

1.1 Site Description

Historically referred to as the South "I" Street Mill, the property consists of three parcels (Assessor's parcel number [APN] 503-251-014, 503-232-013, and 503-232-004) located south of Samoa Boulevard in Arcata, California (Figure 2). The LLI site is comprised of two parcels at 46 South "I" Street and the Johnson Tract (APN 503-251-014), which is located west of LLI, across South "I" Street. The City of Arcata currently owns all former South "I" Street mill parcels.

The LLI property is comprised of approximately 12 acres that is bordered by a creek, slough, paved street, open space, and commercial property (Figure 2). Jolly Giant Creek is located along the eastern and southern portions of the property boundary and flows south to Butcher's Slough and eventually to Humboldt Bay. Elevation of the site is approximately 10 feet above mean sea level and surface topography gently slopes east toward Jolly Giant Creek. Subsurface conditions at the site generally consist of river-run gravel with silt that grades with depth to (predominantly) silt (W&K, April 1998). Groundwater at the site has been reported at a depth of 2 to 3 feet below ground surface (BGS) and flows toward the creek.

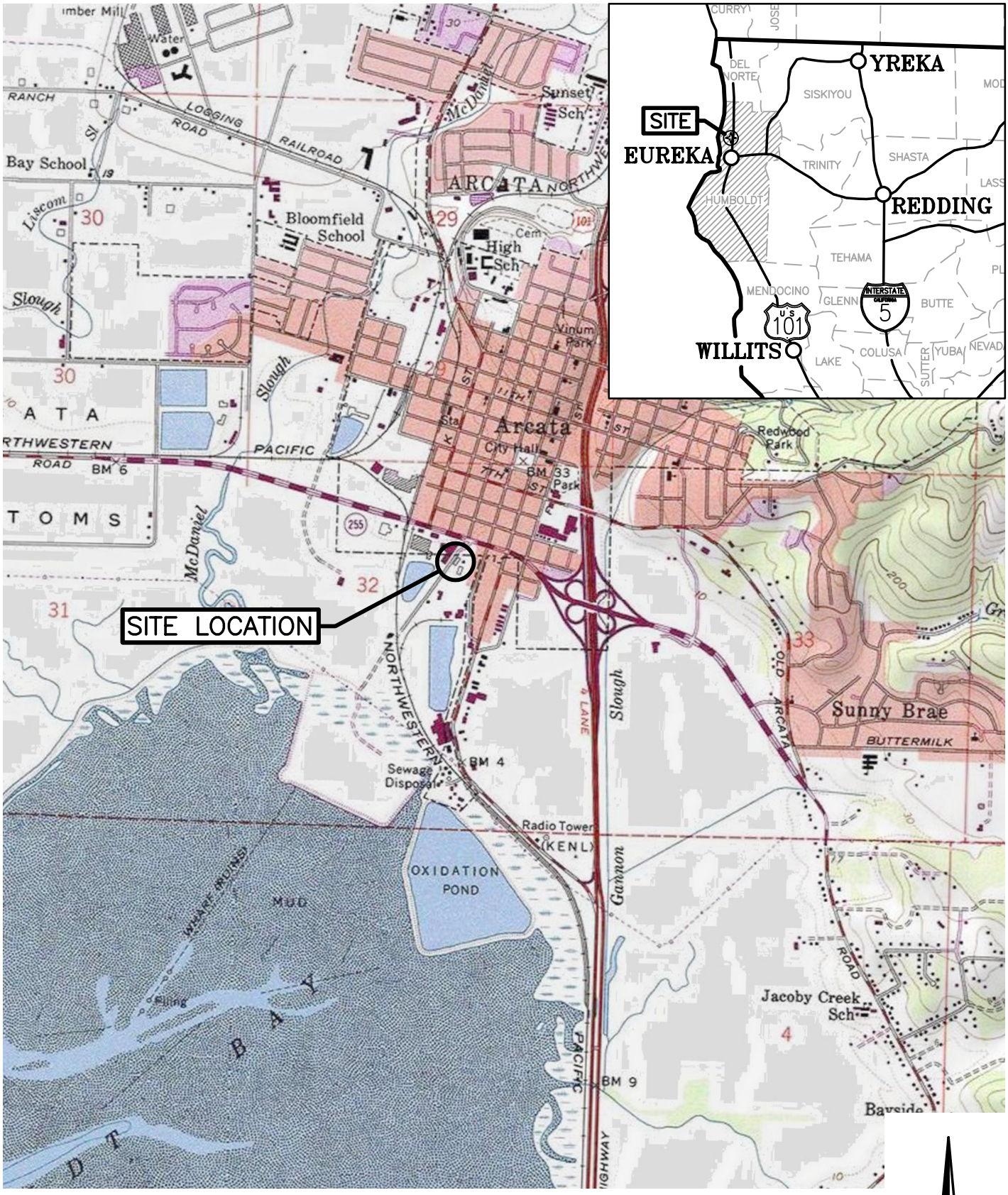
1.2 Site History and Operations

From 1950 to 1988, the site was primarily used for timber-related operations that included log storage, milling, and drying. The Johnson Structures on the site consisted of a remanufacturing complex, kilns, maintenance shed, boiler building, drying shed, conical burner, and office building. No report of wood treatment occurred at the LLI site; however, chemicals associated with treated wood have been identified. Prior to 1950, the area was used for agricultural purposes.

The City of Arcata acquired the property in 2001, and by 2010, all structures located on the property had been removed. The site currently consists of building foundations and footings, bare ground, vegetated areas, and various stockpiles of soil and gravel.

2.0 Environmental Conditions

Several investigations of soil and groundwater have been performed to assess known releases and potential impacts from mill operations starting from the late 1980s under the oversight of the North Coast Regional Water Quality Control Board (RWQCB). Results of the investigations were provided in subsequent reports that are publicly available on the California State Water Resource Control Board (SWRCB) GeoTracker website. A detailed summary of the historical site conditions in the site conditions report and data gaps investigation work plan (SHN, August 2018). This property is a Brownfields site that has received funding grants from the EPA for assessment activities.



SOURCE: ESRI

1"=2000'±

SHN	City of Arcata Former Little Lake Industries Mill Arcata, California	Site Location Map SHN 018022.040
	October 2020 | 018022-040-SITE-LCTN	Figure 1

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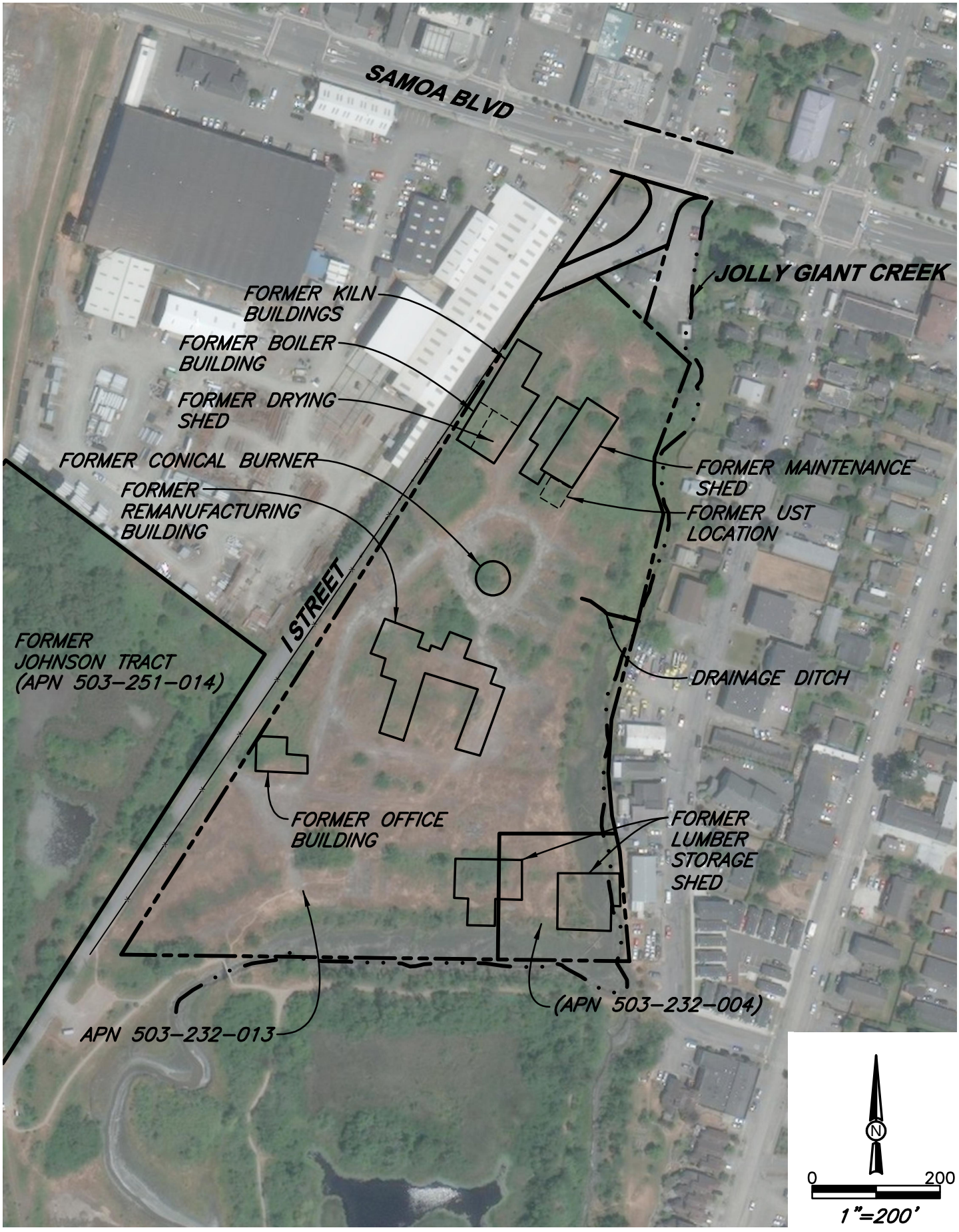


SHN	City of Arcata Former Little Lake Industries Mill Arcata, California	Site Plan with Historic Structure Locations SHN 018022.040
	October 2020 | 018022-040-SITE	Figure 2

2.1 Previous Environmental Actions

Events of significance are listed below; however, the focus of this SCP is the area of planned remediation at the former kiln structures. Historical soil and groundwater samples locations at the LLI site are shown on Figure 3 and analytical testing results are provided in Appendix 1.

Underground storage tanks (USTs) Investigation: Two 1,000-gallon underground storage tanks (USTs) installed in 1959 for diesel fuel were removed from the former Maintenance Building area in August 1987 (W&K, 1991). Approximately 200 cubic yards of soil was removed, and groundwater monitoring was initiated for this area. The UST site received closure from the RWQCB in March 2000 (RWQCB, 2000).

Phase I environmental site assessments (ESAs): Winzler and Kelly in 1998 (W&K, April 1998) and Innovative Technical Solutions, Inc. in 2002 (ITSC, 2002).

Targeted Brownfields Assessment (TBA)**:** Two TBAs of the site were completed by Weston Solutions in December 2002 (Phase II) and April 2004 (Phase IIB) to determine if soil and groundwater at the site were impacted by contaminants from historical use (Weston, 2003 and 2004).

Stockpile Sampling: Two sampling events have been conducted at LLI for stockpile characterization (Weston in 2002 and SHN in 2007). Results from the stockpiles samples indicated that low levels of total petroleum hydrocarbons as diesel (TPHD) and motor oil (TPHMO), and some metals were present and that the material was suitable for reuse at the site with placement controls.

Kiln Demolition and Disposal: In October and November 2009, demolition and disposal of the kiln buildings, their foundations and the boiler house located in the northwest corner of the site occurred. Contamination issues for the kiln buildings were identified in surface coating on the inside of the buildings, which contained elevated levels of dioxins.

Sampling and Analysis Plan (SAP): completed by Freshwater Environmental Services (FES) to consolidate historical site information and summarize their findings for additional investigation work at LLI (FES, 2016). Implementation of the 2016 SAP did not occur.

Results from the previous investigations at LLI indicated certain metals, petroleum hydrocarbons, pentachlorophenol (PCP), dioxin, and furans warranted further evaluation.

2.2 2019 Data Gaps Investigation

Work was conducted at the site in March and July 2019 to address the identified data gaps in accordance with the December 2018 site investigation work plan (SHN, 2018) and subsequent SAP Addendum (SHN, June 2019). Eleven test pits and nine soil borings were completed as part of the investigation. Soil samples were collected from each test pit and temporary well points were installed at each boring location for the collection of groundwater samples for chemical analysis.

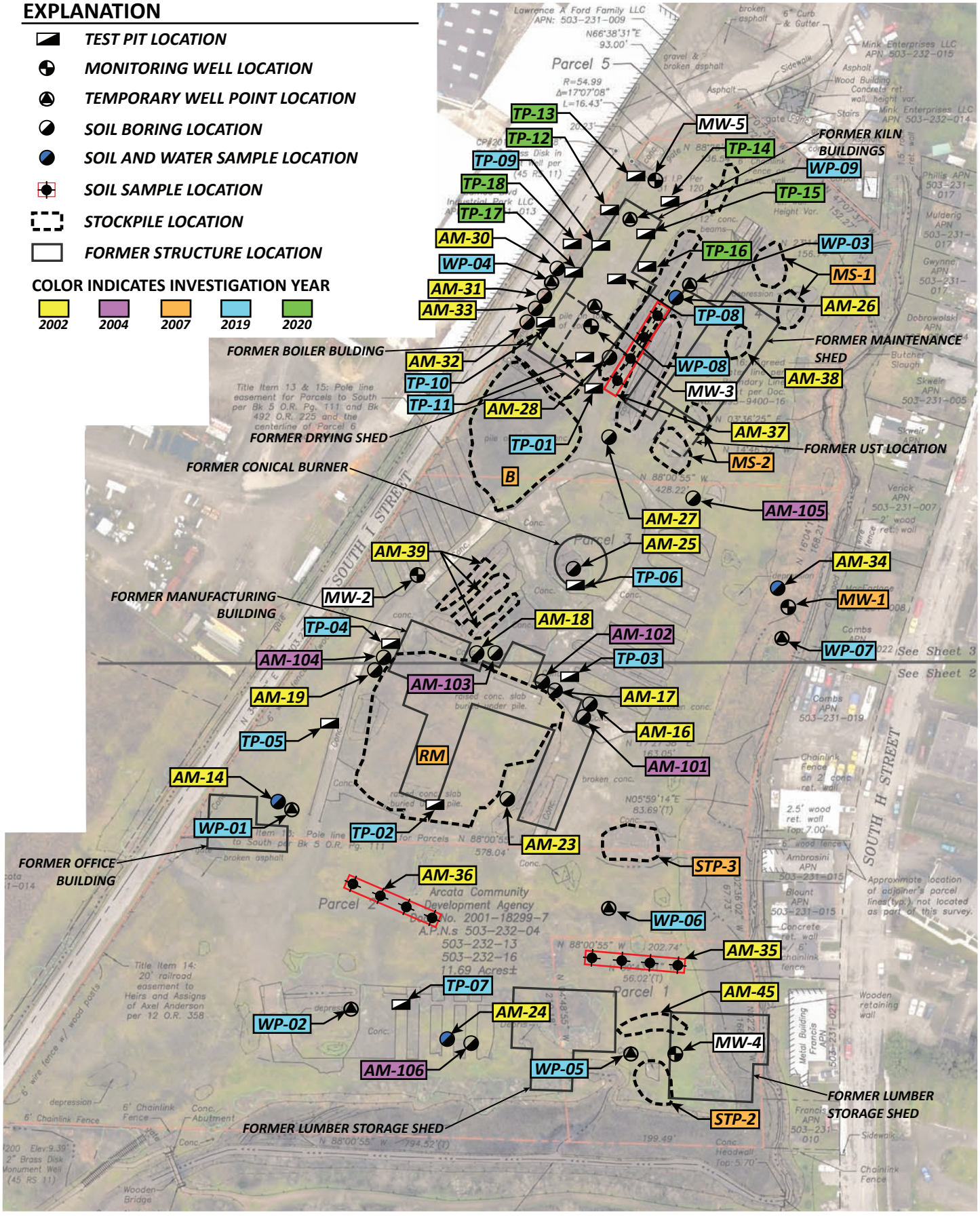
Results of the 2019 site investigation showed soil samples collected from test pits in the location of the former kiln buildings recorded elevated dioxin/furan total toxicity equivalence (TEQ) concentrations (SHN, June and October 2019). A water sample collected from the drainage ditch in this area of the former kiln buildings additionally contained elevated dioxin/furan TEQ concentrations. Almost all other

EXPLANATION

- TEST PIT LOCATION
- MONITORING WELL LOCATION
- TEMPORARY WELL POINT LOCATION
- SOIL BORING LOCATION
- SOIL AND WATER SAMPLE LOCATION
- SOIL SAMPLE LOCATION
- STOCKPILE LOCATION
- FORMER STRUCTURE LOCATION

COLOR INDICATES INVESTIGATION YEAR

2002 2004 2007 2019 2020



NOTE: ALL SAMPLE LOCATIONS ARE APPROXIMATE

BASEMAP FROM SOUSA LAND SURVEYS, "TOPOGRAPHIC SURVEY FOR ARCATA COMMUNITY DEVELOPMENT OF THE LITTLE LAKES SITE", DATED FEB 11, 2012

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SHN	City of Arcata Former Little Lake Industries Mill Arcata, California	Site Plan with Sample Locations SHN 018022.030
	October 2020 | Figure3_SitePlan	Figure 3

constituents of concern tested during the LLI site investigation program were either non-detect, below applicable environmental screening levels or within the range of background concentrations for the area.

2.3 2020 Kiln Area Step-Out Program

During correspondence for 2019 results with the RWQCB and EPA, it was determined that additional testing for soils in the kiln building area would be required to specifically delineate dioxin concentrations (RWQCB, 2019). Based on contaminant levels observed in soil and groundwater at the remainder of the site, no further evaluation outside the kiln area would be warranted. A second step-out program was developed that included completion of seven test pits (TP-12 through TP-18) for soil sample collection in the northern kiln building area. The step-out field program was conducted at the LLI former Kiln area on March 11, 2020, with results provided in the report of findings addendum 1 (SHN, 2020).

The LLI site investigation and subsequent step out sampling program identified dioxins in soil at the former kiln area that appear to be concentrated along the northwest perimeter of the former kiln buildings, along the property boundary with South "I" Street. The general area of dioxin impacted soil is outlined in Figure 4. Soil sample results show that there are minimal impacts outside of the former kiln building area and provide support for a southern and eastern boundary on contamination. Dioxin impacts are within shallow fill soils 2.0 and 3.0 feet BGS; however, no samples were collected below this depth.

TEQ values calculated for soil samples from test pits TP-13 and TP-18 exceeded Department of Toxic Substances Control (DTSC) soil remediation goals for residential soils (DTSC, 2017). TEQ values calculated for soil samples from test pits TP-09 and TP-12 exceeded the lower range for DTSC remediation goals for commercial/industrial soils at 220 picograms per gram (pg/g). No TEQ value in soil exceeded the high-end range for DTSC commercial/industrial remediation goals (700 pg/g). All dioxin testing results were reported at concentrations below DTSC residential soil screening levels for 2,3,7,8-tetrachlorobenzeno-p-dioxin (TCDD) at 4.8 pg/g (DTSC 2020).

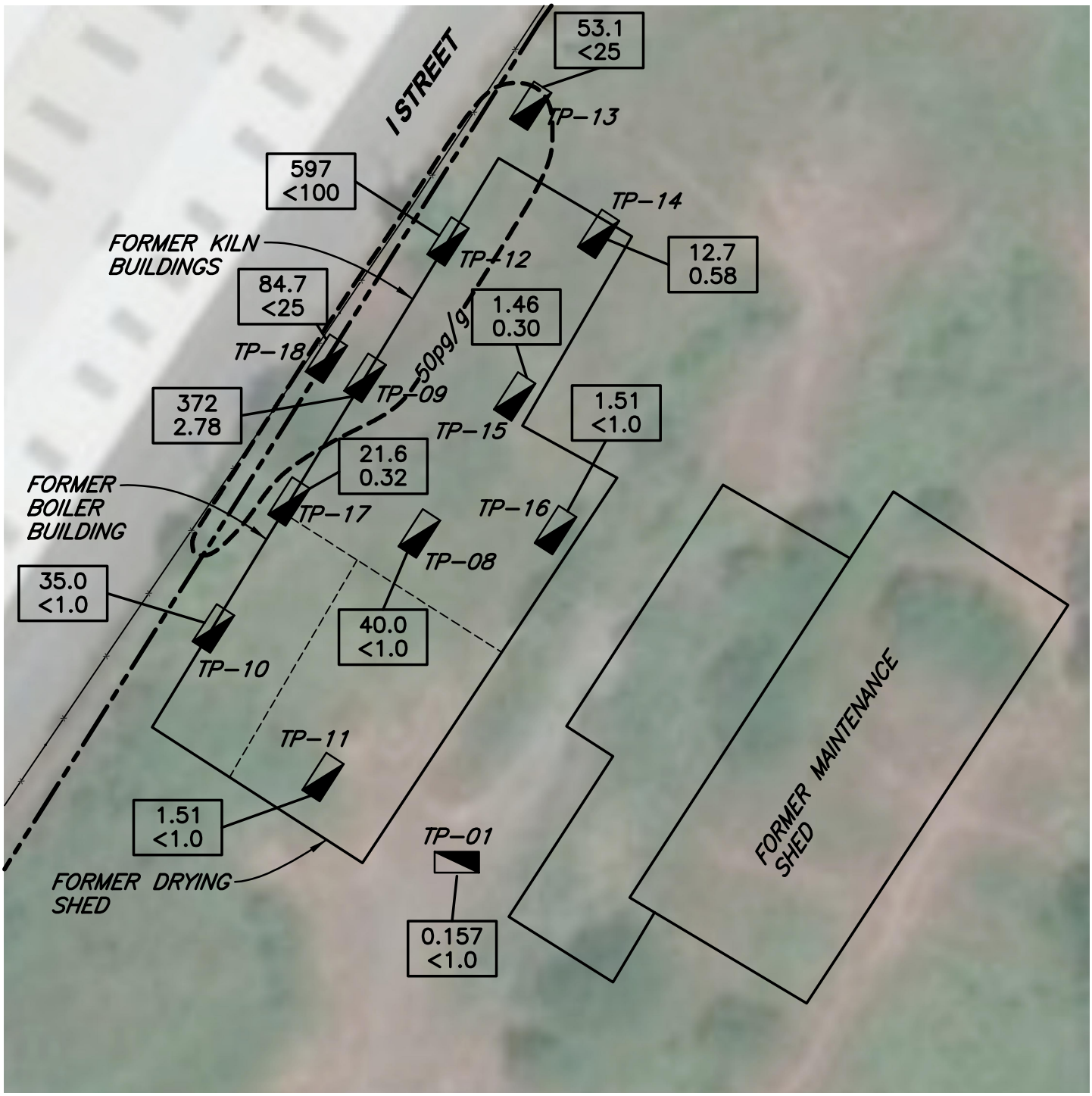
3.0 Remedial Action Alternatives

This section briefly discusses three potential remedial options for the site. The goal of the remediation is to prevent contaminant exposure to potential receptors above the identified screening levels and restore beneficial use of the site under the current zoning of "Waterfront Commercial." Three options were considered and are as follows:

1. Detailed Risk Assessment
2. Excavation and Disposal of Contaminated Soils
3. Soil Cap and/or Access Control

3.1 Alternative 1: Detailed Risk Assessment

Under this alternative, a detailed risk evaluation would be performed to identify all potential exposure pathways and risk factors for potential receptors. The evaluation would consist of complete horizontal and vertical definition of each impacted area, an assessment of potential leaching of contaminants from impacted soil, and an assessment of all potential exposure pathways and receptors. The outcome of



EXPLANATION

TP-01 — TEST PIT LOCATION

40.0 / <1.0 — TEQ (WHO 05) / 2,3,7,8-TCDD } RESULTS IN pg/g

< — CONCENTRATION BELOW REPORTING LIMIT

– – – – DIOXIN TEQ 50 pg/g (APPROXIMATE)

N

0 40

1"=40'

SHN	City of Arcata Former Little Lake Industries Mill Arcata, California	Dioxin Sample Results Former Kiln Area SHN 018022.040
	October 2020	018022-040-DIOXIN-FRMR-KILN	Figure 4

the evaluation would be to determine the risk of leaving all the impacted soil in place, while protecting the potential receptors. After the evaluation, it is possible that select areas may require no further action, although remediation may ultimately be necessary depending on the results of the evaluation.

3.2 Alternative 2: Excavation and Disposal of Contaminated Soils

This alternative would consist of excavating impacted soil with contaminant concentrations substantially above the residential TEQ screening level for dioxins (50 pg/g). Soil would be temporarily stockpiled onsite and then transported to a disposal facility after necessary analytical testing was completed. Samples would be collected to confirm final site conditions and the area would be backfilled with clean material. Alternative 2 is the preferred remedial action.

3.3 Alternative 3: Soil Cap or Access Restriction

This alternative would consist of capping the site soils with either permeable or impermeable materials or fencing off select areas to restrict access and potential human exposure to contaminants identified in site soils.

3.4 Evaluation Criteria

Alternative 2 is the preferred remedial action because it best fulfills the following requirements:

- Regulatory compliance—addresses federal and state regulatory criteria.
- Long-term effectiveness—permanently removes impacted media from the site.
- Overall protection of human health and the environment—complies with regulatory criteria, short-term effectiveness, and long-term effectiveness.
- Reduction of toxicity, mobility, and volume through removal—permanently reduces the toxicity, mobility, and volume of contaminated media.
- Implementation—is technically feasible.
- Schedule—implementation and reporting can be completed within a reasonable timeline.
- Cost—utilizes conventional methods that are not cost prohibitive.

4.0 Remedial Action Program

In addition to this SCP, the project SAP, quality assurance project plan (QAPP), and a health and safety plan (HASP) developed for this site will be followed for site cleanup activities and documentation.

4.1 Objectives

The objectives of the work outlined in this SCP are to:

- Excavate impacted soils and temporarily stockpile impacted soils on site.
- Conduct analytical testing within the excavation boundaries to ensure contaminated soils have removed.
- Coordinate the transport of impacted soils to a permanent disposal facility.

The removal of impacted soil will prevent potential human exposure and prevent the migration of contaminants in site soil into site groundwater.

4.2 Scope of Work

This scope of work is intended to meet the objectives of this investigation. All work will be conducted in accordance with this SCP, the SAP, and HASP developed for this project. The scope of work is defined as:

- Project implementation, including subcontractor coordination and agency notification
- Excavation and stockpiling of contaminated soil
- Soil sample collection within the excavation boundaries
- Proper characterization of stockpiled soil for disposal
- Offsite transport and disposal of impacted soil
- Excavation backfilling and compaction
- Preparation of a report of findings for excavation activities

5.0 Field Implementation

5.1 Soil Excavation

Soil will be excavated using a backhoe or excavator in the area shown in Figure 5. The soil will be transported to the onsite stockpile area, placed on 6-mil Visqueen® and will be covered with 6-mil Visqueen® at the end of each day. The stockpile will be placed in a secured area of the site and maintained under proper best management practices (BMPs) until removal.

The planned excavation surface area is slightly sloped toward "I" Street and has a shallow drainage ditch on the southern boundary. The area extends for approximately 170 feet along "I" Street and is approximately 30 feet in width at the widest point. The proposed excavation depth will range from 3 to 4 feet BGS. The fence located along the property boundary and the paved surface of "I" Street will be removed to facilitate the extent of the excavation area shown in Figure 5. It is estimated that approximately 460 cubic yards of in-place material will be removed during the excavation program. The actual volume of material removed will depend on the results of the excavation boundary soil sampling. The excavation contractor will be responsible to provide dust control measures during excavation and stockpiling activities.

5.2 Excavation Confirmation Sampling

Upon completion of excavation activities, soil samples will be collected from the excavation sidewalls and floor and submitted for laboratory analysis. Discrete soil samples will be collected from the excavation sidewalls at depths of 2 to 3 feet BGS, and from the excavation floor as shown in Figure 6. Excavation confirmation sampling is proposed to be completed on a frequency of approximately 40-feet distance on the sidewall and excavation floor. The soil sample collection will occur using a stainless-steel trowel to place the material in laboratory-supplied containers for transport to the testing laboratory as outlined in the project SAP.

The excavation area will be left open pending receipt of the conformation soil sampling analytical results. The soil analytical results will be used to assess whether additional excavation is needed in order to achieve the site cleanup goals. Once the excavation work is complete, the excavation areas will be backfilled using clean, river-run gravel or other clean fill material and compacted.

EXPLANATION

TP-01 TEST PIT LOCATION

EXCAVATION AREA

N

0 30

1"=30'

	City of Arcata Former Little Lake Industries Mill Arcata, California	Planned Excavation Area Former Kiln Buildings SHN 018022.040
	December 2020	018022-040-EXCAV-FRMR-KILN	Figure 5

EXPLANATION

TP-01 — TEST PIT LOCATION

EXCAVATION AREA

CONFIRMATION SAMPLE LOCATION

N

0 30

1"=30'

SHN	City of Arcata Former Little Lake Industries Mill Arcata, California	Excavation Area Confirmation Sample Locations Former Kiln Buildings SHN 018022.040
December 2020	018022-040-EXCAV-SAMP-FRMR-KILN	Figure 6

5.3 Laboratory Analysis

Soil samples collected from within the excavation boundaries will be analyzed using the following methods:

- Soil samples to be tested for dioxins and furans will be analyzed using EPA Method 1613B.

All soil samples collected will be submitted to McCampbell Laboratories, a State-certified testing laboratory located in Pittsburgh, California.

5.4 Equipment Decontamination Procedures

The excavator bucket will be cleaned prior to use on site and free of any loose material. Small equipment that requires onsite cleaning between sample location will be cleaned using a triple wash system–a Liquinox® solution wash, followed by two distilled water rinses. All decontamination water generated during the field program will be contained in Department of Transportation (DOT) drums and characterized for proper handing and disposal.

6.0 Soil Disposal

Stockpiled material will be tested for disposal characterization on a frequency of one composite sample (4-point) per 250 cubic yards. It is anticipated that the designated receiving facility will require the following analyses on two composite stockpile samples.

- Total cadmium, chromium, nickel, lead, and zinc in general accordance with EPA Method No. 6010B
- TPHMO and TPHD in general accordance with EPA Method No. 8015B
- Dioxins and furans in general accordance with EPA Method 1613B

If necessary, soluble threshold limit concentrations (STLC) for metals and toxicity characteristic leaching procedure (TCLP) for organic constituents will be performed on the samples to meet the acceptance requirements of the disposal facility.

Based on the results of the stockpile characterization, the material will be loaded onto trucks for disposal at an appropriate facility. Using the estimated stockpile volume of 550 cubic yards (460 cubic yards excavated plus 20% expansion) and estimating that trucks used to haul material carry 18 cubic yards, approximately 30 truck-loads will be necessary to remove the material from the site. Each truck leaving the site will be certified to transport hazardous waste and possess a manifest of the material during hauling to the disposal facility.

7.0 Reporting

A report of findings for the excavation and disposal of impacted soils will be submitted within 90 days of the removal of the soil stockpile. The report will include the summary of excavation activities, results of the confirmation soil sampling, stockpile testing, soil disposal documentation, and backfilling operations.

8.0 References

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Historical Data

1

Table 1
Summary of Chemical Analyses of Soil Samples for TPH, VOCs, PCBs, and Pesticides
Little Lake Industries, Arcata, California

Sample Location ID	Depth (feet)	Date Sampled	TPH [a]-Gasoline	TPH-Diesel (silica gel cleanup)	TPH-Motor Oil (silica gel cleanup)	Acetone	Benzene	cis-Dichloro-ethene	Methyl Acetate	Methylene Chloride	Toluene	Xylene	Trichloro-fluoro-methane	2-Butanone (methyl ethyl ketone) (MEK)	PCB[b] (Aroclor 1260)	beta-BHC[c]	4,4'-DDT[d]	Endrin Aldehyde
		units	mg/kg[e]	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
		Screening Level	100[f]	260[f]	1,600[f]	0.92[f]	0.025[f]	NA[g]	24,000[d]	0.12[f]	3.2[f]	2.1[f]	1,200[h]	6.1[f]	0.24[h]	3.0[i]	1.6[i]	NA[g]
AM-14	3.0'	December 2002	--[j]	**230[k]**	**8.1**	<0.012[l]	<0.012	<0.012	<0.012	0.017	<0.012	<0.012	<0.012	<0.012	--	--	--	--
AM-16	0.0'-0.5'	December 2002	--	**17**	**19**	<0.010	<0.010	<0.010	<0.010	**0.010**	<0.010	**0.013**	<0.010	<0.010	<0.037	<0.0019	<0.0037	<0.0037
AM-16	3.0'	December 2002	--	**14**	**7.2**	**0.040**	<0.011	<0.011	<0.011	**0.011**	<0.011	<0.011	<0.011	**0.006 J**	<0.041	<0.0021	<0.0041	<0.0041
AM-17	0.0'-0.5'	December 2002	--	**39**	**67**	**0.100 J[m]**	**0.009 J**	<0.013	**0.044**	**0.013 J**	**0.025**	**0.026**	<0.013	**0.013**	<0.041	<0.0019	<0.0041	<0.0041
AM-18	0.0'-0.5'	December 2002	--	**140**	**150**	**0.063**	<0.017	<0.017	<0.017	**0.017**	**0.03**	**0.030**	<0.017	<0.017	<0.053	<0.0027	<0.0053	<0.0053
AM-19	0.0'-0.5'	December 2002	--	**39**	**81**	**0.014 J**	<0.010	<0.010	**0.009 J**	**0.012**	**0.017**	**0.018**	<0.010	<0.010	**0.071**	**0.0057**	<0.0042	**0.0058 J**
AM-23	0.0'-0.5'	December 2002	--	**7.9 J**	**15**	**0.006 J**	<0.010	<0.010	<0.010	**0.013**	<0.010	<0.010	**0.003 J**	<0.010	<0.036	<0.0019	<0.0036	<0.0036
AM-24	0.0'-0.5'	December 2002	--	--	--	**0.010 J**	<0.010	<0.010	<0.010	**0.011**	<0.010	<0.010	**0.001 J**	<0.010	--	--	--	--
AM-24	3.0'	December 2002	--	--	--	**0.024**	<0.010	<0.010	<0.010	**0.010**	<0.010	<0.010	<0.010	<0.010	--	--	--	--
AM-26	0.0'-0.5'	December 2002	<1.1	**170**	**270**	**0.037**	<0.010	<0.010	<0.010	**0.010**	<0.010	<0.010	<0.010	**0.004 J**	<0.039	<0.0020	<0.0039	<0.0039
AM-26	3.0'	December 2002	<1.3	**33**	**119**	**0.018**	<0.013	<0.013	<0.013	**0.013 J**	<0.013	<0.013	<0.013	<0.013	<0.043	<0.0022	<0.0043	<0.0043
AM-27	0.0'-0.5'	December 2002	<1.3	**82**	**140**	**0.250**	<0.012	<0.012	<0.012	**0.012 J**	<0.012	<0.012	<0.012	**0.027**	<0.044	<0.0023	**0.0032 J**	<0.0044
AM-28	0.0'-0.5'	December 2002	--	**370[n]**	**800**	**0.007**	<0.012	<0.012	<0.012	**0.020**	<0.012	<0.012	**0.004 J**	<0.012	--	--	--	--
AM-30	0.0'-0.5'	December 2002	--	**150**	**360**	**0.019**	<0.016	<0.016	<0.016	**0.024**	<0.016	<0.016	**0.002 J**	<0.016	--	--	--	--
AM-31	0.0'-0.5'	December 2002	--	**4.9 J**	**5.8 J**	<1.6	<1.6	<1.6	<1.6	**2.3**	<1.6	**1.6**	<1.6	<1.6	--	--	--	--
AM-33	0.0'-0.5'	December 2002	--	**140**	**240**	**0.120**	<0.012	<0.012	<0.012	**0.012 J**	<0.012	<0.012	<0.012	**0.011 J**	--	--	--	--
AM-35 (4-point composite)	0.0'-0.5'	December 2002	--	**90**	**160**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-35 (4-point composite)	3.0'	December 2002	--	**97**	**200**	**0.050**	<0.014	<0.014	<0.014	**0.015**	<0.014	<0.014	**0.002 J**	<0.014	--	--	--	--
AM-36 (4-point composite)	0.0'-0.5'	December 2002	--	**160**	**270**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-37 (4-point composite)	0.0'-0.5'	December 2002	--	**390**	**850**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-38	Stockpile	December 2002	--	**53**	**68**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-39	Stockpile	December 2002	--	**91**	**180**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-40	Stockpile	December 2002	--	**150**	**210**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-45	Stockpile	December 2002	--	**8.7 J**	**13**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-101	0.0'-0.5'	April 2004	--	**20**	**140**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-101	1.0'	April 2004	--	**250**	**3,000**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-102	0.0'-0.5'	April 2004	--	**57**	**470**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-103	0.0'-0.5'	April 2004	--	**30**	**210**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-104	0.0'-0.5'	April 2004	--	**34**	**220**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-105	0.0'-0.5'	April 2004	--	**150**	**1,500**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-106	0.0'-0.5'	April 2004	--	**21**	**170**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-107	0.0'-0.5'	April 2004	--	**67**	**670**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-108	0.0'-0.5'	April 2004	--	**180**	**1,800**	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-109	0.0'-0.5'	April 2004	--	**11**	**72**	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
Summary of Chemical Analyses of Soil Samples for TPH, VOCs, PCBs, and Pesticides
Little Lake Industries, Arcata, California

Sample Location ID	Depth (feet)	Date Sampled	TPH [a]-Gasoline	TPH-Diesel (silica gel cleanup)	TPH-Motor Oil (silica gel cleanup)	Acetone	Benzene	cis-Dichloro-ethene	Methyl Acetate	Methylene Chloride	Toluene	Xylene	Trichloro-fluoro-methane	2-Butanone (methyl ethyl ketone) (MEK)	PCB[b] (Aroclor 1260)	beta-BHC[c]	4,4'-DDT[d]	Endrin Aldehyde
		units	**mg/kg[e]**	**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**
		Screening Level	**100[f]**	**260[f]**	**1,600[f]**	**0.92[f]**	**0.025[f]**	**NA[g]**	**24,000[d]**	**0.12[f]**	**3.2[f]**	**2.1[f]**	**1,200[h]**	**6.1[f]**	**0.24[h]**	**3.0[i]**	**1.6[i]**	**NA[g]**
TP-01	unknown	March 2019	--	99	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-07	unknown	March 2019	--	<1.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[a] TPH: total petroleum hydrocarbons
[b] PCB: polychlorinated biphenyl
[c] Beta-BHC: β-Hexachlorocyclohexane
[d] DDT: dichloro-diphenyl-trichloroethane
[e] mg/kg: milligrams per kilogram
[f] San Francisco Bay Regional Water Quality Control Board, Tier 1 Environmental Screening Levels for Soil, Revision 2, January 2019.
[g] NA: not available
[h] California Department of Toxic Substances Control, Human Health Risk Assessment Note 3, Screening Levels for Soil, June 2020.
[i] U.S. Environmental Protection Agency, Regional Screening Levels for Residential Soil, May 2020.
[j] --: not analyzed
[k] Indicates a detection
[l] <: "less than"
[m] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[n] underlined indicates a detection above a screening level.

Table 2
Summary of Chemical Analyses of Soil Samples for SVOCs[a]
Little Lake Industries, Arcata, California

Sample Location ID	Depth (feet)	Date Sampled	Atrazine	Anthracene	Benzaldehyde	Benzo(a) anthracene	Benzo(a)pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Benzoic Acid	Bis(2-Ethylhexyl) Phthalate	Butylbenzyl-phthalate	Caprolactam	Chrysene	Dibenzofuran	Diethyl phthalate	Di-n-butylphthalate (dibutyl phthalate)	Fluoranthene	Naphthalene	Pentachloro-phenol	Phenanthrene	Pyrene	2-Methyl-naphthalene	2,2 -oxybis	4-Methylphenol (p-cresol)
units			**mg/kg[b]**	**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**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Screening Level			**2.4[c]**	**1.9[d]**	**170[c]**	**0.63[d]**	**0.11[d]**	**0.16[d]**	**2.5[d]**	**2.8[d]**	**250,000[c]**	**0.8[d]**	**290[e]**	**31,000[c]**	**2.2[d]**	**66[e]**	**0.025[d]**	**6,300[c]**	**0.69[d]**	**0.042[d]**	**1.0[e]**	**7.8[d]**	**45[d]**	**0.88[d]**	**NA[f]**	**6,300[c]**
AM-14	3.0'	Dec 2002	--[g]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AM-16	0.0'-0.5'	Dec 2002	<370[h]	<0.370	<0.370	<0.370	<0.370	<0.370	<0.370	<0.370	--	0.420	<0.370	<0.370	<0.370	<0.370	<0.370	<0.370	<0.370	<0.370	<0.370	<0.930	<0.370	<0.370	<0.370	<0.370
AM-16	3.0'	Dec 2002	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	--	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	0.190 J	<0.410	<0.410	<0.410	<0.410	<0.410
AM-17	0.0'-0.5'	Dec 2002	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	--	0.410 J[i]	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<0.410	<1.0	<0.410	<0.410	<0.410	<0.410	<0.410
AM-18	0.0'-0.5'	Dec 2002	<0.520	<0.520	<0.520	<0.520	<0.520	<0.520	<0.520	<0.520	--	0.520 J	<0.520	<0.520	<0.520	<0.520	<0.520	<0.520	<0.520	<0.520	0.180 J	<0.520	<0.520	<0.520	<0.520	<0.520
AM-19	0.0'-0.5'	Dec 2002	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	--	0.420 J	<0.420	0.120 J	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	0.160 J	<0.420	<0.420	<0.420	<0.420	<0.420
AM-23	0.0'-0.5'	Dec 2002	<0.360	<0.360	<0.360	<0.360	<0.360	<0.360	<0.360	<0.360	--	0.045 J	<0.360	<0.360	<0.360	<0.360	<0.360	<0.360	<0.360	<0.360	<0.900	<0.360	<0.360	<0.360	<0.360	<0.360
AM-25	0.0'-0.5'	Dec 2002	<2.300	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<5.8	<2.3	<2.3	<2.3	<2.3	<2.3
AM-25	3.0'	Dec 2002	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	0.400 J	<0.400	<0.400	<0.400	0.051 J	<0.400	<0.400	<0.400	**0.041[j] J**	<1.0	<0.400	<0.400	<0.400	<0.400	<0.400
AM-26	0.0'-0.5'	Dec 2002	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<0.780	<2.0	<0.780	<0.780	<0.780	<0.780	<0.780
AM-26	3.0'	Dec 2002	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	0.048 J	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<1.1	<0.420	<0.420	<0.420	<0.420	<0.420
AM-27	0.0'-0.5'	Dec 2002	<4.400	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<11.0	<4.4	<4.4	<4.4	<4.4	<4.4
AM-28	0.0'-0.5'	Dec 2002	<4.100	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<10.0	<4.1	<4.1	<4.1	<4.1	<4.1
AM-30	0.0'-0.5'	Dec 2002	<0.970	<0.970	0.11 J	<0.970	<0.970	<0.970	<0.970	<0.970	<0.970	**0.260[j] J**	<0.970	<0.970	<0.970	<0.970	<0.970	<0.970	<0.970	<0.970	<2.4	<0.970	<0.970	<0.970	<0.970	<0.970
AM-31	0.0'-0.5'	Dec 2002	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	0.150 J	<0.830	<0.830	**0.320[j] J**	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	<2.1	<0.830	<0.830	<0.830	<0.830	<0.830
M-33	0.0'-0.5'	Dec 2002	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	**0.130[j] J**	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	<0.770	<1.9	<0.770	<0.770	<0.770	<0.770	<0.770
AM-35 (4-point composite)	0.0'-0.5'	Dec 2002	<0.390	<0.390	0.061 J	<0.390	<0.390	<0.390	<0.390	<0.390	<0.390	**0.085[j] J**	<0.390	0.140 J	<0.390	<0.390	<0.390	<0.390	<0.390	<0.390	<0.990	0.046 J	<0.390	<0.390	<0.390	<0.390
AM-35 (4-point composite)	3.0'	Dec 2002	<0.450	<0.450	0.250 J	<0.450	<0.450	<0.450	<0.450	<0.450	<0.450	**0.360 [j] J**	<0.450	<0.450	<0.450	<0.450	<0.450	<0.450	<0.450	<0.450	<1.1	0.053 J	<0.450	<0.450	<0.450	<0.450
AM-36 (4-point composite)	0.0'-0.5'	Dec 2002	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	**0.420[j] J**	<0.420	**0.160[j] J**	<0.420	<0.420	<0.420	<0.420	<0.420	<0.420	<1.1	<0.420	<0.420	<0.420	<0.420	**0.049[j] J**
AM-37 (4-point composite)	0.0'-0.5'	Dec 2002	<4.700	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	**4.70[k] J**	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<12.0	<4.7	<4.7	<4.7	<4.7	<4.7
AM-38	Stockpile	Dec 2002	<2.200	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	**2.20[k] J**	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<5.6	<2.2	<2.2	<2.2	<2.2	<2.2
AM-39	Stockpile	Dec 2002	<0.760	<0.760	<0.760	<0.760	<0.760	<0.759	<0.760	<0.760	<0.760	**1.10[j]**	**0.130[j] J**	<0.760	<0.760	<0.760	<0.760	**0.096[j]** J	<0.760	<0.760	**0.078[j] J**	<0.760	<0.760	<0.760	<0.760	<0.760
AM-40	Stockpile	Dec 2002	<0.900	<0.90	**0.190[j] J**	**0.110[j] J**	**0.120[j] J**	**0.250[j] J**	<0.900	0.120 J	<0.90	**1.50[j]**	0.250 J	<0.90	**0.210[j] J**	<0.90	<0.90	<0.90	**0.330[j] J**	<0.90	<2.3	**0.220[j] J**	**0.290[j] J**	<0.90	<0.90	<0.90
AM-45	Stockpile	Dec 2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Chemical Analyses of Soil Samples for SVOCs[a]
Little Lake Industries, Arcata, California

Sample Location ID	Depth (feet)	Date Sampled	Atrazine	Anthracene	Benzaldehyde	Benzo(a) anthracene	Benzo(a)pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Benzoic Acid	Bis(2-Ethylhexyl) Phthalate	Butylbenzyl-phthalate	Caprolactam	Chrysene	Dibenzofuran	Diethyl phthalate	Di-n-butylphthalate (dibutyl phthalate)	Fluoranthene	Naphthalene	Pentachloro-phenol	Phenanthrene	Pyrene	2-Methyl-naphthalene	2,2 -oxybis	4-Methylphenol (p-cresol)
	units		mg/kg[b]	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	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Screening Level		2.4[c]	1.9[d]	170[c]	0.63[d]	0.11[d]	0.16[d]	2.5[d]	2.8[d]	250,000[c]	0.8[d]	290[e]	31,000[c]	2.2[d]	66[e]	0.025[d]	6,300[c]	0.69[d]	0.042[d]	1.0[e]	7.8[d]	45[d]	0.88[d]	NA[f]	6,300[c]
AM-101	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.400	--	**0.250[j] J**	<0.400	--	--	--	--	<0.40	**0.230[j]**	--	--	<0.400	--	--	<0.400	--	--
AM-101	1.0'	April 2004	--	--	--	--	--	--	<2.700	--	<5.300	<2.700	--	--	--	--	<2.70	<2.30	--	--	<2.700	--	--	<2.700	--	--
AM-102	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.350	--	**0.250[j]**	**0.180[j] J**	--	--	--	--	<0.350	<0.350	--	--	**0.072[j] J**	--	--	<350	--	--
AM-103	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.420	--	**0.360[j] J**	**0.170[j] J**	--	--	--	--	<0.420	<0.220	--	--	<0.420	--	--	<460	--	--
AM-104	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.460	--	**0.380[j] J**	**0.100[j] J**	--	--	--	--	<0.460	<0.250	--	--	**0.140[j] J**	--	--	<420	--	--
AM-105	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.420	--	**0.310[j] J**	<0.140	--	--	--	--	<0.420	<0.180	--	--	<0.420	--	--	<420	--	--
AM-106	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.470	--	<0.940	<0.097	--	--	--	--	<0.470	<0.200	--	--	<0.470	--	--	<470	--	--
AM-107	0.0'-0.5'	April 2004	--	--	--	--	--	--	<0.360	--	<0.720	**0.180[j] J**	--	--	--	--	<0.360	<0.370	--	--	<0.360	--	--	**0.085[j] J**	--	--
AM-108	0.0'-0.5'	April 2004	--	--	--	--	--	--	**0.069[i] J**	--	**0.680[j]**	**0.180[j]**	--	--	--	--	**<u>0.340[j]</u>**	**0.200[j]**	--	--	**0.340[j]**	--	--	**<u>0.340[j]</u>**	--	--
AM-109	0.0'-0.5'	April 2004	--	--	--	--	--	--	**0.460[i]**	--	**0.360[j] J**	**0.140[j] J**	--	--	--	--	**<u>0.096[j] J</u>**	**0.340[j]**	--	--	**0.460[j]**	--	--	**<u>0.460[j]</u>**	--	--
TP-01	1.5'	March 2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.031	--	--	--	--	--
TP-02	2.5'	March 2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--
TP-03	2.0'	March 2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.031	--	--	--	--	--
TP-04	2.0'	March 2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.031	--	--	--	--	--
TP-05	2.0'	March 2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.031	--	--	--	--	--
TP-06	1.5'	March 2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.031	--	--	--	--	--

[a] SVOCs: semi volatile organic compounds
[b] mg/kg: milligrams per kilogram
[c] U.S. Environmental Protection Agency, Regional Screening Level for Residential Soil, May 2020.
[d] San Francisco Bay Regional Water Quality Control Board, Tier 1 Environmental Screening Levels for Soil, Revision 2, January 2019.
[e] California Department of Toxic Substances Control, Human Health Risk Assessment Note 3, Screening Levels for Soil, June 2020.
[f] NA: Not Available
[g] --: Not Analyzed
[h] <: "less than"
[i] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[j] indicates a detection
[k] <u>underlined</u> indicates a detection above a screening level.

Table 3
Summary of Chemical Analyses of Soil Samples for Metals
Little Lake Industries, Arcata, California

Sample Location ID	Depth (feet)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		units	mg/kg[a]	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
		Screening Level	11[b]	0.41[c]	390[b]	16[c]	1.9[b]	160[b]	23[b]	180[b]	80[c]	1.0[c]	820[c]	2.4[b]	25[b]	0.78[b]	18[b]	340[b]
AM-14	3.0'	December 2002	<0.70[d]	**4.9[e]**	92.6	0.45	<0.080	72.1	10.7	14.2	6.5	<0.050	77.8	1.8	<0.13	<0.97	**49.2**	55.4
AM-16	0.0'-0.5'	December 2002	0.35	**3.4**	63.2	0.28	<0.070	36.2	8.1	21.4	10.5	0.17	49.1	0.84	<0.17	<0.52	**37.1**	54.4
AM-16	3.0'	December 2002	<0.89	**5.5**	160	0.51	<0.10	95.1	17.7	21.2	8.2	0.080	108	1.8	<0.17	<1.2	**56.6**	69.7
AM-17	0.0'-0.5'	December 2002	<0.28	**2.8**	80.0	0.23	<0.070	16.8	6.4	16.7	11.4	0.090	29.1	<0.71	<0.19	<0.57	**21.6**	71.9
AM-18	0.0'-0.5'	December 2002	1.2	**5.8**	195	0.38	0.57 B[f]	82.7	13.3	101	**124**	3.5	77.8	<1.0	<0.27	<0.82	**46.5**	387
AM-19	0.0'-0.5'	December 2002	0.37	**4.3**	108	0.31	0.31 B	35.4	9.2	35.4	67.7	0.66	42.7	<0.80	<0.21	<0.64	**39.6**	227
AM-23	0.0'-0.5'	December 2002	<0.78	**3.4**	160	0.51	<0.080	95.1	17.7	21.2	5.9	0.080	108	1.8	<0.17	<1.2	**48.4**	51.5
AM-24	0.0'-0.5'	December 2002	0.37	**2.7**	61.0	0.25	<0.060	29.5	7.1	18.5	14.6	0.060	39.7	<0.63	<0.17	<0.51	**35.3**	41.3
AM-24	3.0'	December 2002	<0.95	**6.1**	115	0.48	<0.010	93.0	10.6	14.0	8.5	0.080	93.7	2.2	<0.18	<1.3	**57.5**	69.3
AM-26	0.0'-0.5'	December 2002	<0.73	**2.9**	301	0.27	<0.080	35.6	6.9	37.4	62.3	0.11	31.5	1.3	<0.14	<1.0	**32.1**	92.1
AM-26	3.0'	December 2002	<0.90	**5.2**	207	0.44	<0.10	72.7	15.3	21.6	53.0	0.090	86.1	1.6	<0.17	<1.2	**50.5**	150
AM-27	0.0'-0.5'	December 2002	<0.89	**5.6**	219	0.34	0.15 B	52.2	11.1	51.2	**166**	0.33	55.6	1.9	<0.17	<1.2	**40.6**	207
AM-28	0.0'-0.5'	December 2002	<1.1	**3.8**	151	0.32	<0.11	38.9	8.8	20.3	74.5	0.17	45.2	<0.94	1.1	<1.5	**44.4**	**391**
AM-30	0.0'-0.5'	December 2002	<1.1	**6.3**	180	0.41	**6.9**	67.6	9.0	68.4	59.7	0.11	45.2	<0.94	<0.21	<1.5	**41.4**	**664**
AM-31	0.0'-0.5'	December 2002	<0.87	**4.4**	377	0.22	<0.090	39.6	7.9	103	54.3	0.080	46.2	1.1 B	<0.16	<1.2	**28.6**	**592**
AM-33	0.0'-0.5'	December 2002	0.70	**4.2**	200	0.30	0.44	43.0	**43.6**	45.8	56.6	0.10	53.3	1.2	<0.18	<0.55	**37.9**	**637**
AM-35 (4-point composite)	0.0'-0.5'	December 2002	0.86	**2.5**	137	0.23	<0.070	29.4	9.4	20.5	**116**	0.11	50.5	<0.69	<0.18	<0.55	**29.0**	99.9
AM-35 (4-point composite)	3.0'	December 2002	<0.86	**7.5**	217	0.53	<0.090	39.6	13.4	17.7 J[g]	10.7	0.090	111	2.0	<0.16	<1.2	**61.5**	80.8
AM-36 (4-point composite)	0.0'-0.5'	December 2002	<0.86	**3.8**	225	0.40	0.25	42.6	13.8	54.9	**200**	0.35	48.8	<1.2	<0.33	<0.98	**52.7**	249
AM-37 (4-point composite)	0.0'-0.5'	December 2002	0.96	**6.7**	203	0.36	0.53	46.3	11.4	45.2	**191**	0.14	55.8	0.74	<0.19	<0.58	**43.6**	309
AM-38	Stockpile	December 2002	0.77	**6.7**	149	0.44	<0.080	73.6	14.9	41.4	33.3	0.12	87.9	1.3	<0.20	<0.60	**55.5**	89.6
AM-39	Stockpile	December 2002	0.36	**5.3**	141	0.37	<0.070	52.4	11.3	41.7	78.6	0.26	63.1	<0.68	<0.18	<0.54	**45.5**	133
AM-40	Stockpile	December 2002	<0.35	**6.0**	120	0.40	0.90	60.9	12.4	50.5	**124**	0.21	70.2	<0.87	<0.23	<0.70	**48.0**	229
AM-45	Stockpile	December 2002	0.68	**4.3**	133	0.40	<0.060	50.2	10.3	27.1	57.4	0.10	52.1	<0.64	<0.17	<0.51	**45.2**	87.7
AM-101	0.0'-0.5'	April 2004	--[h]	**2.6 J**	--	--	0.18 J	--	--	--	24.8 J	--	--	--	--	--	--	131 J
AM-101	1.0'	April 2004	--	**3.3 J**	--	--	0.15 J	--	--	--	7.5 J	--	--	--	--	--	--	68.4 J
AM-102	0.0'-0.5'	April 2004	--	**4.3 J**	--	--	0.18 J	--	--	--	27 J	--	--	--	--	--	--	145 J
AM-103	0.0'-0.5'	April 2004	--	**3.6 J**	--	--	0.18 J	--	--	--	54.5 J	--	--	--	--	--	--	181 J
AM-104	0.0'-0.5'	April 2004	--	**8.7 J**	--	--	0.18 J	--	--	--	**87.3 J**	--	--	--	--	--	--	318 J
AM-105	0.0'-0.5'	April 2004	--	**3.3 J**	--	--	<0.18	--	--	--	**93.5 J**	--	--	--	--	--	--	233 J
AM-106	0.0'-0.5'	April 2004	--	**4.9 J**	--	--	0.24 J	--	--	--	**155 J**	--	--	--	--	--	--	113 J
AM-107	0.0'-0.5'	April 2004	--	**5.4 J**	--	--	0.17 J	--	--	--	**149 J**	--	--	--	--	--	--	316 J
AM-108	0.0'-0.5'	April 2004	--	**4.1 J**	--	--	0.15 J	--	--	--	**169 J**	--	--	--	--	--	--	341 J
AM-109	0.0'-0.5'	April 2004	--	**5.9 J**	--	--	0.22 J	--	--	--	66 J	--	--	--	--	--	--	490 J
AM-BG-1	unknown	December 2002	<2.3	**7.4**	94.6	0.70	<0.25	88.9	14.3	96.0 J	61.2	0.19 B	112	<2.0	<0.43	<3.2	**61.5**	168 J
AM-BG-2	unknown	December 2002	<1.9	**8.2**	59.6	0.83	<0.21	127	23.9	19.8 J	29	0.16 B	153	2.2	<0.37	<2.7	**83.1**	118 J

Table 3
Summary of Chemical Analyses of Soil Samples for Metals
Little Lake Industries, Arcata, California

Sample Location ID	Depth (feet)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		units	mg/kg[a]	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
		Screening Level	11[b]	0.41[c]	390[b]	16[c]	1.9[b]	160[b]	23[b]	180[b]	80[c]	1.0[c]	820[c]	2.4[b]	25[b]	0.78[b]	18[b]	340[b]
TP-01	1.5'	March 2019	--	--	--	--	--	--	--	--	28	--	--	--	--	--	--	--
TP-02	2.5'	March 2019	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--
TP-03	2.0'	March 2019	--	--	--	--	--	--	--	--	13	--	--	--	--	--	--	--
TP-04	2.0'	March 2019	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
TP-05	2.0'	March 2019	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--
TP-06	1.5'	March 2019	--	--	--	--	--	--	--	--	28	--	--	--	--	--	--	--
TP-07	1.5'	March 2019	--	--	--	--	--	--	--	--	13	--	--	--	--	--	--	--

[a] mg/kg: milligrams per kilogram
[b] San Francisco Bay Regional Water Quality Control Board, Tier 1 Environmental Screening Levels, Revision 2, January 2019.
[c] California Department of Toxic Substances Control, Human Health Risk Assessment Note 3, Screening Levels for Soil, June 2020
[d] <: less than
[e] underlined indicates a detection above a screening level.
[f] B: Analyte was detected in the method blank and in the sample.
[g] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[h] --: This analyte may have been analyzed but there are no lab reports or tables listing the results

Table 4
Dioxins and Furans Congeners in Soil, 2019 and 2020
Little Lake Industries Mill, Arcata, California
(in pg/g[a], unless noted)

Sample Identification	**TP-01**	**TP-02**	**TP-03**	**TP-04**	**TP-05**	**TP-06**	**TP-08**	**TP-09**	**TP-10**
Depth (feet BGS)[b]	**1.0'-1.5'**	**2.0'-2.5'**	**1.5'-2.0**	**1.5'-2.0**	**1.5'-2.0'**	**1.0'-1.5'**	**1.5'-2.0'**	**2.0'-2.5'**	**2.0'-2.5'**
2,3,7,8 TCDD (4.8 pg/g)[c]	<1.00[d]	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	**2.78[e]**	<1.00
1,2,3,7,8,PeCDD	<5.00	1.20 J[f]	<5.00	<5.00	1.64 J	<5.00	<5.00	20.7	<5.00
1,2,3,4,7,8 HxCDD	<5.00	4.10 J	<5.00	<5.00	4.32 J	0.580 J	9.96	46	9.36
1,2,3,6,7,8 HxCDD	0.420 J	11.7	<5.00	<5.00	11.8	1.50 J	38.8	754	42
1,2,3,7,8,9 HxCDD	<5.00	4.58 J	<5.00	<5.00	2.28 J	1.06 J	12.1	171	17.2
1,2,3,4,6,7,8 HpCDD	8.38 J	248	1.72 J	1.48 J	158	46.2	1,100	14,000	1,120
OCDD	72.9 J	2,920	15.4	12	1,140	379	15,100	87,000	12,300
2,3,7,8 TCDF	0.280 J	<1.00	<1.00	0.400 J	<1.00	<1.00	1.64	2.78	1.38
1,2,3,7,8 PeCDF	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	14.0	<5.00
2,3,4,7,8 PeCDF	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	28.7	<5.00
1,2,3,4,7,8 HxCDF	<5.00	2.30 J	<5.00	<5.00	1.04 J	<5.00	15.2	158	11.5
1,2,3,6,7,8 HxCDF	<5.00	1.80 J	<5.00	<5.00	5.24	1.50 J	72.7	360	47.2
1,2,3,7,8,9 HxCDF	<5.00	0.940 J	<5.00	<5.00	<5.00	<5.00	<5.00	13.0	<5.00
2,3,4,6,7,8 HxCDF	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	5.58	61.6	7.64
1,2,3,4,6,7,8 HpCDF	3.40 J	116	0.980 J	0.980 J	57.2	6.24	844	1560	622
1,2,3,4,7,8,9 HpCDF	<5.00	5.18	<5.00	<5.00	2.06 J	<5.00	17.8	56.5	12.8
OCDF	3.86 J	231	<10.0	<10.0	242	16.9	703	979	489
TEQ (50 pg/g)[6]	**0.157[e] J**	**8.01[e]**	**0.0154[e]**	**0.0120[e]**	**5.24[e]**	**0.920[e]**	**40.0[e]**	**372[e]**	**35.0[e]**

Table 4 (Continued)
Dioxins and Furans Congeners in Soil, 2019 and 2020
Little Lake Industries Mill, Arcata, California
(in pg/g[1], unless noted)

Sample Identification	TP-11	TP-12	TP-13	TP-14	TP-15	TP-16	TP-17	TP-18
Depth (feet BGS)[b]	**2.0'-2.5'**	**1.5'-2.0'**	**1.5'-2.0'**	**2.0'-2.5'**	**2.0'-2.5'**	**1.5'-2.0'**	**1.5'-2.0'**	**1.5'-2.0'**
2,3,7,8 TCDD (4.8 pg/g)[c]	<1.00	<100	<25	**0.580[e]** J	**0.300[e]** J	<1.0	**0.320[e]** J	<25
1,2,3,7,8, PeCDD	<5.00	<500	<125	2.52 J	<5.0	<5.0	2.46 J	<125
1,2,3,4,7,8 HxCDD	<5.00	<500	<125	8.10	1.46 J	1.06 J	7.58	<125
1,2,3,6,7,8 HxCDD	<5.00	612	112 J	18.0	3.74 J	3.30 J	20.3	126
1,2,3,7,8,9 HxCDD	<5.00	<500	62.0 J	16.1	1.84 J	1.00 J	12.5	<125
1,2,3,4,6,7,8 HpCDD	92.1	26,100	3590	462	92.3	92.3	948	4,140
OCDD	1,130	309,000	42500	290	898 B	1,020	15,600	56,700
2,3,7,8 TCDF	<1.00	<100	<25	0.420 J	0.620 J	<1.0	0.900 J	<25
1,2,3,7,8 PeCDF	<5.00	<500	<125	1.06 J	0.700 J	0.480 J	1.16 J	<125
2,3,4,7,8 PeCDF	<5.00	<500	<125	1.32 J	0.940 J	0.860 J	1.36 J	<125
1,2,3,4,7,8 HxCDF	<5.00	200 J	<125	5.38	1.98 J	3.42 J	5.72	71.0 J
1,2,3,6,7,8 HxCDF	<5.00	840	48.0 J	3.22 J	0.760 J	0.820 J	13.8	<125
1,2,3,7,8,9 HxCDF	<5.00	<500	<125	0.840 J	<5.0	0.700 J	0.940 J	<125
2,3,4,6,7,8 HxCDF	<5.00	<500	<125	4.78 J	0.840 J	<5.0	<5.0	<125
1,2,3,4,6,7,8 HpCDF	23.9	9,740	419	148	24.9	26.7	126	1,320
1,2,3,4,7,8,9 HpCDF	<5.00	<500	<125	10.4	1.52 J	1.78 J	12.2	63.0 J
OCDF	34.6	3,640	719	868	59.4	59.8	365	1,670
TEQ (50 pg/g)[g]	**1.51[e]**	**597[h]**	**53.1[h]**	**12.7[e]**	**1.46[e]**	**1.51[e]**	**21.6[e]**	**84.7[h]**

[a] pg/g: picogram per gram
[b] BGS: below ground surface
[c] 2,3,7,8-TCDD Screening Level: micrograms per gram; California Department of Toxic Substances Control, Human Health Risk Assessment Note 3, June 2020.
[d] <: "less than" the laboratory reporting limit
[e] indicates a detection
[f] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[g] TEQ Screening Level: California Department of Toxic Substances Control, Human Health Risk Assessment Note 2, Remediation Goal for Residential Soil, April 2017.
[h] underlined indicates a detection above a screening level.

Table 5
Summary of Chemical Analyses of Groundwater Samples for TPH[a] and VOCs[b]
Little Lake Industries, Arcata, California

Sample Location ID	Date Sampled	TPH-Gasoline	TPH-Diesel (silica gel cleanup)	TPH-Motor Oil (silica gel cleanup)	Acetone	Benzene	Bromo-methane	Chloro-benzene	Ethyl-benzene	Methylene Chloride (Dichloro-methane)	Methyl t-butyl ether (MTBE)	Toluene	1,1-Dichlor-oethene	Trichloro-ethene	1,2-Dibromo-3- chloro-propane (DBCP)	1,2,3-Trichloro-benzene	2-Butanone (methyl ethyl ketone) (MEK)
	units	µg/L[c]	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Screening Level	**5[d]**	**100[d]**	**175[d,e]**	**6,300[f]**	**0.15[d]**	**9.8[f]**	**70[g]**	**3.2[d]**	**4[g]**	**5[d]**	**42[d]**	**0.06[h]**	**1.7[e]**	**0.0017[g]**	**NA[i]**	**4,000[h]**
AM-14	December 2002	**13[j] J[k]**	**340[j]**	<100[l]	<10	<10	<10	<10	<10	**10[j] JB[m]**	<10	<10	<10	<10	<10 R[n]	--[o]	<10
AM-24	December 2002	**11[j] J**	**230[j]**	<100	<10	<10	<10	<10	<10	**10[j] JB**	<10	<10	<10	<10	<10 R	--	<10
AM-26	December 2002	**16[j] J**	**210[j]**	<100	<10	<10	<10	<10	**1.0 J**	**10[j] JB**	<10	<10	<10	<10	<10 R	--	<10
AM-32 (Industrial Supply Well)	December 2002	**6.0[j] J**	**840[j]**	<100	<10	<10	<10	<10	<10	**10[j] JB**	<10	<10	<10	<10	<10 R	--	<10
AM-34	December 2002	**16[j] J**	**1,100[j]**	<100	**10[p] JB**	<10	<10	<10	<10	**10[j] JB**	<10	<10	<10	<10	<10 R	--	<10
AM-35	December 2002	**7.0[j] J**	**880[j]**	<120	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	April 2004	--	<250	<1,000	**3.5[p] J**	--	--	--	--	--	<1.0	--	--	--	--	**0.5[p] J**	**5.5[p]**
MW-2	April 2004	--	<320	**820[j]**	**3.2[p] J**	--	--	--	--	--	<1.0	--	--	--	--	<1	<4
MW-3	April 2004	--	<270	<1,100	**3.6[p] J**	--	--	--	--	--	<1.0	--	--	--	--	<1	<4
MW-4	April 2004	--	**200[j]**	<1,100	<4	--	--	--	--	--	<1.0	--	--	--	--	<1	<4
MW-5	April 2004	--	<280	<1,100	**2.1[p] J**	--	--	--	--	--	<1.0	--	--	--	--	<1	<4
WP-01	March 2019	<50	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WP-02	March 2019	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WP-03	March 2019	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WP-04	March 2019	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WP-05	March 2019	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WP-06	March 2019	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WP-07	March 2019	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[a] TPH: total petroleum hydrocarbons
[b] VOCs: volatile organic compounds
[c] µg/L: micrograms per liter
[d] North Coast Regional Water Quality Control Board, Groundwater Water Quality Objectives for Cleanup Projects in the North Coast Region, August 2016.
[e] PQL: Practical quantitation limit based on current technology used when water quality objective cannot be achieved.
[f] U.S. Environmental Protection Agency Integrated Risk Information System
[g] California Public Health Goal or PHG (Cal-EPA, OEHHA)
[h] U.S. Environmental Protection Agency Health Advisory
[i] NA: not available
[j] underlined indicates a detection above a screening level.
[k] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[l] <: less than
[m] B: Analyte was detected in the method blank and in the sample.
[n] R: The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
[o] --: not analyzed
[p] indicates a detection

Table 6
Summary of Chemical Analyses of Groundwater Samples for SVOCs[a]
Little Lake Industries, Arcata, California

Sample Location ID	Date Sampled	Atrazine	Bis(2-Ethylhexyl) Phthalate (Di (2-ethylhexyl) phthalate)	Butyl Benzyl Phthalate (n-Butyl benzyl phthalate)	Caprolactam	Diethyl-phthalate	Di-n-butylphthalate	Naphthalene	Pentachloro-phenol	Phenol	4-Chloro-3-methylphenol (4-Chloro-m-cresol)
	units	**µg/L[b]**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
	Screening Level	**0.15[c]**	**4[d]**	**140[e]**	**3,500[e]**	**5,600[e]**	**700[e]**	**17[f]**	**0.3[c]**	**2,000[g]**	**NA[h]**
AM-14	December 2002	<10[i] R[j]	**10[k] J[l] B[m]**	<100	<10	<10	<10	<10	**74[n]**	<10	<10
AM-24	December 2002	<10 R	**27[k] B**	<100	<10	**1[n] J**	<10	<10	<25	<10	<10
AM-26	December 2002	<10 R	**10[k] JB**	<100	<10	<10	<10	<10	<25	<10	<10
AM-32-GW (Industrial Supply Well)	December 2002	<10 R	**10[k] JB**	<100	<10	<10	<10	<10	<25	<10	<10
AM-34	December 2002	<10 R	**10[k] B**	<100	**1[n] J**	**4[n] J**	<10	<10	<25	**5[n] J**	<10
AM-35	December 2002	--[o]	--	<120	--	--	--	--	--	--	--
MW-1	April 2004	--	**0.6[n] J**	<1,000	--	<1	**0.5[n] J**	--	<5	--	--
MW-2	April 2004	--	**0.5[n] J**	**820[k]**	--	<1	**0.6[n] J**	--	<5	--	--
MW-3	April 2004	--	<1.1	<1,100	--	<1.1	<1.1	--	<5.5	--	--
MW-4	April 2004	--	**1[n]**	<1,100	--	<1	**1.1[n]**	--	<5	--	--
MW-5	April 2004	--	**0.7[n] J**	<1,100	--	<1	<1	--	<5	--	--
WP-01	March 2019	--	--	--	--	--	--	--	<0.25	--	--
WP-04	March 2019	--	--	--				--	<1.2	--	--
WP-07	March 2019	--	--	--	--	--	--	<0.010	<0.25	--	--

[a] SVOCs: semi-volatile organic compounds
[b] µg/L: micrograms per liter
[c] California Public Health Goal or PHG (Cal-EPA, OEHHA)
[d] California Department of Public Health, Primary MCL
[e] U.S. Environmental Protection Agency Integrated Risk Information System (IRIS)
[f] North Coast Regional Water Quality Control Board, Groundwater Water Quality Objectives for Cleanup Projects in the North Coast Region, August 2016.
[g] Environmental Protection Agency Health Advisory
[h] NA: not available
[i] <: less than
[j] R: The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
[k] underlined indicates a detection above a screening level.
[l] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[m] B: Analyte was detected in the method blank and in the sample.
[n] indicates a detection
[o] --: not analyzed

Table 7
Summary of Chemical Analyses of Groundwater Samples for Metals
Little Lake Industries, Arcata, California

Sample Location ID	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molyb-denum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
	units	**µg/L[a]**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
	Screening Level	**2.8[b]**	**0.004[b]**	**700[c]**	**1[b]**	**0.04[b]**	**3[d]**	**3.0[e]**	**300[b]**	**0.2[b]**	**1.2[b]**	**35[c]**	**12[b]**	**30[b]**	**35[f]**	**0.1[b]**	**63[f]**	**2,000[c]**
AM-14	December 2002	**3.5[g] B[h]**	<3.0[i]	52.3 B	<0.20	<0.30	<0.80	2.1 B	32.3	<1.2	<0.10	--[j]	8.9 B	<3.0	<0.80	<2.4	1.8 B	2.7 B
AM-24	December 2002	<1.2	<3.0	32.6 B	<0.20	<p0.30	<0.80	0.78 B	17.7 B	<1.2	<0.10	--	3.8 B	<3.0	<0.80	<2.4	2.2 B	9.7 B
AM-26	December 2002	<1.2	<3.0	40.2 B	<0.20	<0.30	<0.80	1.2 B	9.1 B	<1.2	<0.10	--	4.1 B	<3.0	<0.80	<2.4	1.7 B	176
AM-32 (Industrial Supply Well)	December 2002	1.7 B	<3.0	44.1 B	<0.20	<0.30	<0.80	**66.0[g]**	179	<1.2	<0.10	--	6.5 B	<3.0	<0.80	<2.4	<0.70	358
AM-34	December 2002	<1.2	**3.8[g] B**	305	<0.20	<0.30	<0.80	**15.9[g] B**	3.6 B	<1.2	<0.10	--	**26.8[g] B**	5.8	<0.80	**6.9[g] B**	1.2 B	<1.1
AM-35	December 2002	2.0 B	**16.3[g]**	**2,930[g]**	**3.9[g] B**	**2.5[g] B**	**84.4[g]**	**105[g]**	156	**92.4[g]**	<0.10	--	**148[g]**	3.2 B	<0.80	**15.8[g]**	**113[g]**	205
MW-1	April 2004	--	**3.4[g]**	--	--	<0.5	0.54 J[k]	**3.3[g]**	1.2	<0.5	--	5.4	9.4	--	--	--	--	6
MW-2	April 2004	--	**9.4[g]**	--	--	<0.5	<4.0	**6.0[g]**	2.8	<0.5	--	8.5	8.2	--	--	--	--	9.7
MW-3	April 2004	--	**5.2[g]**	--	--	<0.5	<1.0	**5.0[g]**	1.2	<0.5	--	3.5	7.8	--	--	--	--	3.8
MW-4	April 2004	--	**3.3[g]**	--	--	<0.5	2.0	2.2	11	<0.5	--	4.1	5.5	--	--	--	--	27
MW-5	April 2004	--	**0.32[g]**	--	--	<0.5	<1.0	1.9	1.8	<0.5	--	0.81	11	--	--	--	--	7.3
WP-06	March 2019	0.24 J	**1.9[g]**	140	0.071	<0.25	2.1	5.8	--	5.5	--	--	**14[g]**	--	--	<0.50	4.6	--
WP-07	March 2019	0.090 J	**6.9[g]**	160	<0.504	<0.25	0.38 J	6.8	--	<0.50	--	--	11	--	--	<0.50	0.93	--

[a] µg/L: micrograms per liter
[b] California Public Health Goal or PHG (Cal-EPA, OEHHA)
[c] U.S. Environmental Protection Agency Health Advisory
[d] California Department of Public Health, Primary MCL
[e] San Francisco Bay Regional Water Quality Control Board, Tier 1 Environmental Screening Levels, Revision 2, January 2019.
[f] U.S. Environmental Protection Agency Integrated Risk Information System (IRIS)
[g] underlined indicates a detection above a screening level.
[h] B: Analyte was detected in the method blank and in the sample.
[i] <: less than
[j] --: not analyzed
[k] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.

Table 8
Dioxins and Furans Congeners in Groundwater, March and July 2019
Little Lake Industries Mill, Arcata, California
(in pg/L)[a]

Analyte	Sample Identification			
	WP-01	**WP-04**	**WP-08**	**WP-09**
2,3,7,8 TCDD (PHG)[b]	0.05	0.05	0.05	0.05
2,3,7,8 TCDD (MCL)[c]	30	30	30	30
2,3,7,8 TCDD	<10.0[d]	<10.0	<9.78	<9.60
1,2,3,7,8,PeCDD	<50.0	<50.0	<48.9	<48.0
1,2,3,4,7,8 HxCDD	<50.0	23.2 J[e]	<48.9	<48.0
1,2,3,6,7,8 HxCDD	<50.0	96.1	<48.9	<48.0
1,2,3,7,8,9 HxCDD	<50.0	49.7	<48.9	<48.0
1,2,3,4,6,7,8 HpCDD	104	3,210	<48.9	<48.0
OCDD	632	38,600	272	<96.0
2,3,7,8 TCDF	<10.0	<10.0	<9.78	<9.60
1,2,3,7,8 PeCDF	<50.0	<50.0	<48.9	<48.0
2,3,4,7,8 PeCDF	<50.0	<50.0	<48.9	<48.0
1,2,3,4,7,8 HxCDF	<50.0	25.8 J	<48.9	<48.0
1,2,3,6,7,8 HxCDF	<50.0	90.1	<48.9	<48.0
1,2,3,7,8,9 HxCDF	<50.0	<50.0	<48.9	<48.0
2,3,4,6,7,8 HxCDF	<50.0	<50.0	<48.9	<48.0
1,2,3,4,6,7,8 HpCDF	48.0 J	1,080	<48.9	<48.0
1,2,3,4,7,8,9 HpCDF	<50.0	31.8	<48.9	<48.0
OCDF	27.0 J	1,640	<97.8	<96.0
TEQ	**1.67[f]**	**102[f]**	**0.0816[f]**	0.0

[a] pg/L: picogram per liter
[b] California Public Health Goal for drinking water SWRCB, August 2020.
[c] California Maximum Contaminant Level for drinking water SWRCB, August 2020.
[d] <: "less than" the laboratory reporting limit
[e] J: result is less than the reporting limit/method limit but greater than the method detection limit. The reported concentration is an estimated value.
[f] indicates a detection

Table 9
Soil Stockpile Sampling Results, June 2007
Little Lake Industries, Arcata, California

Sample ID	Stockpile Location	Sample Date	Total[a]		TCLP[b]		TCLP with Silica Gel[c]	
			Diesel	Motor Oil	Diesel	Motor Oil	Diesel	Motor Oil
			(µg/g)[d]		(µg/L)[e]		(µg/L)	
MS-01	MS	6/26/2007	**8.4**[f]	**49**[f]	**120**[f]	<170[g]	<50	<170
MS-02	MS	6/26/2007	**9.4**[f]	**53**[f]	<50	<170	--[h]	--
SS-01	SS	6/26/2007	**12**[f]	**51**[f]	<50	<170	--	--
SS-02	SS	6/26/2007	**27**[f]	**120**[f]	<50	<170	--	--
STP-3-01	STP-3	6/26/2007	**13**[f]	**80**[f]	<50	<170	--	--
RS-01	RS	6/26/2007	**23**[f]	**280**[f]	**60**[f]	<170	--	--
RS-02	RS	6/26/2007	**7.3**[f]	**50**[f]	<50	<170	--	--
RS-03	RS	6/26/2007	**4.6**[f]	**29**[f]	--	--	--	--
RM-01	RM	6/26/2007	**3.8**[f]	**24**[f]	<50	<170	--	--
RM-02	RM	6/26/2007	**7.2**[f]	**58**[f]	**78**[f]	<170	<50	<170
RM-03	RM	6/26/2007	**25**[f]	**120**[f]	<50	<170	--	--
RM-04	RM	6/26/2007	**6.5**[f]	**37**[f]	**80**[f]	<170	<50	<170
RM-05	RM	6/26/2007	**24**[f]	**170**[f]	**62**[f]	<170	--	--
RM-06	RM	6/26/2007	**9.5**[f]	**63**[f]	<50	<170	--	--
RM-07	RM	6/26/2007	**14**[f]	**100**[f]	<50	<170	--	--
RM-08	RM	6/26/2007	**26**[f]	**230**[f]	**65**[f]	<170	--	--
RM-09	RM	6/26/2007	**5.0**[f]	**26**[f]	<50	<170	--	--
RM-10	RM	6/26/2007	**1.8**[f]	**14**[f]	**64**[f]	<170	--	--
RM-11	RM	6/26/2007	**18**[f]	**160**[f]	**50**[f]	<170	--	--
RM-12	RM	6/26/2007	**18**[f]	**180**[f]	<50	<170	--	--
RM-13	RM	6/27/2007	**10**[f]	**72**[f]	**69**[f]	<170	--	--
RM-14	RM	6/27/2007	**13**[f]	**96**[f]	**66**[f]	<170	--	--
RM-15	RM	6/26/2007	**16**[f]	**170**[f]	--	--	--	--
SP-A-01	SP-A	6/26/2007	**16**[f]	**140**[f]	**130**[f]	**540**[f]	**120**[f]	<170[f]
SP-B-01	SP-B	6/26/2007	**14**[f]	**150**[f]	**64**[f]	**170**[f]	--	--
SP-B-02	SP-B	6/26/2007	**20**[f]	**260**[f]	**86**[f]	**310**[f]	--	--
SP-C-01	SP-C	6/26/2007	**23**[f]	**220**[f]	**100**[f]	**430**[f]	**70**[f]	**180**[f]
B-01	B	6/26/2007	**10**[f]	**94**[f]	**69**[f]	<170	--	--
B-02	B	6/26/2007	**8.2**[f]	**82**[f]	**66**[f]	<170	--	--
B-03	B	6/26/2007	**24**[f]	**180**[f]	**58**[f]	<170	--	--
B-04	B	6/26/2007	**12**[f]	**78**[f]	**66**[f]	<170	--	--
B-05	B	6/26/2007	**22**[f]	**210**[f]	**90**[f]	**280**[f]	<50	<170
B-06	B	6/26/2007	**12**[f]	**100**[f]	**58**[f]	<170	--	--
B-07	B	6/26/2007	**29**[f]	**240**[f]	**74**[f]	**260**[f]	--	--
B-08	B	6/26/2007	**10**[f]	**120**[f]	**91**[f]	**270**[f]	--	--
B-09	B	6/26/2007	**19**[f]	**130**[f]	**82**[f]	**280**[f]	--	--
B-10	B	6/26/2007	**5.7**[f]	**58**[f]	**80**[f]	**290**[f]	**150**[f]	**600**[f]
B-11	B	6/26/2007	**17**[f]	**110**[f]	**83**[f]	**280**[f]	**57**[f]	<170
B-12	B	6/26/2007	**11**[f]	**99**[f]	**87**[f]	<170	--	--

Table 9 Soil Stockpile Sampling Results, June 2007 Little Lake Industries, Arcata, California								
Sample ID	Stockpile Location	Sample Date	Total[a]		TCLP[b]		TCLP with Silica Gel[c]	
			Diesel	Motor Oil	Diesel	Motor Oil	Diesel	Motor Oil
			(µg/g)[d]		(µg/L)[e]		(µg/L)	
B-13	B	6/26/2007	**11**[f]	**83**[f]	**56**[f]	<170	--	--
B-14	B	6/26/2007	**4.4**[f]	**40**[f]	**96**[f]	**200**[f]	--	--
B-15	B	6/26/2007	**9.7**[f]	**79**[f]	**72**[f]	**250**[f]	**81**[f]	**240**[f]
B-16	B	6/27/2007	**43**[f]	**110**[f]	<50	<170	--	--
B-17	B	6/27/2007	**8.3**[f]	**66**[f]	**140**[f]	**670**[f]	--	--
B-18	B	6/27/2007	**25**[f]	**23**[f]	**290**[f]	**800**[f]	--	--
B-19	B	6/27/2007	**6.0**[f]	**39**[f]	**86**[f]	**290**[f]	<50	<170
B-20	B	6/27/2007	**19**[f]	**69**[f]	**180**[f]	**540**[f]	--	--
B-21	B	6/27/2007	**12**[f]	**99**[f]	--	--	--	--

[a] TPHD & TPHMO (Total) analyzed in general accordance with EPA Method No. 3550/8015B.
[b] TCLP: Toxicity Characteristic Leaching Procedure. Analyzed in general accordance with EPA Method SW 8015B (completed using deionized water)
[c] Extractable TCLP analyzed in general accordance with EPA Method SW 8015B, using silica gel cleanup.
[d] µg/g: micrograms per gram
[e] µg/L: micrograms per liter
[f] indicates a detection
[g] <: "less than" the laboratory reporting limit
[h] --: not analyzed

Eureka, CA | Arcata, CA | Redding, CA | Willits, CA | Fort Bragg, CA | Coos Bay, OR | Klamath Falls, OR