REMEDIAL INVESTIGATION REPORT
Southern Avenue Industrial Area Superfund Site
South Gate, California

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EXECUTIVE SUMMARY

The Southern Avenue Industrial Area Superfund Site ("SAIA" or "Site") is located in a mixed industrial and residential area in South Gate, California. The site is currently vacant. The property owner demolished any existing buildings in 2013. Prior to the demolition of the facility buildings, Seam Master Industries was the last occupant at the property, and used the facility to manufacture hot-melt adhesive tape for laying carpet. From 1942 to 1951, Pacific Screw Products Corporation, and then, from 1951 to 1972, Screw Products of America manufactured screw products at the subject property. These operations involved cleaning the screws with chlorinated solvents, which occurred at a degreasing building in the northeastern portion of the property. Releases from this part of the property during the periods of screw manufacturing appear to account for the contamination of soil, soil gas, indoor air, and groundwater at and near the property with volatile organic compounds (VOCs), and locally, metals in shallow soils.

Remedial investigation (RI) work involved characterizing subsurface soils for contaminants on the SAIA property and nearby areas to the north (on ELG Metals property) and to the east (in a truck parking area). Soil contamination by several metals and PCBs at analytical concentrations exceeding the industrial Regional Screening Levels (RSLs), was limited to several borings in the northeastern portion of the SAIA property, and adjoining areas in the southeastern portion of the ELG Metals property. Most of these RSL exceedances were within the upper 5 feet of the subsurface, and involved lead, arsenic, thallium, and the PCBs Aroclor 1248, and Aroclor 1260 that exceeded the RSLs at seven, one, two, two, and two locations, respectively. Analytical concentrations of arsenic in soils exceeded the RSL at all locations, but in all but one case, these concentrations appear to result from natural background for southern California soils. TCE was the only VOC that exceeded an RSL in soil sample analyses, but the two exceedances were associated with several other samples indicating elevated concentrations of chlorinated VOCs and petroleum-associated VOCs that, together, clearly indicated the location of the contaminant source of the extensive VOC groundwater contaminant plume downgradient from the property. This VOC source area in soil is limited in extent, located directly beneath the former location of

the degreasing building along the northeastern perimeter of the former main manufacturing building.

RI characterization of soil gas indicated an extensive plume of soil gas analytical concentrations exceeding industrial and/or residential RSLs (soil-gas RSLs are based on indoor-air RSLs divided by an attenuation factor of 0.03 [i.e., multiplied by 33.3]). This area of soil-gas exceedances extends beneath nearly the entire SAIA property and in adjoining areas to the north, east, and south. Within the SAIA property, occupied structures no longer exist, and thus there is no threat of vapor intrusion within the property. Off the SAIA property, many of the highest VOC concentrations in soil gas sample analyses were at depth (15, 25, or 35 feet bgs), and have relatively low potential to cause vapor intrusion into structures, compared to samples collected from shallower depth (5 feet bgs). However, the deeper concentrations are still relevant to assessing the risk and determining the protectiveness of any remedy as they represent the potential for vapor intrusion.

A vapor-intrusion (VI) assessment focused on residential structures where nearby soil-gas samples from the 5-foot bgs interval indicated VOC concentrations above residential RSLs. The RI field team could not complete planned sampling at similarly affected industrial buildings due to access issues. The VI assessment indicated PCE exceeded the residential RSL at one residential structure in samples from both sampling events. However, the evidence is somewhat ambiguous as to the source of PCE: while nearby soil gas samples contained PCE significantly above the soil-gas RSL, crawlspace air samples did not contain anomalous levels of PCE. Thus, the PCE could originate from indoor sources at this location.

At all other locations, exceedances of indoor-air RSLs by benzene and 1,2-dichloroethane (1,2-DCA) appear to be related to the occurrence of these samples in either normal background air (which is unremarkable based on the high-traffic area near Interstate 710 and busy streets), or at locations where other samples (crawlspace air and nearby soil-gas samples) provided no supporting evidence that these compounds would have originated from underlying soil gas. Also, benzene and 1,2-DCA are present in groundwater at analytical concentrations at least two

orders of magnitude lower than those reported for other chlorinated VOCs such as TCE and cis-1,2-dichloroethene (*cis*-DCE).

RI work included cone penetrometer test (CPT) borings and monitoring-well installations to characterize subsurface lithology and hydrogeology, which are generally consistent with previous work in the vicinity. The shallowest subsurface unit explored in the RI is the Bellflower Aquiclude, which is predominantly fine-grained, largely unsaturated, and does not transmit significant quantities of groundwater; thus, it does not contain VOCs at significant analytical concentrations. The underlying two units consist largely of sands and gravels and are the two aquifers of primary concern at the site: the Gaspur Aquifer, subdivided into shallow, intermediate, and lower intervals, and the underlying Exposition Aquifer, explored only to a depth of 140 feet below ground surface (bgs) (about 20 feet into the upper Exposition). Measurements of groundwater elevations indicate generally southerly hydraulic gradients, along with a significant downward component of flow both within the Gaspur Aquifer, and between the Gaspur and Exposition Aquifers.

These two aquifers have extensive groundwater contaminant plumes with analytical concentrations of TCE, *cis*-DCE, several other chlorinated VOCs, and the semivolatile organic compound (SVOC) 1,4-dioxane (1,4-D), at concentrations exceeding screening levels (SLs), specifically the EPA's maximum contaminant levels (MCLs) and the notification level (NL) for California. SL exceedances for metals in groundwater appear to be either local (aluminum, lead, and nickel) or related to the reducing geochemical conditions and common to groundwater conditions of the surrounding area (arsenic, manganese). Thus, the metal SL exceedances do not represent significant groundwater impacts attributable to the SAIA property.

Near the SAIA property, there are four other groundwater VOC plumes that approach and, in some cases, commingle somewhat with the SAIA groundwater VOC plume: the Jervis Webb plume; the Cooper Drum plume; the Atlantic Avenue plume; and several small plumes at the Los Angeles Unified School District (LAUSD) property. The RI team characterized the SAIA groundwater plumes and neighboring portions of the other plumes through collection of groundwater samples from the monitoring network, which included discrete-depth samples

collected from CPT borings, and four sampling events at groundwater monitoring wells installed for the RI, supplemented by results for sampling of 13 monitoring wells installed for investigations into the Cooper Drum VOC plume located a short distance west and southwest of the SAIA VOC plume. The characterization also used some analytical results obtained by others from groundwater investigations into the Jervis Webb, Atlantic Avenue, and LAUSD plumes.

The hydraulic gradients cited above account for the shape and vertical extent of the VOC groundwater contaminant plume attributable to the source area in the northeastern part of the SAIA property. Analytical results indicate that several VOCs and 1,4-D are widespread in groundwater beneath and downgradient from the site. *cis*-DCE has the largest footprint of the contaminants in the SAIA groundwater plume, and exists at analytical concentrations greater than the MCL (6 ug/L) across an aerial extent about 1,000 feet wide and at least 2,750 feet long. The plume migrates downward along its north-to-south migration path: at and near the SAIA property, the shallow Gaspur Aquifer is the primary interval affected; proceeding south, progressively lower intervals are impacted by SL exceedances, so that in its southernmost extent the bulk of contamination of the SAIA plume is within the Exposition Aquifer, at depths of least 120 feet bgs.

Geochemical conditions in the groundwater throughout and near the SAIA plume are anoxic to reducing, and foster the biologically mediated reductive dechlorination of TCE to *cis*-DCE, and under limited circumstances, further degradation to vinyl chloride. The ratio of *cis*-DCE to TCE increases markedly downgradient, indicating extensive biodegradation of TCE. The SAIA plume commingles marginally with the underlying, lower-concentration Jervis Webb VOC plume, and commingles to a limited extent with the Cooper Drum VOC plume to the west. The Atlantic Avenue and LAUSD plumes appear to be largely separate from the SAIA plume.

The following recommendations were developed during the RI:

- More fully characterize the extent of VOC impacts to the Exposition Aquifer, which is in contact with an underlying municipal water-supply aquifer (the Gage Aquifer at about 280 feet bgs), by advancing up to four groundwater profile borings downgradient and below the current extent of the SAIA monitoring network in the Exposition Aquifer; collect discrete-depth groundwater samples at every 20 feet beginning at 130 feet bgs down to 230 feet bgs, possibly followed by installation of monitoring wells.

- Collect two rounds of indoor-air samples from several industrial buildings just north and south of the SAIA property, at locations near borings where soil-gas analytical concentrations exceeded industrial RSLs, and indicate any potential impacts to indoor air. Although EPA attempted to gain access to buildings just south of the SAIA property, it is noted that the lack of indoor-air sampling in these buildings is a data gap.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY 1
1.0 INTRODUCTION 1
1.1 Site Background and Setting 2
1.1.1 Site Description 2
1.1.2 Regional Geologic and Hydrogeological Setting 3
1.1.3 Local Hydrogeologic Setting and Groundwater Production Wells 7
1.1.3.1 Operational History 10
1.1.4 Summary of Previous Investigations and Related Nearby Work 11
1.1.4.1 Initiation of EPA RI Activity 12
1.1.5 Nearby Contaminated Sites 13
1.1.5.1 Jervis Webb Superfund Site 14
1.1.5.2 Former Dial Corporation Site 15
1.1.5.3 Cooper Drum Superfund Site 15
1.1.5.4 Atlantic Avenue South Gate Plume Site 16
1.1.5.5 Los Angeles Unified School District (LAUSD) 16
2.0 REMEDIAL INVESTIGATION ACTIVITIES 19
2.1 Soil Investigation 19
2.1.1 Cone Penetrometer Testing 19
2.1.2 Soil Borings 20
2.2 Soil Gas Investigation 20
2.3 Vapor Intrusion Investigation activities 22
2.3.1 Residential Properties 23
2.3.2 Commercial Properties 24
2.4 Groundwater Investigation 25
2.4.1 Groundwater Discrete-Depth Sampling 25
2.4.2 Monitoring Well Installation and Development 26
2.4.2.1 Monitoring Well Sampling 27
2.4.2.2 Groundwater Level Measurement 28
2.4.3 Decontamination Procedures 28
2.4.4 Site Survey 28
2.4.5 Investigation-Derived Waste 29
2.5 Data Quality Assurance/Quality Control 29
2.5.1 Qualified Results 31
2.5.2 Rejected Results 31
2.5.3 Field Duplicates 31
2.5.4 Field Deviations and Other Issues 32
2.5.5 Conclusion and Data Usability 32
3.0 PHYSICAL CHARACTERISTICS OF THE SITE 35
3.1 Hydrogeology 35
3.2 Hydrogeologic Cross-Sections 37
3.2.1 CPT Logging and Cross-Section Development 38
3.2.2 Bellflower Aquiclude 40

3.2.3 Gaspur Aquifer ... 40
3.2.4 Exposition Aquifer ... 41
3.3 Groundwater Flow Characteristics ... 42
3.3.1 Groundwater Fluctuations ... 42
3.3.2 Horizontal Flow Gradients ... 42
3.3.3 Vertical Flow Gradients ... 43
3.3.4 Aquifer Tests ... 44
3.4 Current Land Use ... 44
3.5 Climatology ... 45
3.6 Ecology ... 45
4.0 NATURE AND EXTENT OF CONTAMINATION ... 47
4.1 Soil and Vadose Zone ... 47
4.1.1 Soil Screening Levels ... 47
4.1.2 Background Concentrations in Soil ... 48
4.1.3 Nature of Soil Contaminantion ... 48
4.1.3.1 VOCs ... 48
4.1.3.2 SVOCs ... 49
4.1.3.3 Metals ... 50
4.1.3.4 PCBs ... 52
4.1.4 Extent of Soil Contamination On and Off the SAIA Property ... 53
4.1.5 Soil-Gas Data ... 55
4.1.6 Extent of Soil Gas Contamination ... 57
4.2 Vapor Intrusion ... 60
4.2.1 Air Screening Levels ... 60
4.2.2 Outdoor Air Conditions ... 60
4.2.3 Vapor Intrusion Evaluation ... 61
4.2.3.1 Residential Air Sampling Results ... 62
4.3 Groundwater ... 67
4.3.1 Groundwater Screening Levels ... 67
4.3.2 Groundwater Movement in Gaspur and Exposition Aquifers ... 68
4.3.3 Nature of Groundwater Contamination in Gaspur and Exposition Aquifers ... 68
4.3.3.1 Volatile Organic Compounds (VOCs) in Monitoring Wells ... 69
4.3.3.2 Semivolatile Organic Compounds (SVOCs) in Monitoring Wells ... 72
4.3.3.3 Metals in Monitoring Wells ... 73
4.3.3.4 PCBs in Monitoring Wells ... 74
4.3.3.5 Perchlorate in Monitoring Wells ... 74
4.3.3.6 General Chemistry in Monitoring Wells ... 74
4.3.3.7 VOCs and SVOCs Exceeding Screening Levels in Discrete-Depth Groundwater Samples ... 75
4.3.4 Extent of Groundwater Contamination ... 76
4.3.4.1 Semi-perched Aquifer ... 77
4.3.4.2 Gaspur Aquifer ... 77
4.3.4.3 Exposition Aquifer ... 82

4.3.4.4 Temporal Changes in Contaminant Concentrations 83
4.3.5 Commingling of the SAIA Groundwater Plume with Neighboring Plumes 83
4.3.5.1 Evidence Based on Hydraulic Considerations 84
4.3.5.2 Evidence Based on Differing VOC Concentrations 85
4.3.5.3 Evidence Based on Contrasting VOC Fingerprints 87
5.0 CONTAMINANT FATE AND TRANSPORT 93
5.1 Chemical Releases to the Environment at the Site 94
5.2 Processes Affecting Contaminant Fate and Transport 95
5.2.1 Contaminant Properties 95
5.2.2 Contaminant Fate and Transport Processes 96
5.3 Contaminant Fate and Transport at SAIA 97
5.3.1 Contaminant Fate and Transport in the Vadose Zone 98
5.3.2 Saturated Zone 100
5.3.2.1 Advection and Hydrodynamic Dispersion 100
5.3.2.2 Sorption 100
5.3.2.3 Degradation 102
5.4 Contaminant Migration 105
5.4.1 Volatilization 105
5.4.2 Soil-to-Groundwater Migration 105
5.4.3 Migration in Groundwater 106
5.4.4 Fugitive Dust 111
5.4.5 Surface Water Runoff 111
5.5 Potential Routes of Future Migration 111
5.5.1 Subsurface Soils 111
5.5.2 Soil Vapor 112
5.5.3 Groundwater 113
5.5.3.1 Future Contaminant Migration Routes in Groundwater 113
5.5.3.2 Measures of Stability of the Contaminant Plume 114
6.0 HUMAN HEALTH BASELINE RISK ASSESSMENT 117
6.1 Scope of the HHRA 117
6.2 Data Evaluation 118
6.3 Conceptual Site Exposure Model (CSEM) 119
6.4 Identification of Chemicals of Potential Concern 122
6.5.1 Exposure Assessment 126
6.5.2 Toxicity Assessment 126
6.5.2.1 Cancer Effects 127
6.5.2.2 Non-Cancer Hazards 127
6.5.3 Air, Soil Gas, Groundwater and Soil RBCs 128
6.6 Risk Characterization 129
6.6.1 Commercial/Industrial Receptor 131
6.6.1.1 Soil Gas COPCs (Vapor Intrusion) 131
6.6.1.2 Soil COPCs 132
6.6.2 Construction Worker Receptor 132
6.6.2.1 Soil Gas COPCs (Vapor Intrusion) 132

6.6.2.2 Soil COPCs ... 133
6.6.3 Indoor Air (Residential Receptor) Risk Values ... 133
6.7 Summary ... 135
6.7.1 Future Commercial/Industrial Receptor ... 135
6.7.2 Future Construction Worker Receptor ... 136
6.7.3 Residential Receptor ... 136
6.8 Uncertainty Analysis ... 137
6.8.1 Uncertainty Associated with Site Characterization Data ... 137
6.8.2 Uncertainty Associated with Risk-Based Concentrations ... 138
6.8.3 Uncertainty Associated with Risk Characterization ... 138
7.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS ... 141
7.1 Summary ... 141
7.1.1 Remedial Investigation Activities ... 141
7.1.2 Physical Characteristics ... 142
7.1.3 Nature and Extent of Contamination ... 142
7.1.4 Contaminant Fate and Transport ... 144
7.1.4.1 Soil ... 144
7.1.4.2 Soil Gas ... 145
7.1.4.3 Groundwater ... 145
7.1.5 Human Health Risk Assessment (HHRA) and Identification of Site COPCs ... 146
7.2 Conclusions ... 149
7.3 Recommendations ... 150
8.0 REFERENCES ... 153

LIST OF TABLES

2-1 Groundwater Monitoring Well Installation Data
2-2 Groundwater Elevations
3-1 Vertical Gradients in Gaspur and Exposition Aquifers
4-1 Summary of VOCs Detected in Soil
4-2 Summary of SVOCs, Metals and PCBs Detected in Soil
4-3 VOCs Detected in Soil Gas Samples
4-4 VOCs Detected in Outdoor, Crawlspace, and Indoor Air Samples
4-5 VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
4-6 VOCs and SVOCs Detected in Groundwater Discrete-Depth Samples from CPT Borings
5-1 Summary of Physical and Chemical Properties of COPCs at 25 ^{o}C
5-2 Dissolved Oxygen and Oxygen Reduction Potential at Site Monitoring Wells
6-1 Summary of Detected Chemicals
6-2 Chemicals of Potential Concern
6-3a Air Risk-Based Concentrations, Commercial/Industrial Receptor
6-3b Air Risk-Based Concentrations, Construction Receptor (based on Commercial/Industrial Receptor)
6-3c Air Risk-Based Concentrations, Residential Receptor
6-4 Soil Gas Risk-Based Concentrations, all Receptors
6-5 Groundwater Risk-Based Concentrations, Residential Receptor
6-6a Soil Risk-Based Concentrations, Commercial/Industrial Receptor
6-6b Soil Risk-Based Concentrations, Construction Receptor
6-7 Exposure and Risk Characterization Approach
6-8a Risk Characterization (Soil Gas), Commercial/Industrial Receptor
6-8b Soil Exposure Point Concentrations and Risk Values, Commercial/Industrial Receptor
6-9a Risk Characterization (Soil Gas), Construction Receptor
6-9b Soil Exposure Point Concentrations and Risk Values, Construction Receptor
6-10a Risk Characterization (Soil Gas), Residential Receptor
6-10b Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
6-10c Risk Characterization (Vapor Intrusion), Residential Receptor

LIST OF FIGURES

1-1 Site Location Map
1-2 Production Wells and Other Groundwater Sites
1-3 Former SAIA Building and Other Property Features
1-4 Groundwater Monitoring Well and CPT Boring Locations
2-1 Soil Gas, Indoor Air, Outdoor Air, and Crawlspace Sampling Locations
3-1 Lines of Geologic Cross-Sections
3-2 Hydrogeologic Cross Section A-A’

3-3 Hydrogeologic Cross Section B-B'
3-4 Hydrogeologic Cross Section C-C'
3-5 Hydrogeologic Cross Section D-D'
3-6 Hydrogeologic Cross Section E-E'
3-7 Groundwater Elevation and Potentiometric Map, Shallow Gaspur Aquifer, June/July 2016
3-8 Groundwater Elevation and Potentiometric Map, Intermediate Gaspur Aquifer, June/July 2016
3-9 Groundwater Elevation and Potentiometric Map, Lower Gaspur Aquifer, June/July 2016
3-10 Groundwater Elevation Map, Exposition Aquifer, July 2016
4-1 Extent of VOC, PCB, and Metal Contamination in Soil
4-2 Trichloroethene (TCE) in Soil Gas Sample Locations
4-3 Trichloroethene (TCE) Isocontours Soil Gas at 5-foot Depth
4-4 Residential Air and Nearby Soil Gas Analytical Results
4-5 Trichloroethene in Groundwater, Shallow Gaspur Aquifer, July/September 2016
4-6 Trichloroethene in Groundwater, Intermediate Gaspur Aquifer, July/September 2016
4-7 Trichloroethene in Groundwater, Lower Gaspur Aquifer, July/September 2016
4-8 Trichloroethene in Groundwater, Exposition Aquifer, July/September 2016
4-9 *cis*-1,2-Dichloroethene in Groundwater, Shallow Gaspur Aquifer, July/September 2016
4-10 *cis*-1,2-Dichloroethene in Groundwater, Intermediate Gaspur Aquifer, July/September 2016
4-11 *cis*-1,2-Dichloroethene in Groundwater, Lower Gaspur Aquifer, July/September 2016
4-12 *cis*-1,2-Dichloroethene in Groundwater, Exposition Aquifer, July/September 2016
4-13 1,4-Dioxane in Groundwater, Shallow Gaspur Aquifer, July/September 2016
4-14 1,4-Dioxane in Groundwater, Intermediate Gaspur Aquifer, July/September 2016
4-15 1,4-Dioxane in Groundwater, Lower Gaspur Aquifer, July/September 2016
4-16 1,4-Dioxane in Groundwater, Exposition Aquifer, July/September 2016
4-17 cis-DCE to TCE Ratios in SAIA and Jervis Webb Groundwater VOC Plumes
4-18 Contaminant Ratios in Groundwater VOC Plumes in and near SAIA
4-19 Transects for Commingling Plots
4-20 cis-DCE Concentrations and Contaminant Ratios in East-West Transects of Cooper Drum and Jervis Webb/SAIA VOC Contaminant Plumes
4-21 cis-DCE Concentrations and Contaminant Ratios in East-West Transects of Cooper Drum, Atlantic Avenue, and SAIA Groundwater VOC Contaminant Plumes
4-22 Estimated VOC Plume Outlines and Commingling Areas
6-1 Conceptual Site Exposure Model

LIST OF APPENDICES

A Historical Reference Maps and Figures

A-1: Generalized Hydrogeologic Cross-Section through South Gate, CA (URS, 2002)
A-2: Jervis Webb Groundwater Elevation Maps and TCE Groundwater Plume Map (Gilbane, 2018)
A-3: Cooper Drum Site Groundwater Contour Maps, 2000 and 2007 (URS, 2002, 2007) and Pre-RI Soil Analytical Results Summary Table (Bechtel, 1997)
A-4: Cooper Drum Site Monitoring Well Groundwater Analytical Results, 1998-2017 (Haley and Aldrich, 2017)
A-5: Cooper Drum Site Vicinity, Estimated Plume Boundaries (ITSI, 2010)

B CPT, Boring, and Well Installation Logs

C Field Documentation (Sampling Forms, Indoor Air Quality Survey Forms, Groundwater Elevation Forms and Waste Manifests)

D Survey Data Reports

E Analytical Data Tables and Commercial Laboratory Reports

F Data Quality Summary Report and Data Validation Reports

G Pump Test and Modeling Technical Memorandum

LIST OF ACRONYMS AND ABBREVIATIONS

Chemical Abbreviations

1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
1,1,1-TCA	1,1,1-trichloroethane
1,1,2-TCA	1,1,2-trichloroethane
1,2-DCA	1,2-dichloroethane
1,4-D	1,4-dioxane
CCl_4	carbon tetrachloride
cis-DCE	*cis*-1,2-dichloroethene
EVA	ethyl vinyl acetate
Hg	Mercury
PCB	polychlorinated biphenyl
PCE	tetrachloroethene (perchloroethene)
TCA	Trichloroethane
TCE	Trichloroethene
TCM	Trichloromethane
trans-DCE	trans-1,2-dichloroethene
TCE	trichloroethene
VC	vinyl chloride

Abbreviations

ºC	degrees Celsius
ºF	degrees Fahrenheit
AASGP	Atlantic Avenue South Gate Plume
AOC	area of concern
AST	aboveground storage tank
bgs	below ground surface
CCS	California Coordinate System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive, Environmental Response, and Liability Information System
CFR	Code of Federal Regulations
CLP	(US EPA) Contract Laboratory Program
cm	centimeter(s)
COC	chain of custody
COPC	contaminant of potential concern
CPT	cone penetrometer testing
DNAPL	dense non-aqueous phase liquid
D.O.	dissolved oxygen
DOC	dissolved organic carbon
DPT	direct push technology

DQSR	data quality summary report
DTSC	[California] Department of Toxic Substances Control
DWR	Department of Water Resources
eDMS	electronic data management system
EPA	U.S. Environmental Protection Agency
ft	Feet
ft/day	feet per day
ft/ft	feet per foot
ft/year	feet per year
FS	feasibility study
g/cm^3	grams per cubic centimeter
g/mL	grams per milliliter
gpm	gallons per minute
GPS	global positioning system
H	Henry's Law constant
HI	hazard index
HP	Hydropunch
HS	high school
HSA	hollow-stem auger
ID	identification
IDW	investigation-derived waste
in Hg	Inches of mercury
ITSI	Innovative Technical Solutions, Inc.
J	estimated result
kWh	kilowatt-hours
LAUSD	Los Angeles Unified School District
LNAPL	light non-aqueous phase liquid
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mgd	million gallons per day
mL	milliliter(s)
mL/g	milliliters per gram
mm	millimeter(s)
MS/MSD	matrix spike/matrix spike duplicate
mS/cm	millisiemens per centimeter
msl	mean sea level
mV	millivolts
NAD83	North American Datum of 1983
NAPL	non-aqueous phase liquid
NAVD88	North American Vertical Datum of 1988
NL	Notification Level
NPL	National Priorities List
NTU	nephelometric turbidity unit
OEHHA	Office of Environmental Health Hazard Assessment

ORP	oxidation-reduction potential
OU	operable unit
PA	preliminary assessment
ppm	parts per million
PVC	polyvinyl chloride
QA	quality assurance
QAO	Quality Assurance Office(r)
QC	quality control
R	retardation factor
R9	EPA Region 9
RDTM	Remedial Design Technical Memorandum
RI	remedial investigation
RI Report	Remedial Investigation Report
RL	reporting limit
RPD	relative percent difference
RSL	regional screening level, US EPA Region 9
RWQCB	[California] Regional Water Quality Control Board
SAIA	Southern Avenue Industrial Area
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SBT	sediment behavior type
SDG	sample delivery group
Site	SAIA Superfund Site
SI	site inspection
SL	screening level
SVOC	semivolatile organic compound
TOC	total organic carbon
ug/kg	micrograms per kilogram
ug/L	micrograms per liter
ug/m^3	micrograms per cubic meter
UN	United Nations
US EPA or EPA	United States Environmental Protection Agency
UST	underground storage tank
VI	vapor intrusion
VOA	volatile organic analysis
VOC	volatile organic compound
Weston	Weston Solutions, Inc.

1.0 INTRODUCTION

This Remedial Investigation Report presents the findings, conclusions, and recommendations from investigations that the United States Environmental Protection Agency (U.S. EPA or EPA) conducted at the Southern Avenue Industrial Area (SAIA) Superfund Site (the Site), located in South Gate, California (**Figure 1-1**). After several preliminary evaluations (**Section 1.1.4**), EPA began Remedial Investigation (RI) activities at the Site in 2012, soon after EPA included the Site on the National Priorities List (NPL) in September 2011. EPA proposed the addition of the SAIA property, at the time referred to as the "Seam Masters Industries" site, to the Superfund NPL in September, 2011. EPA finalized the SAIA property to the Superfund NPL as the "Southern Avenue Industrial Area" site in May, 2012.

As detailed in the Final Sampling and Analysis Plan (ITSI Gilbane, 2012), which specified in detail how the project objectives would be carried out through the field sampling and analysis efforts, the primary objectives of this RI as stated in the EPA's Statement of Work were to:

1. Identify the extent of the principal contaminants of concern, including volatile organic compounds (VOCs) in the soil and vadose zone (the area between the ground surface and the underground water table) within the on-site source area;
2. Define the horizontal and vertical extent of VOC contamination in groundwater on and off the site;
3. Due to the presence of VOCs, evaluate the potential for vapor intrusion into any buildings and residential areas located on or near the contaminated source areas and groundwater plume.

After completing this RI (including a human health risk assessment [HHRA]), EPA will conduct a Feasibility Study (FS) to evaluate remedial action alternatives (cleanup methods and treatment technologies) for the Site. EPA will present the selected remedy and remedial action objectives in a Proposed Plan which EPA will publish in a fact sheet and distribute to the community. The Proposed Plan will provide for a public comment period and community meeting. EPA will then document the selected remedy in a Record of Decision, will subsequently develop a remedial design and remedial action workplan, and will then implement the remedy for the Site.

EPA prepared this RI report in accordance with the EPA Guidance for Conducting Remedial Investigations and Feasibility Studies under the Comprehensive Environmental Response,

Compensation, and Liability Act (CERCLA; USEPA, 1988). The remainder of this report is organized as follows:

- The remainder of **Section 1.0** describes the site background including geologic setting, site operational history, and the investigative history of the Site and other nearby sites.
- **Section 2.0** provides information regarding field investigations conducted for this RI.
- **Section 3.0** describes the physical characteristics of the Site, including physiographic setting, land use and demographics, topography, climate, geology, and hydrogeology.
- **Section 4.0** describes the nature and extent of contamination in soil, soil gas, air, and groundwater.
- **Section 5.0** describes the contaminant fate and transport, migration pathways, exposure media, and receptors.
- **Section 6.0** presents a summary of the risk assessment.
- **Section 7.0** summarizes the RI and presents conclusions and recommendations based on RI findings.
- **Section 8.0** provides references used in the preparation of the RI.
- Tables, figures, and appendices provide supporting or illustrative information to supplement the text.

1.1 SITE BACKGROUND AND SETTING

This section provides a description of the physical setting, the subsurface geology and hydrogeology characteristics of the Site. This section also includes an inventory of production wells in the vicinity and their potential influences on groundwater movement. Finally, this section summarizes the operational history of the source site (the SAIA property) and the environmental investigations performed at the Site and at nearby contaminated sites.

1.1.1 Site Description

The SAIA property is nearly 4 acres in size and is located at 5211 Southern Avenue, South Gate, California. The property is roughly trapezoidal in shape and is oriented in an approximate east-west direction, parallel to Southern Avenue, as shown on **Figure 1-2**. The SAIA property is located in a mixed industrial, commercial, and residential area. ELG Metals borders the site to the north, railroad tracks and right-of-way border the site to the east, Domar Precision, Inc. borders the site to the south, and Bimbo Bakery borders the site to the west.

1.1.2 Regional Geologic and Hydrogeological Setting

The following summary of the regional geology and hydrogeology of the Los Angeles basin is based on the works of Driver (1948), Jahns (1954), Poland et al. (1956), Yerkes et al. (1965), and the California Department of Water Resources (DWR 1961). Following the regional geology and hydrogeology discussion is a summary of the local hydrogeology based on previous investigations conducted at the nearby Cooper Drum site by URS (RI report, 2002), Geotechnical Consultants (1989, 1990, and 1993), Ecology and Environment, Inc. (E&E; 1990), and Bechtel (1997). The present-day Los Angeles basin (often referred to as the Coastal Plain) is at the north end of the Peninsular Ranges geomorphic province. The physiographic basin is bounded on the east and southeast by the Santa Ana Mountains and San Joaquin Hills; on the northwest, it is bounded by the Santa Monica Mountains of the Transverse Ranges province, and the province boundary is an east-trending zone of faults.

Geology Setting

The Los Angeles Basin (Coastal Plain) is underlain by a structural depression of great relief and complexity in relation to its geologic youth, small size, and prolific oil production. The Los Angeles Basin is subdivided into four structural blocks, whose contacts with adjoining blocks are major zones of faulting or flexure in older basement rocks. The four structural blocks (southwestern, northwestern, central, and northeastern) have unique stratigraphic characteristics based on distribution, thickness, and internal structure. The Site lies within the central block.

The dominant structural feature of the central block of the Coastal Plain is a northwest-trending, doubly-plunging syncline that underlies its central part. The basement in the trough of this syncline is as deep as 30,000 feet below sea level. The central part of the basin continued to subside and to receive sediment throughout late Pleistocene and Recent times. Floods of coarse clastic debris derived from the distant San Gabriel Mountains and the rapidly rising Puente Hills, Santa Ana Mountains, and eastern Santa Monica Mountains pushed the retreating shoreline southward and westward. The tectonism which produced deformation within and adjacent to the Los Angeles Basin continued throughout Tertiary and Pleistocene time. The Recent-age sediments of dune sand and alluvium reportedly have not been structurally disturbed.

The Coastal Plain is underlain by more than 10,000 feet of Miocene to Recent marine and non-marine sediments which lay in nonconformity over the Triassic and Jurassic metasedimentary formations and Cretaceous batholithic units. The early Tertiary to Recent sediments of the Central basin include (oldest to youngest) the Paleocene-Eocene Chico and Martinez Formations, the Oligocene Vaqueros and Sespe Formations, the Miocene Puente, Monterey, Topanga, and Modelo Formations, the Pliocene Repetto and Pico Formations, the lower Pleistocene San Pedro Formation, the upper Pleistocene Lakewood Formation, and Recent dune and alluvium deposits.

Within the Coastal Plain area, the upper Pliocene Pico and Repetto Formations, the lower Pleistocene San Pedro Formation, the upper Pleistocene Lakewood Formation, and Recent alluvium are the primary water-bearing formations. The Pico Formation contains fresh water locally, while the underlying Repetto Formation contains saline water. The lower Pleistocene San Pedro Formation underlies almost all the Coastal Plain. Most of the important freshwater aquifers used for production within the Coastal Plain are contained within the San Pedro Formation.

The upper Pleistocene Lakewood Formation extends beneath most of the Coastal Plain. Coarse basal deposits of sand and gravel are fairly continuous, and are interbedded with discontinuous lenses of sandy silt and clay. In the upper part of the Lakewood Formation, lithologic changes are rapid, with discontinuous permeable zones and considerable variation in particle size. These features represent typical alluvial (stream) deposits, with floodplain-type, fine-grained sediments comprising from 40% to 80% of the total deposits. The Lakewood Formation hosts four water-bearing aquifers.

Recent-age materials were deposited upon the erosional surface that existed near the end of the last glacial stage (approximately 15,000 years before present). In most of the Coastal Plain these sediments are alluvial deposits, but near the ocean they include tidal, marine, and wind-deposited materials. Geologic members present within the alluvial deposits include an intermittent semi-perched aquifer, a near-surface aquiclude, a water table aquifer, and deeper aquifers.

Hydrogeologic Setting

Geological and surface features divide the Coastal Plain into four groundwater basins (Santa Monica, West Coast, Hollywood, and Central) (e.g., DWR, 1961). Groundwater basins are separated from adjacent basins by geologic features such as non-water-bearing rock, faults, or other geologic structures which impede groundwater movement, and by natural or artificial mounds or divides in the water table or piezometric surface. The Central Groundwater Basin comprises four areas: the Los Angeles Area, the Montebello Forebay Area, the Whittier Area, and the Central Basin Pressure Area. The Central Basin Pressure Area is the largest of the four subdivisions of the Central Basin. The Site is within the Central Basin Pressure Area groundwater basin that is dissected in a north-south direction by the Los Angeles River. The Site lies within the portion of the Central Basin Pressure Area west of the Los Angeles River.

Surface and subsurface waters inflow from the hills and mountains bordering the areas, and they, along with the adjacent San Gabriel and San Fernando Valleys, recharge the groundwater basins in the Coastal Plain. The extensive paving of streets and construction of urban communities has greatly reduced the areas open to direct percolation of precipitation and applied water. Extension of sewer systems discharging through ocean outfalls, improvement in surface drains, and the lining of river channels to facilitate the runoff of floodwaters also limit the volume of water that percolates into these groundwater basins.

The boundary between fresh and saline waters within the Coastal Plain is the geologic contact between the Upper Pliocene Repetto and Pico Formations. The first major freshwater-producing geologic unit in the Coastal Plain is the Lower Pleistocene San Pedro Formation. Only those members capable of storing or conveying groundwater in suitable quantities have been named as aquifers, while the intervening finer-grained zones were not named, except for the Recent-age, shallowest alluvial unit. Five separate aquifers have been recognized within the San Pedro Formation, designated (from deepest to shallowest) the Sunnyside, Silverado, Lynwood, Jefferson, and Hollydale Aquifers.

The Upper Pleistocene Lakewood Formation hosts four water-bearing aquifers, from deepest to shallowest: the Gage (deepest), the Gardena, the Artesia, and the Exposition (shallowest). The

Artesia Aquifer has a general southwesterly dip and varies in thickness and bottom configuration. The ancestral San Gabriel and Santa Ana Rivers and Coyote Creek appear to have been the main sources of the sediments comprising this aquifer. The configurations of the bases of the Exposition Aquifer and the Artesia Aquifer are highly irregular, and it appears that both were deposited on an erosional surface.

The maximum thickness of the Exposition Aquifer is 150 feet, and the unit is reportedly related to the ancestral Los Angeles River drainage system (DWR, 1961). Materials range in size from coarse gravel to clay, with the fine deposits separating lenticular sandy and gravelly beds. The upper coarse members of the Exposition appear to have been either eroded and backfilled by the overlying Gaspur Aquifer deposits, or some of the upper members were deposited contemporaneously with the formation of the younger Gaspur Aquifer. However, both the Artesia and Exposition Aquifers have been affected by folding and show slight warping near the Newport-Inglewood uplift and in the down-warped area of the Central Basin. The Potrero fault is the only known structure that displaces the Exposition Aquifer.

Recent-age geologic members that control the occurrence of groundwater within the alluvial deposits include a semi-perched aquifer, the near-surface Bellflower Aquiclude, and the water-table Gaspur Aquifer. Coarse sands and gravels of the semi-perched aquifer are found on or near the ground surface in much of the Coastal Plain. These materials vary in thickness from 0 to 60 feet and may contain significant amounts of unconfined water where they are more than 20 feet thick. Where the underlying aquifers are confined, the semi-perched aquifer is generally separated from them by silts, clays, and other low-permeability material referred to as the Bellflower Aquiclude. The relatively impermeable materials of the Bellflower Aquiclude restrict the vertical movement of water from the semi-perched aquifer into the underlying Gaspur Aquifer, which is the basal coarse phase of the Recent-age alluvium. The Gaspur Aquifer consists of alluvial deposits that range in size from boulders and gravel to silt and clay. The Gaspur Aquifer occurs within an ancestral Los Angeles River channel cut during the previous sea-level low-stand approximately 18,000 years before the present (Ehman et al., 2001). Variations in the thickness and width of the Gaspur Aquifer seem to indicate that the stream or streams responsible for original deposition were meandering, braiding, eroding, and aggrading.

Appendix A-1 contains a generalized geologic cross-section which parallels Firestone Boulevard (approximately 2,000 feet north of the site).

1.1.3 Local Hydrogeologic Setting and Groundwater Production Wells

Site Hydrogeology

The characterization of local hydrogeologic setting in this section is based on the investigations conducted for the Site, as well as for other nearby Superfund sites such as Cooper Drum to the northwest and Jervis B. Webb Co. (Jervis Webb) to the north (Geotechnical Consultants [1989, 1990, and 1993], Ecology and Environment, Inc. [1990], and Bechtel [1997]). Monitoring wells installed on and off the Site property penetrate the semi-perched aquifer, the Gaspur Aquifer, and the Exposition Aquifer. The majority of the monitoring wells EPA installed at the site were completed in the Gaspur Aquifer. There are a total of 13 locations with monitoring well installations, with 10 of those being multiple-well clusters completed in the Gaspur Aquifer, and three single wells completed in the upper portion of the Exposition Aquifer. At the Site, the Bellflower Aquiclude includes the interval from the ground surface to 50 feet below ground surface (bgs). The semi-perched aquifer within the Bellflower Aquiclude is generally encountered at a depth of approximately 30 feet bgs, while the top of the upper Gaspur Aquifer occurs at a depth of approximately 50 to 70 feet bgs. The top of the upper Exposition Aquifer occurs at a depth of approximately 110 to 120 feet bgs. The groundwater flow direction beneath the Site is to the south at a hydraulic gradient of 0.0017 feet/foot (ft/ft) in the Gaspur Aquifer.

Groundwater Production Wells

More than 90 production wells within four miles of the Site supply drinking water to 19 water systems serving more than 500,000 people. Groundwater production wells within about one mile of the Site are shown on **Figure 1-2**. The City of South Gate operates drinking water wells within one-half mile of the Site. City of South Gate wells #24 and #25 are located approximately 0.4 mile to the east, near the west edge of the concrete-lined Los Angeles River. The top of their perforated sections (or screen intervals) reportedly begin at 310 and 280 feet bgs, respectively. These two wells draw groundwater from the Gage Aquifer, the deepest aquifer of the Lakewood Formation. These wells have total depths of more than 1,200 feet, and hence also draw groundwater from aquifers of the San Pedro Formation. The Lynwood and Silverado Aquifers

of the deeper San Pedro Formation are the primary aquifers used for municipal, domestic, industrial, and commercial purposes in the vicinity of the Site.

City of South Gate production wells #13, #14, #18, and #19 are located in South Gate Park approximately 0.5 miles cross-gradient west/southwest of the Site. The screen intervals of these wells begin at approximately 600 feet bgs; thus, they draw water from the Silverado Aquifer (Figure A-1, **Appendix A**). The City of South Gate temporarily shut these wells down in 1987 due to low-level tetrachloroethene (PCE) contamination; wells #14, #18, and #19 are currently in service.

Data from City of South Gate production wells suggest the presence of VOC contamination in the immediate vicinity of the Site slightly greater than EPA maximum contaminant levels (MCLs). Well #7 is located approximately 2,000 feet cross-gradient and upgradient (north) of the Site, and Well #23 is located approximately 200 feet downgradient and south of the Site. The screen intervals of these wells begin at 500 and 530 feet bgs, respectively. Well #7 has shown low-level PCE and trichloroethene (TCE) concentrations of up to 9.9 micrograms per liter (ug/L) (City of South Gate, 2001), and Well #23 has also shown low-level PCE concentrations (E&E, 1990). Neither of these wells is active, and more-recent analytical data are not available.

The City of South Gate currently operates seven of its 11 existing production wells, as specified in the city's 2015 Urban Water Management Plan (City of South Gate, 2016). The active wells are #14, #18, #19, #24, #26, #27, and #28 (**Figure 1-2**; wells #26, #27, and #28 are located more than one mile from the Site and do not appear on this figure). The active wells have a combined rated/tested capacity of about 13,500 gallons per minute (gpm), or 19.4 million gallons per day (mgd). Six of the active wells discharge into existing storage reservoirs. Well #28 discharges directly into the distribution system using on-site chlorination. A brief description of the City of South Gate production wells located within one mile of the Site is provided below:

Well #13 (Standby): The City of South Gate drilled this well in 1940 in South Gate Park (**Figure 1-2**). The well is screened from depths of 600 to 758 feet, and has 16-inch-diameter casing. Well #13 discharges into the South Gate Park Reservoir. Chlorinated solvents including TCE and PCE have been detected in this well.

Well #14: The City of South Gate drilled this well in 1944 in South Gate Park. The well is screened from depths of 615 to 715 feet, has an 18-inch-diameter casing, and discharges into the South Gate Park Reservoir.

Well #18: The City of South Gate drilled this well in 1945 in South Gate Park. The well is screened from depths of 620 to 762 feet, and has an 18-inch-diameter casing. Well #18 discharges to South Gate Park Reservoir.

Well #19: The City of South Gate drilled this well in 1947 in South Gate Park. The well is screened from depths of 610 to 746 feet, and has an 18-inch-diameter casing. Well No. 19 discharges to South Gate Park Reservoir.

Well #23 (Standby): The City of South Gate drilled this well in 1952 just west of the Los Angeles River and south of Southern Avenue. The well is screened from 530 to 798 feet, and has an 18-inch-diameter casing. The well has suffered from periodic sand production problems, as well as manganese contamination. However, basic water quality at this well has been consistently good.

Well #24: The City of South Gate drilled this well 1985 at the Hawkins Reservoir site, about 2,000 feet northeast of the SAIA property. The well is screened from 310 to 630 feet deep, and has a 16-inch and 20-inch-diameter casing.

Well #25 (Standby): The City of South Gate drilled this well in 1985 at the Hawkins Reservoir site. The well is screened from 280 to 1,310 feet deep, and has a 16-inch and 20-inch-diameter casing. Water quality has generally been good.

Other Wells

One Water Replenishment District (WRD, 2018) nested monitoring well screened at multiple depths is present in the first block south of the SAIA property (**Figure 1-2**). This well, South Gate (SG) #1, is screened at various depth intervals ranging from 220 to 1460 feet bgs. These intervals are below the depth of the SAIA plume in this area, which ranges only to the lower Gaspur Aquifer (about 110 feet bgs), as discussed in **Section 4.3.3** and **Section 4.3.4** and depicted in related figures.

1.1.3.1 Operational History

Initially (from at least 1942 until 1951), Pacific Screw Products Corporation manufactured screw products at the site. According to City of South Gate building records and Sanborn maps, there was a large-scale manufacturing operation that included five large oil tanks having a combined capacity of approximately 72,000 gallons. A significant amount of this oil was likely used as cutting oil.

To produce a final product, operators removed the cutting oil in designated degreasing areas. One major degreasing area was located near the northeastern corner of the SAIA property inside a room that contains three former concrete sumps ("Former Degreasing Building" on **Figure 1-3**). Operators may have performed degreasing in the former oil recovery building, at least during the operation of Pacific Screw Products.

From approximately 1951 until 1972, when the business went bankrupt, Screw Products of America, a division of Monogram Industries, manufactured screw products at the subject site. According to Sanborn maps, the operation did not materially change from the Pacific Screw era, as the Sanborn Map from 1970 shows the same oil tanks and degreasing area in use. While the historic available documentation does not list what chemicals the screw manufacturing companies employed for degreasing, it is well documented that chlorinated solvents were most commonly used for degreasing after the 1940s.

From 1972 until 2013, Seam Masters Industries operated at the SAIA property with two enclosed buildings, one partially enclosed building (shed), a pallet manufacturing area, and a paved parking lot. The larger enclosed building, located near the center of the property, was the center of operations for the hot-melt adhesive manufacturing process and dry-goods storage. The hot-melt adhesive manufacturing process involved knitting a fiberglass or cotton roll, approximately five inches wide and several yards long. In a large bin, operators combined ethyl vinyl acetate (EVA), polyethylene, and tackifying resin to create a hot-melt adhesive which was formed first into long, thin strands, approximately one centimeter (cm) thick, and then cut into small pieces. Operators then melted the hot-melt adhesive pieces and the viscous liquid slowly poured onto the fiberglass or cotton rolls. A circular metallic wheel then cooled these rolls. The circular metallic wheel was kept at a low temperature using a refrigeration process. The refrigeration process

used the anti-freezing agent propylene glycol, which Seam Master Industries stored on the site in 55-gallon drums (Weston, 2003).

Seam Master Industries used the shed, located in the southeastern portion of the property, for storage. The pallet manufacturing area was located in the northwestern portion of the property, in an uncovered but paved area. Three concrete vaults containing oil above-ground storage tanks (ASTs) were also located in this northwestern area (**Figure 1-3**). Weston (2003) reported that these tanks had been removed prior to 1972, but the vaults remain. For the EPA preliminary assessment/site inspection (PA/SI), Weston (2003) collected samples from a variety of locations, including near a "sump" (the area of the three sumps at the degreasing building; **Figure 1-3**) and near an underground storage tank (UST) associated with the UST dispenser located in the southeastern portion of the property (**Figure 1-3**). Weston (2003) identified these three areas–the concrete vaults, the sump, and the UST–as the main Areas of Concern (AOCs) on the property. Weston also noted that there was no evidence for use of chlorinated solvents after 1972, when screw manufacturing last occurred at the property.

1.1.4 Summary of Previous Investigations and Related Nearby Work

Past operations associated with the SAIA Site, the Cooper Drum Superfund Site, and the Jervis Webb Superfund Site have contaminated the groundwater in the Gaspur Aquifer. Prior investigations conducted on and downgradient from the Site have identified the presence of volatile organic compounds (VOCs) in groundwater. A summary of the previous investigations conducted at SAIA, and work on or near the SAIA property but conducted for Cooper Drum investigations, is presented below:

- In 2002, URS, on behalf of the U.S. Environmental Protection Agency (EPA), completed a Remedial Investigation for the Cooper Drum Superfund Site (URS, 2002). In March 1999 and October 2000, EPA discovered groundwater contamination beneath the SAIA property during a remedial investigation of the adjacent Cooper Drum Superfund Site. EPA conducted depth-discrete groundwater sampling using Cone Penetrometer Testing/Hydropunch (CPT/HP) borings (CPT-8 to CPT-10, CPT-20, and CPT-21) at the SAIA site to delineate the eastern extent of the Cooper Drum groundwater plume (**Figure 1-4**). The analytical results indicated another groundwater plume of VOCs (TCE and *cis*-1,2-dichloroethene [*cis*-DCE]) beneath the southeastern portion of the SAIA site.
- In 2002, The Source Group, Inc, completed a Phase I Environmental Assessment for the Seam Master Industries Site on behalf of the property owner (The Source Group, Inc.,

2002). Results of this assessment indicated that areas on the property posed environmental concern. These areas included several sumps containing oil and water; three abandoned concrete-lined pits previously used for AST secondary containment; a UST at the southern perimeter of the SAIA property; and an abandoned sump located south of a warehouse structure adjacent to a railroad spur along the eastern perimeter of the SAIA property.

- In 2003, Weston, on behalf of EPA, completed a Preliminary Assessment/Site Inspection (PA/SI), for the Seam Master Industries property [SAIA] (Weston, 2003). Results of the PA/SI indicated that three areas of environmental concern exist on the SAIA property: the location of three former ASTs, an underground sump, and a UST. Weston reported VOC impacts in soil and groundwater analyses of samples collected on and off the property during the PA/SI. The investigation concluded that VOCs were released into the soil and groundwater beneath the SAIA property and that there was subsequent off-site migration in groundwater to downgradient areas, and attributed the release of VOCs to past operations at the SAIA property.
- In 2007, Lindmark Engineering completed a Site Evaluation for the site on behalf of the former tenant, Seam Master Industries (Lindmark Engineering, 2007). This site evaluation included additional soil sampling at the machine shop. This site evaluation reported similar contamination and concentrations to those identified in the previous PA/SI and provided a description of the handling of hazardous chemicals at Seam Master Industries.
- Beginning in 2003 and until 2009, EPA performed field activities for the remedial design and cleanup of the Cooper Drum Superfund Site (URS, 2007; ITSI, 2010). EPA installed additional CPT/HP borings and monitoring wells on and downgradient from the source site to define the areas of plume commingling. ITSI (2010) presented the estimated areas of the plumes and commingling in *Remedial Design Technical Memorandum (RDTM) for Field Sampling Results Addendum No. 4, Monitoring Well Installations, Pumping Test, and Groundwater Sampling Results, April/May 2009, Cooper Drum Company Superfund Site*. Groundwater monitoring wells installed in 2009 included four triple-completion wells and one single-completion well in the Gaspur Aquifer on and downgradient from the Cooper Drum site (MW42-44, MW-45, MW46-48, MW49-51, and MW52-54 [see **Figure 1-4**]).

1.1.4.1 Initiation of EPA RI Activity

EPA discovered contamination at the Site (SAIA) property during the RI effort conducted as part of the adjacent Cooper Drum Superfund Site (Cooper Drum). EPA conducted groundwater investigations on and around the SAIA property in March 1999 and October 2000 to assess the extent of contamination of the Cooper Drum plume to the east of Cooper Drum. Analytical results from the two sampling events indicated a separate groundwater plume of VOCs, with high concentrations of TCE, *cis*-DCE, and 1,1-dichloroethene (1,1-DCE), occurring beneath the

SAIA property. Based on those findings, EPA identified the SAIA property as a "high priority" Site requiring further environmental assessment under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). EPA entered the SAIA Site into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) on February 1, 2002 as "Seam Masters Industries" (EPA ID No.: CAN000905902(1)).

Weston Solutions, Inc. (Weston) performed a PA/SI at the SAIA property, on behalf of EPA in 2002. The California Department of Toxic Substances Control (DTSC) issued an order to the property owners and operator in June 2007 to characterize and remediate site contaminants, but both declined to do as directed. Since 2007, DTSC has been unsuccessful in compelling the potentially responsible parties to conduct work at the Site. Due to the lack of enforcement resources as well as the proximity of the Site to the existing Cooper Drum NPL site, DTSC requested that EPA assume the role of lead agency for the Site to ensure that investigative work continues and cleanup work begins. Site investigation and cleanup activities were thus returned to EPA. EPA proposed the addition of the SAIA property, at the time referred to as the "Seam Masters Industries" site, to the Superfund NPL in September, 2011. EPA finalized the SAIA property to the Superfund NPL as the "Southern Avenue Industrial Area" site in May, 2012.

1.1.5 Nearby Contaminated Sites

This section describes results of groundwater investigations conducted at nearby sites with groundwater contamination in the immediate vicinity of the Site. Information for these nearby sites has been obtained from Regional Water Quality Control Board (RWQCB) file data and the EPA website.

Five sites surrounding the Site have been contaminated with VOCs in groundwater. The five sites discussed in this section include: the Jervis Webb site, located at 5030 Firestone Boulevard; the former Dial Corporation site, located at 9300 and 9400 Rayo Avenue; the Cooper Drum site, located on 9316 South Atlantic Avenue; the Atlantic Avenue South Gate Plume (AASGP) site, located immediately north of the northwestern corner of the Legacy HS Site; and the Legacy High School (HS) property, located at 5225 Tweedy Boulevard, South Gate, California. **Figure 1-2**

depicts the location of each of these source property locations in relation to the Site, except for the AASGP, where the source property was determined to be unknown.

1.1.5.1 Jervis Webb Superfund Site

The Jervis Webb Superfund Site properties are located at 5030 Firestone Boulevard and 9301 Rayo Avenue in South Gate, northwest of the SAIA property. The Jervis B. Webb Company of California ("Jervis B. Webb Company") conducted metal fabrication, finishing, painting, and assembly operations associated with the manufacture of industrial conveyor belt systems from the 1950s to early 1996 on the southeastern portion of the site. In 1997, Reliable Steel, Inc., purchased this property (Rayo Parcel). The Jervis B. Webb Company purchased the northwestern property (Firestone Parcel) in 1975 from Spear Industries. Blake Rivet Company, which produced aluminum and stainless steel aircraft rivets, leased this northwestern portion of the site from 1953 until approximately 1979. Recent RI data collected by EPA for the Jervis Webb RI suggests that TCE and *cis*-DCE are migrating in groundwater from beneath the Jervis Webb site in a southeasterly direction toward the ELG Metals facility. **Appendix A-2** includes a groundwater contour map of the water surface elevations measured for the shallow interval of the Gaspur Aquifer in May 2017 at the Jervis Webb site. As shown on Figure A2-1, the groundwater flow direction is southeast to south, consistent with data collected for this site since November 1998; slight variations to southwesterly flows in localized parts of the Site have occurred through the years. Groundwater samples collected from the Jervis Webb site have shown analytical concentrations of TCE in the groundwater up to 33,000 micrograms per liter (ug/L) at the contaminant source area, and *cis*-DCE up to 17,000 ug/L in the downgradient area beneath the ELG Metals facility. **Appendix A-2** also includes a TCE plume map from the May 2017 monitoring event. The TCE plume map indicates the groundwater plume is migrating off the Jervis Webb site from the southern portion of the Rayo Parcel, with a total plume length of at least 1,200 feet south/southeast of the source area in the Firestone Parcel.

cis-DCE, as the breakdown product of the TCE, is the most predominant VOC analyte in the downgradient area of the Jervis Webb plume beneath the ELG Metals facility. Laboratory analyses detected the highest *cis*-DCE analytical concentration, 17,000 ug/L, from a sample collected in the intermediate Gaspur Aquifer (well JWMW-11B) in May 2017. A downward

migration of Jervis Webb VOC contaminants was also evident beneath the ELG Metals facility to a maximum investigated depth of 143 feet bgs in the Exposition Aquifer, where laboratory analyses detected a low concentration of *cis*-DCE above the MCL in groundwater sampled at well JWMW-12.

1.1.5.2 Former Dial Corporation Site

The main facility of Dial Corporation, formerly located at 9300 and 9400 Rayo Avenue (the main facility was located at 9300 Rayo Avenue), was the site of soap-making operations from the 1920s until the 1980s. Investigations in the 1990s revealed that petroleum hydrocarbons were the primary compounds impacting shallow soils and groundwater on the site, along with some chloroform and methylene chloride. Dial excavated soil and operated a soil-vapor extraction system under RWQCB oversight that removed approximately 34,000 pounds of volatile petroleum hydrocarbons (EMCON, 1996). Among chlorinated hydrocarbons, laboratory analyses detected 1,1-DCA and TCE only locally in soil and groundwater, with the primary detections being for TCE in groundwater along the western boundary of the former Dial Corporation facility: 1,400 ug/L of TCE was reported for a 1993 sample analysis of groundwater from monitoring well MW-5, located west of Rayo Avenue across from the Dial Corporation operations and along the southeastern edge of the Rayo parcel of the Jervis Webb properties (EMCON, 1996). This detection was not traceable to sources on the Dial facility, and was downgradient from the Jervis Webb contaminant source area; therefore, consistent with EMCON's conclusion in a 1996 progress report (EMCON, 1996), the RI team for Jervis Webb (Gilbane, 2018) concluded that the reported analytical detections of TCE represented groundwater contamination from Jervis Webb rather than from the former Dial Corporation facility.

1.1.5.3 Cooper Drum Superfund Site

As described in the Record of Decision for the Cooper Drum site, EPA estimated the groundwater plume from Cooper Drum to be 800 feet long and 250 feet wide, extending approximately 400 feet southeast of the Cooper Drum boundary. As depicted in contaminant plume maps and discussion in **Section 4.3**, the plume now extends approximately 1,200 feet downgradient from this boundary. Investigations and analyses have not detected dense non-

aqueous phase liquids (DNAPLs) in soil or groundwater at Cooper Drum. The groundwater flow direction beneath the source area of contamination (west of Rayo Avenue) is to the southeast. East of Cooper Drum along Rayo Avenue, the groundwater flow direction is southerly.

Shallow groundwater beneath Cooper Drum occurs within or is controlled by an area of lower permeability, the near-surface Bellflower Aquiclude, which incorporates a perched aquifer. The perched aquifer is present beneath the source area at approximately 35 feet bgs and is at least 5 feet thick. The perched aquifer in the area is intermittent and EPA and the Cooper Drum Cooperating Parties Group have not determined its lateral extent. Groundwater sample analyses indicate contamination above drinking water standards down to the shallow Gaspur Aquifer, which extends to depths of approximately 110 feet bgs. EPA defined the extent of the Cooper Drum contaminant plume approximately 400 feet southeast of the property boundary, and delineated two other contaminant plumes to the east: the "northeast plume" attributed to Jervis Webb, and the "southeast plume" attributed to SAIA (URS, 2002). Remedial activities at the Cooper Drum site are ongoing; the Cooper Drum Cooperating Parties Group began operating a soil-vapor extraction system and dual-phase extraction system in 2011, and began operating a groundwater extraction system in 2012 (AMEC, 2012).

1.1.5.4 Atlantic Avenue South Gate Plume Site

The Atlantic Avenue South Gate Plume (AASGP) site, located approximately 1,000 feet southwest of the SAIA property (**Figure 1-2**), is a VOC groundwater plume with no currently identified source. On behalf of EPA, Weston (2012) conducted a Site Inspection (SI) of the AASGP. During the SI, Weston collected perched aquifer analytical groundwater samples from eight of the nine CPT locations at depths that ranged from 32 to 39 feet bgs, and collected Gaspur Aquifer analytical groundwater samples from all CPT locations at depths between 67 and 75 feet bgs. The groundwater plume associated with the AASGP site is defined by relatively high concentrations of TCE and TCE degradation products, primarily *cis*-DCE, within the semi-perched aquifer of the Bellflower Aquiclude and the shallow Gaspur Aquifer (Weston, 2012).

1.1.5.5 Los Angeles Unified School District (LAUSD)

The Legacy School property, owned by the Los Angeles Unified School District (LAUSD), is located at 5225 Tweedy Boulevard, South Gate, California. The 35-acre Site was separated into

several operable units (OUs) to facilitate the environmental investigation (RI/FS) and cleanup by LAUSD under the oversight of DTSC (AECOM, 2013). The Legacy School is approximately 1,250 feet downgradient of the SAIA property. Laboratory analyses of groundwater samples detected nine VOCs and 1,4-dioxane above their respective MCLs or Notification Levels (NLs). The groundwater sampling analytical results (Accord Engineering, Inc., 2015) from the perched and shallow zones indicate a source of VOCs is present beneath the LAUSD property. The VOC plume emanating from beneath the LAUSD property is likely commingling with the SAIA plume at the intermediate and lower Gaspur Aquifer, at depth under the LAUSD property (Gilbane, 2017d).

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2.0 REMEDIAL INVESTIGATION ACTIVITIES

EPA performed the RI activities described in this report from 2012 to 2017. The EPA field team implemented and performed these activities in accordance with the *Final Sampling and Analysis Plan, Remedial Investigation/Feasibility Study, Southern Avenue Industrial Area Superfund Site, South Gate, California* (SAP; ITSI Gilbane, 2012), and the *Sampling and Analysis Plan, Vapor Intrusion Evaluation, Southern Avenue Industrial Area Superfund Site, South Gate, Los Angeles County, California* (Indoor Air SAP; Gilbane, 2015a). The specific field activities, tests, and analyses completed for the RI included:

- soil analytical sampling,
- soil gas analytical sampling,
- Indoor and outdoor air analytical sampling at residential properties, preceded by building walk-through inspections to evaluate indoor air parameters and sampling locations,
- discrete-depth groundwater (Hydropunch™ method) analytical sampling,
- cone penetrometer testing (CPT) of soil,
- monitoring well installation,
- groundwater elevation monitoring and analytical sampling.

2.1 SOIL INVESTIGATION

The RI field team (field team) completed subsurface lithologic characterization primarily using CPT drilling, and investigated contaminated soils by collecting discrete soil analytical samples from soil borings advanced using the direct-push technology (DPT) method.

2.1.1 Cone Penetrometer Testing

The field team advanced a total of 22 boreholes (SAIA-CPT01 through SAIA-CPT22) using CPT methods in three separate events in March 2013, July 2015, and June 2016 (**Figure 1-4**). The CPT investigation served two purposes: to further define the lithology and to confirm whether contaminants impacted groundwater. The field team collected groundwater samples at discrete depths from the CPT borings using Hydropunch sampling methods. The field team used the subsurface profiling provided with each CPT log to perform basic stratigraphic correlation and mapping, as well as to support the design of permanent monitoring wells. **Section 3.2.1**

provides specific information on the data obtained from CPT logging, and how it applies to geologic cross-section development. **Appendix B** includes the CPT logs.

2.1.2 Soil Borings

The drilling subcontractor collected soil samples using a truck-mounted or a limited-access DPT drill rig. The DPT method consisted of advancing drill rods to the desired sampling depth. The drillers attached drill rods to a sample tube equipped with a retractable drive point, and lowered a narrow sampling rod through the center of the drill rod into the sample tube to unscrew the drive point. With the drive point loosened, the drillers drove the sample tube down to fill the sampler with soil. When full, the drillers retracted the sampler to the surface and prepared it for delivery to the applicable laboratory for analysis. The drillers advanced each soil boring to a maximum depth of 35 feet bgs, and collected six soil samples from each boring location at approximately 0.5, 2, 5, 15, 25, and 35 feet bgs.

The EPA field team conducted three subsurface soil investigation events from April 1 through April 4, 2013; from March through April 2014; and during April 2017, collecting approximately 226 total analytical samples from 37 soil boring locations (SAIA-SB/SG01 through -SB12, SAIA-SB/SG18 through -SB/SG39, and SAIA-SB/SG44 through -SB/SG47, respectively (**Figure 2-1**). Soil boring locations were determined based on areas of concern of historical operations, and subsequent data gaps, as specified in the SAP (ITSI Gilbane, 2012).

The field team submitted soil samples for laboratory analysis of EPA Priority Pollutants including metals, VOCs, SVOCs, and polychlorinated biphenyls (PCBs). Soil boring logs are in **Appendix B**.

2.2 SOIL GAS INVESTIGATION

For the soil gas investigation, the drilling subcontractor advanced temporary soil gas borings to 35 feet bgs utilizing the DPT method, and completed each boring with four separate sampling points at intervals of approximately 4 to 5, 14 to 15, 24 to 25, and 34 to 35 feet bgs. The driller installed a perforated ceramic sample point and ¼-inch Teflon tubing at the bottom of each sample interval and added coarse aquarium-grade silica sand as a filter medium around each sample point. The annular spaces between sampling intervals, and from the shallowest sampling

interval to ground surface, were sealed with sodium bentonite, hydrated in place. In all three soil gas sampling events, the field team waited for the equilibration period recommended in the guidance documents *DTSC Advisory – Active Soil Gas Investigations* (2012, 2015) after installation of the temporary soil gas wells and prior to any purging or sampling. The field team performed an initial purge volume test following the DTSC Advisory – Active Soil Gas Investigation guidelines (DTSC, 2012). The field team calculated tubing and sample point volumes, and purged volumes of one, three, and ten times the tubing/sample point volume from each sample interval from one location based on historically high VOC concentrations in groundwater. Based on analytical results (e.g., highest concentrations), the field team selected the optimal purge volumes most appropriate for soil gas sampling conducted for each event.

The EPA field team conducted the soil gas investigation in three separate events in April 2013, April-May 2014, and April 2017, collecting a total of 200 soil gas analytical samples (including 16 field duplicates) from 47 temporary soil gas boring locations (**Figure 2-1**). For the first event, the field team advanced 18 borings (15 on the SAIA property, three off-property) in areas of concern based on site inspections and existing soil and groundwater data (Final SAP, RI/FS Study, ITSI Gilbane, October 2012). The subsequent event of April-May 2014 was based primarily on data gaps identified from the April 2013 event. This second event included 25 soil-gas sampling locations (16 locations installed on the SAIA property, nine off-property) to evaluate the extent of soil gas migration and the potential for soil-vapor intrusion from elevated VOC concentrations present in either shallow soil gas or groundwater. For the 2017 event, the field team collected soil-gas samples from four borings located just east of the SAIA property (SAIA SB/SG-44 through SAIA SB/SG-47) to further delineate the eastern margin of the source area.

For the 2013 and 2014 events, the field team retained an on-site mobile analytical laboratory (H&P Mobile Geochemistry, Inc.) to analyze samples in the field, and to evaluate soil-gas concentrations on a "real-time" basis. For the smaller 2017 event, the field team submitted soil-gas samples only to EPA Region 9 Laboratory for analysis. The field team also collected split samples and sent them to the EPA Region 9 Laboratory for analysis. The field team collected soil gas samples initially in a Tedlar bag and then immediately transferred the sample volume

into a syringe for the mobile laboratory split sample, and into a 1-liter summa canister for the EPA Region 9 laboratory split sample. The EPA Region 9 laboratory provided certified canisters for the sampling events. Prior to sampling, the field team recorded the initial vacuum in each canister. To collect representative soil gas samples, vacuum in the canister is required to be between 25 and 30 inches of mercury (in Hg). If canister pressure did not meet that requirement, the field team did not use the canister and returned it to the EPA R9 laboratory. After checking for vacuum pressure, the field team connected the canister to the tubing, and slowly opened the valve. The field team considered sampling to be complete when pressure in the canister reduced to between -5 and -7 in Hg relative to atmospheric pressure.

Upon completion of soil gas sampling activities, the field team removed all soil gas probes and construction materials from each borehole, backfilled the boreholes from total depth to approximately six inches bgs with bentonite grout, and filled the remaining portion with material appropriate to match the pre-existing ground surface conditions (e.g., asphalt or concrete). The field team disposed of all used soil gas probe construction and sampling materials as non-hazardous waste.

2.3 VAPOR INTRUSION INVESTIGATION ACTIVITIES

EPA conducted vapor intrusion (VI) investigation activities consisting of indoor air sampling at those residences located nearest the SAIA property, located above groundwater with elevated analytical concentrations of VOCs, and located in areas where soil gas analytical data indicated a potential exposure risk to occupants. The field team conducted the VI investigation for the residential dwellings in accordance with the *Sampling and Analysis Plan, Vapor Intrusion Evaluation, Southern Avenue Industrial Area Superfund Site, South Gate, Los Angeles County, California* (VI SAP; Gilbane, 2015a). A *Final Supplemental Sampling and Analysis Plan, Vapor Intrusion Evaluation, Southern Avenue Industrial Area Superfund Site, South Gate, Los Angeles County, California* [Gilbane, 2017] was completed for industrial indoor air sampling, but was not implemented because of access issues at the industrial sampling locations. From the VI SAP, the principal study questions to fulfill the data quality objectives are:

1. Are PCE and/or TCE from the subsurface migrating into residential structures adjacent to and downgradient of the site?

2. Are the detected indoor air concentrations in the sampled residential structures above the residential indoor air RSLs (EPA, 2015c)?
3. What are the sources of the detected VOCs in indoor air?

The boundaries of the VI investigation primarily included the residences where nearby soil gas concentrations exceeded residential screening levels for VOCs. The soil gas analytical data collected off-site and downgradient from the Site property contained VOCs exceeding applicable screening levels for *cis*-DCE, PCE, and TCE; these concentrations were generally higher at locations nearest to the SAIA property and at deeper sample intervals (25 feet to 35 feet bgs).

2.3.1 Residential Properties

EPA conducted indoor air sampling to determine if vapor intrusion is a pathway of concern in residential structures downgradient of the SAIA property (**Figure 2-1**). Before collecting samples, the field team completed preparatory steps including notification of property owners and tenants of the affected buildings, and an assessment of each dwelling to determine optimal sample locations, identify the presence or absence of a crawlspace, understand the building structure and air flow, and identify potential interferences (e.g., household products) that could affect indoor air quality. The field team recorded the findings of these assessments on the Indoor Air Quality Survey forms presented in **Appendix C**. The field team collected indoor, outdoor, and crawlspace air samples at a total of eight residences located south of the SAIA property in April 2015 and January 2016 using charcoal-based Radiello® RAD130 passive-type air samplers, and shipped them for laboratory VOC analysis. Six of the parcels for indoor air sampling had multiple residential units; one residential unit was selected and sampled at these parcels. One parcel had a building with multiple apartments; three units (Units A, B, and D) were sampled at this parcel. The field team collected a total of 28 air samples in the two sampling events (14 samples per event; two samples at each location except where indicated) at the following properties:

<u>17 indoor samples from 6 buildings:</u>

- Building #1 at McCallum Avenue (2 samples [RES 01-IA]).
- Building #2 (Unit 1) at McCallum Avenue (2 samples [RES 02-IA]).
- Building #3 (Unit A) at McCallum Avenue (2 samples [RES 03-IA]).

- Building #3 (Unit B) at McCallum Avenue (2 samples [RES 04-IA]).
- Building #3 (Unit D) at McCallum Avenue (2 samples [RES 05-IA]).
- Building #4 at McCallum Avenue (2 normal samples and 1 field duplicate [RES 06-IA]).
- Building #5 (Unit 1) at McCallum Avenue (2 samples [RES 07-IA]).
- Building #6 at McCallum Avenue (2 samples [RES 08-IA]).

5 outdoor samples from 3 locations:

- Building #1 at McCallum Avenue (1 normal sample, 1 field duplicate [RES 01-OA]).
- Building #4 at McCallum Avenue (2 samples [RES 06-OA]).
- Building #5 at McCallum Avenue (1 sample [RES 07-OA]).

6 crawlspace samples from 3 locations (corresponding to similar-numbered indoor samples):

- Building #1 at McCallum Avenue (2 samples [RES 01-CS]).
- Building #2 at McCallum Avenue (2 samples [RES 02-CS]).
- Building #6 at McCallum Avenue (2 samples [RES 08-CS]).

The EPA field team deployed the samplers, generally at the approximate breathing zone of the residents (approximately 3 feet to 5 feet above ground/floor surface), and left them undisturbed for the duration of the 7-day sampling period. For those residences with crawlspaces, the field team placed additional samplers within the crawlspaces. Outdoor air samples, collected on the same day and concurrently with the deployment of indoor air samplers, were generally located outside and away from wind-shielding objects such as buildings, trees, or bushes, but upwind of each structure and placed approximately 3 feet to 5 feet off the ground.

After the 7-day sampling period, the field team collected the passive air samplers and submitted them to Eurofins Air Toxics, an EPA-certified laboratory located in Folsom, California, which analyzed them for PCE, TCE, and their primary breakdown products, in accordance with EPA Method TO-17 (EPA, 1999), modified for low detection limits and selective ion monitoring.

2.3.2 Commercial Properties

The EPA was unable to gain access to investigate the VI potential on neighboring commercial properties south of the SAIA property.

2.4 GROUNDWATER INVESTIGATION

The EPA field team began the groundwater investigation in February 2013. The field team employed CPT profiling and HP sampling methods to define the subsurface stratigraphy and to collect discrete-depth groundwater samples for delineating the VOC plume at the Site. Subsequently, the field team installed permanent monitoring wells consisting of multiple- and single-construction wells to evaluate the extent of the VOC plume within the Gaspur Aquifer and the Exposition Aquifer.

2.4.1 Groundwater Discrete-Depth Sampling

The field team performed discrete-depth groundwater sampling using the combination of the CPT method (described in **Section 2.1.1** and **Section 3.2.1**) and the HP method (described here). At each of the CPT/Hydropunch locations, the drilling subcontractor pushed the electronic cone penetrometer tool, which consisted of an instrumented metal strain gage probe, into the soil at a constant rate using a 20-ton truck-mounted rig. After the driller manipulated the CPT data using computer processing techniques, the field team interpreted subsurface lithology and selected sampling depths based on the resulting CPT profile. The driller advanced another borehole within a radius of five feet of the CPT profiling borehole, and used the Hydropunch sampling tool to collect the discrete-depth groundwater samples at specific depths. The Hydropunch tool consisted of a nominal 2-inch-diameter by 5-foot hollow stainless-steel cylinder and drive point attached to slotted polyvinyl chloride (PVC) piping. The drilling subcontractor pushed the sampler with the CPT rig to the desired depth, then retracted the sampler by 6 inches to expose the PVC slotted piping, and allowed it to fill. The field team then sampled groundwater using a small stainless steel bailer to collect and transfer the sample volume to the appropriate laboratory sampling containers.

The field team advanced 17 CPT/Hydropunch borings (SAIA-HP10, -17, -18, -21, -36, and SAIA-CPT02 through -13) in February and March 2013 to define the groundwater contaminant plume at locations on the SAIA property, on ELG Metals facility to the north, in areas east of the SAIA property, and in downgradient areas to the south, to about 1,100 feet south of the SAIA property. These locations enabled (1) characterization of the upgradient portions of the Site, where other plumes (Jervis Webb and Cooper Drum) were suspected to be present and to

potentially commingle with the SAIA plume; and (2) characterization of the high-concentration portions of the SAIA plume south of the SAIA property. In July 2015 the field team advanced CPT/Hydropunch borings SAIA-CPT14 through -20 to define groundwater contamination on the LAUSD lots on either side of Tweedy Boulevard (**Figure 1-4**), where both the SAIA and LAUSD contaminant plumes are present. At all these locations, the field team collected discrete-depth samples from the semi-perched aquifer (where possible; this unit was sometimes dry); the shallow, middle, and lower Gaspur Aquifer; and the Exposition Aquifer.

2.4.2 Monitoring Well Installation and Development

During the RI, the field team installed a total of nine triple-completion and four single-completion wells (at locations SAIA-MW01 through SAIA-MW13) to evaluate the extent of groundwater contamination (**Figure 1-4**). Triple-completion wells were constructed with three screening interval depths within the same borehole to intercept the shallow, intermediate, and lower portions of Gaspur Aquifer. Identifiers for wells in these three units contain the suffixes A, B, or C, respectively (e.g., SAIA-MW1A indicates shallow Gaspur Aquifer, etc.). The field team installed the single-point completion wells to monitor groundwater in the upper portion of the Exposition Aquifer; the identifiers for these wells are SAIA-MW7, -8, -10, and -13. The monitoring wells were constructed of 2-inch-diameter, Schedule 40 PVC casing and 0.020-inch milled-slot PVC screen installed in a nominal 12-inch-diameter borehole; for single-completion wells, borehole diameter was 8 inches. Well screens ranged from 5 to 10 feet in length. During well construction, the drillers placed a filter pack to approximately 2 feet above the top of the well screen and filled the remaining portion of the annular space of the borehole with a mixture of neat cement grout. At the ground surface, a 12-inch-diameter traffic-rated well box was set in concrete.

Following a minimum of 24 hours after installation, the field team developed each new monitoring well by swabbing, bailing, and submersible pumping, and removed a minimum of 10 well casing volumes of groundwater from each well during development. The field team measured groundwater during well development for field water-quality parameters, and continued development until field groundwater parameters stabilized (i.e., pH ± 0.1 pH units, specific conductance ± 5 percent of previous readings, temperature ± 1degree Celsius [°C], and

turbidity less than 10 nephelometric turbidity units [NTU]; or 25 NTU for clay formations, in accordance with the SAP [ITSI Gilbane, 2012])). **Appendix B** includes monitoring well construction logs and **Appendix C** includes well development forms used to record field data during well development.

2.4.2.1 Monitoring Well Sampling

The field team sampled groundwater monitoring wells in four separate events, in March and August 2014, and July and September 2016. The network of wells selected for monitoring and sampling for this RI included existing and newly installed monitoring wells. **Figure 1-4** shows the network of existing and new monitoring wells sampled for the RI. **Table 2-1** presents a summary of the wells installed for the RI, and **Appendix B** includes as-built well construction details.

The field team sampled the monitoring wells in four events as follows:

- New wells installed in 2014 (sampled March and August 2014) – SAIA-MW1A/B/C, SAIA-MW2A/B/C, SAIA-MW3A/B/C, SAIA-MW4A/B/C, SAIA-MW5A/B/C, SAIA-MW6A/B/C, SAIA-MW7, SAIA-MW8.
- Existing wells installed as part of the Cooper Drum RI/RD (sampled March 2014) – MW-34, MW-35, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, MW-48, MW-49, MW-52, MW-56.
- New wells installed in 2016 (sampled July and September 2016) – SAIA-MW9A/9B/9C, SAIA-MW10, SAIA-MW11A/11B/11C, SAIA-MW12A/12B/12C, and SAIA-MW13.
- Existing wells (sampled July 2016) – SAIA-MW1A/1B/1C, SAIA-MW2A/2B/2C, SAIA-MW3A/3B/3C, SAIA-MW4A/4B/4C, SAIA-MW5A/5B/5C, SAIA-MW6A/6B/6C, SAIA-MW7, SAIA-MW8, MW-32, MW-34, MW-35, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, MW-48, MW-49, MW-52, MW-56.

The field team purged each monitoring well before sampling, and measured and recorded field parameters (pH, specific conductance, dissolved oxygen, temperature, oxidation-reduction potential, and turbidity) throughout the period of purging. The field team considered purging to be complete when at least three successive readings of parameters (recorded approximately every 3 to 5 minutes) were within the following criteria: ± 0.1 for pH, ± 3 percent for specific conductance, ± 10 percent for dissolved oxygen, ± 10 millivolts (mV) for oxygen-reduction potential (ORP), less than 10 NTU for turbidity (or 25 NTU for clay formations, per the SAP), while maintaining water-level drawdown of less than 0.33 feet (approximately four inches). If

turbidity was greater than 10 NTU (25 NTU for clay), the Puls and Barcelona (EPA, 1996) goal of ±10 percent variance for NTU was followed.

The field team submitted groundwater samples for analysis of VOCs and 1,4-D for all sampling events. Other analyte groups were sampled only for selected monitoring events or locations, including SVOCs, PCBs, metals, perchlorate, and general water chemistry parameters including alkalinity, chloride, sulfate, sodium, potassium, calcium, magnesium, iron, manganese, copper, zinc, total organic carbon, and total dissolved solids. The field team submitted all samples in accordance with the required sample collection, preservation, and chain-of-custody procedures as detailed in the SAP (ITSI Gilbane, 2012).

2.4.2.2 Groundwater Level Measurement

The field team measured groundwater elevations during the four groundwater monitoring events (March and August 2014, and July and September 2016), as summarized for the newly installed monitoring wells in **Table 2-1**, and collected groundwater elevation measurements from a network of approximately 65 to 75 monitoring wells across the Site. The field team measured groundwater levels at each existing and new well using an electronic sounder, recorded on a data sheet as feet below the measuring point (usually top of well casing) to the nearest 0.01 foot.

2.4.3 Decontamination Procedures

The field team decontaminated all reusable sampling equipment and tools that came in contact with potentially contaminated soil or water before and after each use, including all equipment used down-hole, such as groundwater pumps, water level meters, direct-push rods, CPT rods, hollow-stem auger (HSA) flights, Hydropunch samplers, and stainless-steel bailers, by steam-cleaning or scrubbing and rinsing.

2.4.4 Site Survey

A professional surveyor licensed in California surveyed the locations and elevations of each monitoring well location. The elevations were surveyed at a marked reference point at the top of the inside well casing, usually to the north. The field team also used this mark as the reference point for measuring groundwater depths. The surveyor used the elevations of the top of each casing as the reference point to the nearest 0.01 foot and elevations of the ground surface were

measured to the nearest 0.1 foot, both referenced to mean sea level (msl). The surveyor measured the horizontal location of each well's center-point to the nearest 0.1 foot. The survey coordinate data were based on California Coordinate System (CCS83), Zone 5, 1983 Datum. A summary of the survey data is in **Table 2-1**, and survey reports are in **Appendix D**.

The field team surveyed the CPT and soil gas sampling locations using a professional hand-held global positioning system (GPS) receiver, Trimble Geo XH 2005 model, with post-processing data correction capabilities for sub-foot accuracy.

2.4.5 Investigation-Derived Waste

During the well installation and sampling activities, the field team generated soil cuttings and rinsate/purge water, considered to be investigation-derived waste (IDW). The field team stored IDW temporarily at the SAIA property yard in 20-cubic-yard roll-off bins (soil) and Baker tanks (water), or in United Nations (UN) approved 55-gallon drums, labeled as non-hazardous waste, pending characterization and arrangements for transport and disposal.

The field team collected composite samples from IDW containers and submitted them for laboratory analysis. American Integrated Services, Inc., California profiled all IDW as soil or purge water waste, and properly transported and disposed of it. The IDW waste profile and manifest documentation is in **Appendix C**.

2.5 DATA QUALITY ASSURANCE/QUALITY CONTROL

The field team collected and reported approximately 63,000 results for the sampling events that comprise the RI. The Project Chemist compiled a Data Quality Summary Report (DQSR) encompassing groundwater, soil, soil gas, and indoor air samples collected between March of 2013 and April of 2017, attached in **Appendix F**.

The analytical laboratories analyzed groundwater samples for the following groups of constituents: VOCs, SVOCs, 1,4-D, PCBs, metals, cyanide, selected anions, perchlorate, total organic carbon (TOC), alkalinity, and total dissolved solids. Laboratories analyzed soil samples for VOCs, SVOCs, 1,4-D, PCBs, and metals; and analyzed indoor air and soil gas samples for VOCs only. The detailed analytical methods are presented in the DQSR (**Appendix F**).

Laboratories conducted analyses in accordance with approved standard methods and the following project sampling plans: the RI/FS SAP (ITSI Gilbane, 2012) and the VI SAP (Gilbane, 2015a).

The field team submitted soil and groundwater samples to the EPA Contract Laboratory Program (CLP) network of laboratories or EPA Region 9 (R9) Laboratory in Richmond, California. The field team submitted water quality parameter samples for general chemistry analysis to the R9 Laboratory. The R9 Laboratory and H & P Mobile Geochemistry, Inc., of Carlsbad, California analyzed the soil gas samples. The R9 Laboratory and Eurofins Air Toxics, Ltd. (Eurofins), of Folsom, California analyzed the indoor air samples. The laboratories submitted the laboratory analytical reports to Gilbane as portable document format (pdf) files, included as **Appendix E**. Gilbane uploaded the electronic data deliverables from each laboratory into the Gilbane electronic data management system (eDMS) database by sample delivery group (SDG). The eDMS database is configured to perform a consistency check between the laboratory data and the chain-of-custody input information. The Project Chemist resolved any discrepancies (e.g., non-matching sample identifiers) prior to approving the SDG. Gilbane performed an automated data review on all the results, and supplemented this with manual review to meet the requirements of a minimum of a Stage S2BVEM data review for CLP or commercial lab data and S2AVEM for R9 data as defined in the EPA *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (EPA, 2009).

The EPA Region 9 Quality Assurance Office (QAO) data validation contractor performed an independent EPA Tier 3 validation on approximately 10% of the CLP organic and metals data. CLP data received at least EPA Tier 1B validation by the EPA QAO or Stage S2BVEM by the Gilbane Project Chemist. The Gilbane Project Chemist performed approximately 10% S3VEM and 90% S2BVEM validation on indoor air data from the R9 or commercial laboratories.

The EPA Region 9 Quality Assurance Office and the Gilbane Project Chemist reviewed and validated the analytical data according to the procedures specified in the following project plans and EPA guidance, as applicable: RI/FS SAP and/or VI SAP; *National Functional Guidelines for Inorganic Superfund Methods Data Review* (EPA, 2017a); and *National Functional Guidelines*

for Organic Superfund Method Data Review (EPA, 2017b). The validation reports to the DQSR and the DQSR are in **Appendix F**.

2.5.1 Qualified Results

Data qualifiers are defined in National Functional Guidelines (EPA, 2017a and 2017b). The final data tables contain the EPA data qualifiers (J, UJ, U, or R) as appropriate for the RI data. The DQSR contains the reason codes for each data qualifier (Attachment F). Multiple qualifiers may apply to a result.

2.5.2 Rejected Results

The data review and validation process identified and qualified as rejected ("R") 10 results due to analytical performance issues, out of a total of 63,169. The following summarizes the reasons for the rejections:

- Data reviewers rejected nine results for continuing calibration verification (CCV) relative response factor (RRF) anomalies (bromomethane results in SAIA-MW5A, SAIA-MW5B, and SAIA-MW6C; and 1,2,4-trichlorobenzene results in four field samples [SAIA-MW9B-0716, MW56-0716, SAIA-MW9C-0716, and SAIA-MW10-0716], one field duplicate associated with SAIA-MW9C-0716, and one trip blank).
- Data reviewers rejected one result for low matrix spike recoveries (antimony in sample SAIA-SB12-05).

As none of these analytes are chemicals of concern, the loss of the rejected results has minimal impact on project decisions. Although the rejected data are not usable, they represent a very small percentage of the dataset (0.01%). The effect on data usability is not significant.

2.5.3 Field Duplicates

The field team collected approximately one in 10 samples as a field duplicate and submitted these samples for analysis of the same parameters as the primary samples. The RI/FS SAP and VI SAP specify that field duplicate results are in agreement when the relative percent difference (RPD) between the field duplicate result and the normal sample result is less than 35% when the results exceed the reporting limit (RL), or the absolute difference is less than the RL for concentrations near the RL. Data reviewers compared fifty-five sample pairs, representing 4,373 result pairs. Of these 4,373 result pairs, only 63 pairs exceeded the RPD goal of 35%. Over half of the exceedances were metals in soil; these exceedances are attributable to the generally

nonhomogeneous distribution of metals in that matrix. Three additional results with primary or field duplicate results less than one times the RL had absolute differences between the results greater than the RL and the data reviewers considered these out of validation criteria. The effect on data usability is very minor.

In addition to field duplicates, the field team collected soil gas split samples for the April 2014 soil and soil gas monitoring event. The split sample evaluation was presented under separate cover in the *Soil and Soil Gas Monitoring Results April 2014, Southern Avenue Industrial Area Superfund Site Remedial Investigation/Feasibility Study, South Gate, California Technical Memorandum* (Gilbane, 2015b), and is not further discussed here.

2.5.4 Field Deviations and Other Issues

EPA and Gilbane noted the following field deviations or sampling issues for the RI sampling. During the 2016 indoor air sampling event, the field blank was improperly collected, as shown by the dates of exposure on the chain of custody (COC) and by the sample's analytical results, indicating the field blank was collected across 7 days. As described in EPA Method TO-17, the accepted method for collecting field blanks for sorbent tubes is to uncap and immediately reseal the cartridge designated as the field blank. No usable field blank results were available for this event. The effect on data usability is unknown.

The field team collected a total of 1,079 out of 1,093 planned primary samples. During the March 2013 CPT/Hydropunch sampling event, the field team could not collect samples at seven locations, as no water was encountered at the planned depths. One soil boring at location SAIA-SB/SG26 met refusal before the bottom depth samples at 35 feet could be collected by the field team for soil or soil gas, and the soil-gas sample at SAIA-SB/SG28 at 25 feet could not be collected, probably because of a plugged opening in the porous ceramic sample point. Data usability is not significantly affected, as field completeness for the RI is 99.2%, which meets and exceeds the completeness goal of 95%.

2.5.5 Conclusion and Data Usability

The EPA Region 9 Quality Assurance Office selected the analytical methods used for the RI samples to provide quality data sufficient to meet data quality objectives, including

comparability to historical data, continuity of the groundwater monitoring program, and the project sensitivity requirements for soil gas and indoor air sampling.

The analytical completeness of the dataset is determined by the number of acceptable primary results after data review. The data reviewers only used the results for the primary project samples in the calculation to determine the completeness of the data. Out of 53,702 primary results, 3,816 were qualified by the data validator. Of these 3,816 qualified primary results, 1,079 primary results were qualified for trace values only, while 2,737 primary results, or 5.1% of the total primary results, were qualified for method performance or analytical QC issues. These results as qualified can be used for their intended purposes. Data validators qualified eight results as rejected, out of 53,702 primary results. Therefore, the completeness of the analytical dataset is 99.99%, which exceeds the completion goal of 95% specified in the SAPs. Field completeness is determined by the number of planned primary samples collected, shipped, and analyzed. Upon receipt by the laboratory, samples were cross-checked with the COC form documentation for completeness, and entered into the laboratory's data system. A total of 1,084 out of 1,093 planned primary samples were collected, shipped and analyzed. Therefore, the field completeness for the RI is 99.2%, which meets the completeness goal of 95%.

The Project Chemist has determined that the data generated for the RI sampling events met the project objectives. Overall, there were minor quality control deficiencies affecting the data. The estimated data as qualified are of acceptable quality and should be considered usable for their intended purposes. The rejected data, while not usable, are of minimal impact to the project.

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3.0 PHYSICAL CHARACTERISTICS OF THE SITE

The SAIA property is located at 5211 Southern Avenue, South Gate, California. The geographic coordinates for the site are 33º 56' 45" North latitude and 118º 10' 38" West longitude. The SAIA property and the surrounding area have relatively low relief, and are located approximately 1,000 feet west of the concrete-lined Los Angeles River, which flows due south. The Rio Hondo River flows into the Los Angeles River approximately 1.2 miles to the south of the Site. **Figure 1-1** shows the location of the Site.

3.1 HYDROGEOLOGY

Based on the CPT borings and monitoring wells installed for this RI effort, the project geologist has identified the near-surface hydrogeologic units as the semi-perched aquifer, the Bellflower Aquiclude, the Gaspur Aquifer, and the upper portions of the Exposition Aquifer. The RI distinguishes these units as shallow aquifer and deep aquifer systems. The shallow aquifer is composed of the saturated portion of the Bellflower Aquiclude, including a semi-perched aquifer, and the Gaspur Aquifer. The deeper aquifer includes the upper portion of the Exposition Aquifer. The Basin Plan prepared by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB-LA) designates the groundwater beneath the Site as having beneficial uses; however, water purveyors do not use the semi-perched aquifer (or the Gaspur or Exposition aquifers) for drinking water purposes. Furthermore, it is very unlikely that the semi-perched aquifer would be capable of a minimum sustainable yield of 200 gallons per day, one of the criteria that define a potential domestic drinking water aquifer under RWQCB Resolution Number 88-63.

At the Site, the Bellflower Aquiclude extends from the ground surface to depths ranging between 50 and 70 feet bgs. The Gaspur Aquifer underlies the Bellflower Aquiclude and extends to depths ranging from approximately 110 to 120 feet bgs. The Exposition Aquifer is in the upper portion of the deeper aquifer system, underlying the Gaspur Aquifer.

Semi-Perched Aquifer

The RI field team identified the semi-perched aquifer at the Site at a depth of approximately 30 feet bgs. The unit ranges in thickness from approximately 3 to 10 feet, and appears to pinch out

in the downgradient direction, as profiled by the two farthest-downgradient CPT logs, at SAIA-CPT19 and SAIA-CPT22. The semi-perched unit occurs within the predominantly fine-grained Bellflower Aquiclude, and consists of poorly graded sands and silty sands with minor interbeds of finer-grained sediments. The monitoring of this aquifer for work at the nearby Cooper Drum Superfund Site has indicated that its groundwater levels are generally higher than in wells completed within the shallow interval of the Gaspur Aquifer, which lies beneath the semi-perched aquifer.

The lateral extent of the semi-perched aquifer is unknown. The observed water levels have historically fluctuated, suggesting that saturation of the semi-perched zone is intermittent.

Bellflower Aquiclude

Based on the CPT logs, the Bellflower Aquiclude described by DWR (1961), which incorporates the semi-perched aquifer, extends from the ground surface to a depth of approximately 50 to 60 feet near the Site property, and to approximately 70 feet bgs in the downgradient area of the overall Site impacts, south of Tweedy Blvd. The Bellflower Aquiclude consists predominantly of silts, clayey silts, silty clays, and sandy clays. The portion of the Bellflower Aquiclude lying below the semi-perched aquifer ranges from 10 to 30 feet thick.

Gaspur Aquifer

The Gaspur Aquifer as described by DWR (1961) is present beneath the Site starting at approximately 50 to 70 feet bgs, and extends to approximately 110 to 120 feet bgs, dipping and thickening somewhat to the south. The Gaspur Aquifer is present immediately below the overlying Bellflower Aquiclude. Based on the CPT logging conducted by the RI field team, the Gaspur Aquifer in the vicinity of SAIA consists of poorly graded sands, silty sands, clayey sands, well-graded sands, gravelly sands, and minor amounts of silt and clay interbeds.

The Gaspur Aquifer beneath the Site exhibits better sorted and coarser sediments to the east toward the Los Angeles River (see **Figure 3-3** [B-B'] and **Figure 3-4** [C-C'], respectively). The depth to groundwater in the Gaspur Aquifer at the Site is approximately 60 to 70 feet bgs, with a predominant southerly flow direction and gradient.

The RI uses three depth intervals for the Gaspur Aquifer to facilitate the interpretation of groundwater migration across the site, and to conform with the groundwater monitoring program established for the nearby Cooper Drum Superfund Site. The RI refers to these depth-specific intervals as the shallow Gaspur, intermediate Gaspur, and lower Gaspur Aquifers. Groundwater elevations in wells screened within the shallow, intermediate, and lower zones of the Gaspur Aquifer at the Site show downward vertical gradients, indicating downward groundwater flow within this unit (see **Section 3.3.3**).

Exposition Aquifer

The Exposition Aquifer as described by DWR (1961) is present beneath the Site beginning at a depth of approximately 110 to 120 feet bgs. The interface between the base of the Gaspur and the upper Exposition Aquifers is not a clear boundary, but instead varies spatially, consisting of alternating layers of predominantly fine-grained materials of silty sand, sandy silt and clayey silt ranging from 5 to 15 feet in thickness.

The RI team investigated only the upper portion of the Exposition Aquifer in the Site vicinity. Based on the CPT logs, the lithology of this unit is somewhat coarser than the shallower units, consisting of poorly graded sands, silty sands, gravelly sands, poorly graded gravels, sandy gravels, and interbeds of fine-grained silts and clayey silts.

The Exposition Aquifer is the shallowest of four aquifers found within the Lakewood Formation (DWR, 1961). The two deepest aquifers of the Lakewood Formation (Gardena and Gage) are reportedly the shallowest sources for municipal, industrial, and commercial wells in the general area of the Site, beginning at depths ranging from 280 to 300 feet bgs in the vicinity of the Site.

3.2 HYDROGEOLOGIC CROSS-SECTIONS

Figure 3-2 through **Figure 3-6** show five hydrogeologic cross-sections based on the CPT stratigraphic profiling, which in turn is based on the specific sediment behavior types (discussed in the following paragraphs) determined during CPT logging (CPT logs are in **Appendix B**). **Figure 3-1** shows a plan view of the lines of these cross-sections. Cross-section A-A' (**Figure 3-2**), in addition to following the north-south hydraulic gradient flow path from the contaminant source to the downgradient area, also follows the approximate center-line of contaminant

concentrations. The four transverse (east-west) cross-sections illustrate the breadth of contaminants above screening levels, as the eastern and western ends of the cross-sections indicate low VOC concentrations. These cross-sections (**Figure 3-3** through **Figure 3-6**, respectively) follow the southern boundary of the SAIA property (B-B'), McCallum Avenue (C-C'), Wood Avenue (D-D'), and Tweedy Boulevard (E-E').

3.2.1 CPT Logging and Cross-Section Development

The CPT method provides data useful in distinguishing the nature of sediment present in the subsurface, by collecting data on the amount of downward pressure needed to advance the borings, and the magnitude of friction resistance along the sidewall of the lower portion of the cylinder near the bottom of the boring. These data relate to fundamental soil properties, including characteristics such as strength, stiffness, and compressibility. Twelve sediment behavior types (SBTs) have been recognized on this basis by Robertson (1990). To simplify somewhat the display of sediment types and to facilitate comparisons and correlation of units from one location to the next in the cross-sections, the RI groups the sediments according to the following scheme:

- Clay, silty clay, and clayey silt = SBT3, SBT4, and SBT5.
- Clayey silt, sandy silt, and silty sand = SBT6 and SBT7.
- Silty sand, sand = SBT8.
- Sand, gravelly sand = SBT9 and SBT10.
- Very stiff fine-grained, over-consolidated or cemented = SBT11.
- Sand to clayey sand, over-consolidated or cemented = SBT12.

SBT1 and SBT2 are very soft sediment types that were not present in Site CPTs, while SBT11 and SBT12 were very sparse in occurrence. The remaining four sediment groupings listed above (SBT3 through SBT10) account for most of the stratigraphic thickness penetrated in the CPTs at the Site. The sediment groupings are also consistent with literature information (e.g., DWR [1961] and other references provided above) on the depths and distribution of stratigraphic units in the Site vicinity, which in turn support the general accuracy of the cross-sections.

The RI team devised the above grouping of SBTs while keeping in mind the ideas of sequence stratigraphy, which recognizes the prevalence of specific sequences or cycles of sediment

according to the environment in which sediments are deposited (e.g., Van Wagoner et al., 1990; Catuneanu, 2006). In the case of the Bellflower Aquiclude, Gaspur Aquifer, and Exposition Aquifer, the environment of deposition was predominantly that of an alluvial basin (e.g., Jahns, 1954; DWR, 1961). This type of environment of deposition is marked most commonly by a fining-upward sequence (Allen, 1965). The base of a single alluvial cycle is often sharp, eroded into the underlying layer; channel deposits of gravel and coarse sand are at the base of a cycle, overlain successively by finer sand, and then overbank deposits of silt and/or clay. These cycles may repeat multiple times. Specific sedimentary structures are often present, with cross-bedding in the coarse layers and burrowing or laminations in the finer layers. Not all sediment types are present in a single fining-upward alluvial cycle, and the fining-upward pattern does not always hold, but it tends to be the prevalent pattern.

The 22 CPT borings advanced for the RI revealed sediment types consistent with those of the surrounding area, including those at Cooper Drum (URS, 2002). The CPT boring logs from these sites characterize the sediments as having frequent changes in sediment type, with many units only 1 to 5 feet thick. However, some general patterns appear, and the boring logs from both sites distinguish the three main aquifer units described above (Bellflower, Gaspur, and Exposition). The RI team created another set of boring logs based on the physical samples collected from selected depths from the on-property soil borings (SAIA-SB/SG01 series). These soil boring logs correlate quite well with the CPT logs. At the 15- and 25-foot bgs depth samples, for example, the boring logs generally indicate the presence of silty sand, while the 35-foot sample indicated poorly graded (relatively well-sorted) sand; this observation is consistent with CPT logs from on-property locations, such as SAIA-CPT03, -04, and -05, and Cooper CPT-21 and -36 (also located on the SAIA property); both sets of boring logs are presented in **Appendix B**.

On the cross-sections, thick lines indicate boundaries between the three main hydrogeologic units (Bellflower, Gaspur, and Exposition), and narrow lines indicate boundaries between the thinner layers within the main hydrogeologic units. The RI team used analytical data from groundwater samples of both monitoring wells and discrete-depth samples from CPT borings for

the cross-section development and plume concentration contours for TCE and cis-DCE, the two contaminants with the highest analytical concentrations in the SAIA contaminant plume.

3.2.2 Bellflower Aquiclude

The vadose zone comprises the unsaturated portion of the subsurface that lies above the groundwater table. The soils in the vadose zone are not fully saturated with water; that is, the pores within them contain air as well as water. The vadose zone influences pathways of infiltration of water from the land surface to the aquifer. Vadose zone sediments across the site are part of the Bellflower Aquiclude, which ranges downward to depths ranging from 50 to 70 feet bgs. The Bellflower Aquiclude, as described above, is predominantly composed of silts, clayey silts, silty clays, and sandy clays. The blue and green CPT zones in the cross-sections, broadly indicating clay to silty sand, predominate in this upper 50-to-70-foot zone, constituting at least 80% of the sediment thickness of the Bellflower (see **Figure 3-2** through **Figure 3-6**).

The only continuous zone of coarser sediment within the Bellflower Aquiclude is a sandy, locally gravelly zone, ranging from 3 to 10 feet in thickness, which appears in the CPT logs at a depth of approximately 30 to 40 feet bgs. This is the only portion of the Bellflower that is water-saturated, and thus constitutes a semi-perched aquifer. This saturated interval, being thin and variable, is not a significant aquifer. Therefore, EPA does not monitor this semi-perched aquifer in the Site wells, although the nearby Cooper Drum site has several wells screened in the semi-perched aquifer.

Below the semi-perched aquifer, the lower 15 to 30 feet of the Bellflower Aquiclude (extending down to the Gaspur Aquifer) consist of fine-grained sediments similar to the shallower zone above the semi-perched aquifer.

3.2.3 Gaspur Aquifer

The Gaspur Aquifer was a primary focus of the groundwater work for the RI, as it is the shallowest aquifer with a broad horizontal and vertical extent, and prior investigations conclude that this aquifer is impacted by the main contaminants of potential concern (COPCs; TCE, *cis*-DCE, PCE; see **Section 1.1.4**). As a result, 27 of the 31 monitoring wells installed for the RI

monitor the Gaspur Aquifer. (The other four monitoring wells installed for the RI monitor the Exposition Aquifer.)

The CPT logs show that the Gaspur Aquifer is predominantly (about 50% to 80%) composed of sand and gravel, with occasional interbeds of finer sediments. Starting beneath Southern Avenue just downgradient of the SAIA property, and continuing to the south to Aldrich Road, the fine silts and clays (green and blue units; see **Figure 3-2**) become less common in the Gaspur Aquifer, and coarser sediments become predominant, as they are present in thicker, more continuous layers. At a depth of about 65 feet (elevation about 40 feet above msl), there is an apparently continuous coarse interval, in most cases containing both sand and gravel (see **Figure 3-2** through **Figure 3-6**). This coarse interval appears to be a significant unit in terms of contaminant transport, because the four well locations on-property and extending approximately 700 feet downgradient of the Site property (SAIA-MW1, SAIA-MW2, SAIA-MW3, and SAIA-MW4) have very high levels of total VOCs in the shallow Gaspur Aquifer on the Site property and in the intermediate Gaspur Aquifer downgradient of SAIA property (see **Figure 3-2**). The top and bottom contacts of the Gaspur Aquifer, as well as the smaller intervals within the Gaspur, appear to dip slightly southward from the SAIA property to the downgradient area at Aldrich Road, in general concordance with the downward slope of surface elevations from north to south (**Figure 3-2**). This figure also shows increasing depth of contamination southward, with the middle and lower units (middle and lower Gaspur Aquifer and the Exposition Aquifer) hosting the high contaminant concentrations in the southern part of the Site.

3.2.4 Exposition Aquifer

The field team identified the upper portion of the Exposition Aquifer in six of the CPT borings advanced for the RI (SAIA-CPT4, SAIA-CPT5, SAIA-CPT6, SAIA-CPT11, SAIA-CPT14, and SAIA-CPT19), at depths of approximately 110 to 120 feet bgs. CPT borings were advanced no more than about 5 to 15 feet into the Exposition Aquifer. Within this short interval, the field team characterized the sediment as gravel, sand, and fines (silt/clay), in order of decreasing proportions.

3.3 GROUNDWATER FLOW CHARACTERISTICS

EPA evaluated groundwater flow characteristics based on the observations and collection of groundwater data across the site as part of the RI, and on the results of the investigations conducted on the adjacent Cooper Drum Superfund Site (see **Section 1.1.4** and **Section 1.1.5.3**). The SAIA and Cooper Drum sites share close similarities in geologic and hydrogeologic conditions.

Table 2-2 presents the groundwater elevation data collected from the three rounds of water-level measurements in March 2014, July 2016, and September 2016. The data collected in 2016 incorporate the newer wells installed by the RI field team to delineate contaminant plume extent in the downgradient parts of the overall Site.

3.3.1 Groundwater Fluctuations

RI groundwater elevation measurements indicate that groundwater levels decreased by an average of approximately 5 feet across the site between 2014 and 2016. This scenario is likely due to the drought that occurred across the state of California from 2011 to 2015. Similar declines have occurred nearby: Over a longer period, groundwater levels at the Cooper Drum Site, just west of the SAIA Site, declined by about 10 feet in the shallow Gaspur Aquifer from 2012 to the present.

3.3.2 Horizontal Flow Gradients

Figure 3-7, **Figure 3-8**, and **Figure 3-9** show the groundwater potentiometric contour maps for the shallow, intermediate, and lower Gaspur Aquifers, respectively, based on the July 2016 monitoring event. **Figure 3-10** shows groundwater elevations for the Exposition Aquifer; however, the number of Exposition Aquifer wells is limited, and these elevations are not sufficiently consistent to allow for accurate interpretation of potentiometric lines. The water levels collected during the other groundwater monitoring events (March 2014 and September 2016) are generally consistent with the relative elevations and gradients determined for the July 2016 event.

Based on the RI groundwater elevation data measured at Site wells, the predominant groundwater flow direction within the Gaspur Aquifer is south to southeast, with an estimated

horizontal hydraulic gradient of 0.0015 ft/ft within the shallow interval of the Gaspur Aquifer. Local variations in groundwater flow direction within the shallow and intermediate Gaspur Aquifer also have occurred: A groundwater elevation map from URS Group (2007), presented in **Appendix A-3**, depicts south-southwesterly groundwater flow in a limited area beneath the western part of the SAIA property. The operation of the extraction system on and downgradient of the nearby Cooper Drum Superfund Site since December 2013 (Haley and Aldrich, 2014) appears to influence localized flow patterns west of the SAIA site, creating a local flow component to the southwest. This pattern has continued to the present (Haley and Aldrich, 2019).

3.3.3 Vertical Flow Gradients

Table 3-1 draws a comparison of water levels for wells screened in different vertical portions of the subsurface. These co-located pairs include (1) wells screened in different intervals within the Gaspur Aquifer and (2) locations where one well is screened in the Gaspur Aquifer and the other is screened in the underlying Exposition Aquifer. A positive result, by convention, indicates that the hydraulic head in the shallower well is greater than the hydraulic head in the deeper well. Calculation of the gradients is performed by dividing the difference in groundwater elevations between two wells, by the difference in the physical elevations of the mid-point of the well screens. A positive quotient indicates a downward vertical gradient between the two wells, from shallow to deep, indicating a tendency of groundwater to migrate downward as it moves along its direction of flow.

The vertical gradients between co-located pairs of wells within the Gaspur Aquifer ranged from -0.03 ft/ft at SAIA-MW4A (a shallow Gaspur well) and SAIA-MW4B (a middle Gaspur well), indicating a slight upward gradient, to 0.12 ft/ft at SAIA-MW11B and SAIA-MW11C (a lower Gaspur well), indicating a fairly strong downward gradient (**Table 3-1**). The calculated difference in water levels (hydraulic heads) between the Gaspur and Exposition Aquifers ranged from 0.06 ft/ft at the downgradient co-located wells (SAIA-MW12C and SAIA-MW13) to 0.25 ft/ft at the SAIA property wells (SAIA-MW2C and SAIA-MW7).

Within the three subunits of the Gaspur Aquifer (the A [shallow], B [middle], and C [lower] wells of each cluster), the calculated gradients tend to be more strongly downward between B

and C wells than between A and B wells. Between the Gaspur and the Exposition Aquifer, there is a predominant downward flow which serves to provide an impetus for contaminants to migrate downward as they proceed downgradient from the contaminant source area at the Site.

3.3.4 Aquifer Tests

EPA has not performed aquifer tests at the Site. However, URS (2009), on behalf of EPA, conducted a pumping test in May 2009 for the adjacent Cooper Drum Superfund Site as part of the remediation design to optimize the capture of VOC contaminants released from the Cooper Drum site. URS installed an extraction well (EW-3) to evaluate the conditions and potentially extract groundwater in the downgradient area along McCallum Avenue approximately 400 to 500 feet downgradient and south to southwest of the SAIA property. URS (2009) reported the results of these tests as showing hydraulic conductivity values ranging from 26 to 57 feet per day. A copy of the results of this pump test is in **Appendix G**.

3.4 CURRENT LAND USE

Land uses categorized as residential, commercial, industrial, and public/institutional comprise approximately 82% of the City of South Gate's total land area of 3,739 acres (South Gate General Plan, 2015). The remaining land consists of public parks, freeways, flood control rights-of-way, and railroad rights-of-way. Almost all of South Gate is developed, with less than 60 acres remaining undeveloped or vacant. Commercial land use includes neighborhood, community, and regional shopping centers; commercial sales and service; general office; medical office; and lodging. Commercial development is located primarily on commercial strips located adjacent to major arterials such as Firestone Boulevard, Long Beach Boulevard, and Tweedy Boulevard. The northeastern, eastern, and extreme western parts of the City contain the majority of industrial land uses. Warehousing and distribution sites occupy the southwestern industrial area of the City. A variety of industrial users, such as light manufacturing and mineral processing sites, occupy the northwestern industrial area of the City.

In the ultimate land use scenario, the City plans that 376 parcels totaling 160 acres will change from their current land uses. The 160-acre total represents 60 acres of vacant land slated for development and 100 acres of existing land use slated for redevelopment. The large areas of

concentrated redevelopment include two areas of new schools in the eastern/southeastern areas of the City (South Gate General Plan, 2015).

3.5 CLIMATOLOGY

South Gate has a semi-arid Mediterranean climate with mild winters and hot, dry summers. The average annual precipitation is 14.8 inches (380 millimeters [mm]) per year, with most occurring between November and April (Wikipedia). Temperatures range from a low of 40 degrees Fahrenheit (°F; 4 °C) to a high of 110 °F (43 °C). Throughout the year, the average daily temperatures range from 54 °F (12 °C) to 73 °F (23 °C).

In nearby Los Angeles (two miles west), wind velocity at the 90th percentile (based on hourly averages) ranges from 10 to 15 miles per hour throughout the year, with higher velocities generally occurring from November through April (https://weatherspark.com/y/1705/Average-Weather-in-Los-Angeles-California-United-States-Year-Round). Wind direction varies, but winds from the west are most common. Measured by dew point, the humidity levels are relatively low, being dry to comfortable (dew points less than 60 ºF) for much of the year. Inversion layers are more common in the summer months. On average, an inversion ceiling is present over Los Angeles 260 days a year (https://gizmodo.com/why-air-pollution-has-always-been-a-problem-in-l-a-an-1572151647). However, air quality has been good in recent decades, with no Stage 1 ozone alerts since 2003 (there were 112 such alerts per year from 1976 through 1980).

3.6 ECOLOGY

South Gate is an entirely urbanized municipality. Plants and trees are mostly located in parks, streetscaping, some riparian zones around the Los Angeles River and Rio Hondo Channel, and private yards and gardens. There are no known threatened or endangered species and very sparse wildlife, though natural areas such as South Gate Park or areas around the Los Angeles River may support migratory or native birds (South Gate General Plan 2015).

This site is completely covered with unbroken pavement. The industrial nature of the Site severely limits the available habitat for vegetation and soil invertebrates. As such, there are no actual or potential exposure pathways to any ecological receptors and so the ecological risk is

acceptable by definition. However, there are multiple contaminants present in soils and soil gas within 6 feet of the ground surface. If the pavement is ever removed and the land used in such a way as to allow exposure to uncovered soils, for example as a park, there would be complete exposure pathways and the ecological risk would likely be unacceptable. On this basis, EPA determined a screening-level ecological risk assessment is not warranted.

4.0 NATURE AND EXTENT OF CONTAMINATION

This section discusses the nature and extent of contamination identified at the Site during the RI. This key portion of the RI requires collection of sufficient quantitative data about the Site to fully characterize both the nature and extent of COPCs at the Site. The nature and extent of contamination provides input information to the fate and transport of contamination and the potential exposure pathways for risk, and serves as the basis for evaluation and selection of remedial alternatives if a site-specific human health risk assessment shows that remediation is necessary. This section describes the vertical and areal extent of contamination based on laboratory analysis of soil, soil vapor, air, and groundwater samples, and discusses the spatial distribution and temporal trends for specific COPCs identified based on this data.

4.1 SOIL AND VADOSE ZONE

EPA's soil and soil-gas investigations for the RI focused initially on sampling the areas of concern that previous studies identified as potential contaminant sources associated with historical operations at the former screw manufacturing facility at the SAIA property. The field team subsequently performed additional sampling at step-out locations, to define the extent of contamination in soil and soil gas. At each sampling location, the field team sampled soils within the vadose zone beneath the Site property at regular-interval depths of 0.5, 2, 5, 15, 25, and to a maximum depth of 35 feet bgs.

4.1.1 Soil Screening Levels

The RI team evaluated the analytical results detected above the respective laboratory reporting limits and compared them to the potential risk to human health based on EPA Regional Screening Levels (RSLs; EPA Region 9, 2018) for chemical contaminants under both residential and industrial land-use scenarios, using a total hazard quotient of 1.0. However, the applicable land-use scenario for the site where the field team collected soil samples is industrial, as all soil sampling locations are within either the SAIA property, the ELG Metals property, or the parking lot owned by Bell Foundry east of the SAIA property, just east of the railroad tracks. The field team advanced 31 soil borings on the SAIA property, nine borings a short distance off-property to the north (on the ELG Metals property), and four borings in the Bell Foundry property. The

field team collected soil analytical samples at 37 of these 40 soil borings, while the other three borings served as soil-gas collection locations only. The field team advanced an additional seven soil borings in the city right-of-way of properties south of the SAIA property. The field team did not collect soil samples for analysis from these locations; they only collected as soil-gas analytical samples.

4.1.2 Background Concentrations in Soil

Metals occur naturally in soils, and to be able to discern whether anomalous concentrations of metals are related to anthropogenic sources, the RI team compared Site analytical results with relevant regional background studies for applicable analytes (see discussion below). The regional background data provide threshold values to assess the degree and extent of contamination attributable to a Site. The California DTSC conducted a study of arsenic in background soils for the Southern California region in 2008, which resulted in an upper-bound background arsenic concentration of 12 milligrams per kilogram (mg/kg) for the region (DTSC, 2008). A study conducted by the Kearney Foundation of Soil Science in 1996 evaluated iron analytical concentrations in background soils in California in agricultural fields distant from known point-sources of contamination. Based on 50 such non-industrial soils, their reported average for iron concentration was 37,000 mg/kg (Bradford et al., 1996). Arsenic and iron are two of the only metals for which the background is greater than an RSL; background considerations are not significant for other metals at the Site.

4.1.3 Nature of Soil Contaminantion

Unlike metals that occur naturally in soils, most organic analytes (including most VOCs, SVOCs, and PCBs) are not naturally present in soils at significant levels.

4.1.3.1 VOCs

Table 4-1 lists the VOCs that laboratory analyses detected in samples that the field team collected from subsurface soils. Analyses indicated VOCs present in subsurface soil samples from various depths at 18 of the 37 soil boring locations analyzed for VOCs. Among VOCs, analyses detected only *cis*-DCE and TCE were at concentrations exceeding RSLs. Laboratory analyses reported *cis*-DCE at concentration of 65,000 micrograms per kilogram (ug/kg) in the 25-foot-bgs sample in soil boring SAIA-SB/SG09, exceeding the residential RSL. TCE soil

analyses exceeded the residential RSL at boring SAIA-SB/SG08 (2,000 ug/kg at 15 feet bgs), while TCE soil analyses exceeded residential or industrial RSLs at boring SAIA-SB/SG09 at all depths from 0.5 through 25 feet bgs, with the two industrial RSL exceedances reported at 32,000 ug/kg at 0.5 feet and 60,000 ug/kg at 25 feet bgs. **Figure 4-1** shows the extent of VOC contamination above industrial RSLs. This figure shows the approximate limits of contamination only around locations with analytical exceedances of the industrial RSLs, appropriate to the current and envisioned site use.

Of the 37 borings from which the field team collected soil samples for the RI, four borings had one or more sampling depths reporting analytical concentrations of one or more other chlorinated VOCs (other than TCE and *cis*-DCE) or petroleum-associated VOCs at levels less than RSLs, but at an order of magnitude greater than in the other borings (e.g., >100 ug/kg in these four borings). These VOC occurrences were limited to borings SAIA-SB/SG06, -SB/SG08, -SB/SG09, and -SB/SG10, from which samples from various depths contained chlorinated organics (trichloroethane [TCA], 1,1-DCA, 1,1,2-TCA, or PCE), and petroleum-associated compounds (isopropylbenzene, m,p-xylenes, or o-xylene) at peak analytical concentrations ranging from 100 to 3,000 ug/kg each. At all other soil sampling locations, these and all other VOCs were either non-detect or reported only at near-trace levels of about 10 ug/kg or less. The above-listed compounds have significance for characterizing the contaminant source area around the former degreasing building (see **Section 4.1.4**).

4.1.3.2 SVOCs

In RI soil samples, the analytical laboratory reported detections of SVOCs at concentrations above residential RSLs in six samples from five borings out of the 37 soil boring locations, at shallow depth intervals. **Table 4-2** lists the detected SVOCs and their soil sample analytical results, along with results for metals and PCBs. Benzo(a)pyrene exceeded the residential RSL at three soil boring locations, with detected analytical concentrations ranging from 130J (estimated) ug/kg (SAIA-SB/SB29, 0.5 feet bgs) to 1,100 ug/kg (SAIA-SB/SG36, 2 feet bgs). Dibenz(a,h)-anthracene also exceeded the residential RSL in the 5-foot analytical soil sample collected from SAIA-SB/SG36 (190 ug/kg), and in the near-surface 0.5-foot sample from SAIA-SB/SG38 (120J ug/kg). Naphthalene exceeded the residential RSL in the 5-foot analytical soil sample collected

from on-site boring SAIA-SB/SG03 (7,300J ug/kg). Two of the soil borings with residential RSL exceedances are off-property, in the southeastern portion of the ELG Metals recycling facility (at SAIA-SB/SG36 and SAIA-SB/SG38), and one is across the railroad tracks to the east of the Site on the Bell Foundry property (SAIA-SB/SG47); SAIA-SB/SG29 is located just inside the SAIA property, along its northern border with ELG Metals, while SAIA-SB/SG03 is located beneath the former Seam Master Industries building.

The highest SVOC analytical concentrations were from soil samples collected at and near the VOC source area in the northeastern part of the SAIA property, where a sample from 5 feet bgs at SAIA-SB/SG03 (between the degreasing building and the oil recovery building) had total SVOCs (mainly petroleum-associated compounds such as naphthalene and 2-methylnaphthalene) of 35,000 ug/kg. None of the SVOCs exceeded industrial RSLs in analytical soil samples; consequently, **Figure 4-1** does not show any SVOC exceedances.

4.1.3.3 Metals

Laboratory analyses for metals in soil samples reported antimony, arsenic, cobalt, copper, iron, lead, manganese, and thallium at concentrations above the residential RSL; only arsenic, lead, and thallium exceeded industrial RSLs, however. **Table 4-2** lists analytical results for metals in soil in **Table 4-2**, and **Figure 4-1** shows the distribution of metals exceeding industrial RSLs.

Arsenic. Arsenic analytical results exceeded both the residential and industrial RSLs in all soil borings and at nearly every sample depth, with detected concentrations ranging from 0.93J mg/kg to 43.8 mg/kg (J is a laboratory-applied qualifier indicating an estimated concentration). However, 227 of the 242 analytical soil samples had arsenic results ranging from 1.1 mg/kg to 12.7 mg/kg, within or slightly greater than the 12 mg/kg background range reported by DTSC (2008); two other samples were non-detect. Of the remaining 13 soil samples with higher reported arsenic analyses, 12 samples may also have arsenic of natural origin: while they range up to 27.5 mg/kg, they were all collected from depths of 25 or 35 feet, and the shallower samples from the same borings were all reported at less than the background range of 12 mg/kg. Site-related impacts of metals in soils should primarily occur at shallow depths rather than deep. As this is not the pattern for arsenic in these 12 samples from 25 and 35 feet, those exceedances likely reflect the natural background for arsenic. One soil analytical sample does appear to have

an arsenic analytical result that is Site-related: soil sample SAIA-SB/SG37 from 0.5 feet contained arsenic at 43.8 mg/kg. This soil sample also exceeded RSLs for analyses of antimony, iron, lead, manganese, and thallium, and may be due to site-related activities rather than being typical of background. Deeper soil samples from this location had much lower analytical concentrations of arsenic, and there is no evidence for either significant mobility of this metal, or broad distribution due to an onsite source on either ELG or SAIA properties.

Lead. Among other metals, lead had the greatest number of exceedances of RSLs in soil, with 20 exceedances of the residential RSL and 10 exceedances of both the industrial and residential RSLs reported from the 242 analytical soil sampling results. The highest analytical result for lead in soil was for sample SAIA-SB/SG26 at 2.0 feet bgs, at 2,620J mg/kg. All the lead analyses that exceeded residential or industrial RSLs were collected by the field team from the upper four feet of soil sampled (mostly from 0.5 or 2 feet bgs). At these borings with lead RSL exceedances, analytical concentrations of lead declined abruptly with depth in soil samples collected from below 2 feet bgs. The shallow distribution of lead exceedances in soil is most consistent with a source from atmospheric deposition of lead due to settling out of the combustion products of leaded gasoline, which was very commonly used in the U.S. from about 1926 through the 1970s. The elevated lead concentrations are likely to have settled on surface soils before the SAIA and ELG properties were paved in about 1950. The fairly broad occurrence of lead in the upper 2 feet of the soil is common in high-traffic areas, and the lack of penetration of lead to greater depths indicates very little mobility of this metal.

Other Metals. The other metals exceeding RSLs in soil analytical samples generally followed the distribution of lead exceedances in terms of location and depth, although with a much lower frequency of RSL exceedances than for lead, as follows (note that **Figure 4-1** shows analytical exceedances of industrial RSLs only, while the bullets below also list exceedances of residential RSLs):

- Antimony analytical soil results exceeded the residential RSL in two samples, with the maximum result of 64.1 mg/kg in SAIA-SG/SB26 at a depth of 2 feet bgs.
- Cobalt analytical soil results exceeded the residential RSL in five samples, with the maximum analytical concentration of 197J mg/kg in SAIA-SB/SG29 at the depth of 0.5

feet bgs. The other four exceedances for cobalt ranged from 24.3 to 25.2 mg/kg, only slightly greater than the residential RSL of 23 mg/kg.

- Copper analytical soil results exceeded the residential RSL in one sample, at 4,350 mg/kg in sample SAIA-SB/SG19 at 0.5 feet bgs.
- Iron analytical results exceeded the residential RSL in three samples, at shallow depths down to 2 feet bgs, with concentrations ranging up to 206,000 mg/kg at SAIA-SB/SG37 at a depth of 0.5 feet bgs.
- Manganese analytical soil results exceeded the residential RSL in two soil boring locations, at shallow depths, with concentrations ranging up to 5,260 mg/kg at SAIA-SB/SG37 at a depth of 2 feet bgs.
- Thallium analytical results exceeded the residential RSL in three soil samples and exceeded the industrial RSL in two samples. The industrial RSL exceedances were at analytical concentrations of 26.2 mg/kg in sample SAIA-SB/SG34 at 35 feet, and 12.1 mg/kg in sample SAIA-SB/SG25 at 2 feet.

The only metals with exceedances of industrial RSLs were lead, thallium, and arsenic. As discussed above, the lead exceedances are common for near-surface soils in urban areas, and likely originated by deposition of lead as a combustion product of leaded gasoline, before the sites were paved. Thallium and arsenic exceedances of industrial RSLs were single isolated occurrences that do not indicate any pattern of continuity, mobility or penetration in the soil; they most likely reflect background conditions.

4.1.3.4 PCBs

In RI soil samples, the analytical laboratory reported detections of PCBs in 15 samples from soil boring locations. While 12 of these exceedances were from shallow depths of 0.5 to 5 feet bgs, two were from 15 feet bgs and one was from 35 feet bgs. **Table 4-2** lists the analytical results for detected PCBs in all RI soil samples, and **Figure 4-1** displays the extent of PCB contamination above industrial RSLs. Laboratory analyses detected PCB contamination in samples collected from three general locations within the SAIA property (north of a former oil recovery building, the former sumps in the former degreasing room, and a former shed area; see **Figure 1-3**). There were ten analytical results for Aroclor 1248 that exceeded either residential or industrial RSLs, five analytical results that exceeded the residential RSL only for Aroclor 1254, and five analytical results that exceeded both residential and industrial RSLs for Aroclor 1260. Analyses indicated Aroclor 1248 at analytical concentrations ranging from 9.8 ug/kg

(SAIA-SB/SG12, at 5 feet bgs) to 24,000 ug/kg (SAIA-SB/SG08, 0.5 feet bgs). Analyses detected Aroclor 1254 at analytical concentrations ranging from 3.7 ug/kg (SAIA-SB/SG06, 5 feet bgs) to 320 ug/kg (SAIA-SB/SG01, 0.5 ft bgs). Analyses indicated Aroclor 1260 at analytical concentrations ranging from 390 ug/kg (SAIA-SB/SG29, 35 feet bgs) to 7,300J ug/kg (SAIA-SB/SG26, 0.5 ft bgs).

4.1.4 Extent of Soil Contamination On and Off the SAIA Property

Analytical results for soil samples collected during the RI indicated concentrations of contaminants above the industrial RSLs mainly in samples collected from the eastern portion of the SAIA property, as shown by the locations of the industrial RSL exceedances on **Figure 4-1**. The soil contamination is associated primarily with past industrial operations at the SAIA property (**Section 1.1.4**; see also ITSI, 2010).

VOCs: Laboratory analyses detected TCE-impacted soil samples, some with concentrations exceeding RSLs, in samples collected beneath the area of the former degreasing building, where three sumps existed (see **Figure 1-3**). Analyses detected TCE and other chlorinated and petroleum-associated VOCs at most sampling depths from near-surface (0.5 feet bgs) to 35 feet bgs from the three borings beneath this building (SAIA-SB/SG08, -SB/SG09, and -SB/SG10) and from one nearby boring (SAIA-SB/SG06). The 0.5 and 25-foot analytical samples from SAIA-SB/SG09 greatly exceeded the industrial RSL for TCE. Thus, chlorinated VOCs in soil (and in soil gas; see soil gas discussion in **Section 4.1.5** and **Section 4.1.6**) beneath the former degreasing building appear to be the primary sources of chlorinated VOC contamination of groundwater, resulting in a contaminant plume at least 2,800 feet long (as discussed in **Section 4.3.4**). Furthermore, the field team collected the highest TCE analytical groundwater sampling result for the RI from nearby monitoring well SAIA-MW1A (about 50 feet to the southeast and approximately downgradient of SAIA-SB/SG09) (see also **Section 4.3.4.2**). While PCE did not exceed an RSL in soil analytical samples, it was detected in most of the same samples that had TCE detections (but at much lower concentrations), thus accounting for the PCE analytical detections in many soil gas samples (**Section 4.1.5**).

SVOCs and PCBs: Laboratory analyses did not indicate SVOCs in soils at concentrations above industrial RSLs; thus SVOCs are not discussed further.

PCB contamination is present in three small areas within the SAIA property (**Figure 4-1**): adjacent to the former oil recovery building, at the former degreasing room, and near the former shed (near the southeastern corner of the property). PCB contamination in soil appears to be isolated and not migrating extensively, as analyses did not detect PCBs in samples collected from the step-out sampling locations; also, nearly all exceedances were in the upper 15 feet of soils, likely indicating limited vertical migration.

Metals: Most detections of arsenic and cobalt in soil analyses appear to be due to background conditions, with the exceptions being one off-site sample with arsenic above background near the southeastern corner of the ELG Metals property (at SAIA-SB/SG37) and one sample near the northern SAIA property boundary (cobalt above background at SAIA-SB/SG29; but this result exceeded the residential RSL only, and thus does not appear on **Figure 4-1**). The two thallium exceedances are at widely separated locations at 2 and 35 feet, and are not associated with other contaminants. By a factor greater than two, the highest analytical result for thallium was from 35 feet. These facts are consistent with the idea that the thallium soil exceedances of industrial RSLs may be due to natural background conditions.

Lead was the compound that most frequently exceeded RSLs, and laboratory analyses reported lead concentrations above the industrial RSL in 10 samples (from seven locations) within the upper 2 feet bgs in two areas beneath the former Seam Master Industries building, and along parts of the northern and eastern perimeters of the SAIA property. Copper contamination is present at shallow depths (to 2 feet bgs) near the northeastern perimeter of the SAIA property (SAIA-SB/SG19). Metal contamination off-property occurs in the southeastern corner of the ELG Metals facility, with significant concentrations of antimony, arsenic, iron, manganese, and lead from near-surface to 2 feet bgs (SAIA-SB/SG37). These shallow occurrences of metal contamination are relatively common for metals, based on their generally low aqueous solubilities. However, while many of these metal analytical results are likely site-related, the only site-related results that exceeded the applicable industrial RSLs were lead (seven sample locations), thallium (two locations), and arsenic (one location) (see **Figure 4-1**). As discussed in **Section 4.1.3.3**, these exceedances are all limited in extent and do not indicate significant mobility. For lead, the RSL exceedances are all limited to shallow soils and probably originated

from atmospheric deposition of the combustion products of leaded gas. The arsenic and thallium RSL exceedances are isolated, single occurrences; thus they do not indicate significant mobility in the subsurface, and are more likely than not to originate through natural background conditions rather than from operations on either the SAIA or ELG properties.

4.1.5 Soil-Gas Data

The most frequently-detected and highest-concentration VOCs reported in soil-gas sample analyses collected from locations on the SAIA property were 1,1-DCA, *cis*-DCE, PCE, TCE, and VC. **Table 4-3** presents a listing of the detected analytical results for VOCs and 1,4-D (laboratories report 1,4-D in the VOC scan for air samples). **Figure 4-2** displays TCE analytical results in soil-gas samples, and highlights those results that exceeded RSLs. On-property soil-gas boring locations were SAIA-SB/SG01 through -SB/SG14 and -SB/SG19 through -SB/SG35, representing 138 samples. The following compounds exceeded RSLs in soil-gas analytical samples:

- 1,1-DCA exceeded either residential or industrial RSLs in 17 of the 31 on-property soil-gas boring locations at various depths, with analytical concentrations ranging up to 650,000 micrograms per cubic meter (ug/m^3) in SAIA-SB/SG10 at 25 feet bgs.
- 1,1-DCE exceeded either residential or industrial RSLs in five of the 31 on-property borings at various depths, with analytical concentrations ranging up to 140,000 ug/m^3 in SAIA-SB/SG09 at 25 feet bgs.
- Benzene exceeded either residential or industrial RSLs in 25 of the 31 on-property borings at various depths, with analytical concentrations up to 910 ug/m^3 in SAIA-SB/SG20 at 15 feet bgs.
- *cis*-DCE exceeded either residential or industrial RSLs in 23 of the 31 on-property borings at various depths, with analytical concentrations ranging up to 23,000,000 ug/m^3 in SAIA-SB/SG20 at 25 feet bgs.
- Ethylbenzene exceeded either residential or industrial RSLs in seven of the 31 on-property borings at various depths, with analytical concentrations up to 580 ug/m^3 in SAIA-SB/SG09 at 35 feet bgs.
- PCE exceeded either residential or industrial RSLs in 27 of the 31 on-property borings at various depths, with analytical concentrations ranging up to 53,000 ug/m^3 in SAIA-SB/SG27 at 5 feet bgs.
- *trans*-DCE exceeded either residential or industrial RSLs in nine of the 31 on-property borings at various depths, with analytical concentrations up to 93,000 ug/m^3 in SAIA-SB/SG20 at 35 feet bgs.

- TCE exceeded either residential or industrial RSLs in 30 of the 31 on-property borings at various depths, with analytical concentrations ranging up to 7,800,000 ug/m^3 in SAIA-SB/SG03 at 35 feet bgs.
- Vinyl chloride exceeded either residential or industrial RSLs in 21 of the 31 on-property borings at various depths, with analytical concentrations ranging up to 6,100,000 ug/m^3 in SAIA-SB/SB10 at 25 feet bgs).
- The following other compounds exceeded either residential or industrial RSLs at one or more depths in fewer than five of the 31 on-property borings: 1,1,1-trichloroethane (1,1,1-TCA); 1,1,2-TCA; 1,2-DCA; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; 1,4-dichlorobenzene; 1,4-D; m,p-xylenes; naphthalene; and o-xylene.

The field team installed the sixteen off-property soil-gas borings (SAIA-SB/SG15 through -SB/SG18, and -SB/SG36 through -SB/SG47) at locations upgradient, cross-gradient, and downgradient of the SAIA property (**Figure 4-2**). The following compounds exceeded RSLs in soil-gas analytical samples:

- 1,1-DCA exceeded either residential or industrial RSLs in four of the 16 off-property soil-gas boring locations at 35 feet bgs only, with analytical concentrations ranging up to 45,000 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.
- Benzene exceeded either residential or industrial RSLs in 14 of the 16 off-property borings at various depths, with analytical concentrations ranging up to 230 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.
- Chloroform exceeded either residential or industrial RSLs in five of the 16 off-property borings at various depths, with analytical concentrations ranging up to 44 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.
- *cis*-DCE exceeded either residential or industrial RSLs in eight of the 16 off-property borings at various depths, with analytical concentrations ranging up to 1,100,000 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.
- PCE exceeded either residential or industrial RSLs in 10 of the 16 off-property borings at various depths, with analytical concentrations ranging up to 3,100 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.
- TCE exceeded either residential or industrial RSLs in all 16 off-property borings, with analytical concentrations ranging up to 940,000 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.
- Vinyl chloride exceeded either residential or industrial RSLs in seven of the 16 off-property borings at various depths, with analytical concentrations ranging up to 52,000 ug/m^3 at SAIA-SB/SG38 at 35 feet bgs.
- The only other VOC with analytical concentrations reported at above an RSL was 1,2-DCA in a single off-property sample, at 65 ug/m^3 in SAIA-SB/SG38 at 35 feet bgs.

4.1.6 Extent of Soil Gas Contamination

On-Property Extent

Of all VOCs (including 1,4-D, an SVOC that the analytical laboratory can prepare for analysis as a VOC), laboratory analyses most frequently reported TCE at analytical soil-gas concentrations greater than RSLs (at 46 of the 47 borings). Thus, it is a good indicator for the extent of VOCs at concentrations greater than RSLs. **Figure 4-2** displays TCE concentrations for all depths at the locations where the field team collected analytical samples. The highest concentrations of VOCs, principally TCE and *cis*-DCE, were present in the northeastern portion of the SAIA property, in the area directly beneath and near the former degreasing building (**Figure 1-3**). This area contained high analytical VOC concentrations from both shallow (e.g., 5 feet bgs) and deeper sampling intervals of the soil-gas borings, at SAIA-SB/SG03, -08, -09, -10, -19, and -20) (**Figure 4-2**). VOC concentrations were typically lower in the western and southern portions of the SAIA property, especially at shallow depths. However, even away from the northeastern corner of the property, areas within or immediately adjacent to the footprint of the former main building on the SAIA property had significant VOC analytical concentrations above industrial RSLs. The property owner demolished all buildings and other structures associated with the former manufacturing operations at the SAIA property in late 2013 and early 2014, and the property is currently vacant and used for truck parking. Therefore, with no on-property structures except for a small security guard station, there is not a current potential for vapor intrusion at the SAIA property.

Reported analytical soil-gas sample concentrations varied somewhat with depth, and were generally higher at greater depths (25 feet and 35 feet bgs). The VOC analytical results from the shallower depths (5 feet and 15 feet bgs) were relatively lower, with most of the analytes below their respective RSLs (see TCE soil-gas analytical results according to depth in **Figure 4-2**). The exception is that PCE and TCE analyses exceeded residential or industrial RSLs in more than half of the soil-gas samples collected at 5 feet bgs.

Figure 4-3 displays contoured analytical results for soil-gas samples collected from 5 feet bgs for both on-property and off-property soil-gas borings. This figure displays how the elevated analytical concentrations of TCE in soil gas are located primarily in the eastern part of the SAIA

property. For this set of samples from 5 feet bgs, laboratory analyses reported the highest TCE analytical concentration, 5,800,000 ug/m^3, for the sample from SAIA-SB/SG09; this boring is located directly below where the former degreasing building was located along the east side of the larger building. The area surrounding this location is the primary locus of the highest TCE analytical concentrations (e.g., above 1,000 ug/m^3), as is evident from **Figure 4-3**. These elevated TCE results are reflected in samples from greater depth (**Figure 4-2** and **Table 4-3**); the highest analytical results for 1,1-DCA, *cis*-DCE, and vinyl chloride (the other compounds with especially high VOC soil-gas concentrations relative to RSLs) reach their peaks in this same area beneath or near the former degreasing building. Taken together, this evidence appears to indicate that the area constitutes a VOC contaminant source to groundwater. The fact that SAIA-SB/SG08 and -09 are the only borings where soil analytical results exceeded RSLs for VOCs (*cis*-DCE and TCE; see **Section 4.1.3.1**) supports this conclusion. Furthermore, laboratory analyses reported the highest TCE concentration in groundwater in samples from monitoring well SAIA-MW1A located about 50 feet downgradient from the former degreasing building (see **Section 4.3.4**).

Off-Property Extent

For the off-property areas, the field team collected soil gas samples from five borings advanced on the ELG Metals property north of the SAIA property (SAIA-SB/SG18, and -36 through -39); from four borings advanced on the Bell Foundry property east of SAIA (SAIA-SB/SG44 through -47); and from seven borings advanced in the city right-of-way on properties south of Southern Avenue (SAIA-SB/SG15 through -17 and -40 through -43).

In soil-gas sample analyses from the ELG Metals property, all five borings had RSL exceedances at one or more depths. At the 5-foot bgs depth, these analytical samples showed relatively low concentrations. However, just off the ELG property and a few feet south of the large ELG Metals building, laboratory analyses from SAIA-SB/SG29 reported TCE at 5,700 ug/m^3, significantly greater than the industrial RSL. While this location is on SAIA property, it is less than 10 feet from the ELG building. The main ELG building should thus be assessed with indoor-air sampling. By far the highest soil-gas concentrations on ELG property were from the deep (35-foot bgs) sample from SAIA-SB/SG38, where eight VOCs had analytical

concentrations exceeding the industrial RSL; peak concentrations were for cis-DCE and TCE, both near 1,000,000 ug/m^3 at this depth. These analytical results at SAIA-SB/SG38 are similar to those from the deep (25 and 35-foot) soil-gas samples at borings located to the southeast (SAIA-SB/SG03, -24, and -26), toward the VOC source area centered below the former degreasing building. Thus, it appears fairly likely that the high soil-gas analytical results at off-property location SAIA-SB/SG38 are continuous with the soil-gas plume that exists in the 25-to-35-foot bgs range between SAIA-SB/SG38 and the VOC contaminant source below the former degreasing building. This deep contamination is also indicative of a contaminant source that has probably migrated laterally at depth, close to the saturated or perhaps capillary zone.

At locations south of the SAIA property, the field team collected soil gas samples along the alley between Southern and McCallum avenues, McCallum Avenue, and Duncan Way. Four borings (SAIA-SB/SG15 through -17, and -40) yielded PCE and/or TCE analytical concentrations exceeding residential and industrial RSLs at all sampling depths, with a peak concentration of 6,800 ug/m^3 for TCE at SAIA-SB/SG17 at 35 feet bgs (**Table 4-3**). Soil-gas analytical concentrations were considerably lower in the other three of the four southernmost borings along McCallum Avenue and Duncan Way (SAIA-SB/SG41 through -43): benzene, PCE, or TCE exceeded a residential RSL at one or more depths per boring, but analytical concentrations of each compound were less than 100 ug/m^3 in each sample. EPA used the soil-gas analytical results from this area to determine locations of residences where EPA would conduct indoor-air sampling, to evaluate the threat of vapor intrusion into structures. **Section 4.2** discusses indoor air sampling results.

Laboratory analyses also detected TCE and *cis*-DCE at concentrations above residential or industrial RSLs in off-site soil gas borings advanced east and northeast of the SAIA property (SAIA-SB/SG44 through -47). However, these and other VOCs were detected at analytical concentrations one to two orders of magnitude higher in the soil gas samples collected within the SAIA property boundary (to the west, at SAIA-SB/SG19, -20, and -21). Thus, the source of these off-site soil gas exceedances is likely to be within the SAIA property.

4.2 VAPOR INTRUSION

This section presents the analytical results from the three rounds of soil gas sampling and the two rounds of residential air sampling that the field team completed to evaluate the potential vapor intrusion (VI) contaminant migration pathway. **Section 2.2** and **Section 2.3** present details of the field activities completed for the soil gas investigation and indoor air sampling.

4.2.1 Air Screening Levels

The screening levels used to evaluate indoor air quality are based primarily on DTSC and USEPA risk-based screening concentrations (DTSC, 2018 and USEPA, 2018b). The VI COPCs are those VOCs for which risk values are promulgated and based on a conservative risk level for residential (indoor) air (i.e., total hazard quotient of 1.0). Soil gas can enter enclosed structures and create an exposure hazard to humans who work or live in those structures. However, structures have floors and/or foundations that cause attenuation of vapors migrating from the subsurface into the structure. As a result, while health-based RSLs exist for indoor air in structures used for residential and industrial purposes, EPA applies an attenuation factor to soil gas samples before applying the RSL. Based on their compilation of empirical attenuation factors for chlorinated VOCs at 913 buildings, EPA (2015) recommended use of an attenuation factor of 0.03 for determining vapor intrusion screening levels for near-source exterior soil gas (outside a building's footprint) and sub-slab soil gas. The RI applies the attenuation factor as follows:

$$\text{Soil-vapor Screening Level} = \text{Indoor Air RSL} / 0.03$$

This results in screening levels for soil vapor that are about 30 times greater than those used for indoor air. **Table 4-3** presents the resulting RSLs modified for soil-vapor assessment.

4.2.2 Outdoor Air Conditions

The RI team evaluated outdoor air through the collection of outdoor air samples, concurrently with the crawlspace and indoor air sampling. The field team conducted air sampling in accordance with EPA's vapor intrusion guidance (EPA, 2015b) and the VI SAP (Gilbane, 2015a).

The RI field team collected two outdoor air samples during each event, from the front or back yards of residential buildings nearest to the soil gas locations on McCallum Avenue that contained moderate levels of VOCs (**Figure 4-4**). The field team collected these outdoor air samples to establish the outdoor air quality in the surrounding neighborhood during the indoor air sampling events.

Laboratory analyses detected low levels of 1,2-DCA, PCE, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, ethylbenzene, toluene, and xylene in the outdoor air analytical samples as presented in **Table 4-4**. However, benzene was the only compound for which outdoor air analyses exceeded the residential RSL (0.36 ug/m^3). The presence of benzene in outdoor air is consistent with the range of the ambient levels in the community, as measured by EPA and historically by the South Coast Air Quality Management District in North Long Beach (EPA, 2010). Elevated benzene levels are a common occurrence in neighborhoods near major freeways (the 710 freeway is located about 1,700 feet to the east of SAIA).

4.2.3 Vapor Intrusion Evaluation

EPA used the soil gas sample analytical data collected during the 2013 and 2014 investigations to identify the residential buildings to be sampled for indoor air, as specified in the VI SAP (Gilbane, 2015a). EPA had also identified industrial buildings for indoor-air sampling in the Supplemental VI SAP [Gilbane, 2017], but access approval issues prevented collection of these samples. The COPCs EPA selected for analysis in the indoor-air sampling events were PCE, TCE, their primary breakdown products, and petroleum-associated compounds. EPA's goal for this sampling event was to determine if vapor intrusion poses a potential exposure pathway to humans in the residential structures downgradient of the SAIA property. Indoor air typically contains detectable levels of VOCs that are not attributable to vapor intrusion from VOC contamination of vadose zone soil and/or shallow groundwater. The sources of these indoor air VOCs are both outdoor air and indoor sources (chemical products present within the building). VOCs attributable to outdoor air are present in indoor air due to exchanges with outdoor air that occur dozens of times a day, depending upon the building's use and ventilation system (EPA, 2011). **Section 4.2.2** lists the VOCs present in the aforementioned outdoor air analyses.

Indoor sources that may emit VOCs include consumer products (e.g., cleaners, solvents, strippers, polish, adhesives, water repellants, lubricants, air fresheners, aerosols, mothballs, scented candles, insect repellants, plastic products, etc.); building materials (e.g., carpet, insulation, paint, wood-finishing products); fuels; dry-cleaned clothing or draperies; municipal tap water; or occupant activities (e.g., craft hobbies). The types and concentrations of VOCs in background indoor air typically differ between residential and commercial buildings. In addition, VOC concentrations in background indoor air can vary with meteorological events (e.g., the passage of low- and high-pressure systems), as well as over longer times, such as with the seasons.

Based on 15 indoor air studies conducted between 1990 and 2005, EPA (2011) found that the VOCs most commonly present in background indoor air (including outdoor air as a contributing source) include benzene, toluene, ethylbenzene, xylene, trichloromethane (TCM), carbon tetrachloride (CCl_4), PCE, TCE, and 1,1,1-trichloroethane. In contrast, the studies rarely detected VC, 1,1-DCE, *cis*-DCE, and 1,1-DCA in background indoor air. The table below lists the 95th-percentile ranges for VOCs most commonly present in background indoor air.

Chemicals	Background Indoor Air Concentration Range (ug/m^3) [2]
Benzene	9.9 – 29
Toluene	79 – 144
Ethylbenzene	12 – 17
Xylenes	21 – 63.5
Carbon tetrachloride	Less than Reporting Limit of 1.1
Tetrachloroethene (PCE)	4.1 – 9.5
Trichloromethane[1]	4.1 – 7.5
1,1,1-Trichloroethane	3.4 – 28

1 Commonly used chemical name is chloroform
2 Source: US EPA, 2011.
ug/m^3 = micrograms per cubic meter

4.2.3.1 Residential Air Sampling Results

The field team sampled indoor air during two sampling events (April 2015 and January 2016) at eight residential buildings located downgradient of the SAIA property, where the nearby soil gas sampling results had suggested the possible presence of VOCs beneath the buildings. In addition to collecting indoor air samples at each of these locations, the field team collected crawlspace air

samples (from beneath the residence) at several locations, to evaluate potential pathways from soil vapor to indoor air. **Table 4-4** presents a summary of the detected analytical results for outdoor, crawlspace, and indoor air samples. **Appendix E** provides full analytical data tables and laboratory reports.

Table 4-4 identifies all indoor-air contaminants detected above reporting limits. Analytical results for those contaminants with crawlspace or indoor air concentrations above the applicable SLs are in bold type and the cells are highlighted. **Figure 4-3** summarizes the analytical results of indoor air and crawlspace sampling in buildings and nearby soil gas locations. The following paragraphs discuss analytical results for individual buildings.

Building #1

For each of the 2015 and 2016 sampling events, the field team collected a crawlspace sample (RES 01-CS) and an indoor air sample (RES 01-IA); the field team collected an outdoor air sample (RES 01-OA) at this building during the 2016 sampling event only. **Figure 4-4** depicts the sample locations; the larger context of these samples relative to the SAIA property is shown on **Figure 4-3**. Laboratory analyses detected PCE in the indoor air sample for both sampling events, with the maximum analyzed concentration of 1.4 ug/m^3 (in April 2015) exceeding the residential RSL of 0.46 ug/m^3. Laboratory analyses detected 1,2-DCA in the indoor air sample at a concentration (0.19 ug/m^3) that exceeded the residential RSL in the 2015 event, but not in 2016. Laboratory analyses detected benzene in all analytical samples (crawlspace, indoor, and outdoor) at concentrations that exceeded the residential RSL in both sampling events, with the highest concentration of 1.6 ug/m^3 in both 2016 outdoor air samples (RES 01-OA outside this building, and RES 06-OA at a building less than 200 feet away).

The PCE analytical concentrations detected in the indoor air samples were significantly greater than those reported for the outdoor air samples, suggesting that a VI pathway may exist. However, the lack of a significant detection in the crawlspace samples from this location are not consistent with a vapor-intrusion origin for PCE at this location. Comparing this detection to the four nearby soil gas analytical results for PCE at 5 feet bgs, PCE was significantly above the soil gas RSL at SAIA-SB/SG15, -17, and -40 (up to 750 ug/m^3), but was not detected at SAIA-

SB/SG41, as depicted in **Figure 4-4**. Therefore, the evidence from sampling is slightly ambiguous, but it appears most likely that the PCE analytical concentrations above the RSL in both indoor air samples from this building may have originated from sources that may exist inside the building; while less likely, contributions from a groundwater source are still possible.

1,2-DCA analytical concentrations were lower in the crawlspace and outdoor samples than in the indoor air sample. The 2016 analytical indoor sample also showed a 1,2-DCA detection at slightly below the SL, while the crawlspace and outdoor air analytical samples were non-detect. Laboratory analyses did not detect 1,2-DCA in soil gas samples from any depth at surrounding locations SAIA-SB/SG15, -17, -40 and -41. Therefore, the field team attributes the 1,2-DCA concentration to an existing indoor source. Benzene analytical concentrations exceeded the SL in all samples, with the highest of 1.6 ug/m^3 from the primary outdoor sample, indicating that the benzene source is likely associated with outdoor air in the neighborhood.

Building #2

The field team collected a crawlspace sample (RES 02-CS) and an indoor air sample (RES 02-IA) in the areas listed in **Table 4-4** and depicted on **Figure 4-4** for the 2015 and 2016 sampling events. In both sample locations from this building (crawlspace and indoor samples), laboratory analyses detected only benzene at analytical concentrations exceeding the SL in both sampling events, with the highest concentration of 1.5J ug/m^3 reported for the indoor sample. As discussed above for Building #1, laboratory analyses detected benzene concentrations in the outdoor air samples at similar levels, indicating that benzene levels indoors are likely associated with the outdoor levels typical of the neighborhood. Therefore, a VI pathway does not appear to exist at this property.

Building #3

The field team collected samples from three apartment units within the Building #3 complex at McCallum Avenue in 2015 and 2016. The team collected one indoor-air sample from each of the apartments at Unit A (RES 03-IA), Unit B (RES 04-IA), and Unit D (RES 05-IA) in the areas listed in **Table 4-4** and depicted on **Figure 4-4**. Benzene concentrations exceeded the SL in all indoor air samples collected from these apartment units. Laboratory analyses detected benzene

in all air samples (indoor and outdoor; note that the single outdoor sample in this area [RES-07-OA] was collected next-door at Building #5) at concentrations that exceeded the SL in both events (2015 and 2016), with the highest concentration of 2.7J ug/m^3 detected in the indoor air sample (RES 05-IA) from Unit D. Laboratory analyses detected 1,2-DCA in the indoor air sample from Unit D at concentrations above the SL, at 0.27 ug/m^3 and 0.43J ug/m^3 in the 2015 and 2016 events, respectively. Laboratory analyses detected two other VOCs above screening levels: ethylbenzene at 2.4 ug/m^3, and naphthalene at 0.24J ug/m^3 both collected from Unit B (RES 04-IA).

Benzene analytical values at this building were similar to benzene ranges reported for outdoor levels for the neighborhood for both sampling events (RES 01-OA, RES 06-OA, and RES 07-OA; **Table 4-4**). 1,2-DCA analytical concentrations above the SL detected at unit D appear to be associated with existing indoor sources, as all the surrounding soil gas samples (SAIA-SB/SG17, -41, -42, and -43; see **Figure 4-4** for locations) had non-detect analytical results for 1,2-DCA. Similarly, the analytical levels above the SLs for ethylbenzene at 2.4 ug/m^3 and naphthalene at 0.24J ug/m^3, for the indoor air sample collected in Unit B in 2016, are not consistent with non-detect results for the same analytes in the same four nearby soil gas sampling locations (SAIA-SB/SG17, -41, -42, and -43). Thus, the RI team attributes the above detections of these analytes to an outdoor source (for benzene) and to an indoor source (for ethylbenzene and naphthalene). Based on the discussion above, a VI pathway does not exist for the units sampled at this address.

Building #4

The RI field team collected an indoor air sample (RES 06-IA) and an outdoor air sample (RES 06-OA) in the areas listed in **Table 4-4** and depicted on **Figure 4-4** in each of the 2015 and 2016 sampling events. Laboratory analyses detected 1,2-DCA in the indoor duplicate sample at a concentration of 0.17 ug/m^3, exceeding the SL, in the 2016 event only. Laboratory analyses detected benzene in all samples (indoor and outdoor) at concentrations that exceeded the SL in both sampling events (2015 and 2016), with the highest concentration of 1.6 ug/m^3 reported for both the indoor and outdoor samples, indicating that the levels are likely associated with outdoor air in the neighborhood.

Similar to findings at other properties, 1,2-DCA analytical concentrations above the SL at this address appear to be associated with indoor sources, as 1,2-DCA was not detected in soil gas samples from any depth at the surrounding soil gas sampling locations (SAIA-SB/SG15, -16, -17, or -41), consistent with an existing indoor source for this compound. Based on the discussion above, a VI pathway does not exist in this residence.

Building #5

The RI field team collected indoor air samples (RES 07-IA) in 2015 and 2016, and collected one outdoor sample (RES 07-OA) in 2015 only, in the areas listed in **Table 4-4** and depicted on **Figure 4-4**. Laboratory analyses detected 1,2-DCA and ethylbenzene at 0.36 ug/m^3 and 1.3 ug/m^3, respectively, above the SLs, in the indoor sample for the 2016 event only. Laboratory analyses detected benzene in all samples (indoor and outdoor) at concentrations that exceeded the SL in both sampling events (2015 and 2016), with the highest concentration of 1.7 ug/m^3 reported for the indoor sample collected in 2016.

1,2-DCA and ethylbenzene analytical concentrations above the SL appear to be associated with indoor sources, as the nearest soil gas samples (from SAIA-SB/SG17) and the other surrounding analytical results (from SAIA-SB/SG41, -42, and -43) for 1,2-DCA and ethylbenzene were below the laboratory reporting limits for all depths. Benzene analytical concentrations exceeded the SL in all samples, with the highest value of 1.7 ug/m^3 from the indoor sample in 2016. Benzene analytical concentrations at this building are consistent with the outdoor sample concentrations reported for the same event, and are also consistent with the other 2016 results from adjacent Buildings #3 and #6 (which also peaked in 2016). These results indicate that the concentrations are likely associated with the outdoor air in the neighborhood. Based on the discussion above, a VI pathway does not appear to exist at this residence.

Building #6

The RI field team collected a crawlspace sample (RES 08-CS) and an indoor air sample (RES 08-IA) in the 2015 and 2016 sampling events, in the areas listed in **Table 4-4** and depicted on **Figure 4-4**. Benzene was the only compound detected in analytical samples at concentrations exceeding the SL; it exceeded the SL in both crawlspace and indoor samples in both sampling

events (2015 and 2016), with the highest concentration of 1.5 ug/m^3 in the 2016 indoor sample. Benzene analytical concentrations in indoor air are consistent with the outdoor air sample levels reported for the same event, indicating that the indoor levels likely originated from outdoor air in the neighborhood. Therefore, a VI pathway does not appear to exist at this residence.

4.3 GROUNDWATER

The EPA's RI team evaluated the nature and extent of groundwater contamination described in this report based on the data they collected from four groundwater investigation and monitoring events completed since March 2014. The compiled groundwater data consists of discrete-depth (Hydropunch) samples collected from CPT borings advanced for the RI, and samples collected from permanent wells installed to monitor groundwater conditions at the Site. The monitoring well network includes new RI wells installed on the SAIA property and off-property, and a number of existing wells installed by EPA as part of the Cooper Drum RI/FS which are located cross-gradient and partially downgradient of the SAIA property. The Cooper Drum monitoring well network extends southward to Duncan Avenue, mainly west of Adella Avenue. However, based on their locations on or close to the SAIA property, the RI field team sampled several Cooper Drum monitoring wells concurrently with the RI groundwater sampling efforts for SAIA; these wells include Cooper Drum wells on the western portion of the SAIA property (MW41 and MW42-44) and at downgradient locations (MW34-35, MW45, MW46-48) east of Adella Avenue. The CPT borings and the network of monitoring wells selected for RI groundwater monitoring for SAIA are shown on **Figure 1-4**, along with other monitoring wells in the area.

4.3.1 Groundwater Screening Levels

Groundwater SLs are a basis for evaluating analytical concentrations of contaminants in groundwater. This RI compares analytical concentrations of VOCs detected above laboratory reporting limits to the corresponding California State Water Resources Control Board maximum contaminant levels (MCLs; January 2018), many of which are the same as Federal MCLs. Where EPA has not promulgated MCLs, the RI compared analytical concentrations to U.S. EPA Region 9 Tapwater Screening Levels, DTSC-modified RSLs, or California Department of Public Health Notification Levels (NLs; 2018). These SLs are specified in the notes at the bottom of the tables that list the groundwater sample analytical results.

4.3.2 Groundwater Movement in Gaspur and Exposition Aquifers

The RI team assessed groundwater potentiometric surface elevations, based on groundwater elevations measured in July 2016, and calculated an average horizontal hydraulic gradient of 0.0015 ft/ft within the Gaspur Aquifer, with a predominant southerly flow direction (see **Section 3.3**).

Figure 3-7, **Figure 3-8**, and **Figure 3-9** present the July 2016 groundwater potentiometric contours for the shallow, intermediate, and lower Gaspur Aquifers, respectively. We also show groundwater elevations for the Exposition Aquifer on **Figure 3-10**, but these elevations do not show a consistent flow pattern or direction; therefore, contours are not drawn for this unit. The water levels measured during the March 2014, August 2014, and September 2016 sampling events are consistent with those shown on **Figure 3-7** through **Figure 3-10**; the hydraulic gradients and flow directions for these three events are consequently also similar to those for the July 2016 event. Wells SAIA-MW11C and SAIA-MW12C, shown on both **Figure 3-9** and **Figure 3-10**, are completed at slightly greater depths (5 to 10 feet deeper) than most wells completed in the lower Gaspur Aquifer, and are more representative of the depths of the transition from the Gaspur to the Exposition Aquifer.

As we presented in **Section 3.3.3** and **Table 3-1**, the RI team used the differences in groundwater elevation at locations with multiple completion monitoring wells (wells in close proximity and with screen intervals at different depths) to evaluate the vertical hydraulic gradients between the Gaspur zones (wells with A, B, and C suffixes), and between the Gaspur Aquifer and the Exposition Aquifer. The predominant pattern is downward flow gradients within the Gaspur Aquifer, and downward gradients between the lower Gaspur and the Exposition.

4.3.3 Nature of Groundwater Contamination in Gaspur and Exposition Aquifers

The RI team characterized the hydrogeologic and groundwater quality conditions at the Site using an extensive network of monitoring wells, and discrete-depth samples from CPT borings. In addition to the 31 SAIA monitoring wells at 13 locations, the network of monitoring wells includes 13 other monitoring wells, installed under investigations conducted for the nearby Cooper Drum Superfund Site but located within or near the SAIA groundwater contaminant plume (see **Table 4-5**). EPA delineated the nature and extent of groundwater contaminant

plumes based on the locations of analytical concentrations exceeding regulatory criteria such as MCLs, as well as fundamental groundwater hydraulics and solute-transport principles.

COPCs that the RI team identified as impacting Site groundwater quality are primarily the chlorinated VOCs TCE and *cis*-DCE and, to a lesser extent, a variety of other VOCs, along with the SVOC 1,4-D. As specified in the SAP (ITSI Gilbane, 2012), the laboratory analyzed groundwater samples for several other analytical groups (e.g., metals and PCBs) due to their possible presence resulting from historical facility operations, and analyzed general chemistry parameters to provide information useful in evaluating impacts to groundwater. For individual VOCs, SVOCs, metals, PCBs, and general chemistry parameters with any detections in groundwater, **Table 4-5** and **Table 4-6** present analytical sample results from all samples collected for monitoring wells and CPT investigations, respectively. These tables also list MCLs and other SLs, and denote exceedances with highlighted values (based on exceedances of MCLs, or on exceedances of other SLs where MCLs do not exist). The following subsections (**Section 4.3.3.1** through **Section 4.3.3.6**) discuss the analytical groundwater results from monitoring wells, while **Section 4.3.3.7** discusses the analytical results from discrete-depth groundwater samples collected from CPT borings.

4.3.3.1 Volatile Organic Compounds (VOCs) in Monitoring Wells

This section discusses VOC contaminants detected in samples at concentrations above screening levels in analytical groundwater samples collected from the RI monitoring network. As discussed above, the RI data includes four groundwater sampling events conducted since 2014. However, as the most complete monitoring event, performed in July 2016, includes the newer monitoring wells installed in 2016, the discussion of VOC data is based on data collected in July 2016. **Section 4.3.4.4** also discusses any notable variations in concentrations of compounds reported from the four groundwater sampling analytical events; however, these variations were relatively minor. For the discussion below, note that some contamination in the lower units (lower Gaspur and Exposition Aquifers) originated from the Jervis Webb plume (Gilbane, 2018), thus accounting for the fact that contours are open to the north (upgradient) on some of the plume (isoconcentration) maps. This topic is discussed in greater detail in the section on the

extent of groundwater contamination (**Section 4.3.4** and subheadings therein). The plume maps depict only the July 2016 event, the only complete sampling event.

Tetrachloroethene (PCE)

Laboratory analyses did not detect PCE in any groundwater samples collected from monitoring wells in July 2016 (and detected PCE in only one well from any other event, at below the 0.5 ug/L reporting limit). However, analyses did detect PCE very frequently in soil gas, and in several soil samples. Thus, its presence in soil and soil gas media on and near the SAIA property and its lack of mobility into groundwater appear to be a disparity. This contrast may reflect a combination of its low aqueous solubility, its high propensity for sorption to soil, as well as its relative ease of biodegradation by dechlorination under reducing conditions; these are all factors that reduce a contaminant's tendency to migrate in groundwater, as discussed in **Section 5.0**.

Trichloroethene (TCE)

Laboratory analyses detected TCE in 40 out of the 49 groundwater samples from the July 2016 monitoring event, with detected concentrations ranging from 0.57 to 3,500 ug/L. Laboratory analyses reported TCE exceeding the MCL of 5 ug/L in 14 groundwater samples from monitoring wells, with the highest concentration of 3,500 ug/L at well SAIA-MW3B, an off-site well installed in the intermediate Gaspur Aquifer and located approximately 500 feet south of the contaminant source area on the SAIA property. TCE exceedances were present in analytical samples from all three groundwater zones of the Gaspur Aquifer, as shown on the plume maps for the shallow, intermediate, and lower zones of this aquifer (**Figure 4-5** through **Figure 4-7**, respectively; note that, in addition to groundwater analytical samples from monitoring wells, the figures include the analytical results from discrete-depth groundwater samples collected from CPT borings (**Section 4.3.3.7**). TCE also slightly exceeded the MCL at a few wells in the Exposition Aquifer, as shown on **Figure 4-8**.

***cis*-1,2-Dichloroethene (*cis*-DCE)**

Of the COPCs in groundwater samples, *cis*-DCE had the highest reported analytical concentrations. In addition, the *cis*-DCE plume has the largest areal extent (as defined by concentrations exceeding its California MCL of 6 ug/L). Laboratory analyses detected *cis*-DCE in 47 out of 49 groundwater samples collected in the July 2016 event, with reported

concentrations ranging from 0.16J to 4,600 ug/L. Thirty-seven groundwater samples had *cis*-DCE concentrations above the California MCL. Samples from all three zones of the Gaspur Aquifer had *cis*-DCE analytical concentrations above the California MCL, with the most elevated concentrations present in groundwater monitored by the intermediate-zone wells. **Figure 4-9** through **Figure 4-11** show the spatial extent of *cis*-DCE contamination in groundwater of the shallow, intermediate, and lower zones of Gaspur Aquifer, respectively, and **Figure 4-12** shows *cis*-DCE contamination in the Exposition Aquifer.

trans-1,2-Dichloroethene (_trans_-DCE)

Laboratory analyses detected *trans*-DCE in 40 of the 49 groundwater samples collected for the July 2016 monitoring event, with concentrations ranging from 0.13J to 340 ug/L. Laboratory analyses detected the maximum concentration in a sample from the intermediate Gaspur groundwater well SAIA-MW3B, which also contained the peak analytical concentrations of TCE and *cis*-DCE. Twenty groundwater samples had *trans*-DCE concentrations that exceeded the California MCL of 10 ug/L. Analytical concentrations of *trans*-DCE are much lower than those of *cis*-DCE, and the *trans*-DCE plume has a smaller areal footprint.

1,1-Dichloroethene (1,1-DCE)

Laboratory analyses detected 1,1-DCE in 11 of the 49 groundwater samples collected in July 2016, with detected concentrations ranging from 0.66 to 6.4 ug/L. The maximum analytical concentration of 6.4 ug/L was the only exceedance of the SL (the California MCL), and was detected in shallow Gaspur well SAIA-MW2A, located on the SAIA property.

Vinyl Chloride (VC)

Laboratory analyses detected VC in eight of the 49 groundwater samples collected for the July 2016 event, with all eight detections exceeding the California MCL of 0.5 ug/L. Vinyl chloride analytical detections ranged from 0.81 to 45 ug/L. Groundwater in the lower zone of the Gaspur Aquifer monitored by well SAIA-MW4C, located approximately 800 feet downgradient of the source area, had the highest VC analytical result, at 45 ug/L. Laboratory analyses reported VC in exceedance of the California MCL in samples primarily from the intermediate and lower zones of the Gaspur Aquifer.

1,1 -Dichloroethane (1,1-DCA)

Laboratory analyses detected 1,1-DCA in 17 of the 49 groundwater samples collected in July 2016, with reported concentrations ranging from 0.45J to 23J ug/L. The highest analytical result was detected in groundwater from well SAIA-MW3B, located 300 feet downgradient of the SAIA property. Groundwater analyses for nine monitoring wells (four shallow, four intermediate, and one lower Gaspur Aquifer wells) had 1,1-DCA analytical concentrations above the California MCL of 5 ug/L.

1,2-Dichloroethane (1,2-DCA)

Laboratory analyses detected 1,2-DCA in 18 of the 49 groundwater sample analyses collected for the July 2016 monitoring event, with reported concentrations ranging from 0.31J to 44 ug/L. The maximum analytical result for 1,2-DCA was reported in the groundwater sample collected from deep-zone Gaspur Aquifer well SAIA-MW1C, located in the contaminant source area on the SAIA property. Groundwater from five intermediate and seven lower Gaspur Aquifer wells, and three Exposition Aquifer zone wells, had analytical results for 1,2-DCA above the California MCL of 0.5 ug/L.

Benzene

Laboratory analyses detected benzene in four of the 49 groundwater sample analyses, with two reported concentrations exceeding the California MCL of 1 ug/L. Benzene slightly exceeded the California MCL in two Gaspur Aquifer lower-zone wells, with the maximum concentration of 3.2 ug/L in the SAIA property well SAIA-MW1C.

4.3.3.2 Semivolatile Organic Compounds (SVOCs) in Monitoring Wells

1,4-Dioxane (1,4-D)

Laboratory analyses detected 1,4-D in 26 out of 49 groundwater samples in July 2016, with reported concentrations ranging from 0.72 to 62J ug/L (the peak concentration overall was 110J ug/L in the March 2014 event; see **Table 4-5**). Twenty-four of the 26 analytical detections exceeded the SL for 1,4-D (the California NL of 1 ug/L): six in the shallow zone of the Gaspur Aquifer, seven in the intermediate zone, and ten in the lower zone. One well in the Exposition Aquifer had 1,4-D analytical concentrations that exceeded the NL. The highest analytical results for 1,4-D were reported from the intermediate Gaspur Aquifer, with the peak value of 62J ug/L

at SAIA-MW4B. **Figure 4-13** through **Figure 4-16** depict the 1,4-D exceedances in analytical groundwater samples on the plume maps for the shallow, intermediate, and lower zones of the Gaspur Aquifer and for the Exposition Aquifer, respectively.

No other SVOCs had analytical results exceeding their respective laboratory reporting limits, except for samples from MW-43 (bis[2-ethylhexyl]phthalate), MW-52 (bis[2-ethylhexyl]phthalate), and SAIA-MW1C (carbazole). However, these analytical results did not exceed the respective SLs. **Table 4-5** presents the analytical results for all SVOC compounds detected in groundwater samples from one or more monitoring wells.

4.3.3.3 Metals in Monitoring Wells

Table 4-5 presents a listing of analytical results for samples with detections of metals. The laboratory conducted metals analysis only in groundwater samples collected in the March 2014 sampling event; thus, the list of exceedances of SLs reflects only this groundwater sampling event for the Site. Laboratory analysis reported aluminum at analytical concentrations exceeding the MCL (California) of 1,000 ug/L in six of the 36 samples collected from monitoring wells in March 2014. However, the occurrences of aluminum exceeding the MCL were, with one exception (MW43 in the intermediate Gaspur Aquifer), limited to the shallow intervals of the Gaspur Aquifer. Thus, it is quite unlikely that aluminum originating from the SAIA property migrates deep enough to impact the Exposition Aquifer or the deeper water-supply aquifers in the area.

Laboratory analyses reported arsenic at concentrations exceeding the MCL in 26 of the 36 samples collected for the same event. Manganese and cobalt were reported at analytical concentrations exceeding the tapwater SL in 36 and 18 of the 36 monitoring well samples collected for the same event, respectively. However, neither manganese nor cobalt have primary MCLs, and SLs are not enforceable criteria. The similarity of the broad distribution of arsenic and manganese SL exceedances reported for groundwater and soil suggests that these metals may be naturally occurring in the Gaspur Aquifer, particularly considering the reducing conditions in the aquifer in both impacted and unimpacted areas (see **Section 5.0**). Arsenic and manganese were reported from every soil sample at about 2-15 mg/kg (arsenic) and 300-700 mg/kg (manganese), without discernible peaks in concentration at SAIA. (These metals are

always present in natural soils.) Additionally, analytical concentrations of arsenic and manganese were consistent with groundwater data collected from nearby sites (e.g., the Cooper Drum Superfund Site; URS, 2002). As to other metals in groundwater, laboratory analyses reported lead and nickel at concentrations exceeding MCLs from one shallow Gaspur Aquifer well each.

SL exceedances for metals in groundwater thus appear to be either local (aluminum, lead, and nickel) or related to the reducing geochemical conditions and common to groundwater conditions of the surrounding area (arsenic, manganese). Thus, the metal SL exceedances do not indicate significant groundwater impacts of metals attributable to the SAIA property.

4.3.3.4 PCBs in Monitoring Wells

Laboratory analyses did not detect PCBs above their respective laboratory reporting limits in any of the 13 groundwater samples analyzed for these compounds for the March 2014 event, the only event in which PCBs were analyzed.

4.3.3.5 Perchlorate in Monitoring Wells

Laboratory analyses did not detect perchlorate above the laboratory reporting limit in any of the 11 groundwater samples analyzed for this component in the March 2014 event, the only event for which perchlorate was analyzed.

4.3.3.6 General Chemistry in Monitoring Wells

General chemistry parameters (e.g. alkalinity, chloride, sulfate, total dissolved solids, total organic carbon) were reported for nearly all the analytical samples collected for the March 2014 event, the only event for which these parameters were analyzed. Sulfate exceeded its secondary (non-enforceable) MCL of 250 mg/L in more than 85% of the samples. Elevated sulfate levels are typical of the aquifers of the area, and were found in many wells reported for the Cooper Drum RI (URS, 2002). **Table 4-5** presents a listing of compounds detected in samples analyzed for general chemistry parameters.

4.3.3.7 VOCs and SVOCs Exceeding Screening Levels in Discrete-Depth Groundwater Samples

EPA analyzed discrete-depth groundwater samples from CPT borings for VOCs and the SVOC 1,4-D. **Table 4-6** presents the analytical results for all detected analytes in discrete-depth samples, and **Appendix E** presents the results for all analytes in discrete-depth samples (whether detected or not). These samples provide analytical results that complement the monitoring well analytical results, as the field team advanced CPT borings across a wider cross-gradient (east-west) extent than monitoring wells; thus, **Figure 4-5** through **Figure 4-16** present these discrete-depth results along with monitoring well results on the contaminant plume maps. The following contaminants exceeded SLs in one or more discrete-depth groundwater samples:

- TCE exceeded the MCL of 5 ug/L in 38 out of the 133 total discrete-depth sample analyses from CPT borings, with a peak concentration of 3,500 ug/L in the shallow Gaspur Aquifer sample analysis from SAIA-HP21, located on the SAIA property and about 100 feet downgradient from the contaminant source area.
- *cis*-DCE exceeded the California MCL of 6 ug/L in 74 out of 133 discrete-depth sample analyses, with a peak concentration of 3,900 ug/L in the intermediate Gaspur Aquifer sample analysis from SAIA-CPT06, located about 400 feet downgradient of the SAIA property along McCallum Avenue.
- *trans*-DCE exceeded the California MCL of 10 ug/L in 32 out of 133 discrete-depth sample analyses, with a peak concentration of 770 ug/L in the intermediate Gaspur Aquifer sample analysis from SAIA-CPT06, located along McCallum Avenue.
- 1,1-DCA exceeded the MCL of 5 ug/L in 9 out of 133 discrete-depth sample analyses, with a peak concentration of 22J ug/L in the intermediate Gaspur Aquifer sample analysis from on-property location SAIA-HP10, located 100 feet downgradient of the source area.
- 1,2-DCA exceeded the MCL of 0.5 ug/L in 28 out of 133 discrete-depth sample analyses, with a peak concentration of 58 ug/L in a sample analysis from the intermediate Gaspur, from on-property location SAIA-HP10.
- Benzene exceeded the MCL of 1 ug/L in one out of 133 discrete-depth sample analyses, with a concentration of 15 ug/L in the intermediate Gaspur Aquifer sample analysis from SAIA-HP10.
- PCE exceeded the MCL of 5 ug/L in two out of the 133 discrete-depth samples analyzed for this compound, with a peak concentration of 9.9 ug/L in the Exposition Aquifer sample analysis from SAIA-CPT10, located on Wood Avenue, 1,000 feet downgradient from the SAIA property. No other Exposition Aquifer sample analyses exceeded the MCL for PCE.

- 1,2,3-Trichloropropane exceeded the DTSC-modified RSL of 0.0002 ug/L in one out of the 133 discrete-depth samples analyzed for this compound, with a concentration of 0.094J ug/L in the lower Gaspur sample analysis from SAIA-CPT06.
- The SVOC 1,4-D exceeded the California NL of 1 ug/L in 37 out of the 133 discrete-depth samples analyzed for this compound, with a peak concentration of 34 ug/L in the lower Gaspur sample analysis from SAIA-CPT06.

The discussion of the extent of groundwater contamination in **Section 4.3.4** includes the analytical results from discrete-depth groundwater samples from CPT borings along with those from monitoring wells; the groundwater contaminant plume maps cited in that section also show both sets of results.

4.3.4 Extent of Groundwater Contamination

Two VOCs, specifically TCE and *cis*-DCE, and the SVOC 1,4-D, are the most widespread groundwater contaminants at the Site, having been detected above SLs in analyses of groundwater samples from monitoring wells located both on and downgradient from the SAIA property. Note also that the plume maps include several groundwater sampling locations from the ELG Metals property just upgradient from the SAIA property: on the plume contour maps these samples show VOCs and 1,4-D migrating toward the SAIA property, with the contaminants originating from the Jervis Webb property about 1,500 feet to the north; these contaminants are part of the Jervis Webb VOC plume (Gilbane, 2018). The Jervis Webb and SAIA VOC plumes appear to contact each other at depth and just south of SAIA, and appear to commingle for another several hundred feet south of the SAIA property, as discussed in **Section 4.3.5**. Contamination from monitoring wells within the Cooper Drum plume to the west (Haley and Aldrich, 2017) indicates that VOCs originating from Cooper Drum come into proximity with the SAIA plume at locations west and southwest of the SAIA property. The SAIA plume maps presented in the figures thus display results from both the Jervis Webb and Cooper Drum plumes where they approach the SAIA plume.

The plume contour maps for the shallow Gaspur Aquifer suggest that the TCE and *cis*-DCE plumes (**Figure 4-5** and **Figure 4-9**, respectively) originate from the area around the sumps of the former degreasing building on the SAIA property, where laboratory analyses reported the highest VOC concentrations from both soil and soil gas samples. Based on analyses of samples

of these three media, the area of the former sumps thus appears to be the primary contaminant source area for the Site groundwater contaminant plumes. The TCE and *cis*-DCE plumes have migrated off the SAIA property to the south, conforming with the general groundwater flow direction in the area. Along with the CPT results from 2013 and 2015, the wells installed in 2014 and 2016 characterize the areal extent of the VOC plumes. The *cis*-DCE groundwater contaminant plume, the longest contiguous plume, extends at least 2,800 feet south from its source at the SAIA property, to at least Aldrich Avenue, a short distance south of the LAUSD property.

4.3.4.1 Semi-perched Aquifer

RI groundwater sampling events showed VOC contamination above SLs in the semi-perched aquifer, at relatively low concentrations at two locations beneath the southeastern portion of the SAIA property (SAIA-HP10 and -HP21), with maximum analytical concentrations for TCE at 20 ug/L and *cis*-DCE at 11 ug/L at SAIA-HP10. In this small aquifer, only one off-site boring (SAIA-CPT05) advanced south of the SAIA property reported *cis*-DCE, at a low analytical concentration of 9.8 ug/L. At the other 14 CPT locations downgradient from the SAIA property where the field team collected a sample from the semi-perched aquifer, there were no analytical exceedances of SLs except for one to three isolated, low-level MCL exceedances each for *cis*-DCE and TCE near the SAIA property (locations SAIA-HP10, -HP21, and SAIA-CPT05; **Table 4-6**). Thus, groundwater contaminants are not present in the semi-perched aquifer more than about 200 feet south from the SAIA property boundary along Southern Avenue. The lack of contaminants beyond this location is likely due to groundwater contaminants either migrating downward into the underlying Gaspur Aquifer, or simply not migrating south at a significant rate, possibly due to low permeability or low hydraulic gradients, and likely variably saturated conditions beyond the immediate area. The perched water bearing zones are often not contiguous and are transiently (seasonally) unsaturated.

4.3.4.2 Gaspur Aquifer

VOC impacts to Site groundwater are most significant in the Gaspur Aquifer. RI groundwater sampling events showed high analytical concentrations of VOCs (above 1,000 ug/L for TCE and *cis*-DCE) at SAIA-MW1A, SAIA-MW2A, MW-42, and SAIA-CPT10 and -CPT21, which span

the eastern two-thirds of the SAIA property (see **Figure 4-5** and **Figure 4-9**). This observation is consistent with soil-gas analytical results, which showed elevated results in the same area, corresponding to the approximate footprint of the former buildings on the property (**Figure 4-2** and **Figure 4-3**). The SAIA VOC plume likely commingles with the Cooper Drum VOC plume in the southwestern portion of the SAIA property (discussed in greater depth in the section on commingling, **Section 4.3.5**). VOC groundwater contamination extends downgradient (south) from the SAIA property; however, the contaminant plumes for TCE and *cis*-DCE differ significantly.

TCE: South of the SAIA property, the TCE groundwater plume extends in the shallow Gaspur Aquifer for about 1,500 feet south of the contaminant source area (**Figure 4-5**). TCE appears to migrate downward into the intermediate Gaspur Aquifer within about 400 feet south of the source area, based on high analytical concentrations at well SAIA-MW3B and several discrete-depth (CPT) samples (**Figure 4-6**). The TCE plume in the intermediate zone appears to continue into the northern part of the LAUSD property. In the lower Gaspur Aquifer, laboratory analyses reported TCE at greater than the MCL from only one location (SAIA-CPT10, about 1,200 feet south of the SAIA source area) that appears part of contamination that originated from the SAIA source (**Figure 4-7**). At and near the SAIA property, however, the lower-Gaspur TCE contamination originated from the Jervis Webb VOC plume, as evidenced by the high TCE concentrations present upgradient (north of) the SAIA property (**Figure 4-7**). On and near SAIA, the intervening intermediate Gaspur Aquifer (B zone) has relatively low TCE concentrations (compare **Figure 4-6** and **Figure 4-7**): this intermediate interval separates the shallow-Gaspur plume (A zone) that originated from the SAIA contaminant source area, from the lower-Gaspur plume (C zone) that originated from the continuous TCE plume that extends upgradient to the Jervis Webb property about 1,500 feet north of SAIA. Like its distribution in the lower Gaspur, TCE attributable to SAIA has only negligible occurrence in the Exposition Aquifer, with scattered analytical concentrations slightly above the MCL (**Figure 4-8**). The limited distribution of TCE in the two lower intervals may indicate a slower contaminant velocity for TCE than for *cis*-DCE in the groundwater system downgradient from the SAIA property. This phenomenon is likely due in part to degradation by reductive dechlorination of TCE to produce *cis*-DCE, which has a much more extensive plume than TCE (see discussion

under *cis*-DCE below). Degradation of TCE tends to retard its migration progress in groundwater, much like sorption does (see **Section 5.3**). The degradation concept is also documented for the plumes originating at the nearby Jervis Webb (Gilbane, 2018) and Cooper Drum (URS, 2002) properties, and is supported by geochemical data indicating a chemically-reducing environment that is conducive to reductive dechlorination (**Section 5.3**).

A significant aspect of TCE and other groundwater contaminants at the site is that there are other contaminant plumes near SAIA that originate from sources separate from the SAIA property. The TCE plume maps depict these other plumes with orange contours. Specifically, **Figure 4-5** shows a separate area of shallow-Gaspur TCE contamination in the area labeled the Atlantic Avenue Plume (Weston, 2012), with high concentrations at well MW-56. There are two smaller shallow-Gaspur plumes centered on the western and eastern parts of the LAUSD property. In the intermediate Gaspur Aquifer, only one small TCE plume is apparent on the LAUSD property (**Figure 4-6**), while in the lower Gaspur, small TCE plumes are visible downgradient from the Cooper Drum property (at MW62B) and downgradient from the LAUSD property (at SAIA-MW11C; **Figure 4-7**). All these plumes are separate from the TCE contaminant plume that originates at SAIA, based on intervening wells with low to non-detect analytical results for TCE.

Finally, there are several areas of TCE contamination that are not separate from the SAIA TCE plume and may commingle with it: (1) low concentrations of TCE in the intermediate Gaspur near the southwestern corner of the SAIA property appear to emanate from the Cooper Drum VOC plume to the northwest (**Figure 4-6**), and (2) higher concentrations of TCE in the intermediate and lower Gaspur intervals, located at the ELG Metals property upgradient (north) from the SAIA property, likely originate from the Jervis Webb property about 1,600 feet north of SAIA (see **Figure 4-6** and **Figure 4-7**). **Section 4.3.5** discusses the topic of commingling.

cis-DCE: The distribution of *cis*-DCE in Gaspur Aquifer groundwater at levels of concern (above MCLs) is more complex and much more widespread than that of TCE. Directly south of the SAIA property, a contiguous plume of *cis*-DCE extends in the shallow Gaspur Aquifer for about 1,250 feet south of Southern Avenue (**Figure 4-9**), similar to the extent of the TCE plume. However, *cis*-DCE has migrated deeper and at higher analytical concentrations than TCE, as is

evident in the comparison of the contours and concentrations in the intermediate Gaspur Aquifer for TCE (**Figure 4-6** and **Figure 4-7**) with those for *cis*-DCE (**Figure 4-10** and **Figure 4-11**). The contiguous *cis*-DCE plume in the intermediate Gaspur extends about 2,500 feet south of Southern Avenue, to approximately the southern boundary of the LAUSD property (**Figure 4-10**). In the lower Gaspur interval, *cis*-DCE concentrations were somewhat lower than in the intermediate interval, ranging up to 870 ug/L at SAIA-MW4C; however, the lower-Gaspur plume extends somewhat farther downgradient than in the intermediate interval, to include well SAIA-MW12C (**Figure 4-11**). The *cis*-DCE plume extends even farther south and to greater depth into the Exposition Aquifer, as discussed under the next heading.

The much greater downgradient extent of the *cis*-DCE plumes attributable to the SAIA source area compared to the TCE plumes are likely due in part to the fact that *cis*-DCE is a daughter product of the reductive dechlorination of TCE. *cis*-DCE has greater solubility than TCE, and is less prone to sorption, as discussed in **Section 5.3** and **Section 5.4**.

As with TCE, there are other *cis*-DCE plumes near SAIA that originate from sources separate from the SAIA property. The *cis*-DCE plume maps depict these other plumes with yellow-green contours. On **Figure 4-9**, there are five areas of *cis*-DCE above the MCL that represent groundwater contamination in the shallow Gaspur that is largely separate from the larger *cis*-DCE plume directly south of the SAIA property: a small plume west of the SAIA property, located downgradient from (and attributable to) the Cooper Drum property; a larger area with high concentrations centered on well MW-56 (the Atlantic Avenue Plume); and three small plumes centered on the parts of the LAUSD property. In the intermediate Gaspur Aquifer, there are two such areas of cis-DCE that are only partly separate from the SAIA plume (**Figure 4-10**): (1) the cis-DCE occurrences at and west of wells MW-31 and MW-39, downgradient from the Cooper Drum property and likely attributable to that facility; and (2) a small plume near the western boundary of the LAUSD property. In the lower Gaspur Aquifer, the Cooper Drum *cis*-DCE plume is somewhat more distinguishable from the SAIA *cis*-DCE plume, while a small LAUSD plume of this compound still appears to be present, but probably commingles with the SAIA plume (**Figure 4-11**). In all these cases, *cis*-DCE concentrations in the smaller plumes

(Cooper Drum, Atlantic Avenue, and LAUSD plumes) are much lower (usually by at least an order of magnitude) than in the SAIA plume.

Upgradient (north) from SAIA, *cis*-DCE at analytical concentrations above MCLs are apparent in all three intervals of the Gaspur Aquifer (**Figure 4-9** through **Figure 4-11**). These occurrences are attributable to past operations on the Jervis Webb property. In contrast to the other plumes, these *cis*-DCE occurrences originating from Jervis Webb are directly upgradient of the SAIA plume, and are best distinguished from the cis-DCE of the SAIA plume in the cross-section A-A' (see **Figure 3-2**). As discussed above under TCE, the *cis*-DCE contamination of the Jervis Webb and SAIA plumes are also separated vertically at the SAIA property, with the SAIA *cis*-DCE plume largely limited to the shallow Gaspur (e.g., SAIA-MW1A and -2A), and the Jervis Webb *cis*-DCE plume mainly in the lower Gaspur (e.g., at SAIA-MW1C). Compared to Jervis Webb, the SAIA property is the much larger source for contamination. This is based on the fact that the Jervis Webb VOC plume appears to end within about 500 feet of the southern SAIA property boundary (near McCallum Avenue; see **Figure 4-7** and **Figure 4-11**), and VOC concentrations in the SAIA VOC plume at a similar distance downgradient (i.e. 500 feet) are much higher than concentrations in the Jervis Webb plume (see this area on **Figure 4-9** through **Figure 4-11**, which label the areas attributable to the two plumes). **Section 4.3.5** further discusses commingling of the Jervis Webb and SAIA plumes.

1,4-D: The distribution of 1,4-D in groundwater at levels above its SL (the California NL of 1 ug/L) is like that of cis-DCE, with the compound present above its NL in all three intervals of the Gaspur Aquifer. All five plume groups mentioned above (SAIA, Cooper Drum, Atlantic Avenue, LAUSD, and Jervis Webb) contain 1,4-D exceedances of the NL. Analytical concentrations of 1,4-D are not nearly as high as concentrations of TCE or *cis*-DCE, but one difference is that 1,4-D is represented more prominently than TCE or *cis*-DCE in the Cooper Drum plume in terms of concentration and area within the 1 ug/L contour of the SL (**Figure 4-13** through **Figure 4-16**). While analytical concentrations of TCE and *cis*-DCE are much higher in the SAIA plume than the Cooper Drum plume, analytical concentrations of 1,4-D are approximately the same in the Cooper Drum as in the SAIA plume. **Section 4.3.5** further

discusses this contrast of the proportionally higher concentrations of 1,4-D in the Cooper Drum plume versus the SAIA plume as it relates to plume commingling.

4.3.4.3 Exposition Aquifer

VOC impacts to Site groundwater reach into the Exposition Aquifer in the following three discrete areas, and from three different sources:

- The ELG Metals and SAIA properties, where the Jervis Webb plume contains *cis*-DCE and TCE at analytical concentrations above MCLs in a limited area that appears to end near the southern boundary of the SAIA property (see **Figure 4-8** and **Figure 4-12**). As observed in the Jervis Webb RI Report (Gilbane, 2018), the main portion of the Jervis Webb plume in this area is slightly higher, in the overlying lower Gaspur Aquifer.
- Downgradient from the Cooper Drum property, centered somewhere near Cooper Drum well MW-55, where *cis*-DCE exceeds the California MCL. The size of this plume is not well defined, but it is not as large as the SAIA plume, and appears to be separate from the SAIA plume (**Figure 4-12**).
- A large *cis*-DCE plume that begins in the northern part of the LAUSD property and extends southward at least to Aldrich Avenue south of the LAUSD property. This plume is contiguous with the *cis*-DCE plume in the lower Gaspur that originates at the SAIA property; therefore, this *cis*-DCE plume in the Exposition Aquifer beneath LAUSD likely commingles with the *cis*-DCE plume which originates at the SAIA property. South of Tweedy Avenue, *cis*-DCE concentrations in the Exposition Aquifer exceed those in the lower Gaspur Aquifer (compare **Figure 4-11** with **Figure 4-12**), indicating that the center of mass of the *cis*-DCE plume has passed downward from the lower Gaspur to the Exposition.

The Exposition Aquifer is of particular interest because it immediately overlies the Gage Aquifer, a local water-supply aquifer, in which some wells are screened as shallow as 280 feet bgs; the RI wells are screened only as deep as 140 feet bgs. The first two areas of impact to the Exposition Aquifer show declining concentrations with depth (i.e., concentrations are lower in the Exposition Aquifer than in the overlying lower Gaspur), while the opposite is true for the SAIA plume (concentrations are similar or higher in the Exposition than in the overlying Gaspur). Additionally, the SAIA plume in the Exposition Aquifer is much larger and contains much higher concentrations (up to 250 ug/L at SAIA-MW13) than the other two plumes in the Exposition Aquifer (see **Figure 4-12**). Therefore, one data gap remains: the extent and depth of the downgradient VOC impacts to the Exposition Aquifer beyond well SAIA-MW13, which is at the southern end of the area investigated during the RI.

4.3.4.4 Temporal Changes in Contaminant Concentrations

For the six monitoring wells installed in the Gaspur Aquifer in 2014 (SAIA-MW1A/B/C through SAIA-MW6A/B/C), there were marked changes in concentrations from the 2014 sampling events to the July 2016 sampling event. At wells with analytical concentrations of at least 100 ug/L for either *cis*-DCE or TCE, the concentrations of *cis*-DCE generally declined between 10% and 60% from 2014 to 2016, while TCE declined between 50% and 95% (see **Table 4-5**). The greater decline in the analytical concentrations of TCE may be due to increased degrees of degradation to its daughter product, *cis*-DCE. Similar magnitudes of analytical concentration declines during this period can be observed in monitoring wells installed and sampled under the Cooper Drum investigation, including MW34, MW42, MW47, and MW56. Thus, the declining trends for this limited 2014 to 2016 time period appear to be real, and not due to some type of sampling or laboratory artifact.

In several cases, deeper monitoring wells (lower Gaspur Aquifer wells MW35 and MW46, and Exposition well SAIA-MW7) showed increases in *cis*-DCE analytical concentrations by factors of up to five during this period, while TCE concentrations remained constant or decreased. It is possible that these changes may reflect some downward migration of contaminants with time.

Despite these changes in concentrations, the extent of the area underlain by the SAIA contaminant plume changed very little (if at all) among the sampling events. Specifically, nearly every well with one or more compounds that exceeded an SL in one event also exceeded the SL for the same compounds in other events when it was sampled, except in instances when concentrations were close to SLs (see **Table 4-5**).

4.3.5 Commingling of the SAIA Groundwater Plume with Neighboring Plumes

As discussed above, the SAIA property is located near several other sites that have associated VOC groundwater contaminant plumes. The largest of these are the Jervis Webb Superfund Site and the Cooper Drum Superfund Site. Because of the proximity of these plumes, there may be some cross-gradient comingling (between Jervis Webb and Cooper Drum plumes; and between SAIA and Cooper Drum plumes) and some degree of vertical commingling down the axis of the plumes (between SAIA and Jervis Webb plumes). There are several ways of assessing whether and to what extent contaminant plumes may commingle. The RI team used recent data from all

three of these sites to evaluate commingling between the SAIA plume and other nearby contaminant plumes.

4.3.5.1 Evidence Based on Hydraulic Considerations

One method to evaluate plume commingling is to examine groundwater potentiometric contours at various times. Figures A2-1 through A2-3 in **Appendix A-2** depict groundwater elevation contours measured for the Jervis Webb RI (Gilbane, 2018) for the Gaspur Aquifer hydrologic intervals, for the time closest to when the field team measured groundwater elevations at SAIA (May-June 2017). These maps also depict groundwater elevations for Cooper Drum monitoring wells (data from Haley and Aldrich, 2017). Owing to sparse data from the Exposition Aquifer, the RI can only reliably evaluate the shallow, intermediate, and lower Gaspur Aquifer for this period. The RI team also examined historical maps of groundwater elevation contours developed for the Cooper Drum site (December 2000 and February 2007 events, reproduced in **Appendix A-3**).

Figures A2-1 through A2-3 of **Appendix A-2** indicate that groundwater passing beneath the Jervis Webb contaminant source area had gradients impelling migration to the southeast beneath the Jervis Webb property, and then more directly south beneath the ELG Metals and SAIA properties. These gradients direct groundwater flow and contaminant migration from Jervis Webb to locations a short distance east of the Cooper Drum property, at the area of JWMW-11A/B/C, and then almost directly south toward the SAIA property and its source area (near SAIA-MW1A/B/C). The slight shift in direction of hydraulic gradients, from south-southeast near the southern end of the Jervis Webb properties, to more directly south and south-southwest at locations east of the Cooper Drum site, was documented in various groundwater contour maps completed for the Cooper Drum site, such as the February 2007 event included in **Appendix A-3**. (This map shows southeasterly gradients near Cooper Drum well MW-19 in the north, and south-to-southwesterly gradients to the south of MW-19, across the remainder of the Cooper Drum monitoring network.) The net result is that contaminants present in the Jervis Webb VOC plume have tended to migrate toward the SAIA property, a fact borne out by the shape of the Jervis Webb plume and its presence at depth beneath the ELG and SAIA properties (see the

lower Gaspur and Exposition Aquifer plume maps on **Figure 4-7**, **Figure 4-8**, **Figure 4-11**, and **Figure 4-12** in this report).

Beneath the SAIA property, the Jervis Webb plume is located some 40 feet beneath the SAIA contaminant plume (Gilbane, 2018). At the SAIA property, the SAIA plume is largely restricted to the shallow Gaspur Aquifer, at SAIA-MW1A and -MW2A. At, and just west of, the SAIA property, it appears that the hydraulic gradients in 2000 and 2007 were to the south or south-southwest for the shallow Gaspur interval (**Appendix A-3**). By 2016, the south-southwesterly gradients in the same locations and aquifers had yielded to gradients oriented more directly to the south or south-southeast (**Figure 3-7**). Spatial and temporal variations in groundwater flow directions such as these have likely caused some amount of commingling of the SAIA and Jervis Webb VOC plumes with the Cooper Drum VOC plume located to their west, at least along plume margins located east of the northeast corner of the Cooper Drum property beneath Rayo Avenue.

4.3.5.2 Evidence Based on Differing VOC Concentrations

As discussed in **Section 4.3.4.2** under TCE and *cis*-DCE, the Jervis Webb and SAIA VOC plumes are separated vertically beneath the SAIA property, with the SAIA TCE and *cis*-DCE plumes largely limited to the shallow Gaspur (e.g., SAIA-MW1A and -2A), and the Jervis Webb TCE and *cis*-DCE plumes mainly limited to the lower Gaspur (e.g., at SAIA-MW1C). The Jervis Webb VOC plume ends within about 500 feet of the southern SAIA property boundary (near McCallum Avenue; see **Figure 3-2**, **Figure 4-7**, and **Figure 4-11**). An intervening low-VOC concentration interval in the intermediate Gaspur at the same locations (at SAIA-MW1B and -MW2B) serves to define the plumes from Jervis Webb (below, in the "C" wells) and SAIA (above, in the "A" wells) vertically.

In addition, where the Jervis Webb and SAIA VOC plumes coexist, the differing VOC proportions, based on the progressive degradation of TCE to *cis*-DCE by reductive dechlorination, as initially described in **Section 4.3.4.2**, distinguishes these two plumes. For these two plumes, **Figure 4-17** shows the differing ratios of analytical concentrations of *cis*-DCE, the primary TCE degradation daughter product, to TCE (the parent compound). At a given

point on the x-axis, this ratio is higher for wells in the Jervis Webb VOC plume than for wells in the SAIA VOC plume.

The reason for the differing contaminant ratios between the Jervis Webb and SAIA VOC plumes is that the Jervis Webb plume in this area is more mature, having lost most of its TCE through biodegradation to *cis*-DCE. This figure shows increasing values of this ratio in the Jervis Webb plume with distance downgradient from the Jervis Webb contaminant source area. When the Jervis Webb plume arrives at depth beneath the SAIA site, this ratio has increased from <1 at and near the Jervis Webb source area, to >50 at wells SAIA-MW01C and SAIA-MW02C, screened at depth beneath the SAIA property but still within the Jervis Webb plume. In contrast, the shallow wells at the SAIA site are relatively immature and un-degraded, based on much lower *cis*-DCE/TCE ratios of 0.3 to 15 for wells at and near the SAIA source area (wells SAIA-MW1A and -MW2A). Similar to the Jervis Webb plume, the *cis*-DCE/TCE degradation ratios for the SAIA plume increase in the downgradient direction, to values generally > 100, as illustrated on **Figure 4-17**.

Figure 3-2 is a longitudinal cross-section beginning just north of the SAIA property. This cross-section follows the approximate center-line of the downgradient portion of the Jervis Webb plume starting on the ELG Metals property and continuing downgradient (south) along the approximately center-line of the SAIA VOC contaminant plume, to the southern extent of the SAIA monitoring network (**Figure 3-3**). As noted above, these two plumes appear to be separated vertically beneath the SAIA site, based on relatively low analytical concentrations in the intermediate-depth wells SAIA-MW1B and SAIA-MW2B on the SAIA property.

Downgradient from the SAIA property, however, there does not appear to be much vertical separation, if any, between the Jervis Webb and SAIA plumes, as there are no examples of well clusters containing low-concentration VOC intervals located between the two plumes (**Figure 3-2**); nor can we distinguish the two plumes chemically, because from this point and downgradient to the south, the *cis*-DCE/TCE ratio is similar for both plumes. Instead, beginning about 250 feet south of Southern Avenue, the SAIA and Jervis VOC plumes appear to at least be in contact with each other, and may have commingled to some extent. In this commingled area, the relative contribution of VOCs from the Jervis Webb VOC plume is significantly less than VOCs from

the SAIA plume, based on relative concentrations of the two plumes: peak analytical concentrations of total VOCs in the Jervis Webb plume near McCallum Avenue are about 100 ug/L, while in the SAIA plume total VOCs are about 10,000 ug/L. Thus, it appears that the Jervis Webb and SAIA plumes may be slightly commingled, because the leading edge of the Jervis Webb plume is at much lower concentrations relative to that of SAIA by the time that it contacts the SAIA plume.

4.3.5.3 Evidence Based on Contrasting VOC Fingerprints

While *cis*-DCE-to-TCE ratios distinguish the Jervis Webb and SAIA VOC plumes (**Section 4.3.5.2**), the Cooper Drum VOC plume has irregular patterns of this ratio, with no apparent trends correlating with distance downgradient from the Cooper Drum VOC source area. There are other ways to distinguish the Cooper Drum plume from the other two plumes. While the primary COPCs in the groundwater contaminant plumes from all three sites are identical (TCE and *cis*-DCE), the relative proportions of several other contaminants differ among the plumes. The compounds 1,1-DCA, 1,1-DCE, and 1,4-D appear to be present at higher concentrations in the Cooper Drum VOC plume than in the other two plumes. These three compounds are most commonly associated with TCA rather than TCE or PCE. 1,1-DCA and 1,1-DCE form readily as byproducts of biotic and abiotic degradation of TCA, respectively (**Section 5.3.2.3**), while industrial facilities widely used 1,4-D in the 1980s as a stabilizer and metal corrosion inhibitor for TCA during its storage and transport in aluminum containers (Mohr et al., 2010; Wikipedia, 2018). While groundwater analyses for each of the three sites did not detect TCA, analyses did detect it in many soil-gas samples from the Jervis Webb, Cooper Drum, and SAIA sites, and in some soil sample analyses from only the Cooper Drum site. Owing to high degradation/hydrolysis rates, the presence of its common daughter products 1,1-DCA and 1,1-DCE indicate that TCA was probably present at higher concentrations in the past at each site. Most significantly, in soil sample analyses for the 1996 pre-RI investigation at Cooper Drum, Bechtel (1997) reported TCA at up to 13.4 mg/kg in 11% of the soil samples analyzed for TCA and total TCA (the sum of 1,1,1-TCA and 1,1,2-TCA); TCA was the third-most-frequently detected chlorinated compound in soil samples (**Appendix A-3** presents the summary table from Bechtel [1997]). These detections of TCA in soil sample analyses for the Cooper Drum site

distinguish it from the Jervis Webb and SAIA sites, where analyses did not detect TCA in soil samples.

Considering the various organic contaminants at the SAIA, Jervis Webb, and Cooper Drum sites, EPA groups the contaminants into those associated with the chlorinated ethenes PCE and TCE (a group that includes *cis*-DCE and *trans*-DCE), and those generally associated with the chlorinated ethane TCA (a group that includes 1,1-DCA, 1,1-DCE, and 1,4-D). For the higher-concentration wells in each plume, using groundwater analytical data, the RI team calculated ratios of the concentrations (by mass) in each sample, of:

- 1,4-D to the sum (*cis*-DCE + TCE), and
- the sum (1,1-DCA + 1,1-DCE) to the sum (*cis*-DCE + TCE).

These ratios, in effect, give a measure of the proportion of TCA-associated compounds (1,1-DCA, 1,1-DCE, and 1,4-D) to TCE-associated compounds (cis-DCE and TCE). To compare the most representative samples from each site, the RI team calculated ratios only for wells where the sums of the *cis*-DCE and TCE analyses were at least 50 ug/L. For the date range, the RI team used groundwater analytical samples from monitoring wells collected primarily in the June through December 2016 period, which were available from all three sites; the RI team also used data from May 2017 for two Jervis Webb wells that the field team did not sample in 2016. To the set of data for the SAIA Site used in this comparison, the RI team added the most-recent (2013) discrete-depth groundwater analytical samples from CPT locations advanced for the SAIA RI. The ratios calculated using the 2013 SAIA discrete-depth groundwater analyses appear to be consistent with the ratios based on the 2016 monitoring well sampling events for SAIA.

Figure 4-18 provides a graph of the two ratios listed above, color-coded according to location within the Cooper Drum, SAIA, or Jervis Webb plume. In addition, the RI team plot these ratios for one groundwater analytical sample from each of two minor contaminant plumes (the Atlantic Avenue plume and the LAUSD plume) in or near downgradient portions of the SAIA plume; these samples met the >50 ug/L concentration criterion noted above. This figure shows a significant separation in the regions of the graph occupied by the Cooper Drum plume groundwater samples compared to the other sites. Analytical samples from the Cooper Drum

plume plot in the upper right portion of the graph, while the great majority of analytical samples from the Jervis Webb and SAIA plumes plot to the left of and below the Cooper Drum plume samples. This indicates that the Cooper Drum analytical samples have consistently higher proportions of 1,4-D, 1,1-DCA, and 1,1-DCE relative to *cis*-DCE and TCE, which are the main contaminants of each plume. Using ratios is a key step, because the magnitudes of 1,4-D, 1,1-DCA, and 1,1-DCE concentrations are similar in each plume; the contrast between samples from the respective plumes is brought out by normalizing concentrations of these less-abundant compounds to the more-abundant *cis*-DCE and TCE. As noted above, 1,1-DCA, 1,1-DCE and 1,4-D are most commonly associated with TCA, which was reported in soil sample analyses from the Cooper Drum site but not from the other two sites.

The spread of data on **Figure 4-18** is fairly compact, and there appears to be a correlation between the two ratios in the plot. These points support the idea that there is a systematic difference between the Cooper Drum VOC plume and the Jervis Webb and SAIA VOC plumes (as well as a difference with the two smaller plumes). This graph supports the existence of a consistent and distinctive fingerprint for the Cooper Drum plume that the RI uses as a line of evidence to distinguish it from the Jervis Webb and SAIA plumes based on the contrasting VOC compositions of the plumes.

A more specific way to evaluate whether and where the plumes have commingled is to examine the ratios in groundwater analytical samples for specific wells located along transects that extend from one plume to another; transect lines are shown in **Figure 4-19**. **Figure 4-20** and **Figure 4-21** are transects of analytical data and ratios of groundwater from wells and CPT discrete-depth samples collected from the Cooper Drum plume in the west and proceeding east to the Jervis Webb and/or SAIA plume(s). The x-axis in these plots represents distance, and the y-axis represents two different measures. The right-hand (secondary y-axis) scale represents the two ratios listed above. Red represents the 1,4-D / (*cis*-TCE + TCE) ratio, and blue represents the (1,1-DCA + 1,1-DCE) / (*cis*-DCE + TCE) ratio. Green represents the analytical concentrations of *cis*-DCE, the most abundant VOC contaminant in all three plumes on the left-hand y-axis scale.

In general, the Cooper Drum samples that appear on the left side of these graphs have ratios that are notably higher than ratios in either the Jervis Webb or SAIA plumes, for all four transects. Along Transect B-B' (**Figure 4-20**), however, wells MW31B (Cooper Drum plume) and MW35 (Jervis Webb plume) have ratios that are somewhat close to each other, possibly indicating that they may be transitional in their compositions due to commingling along the interface between these two plumes. The Cooper Drum Cooperating Parties Group installed monitoring well MW35 for the Cooper Drum site investigation, but the well is more directly downgradient of Jervis Webb and the SAIA operations area; the Cooper Drum Cooperating Parties Group installed the well to evaluate the eastern boundary of the Cooper Drum VOC plume in the area.

The concentrations of *cis*-DCE provide a third method to distinguish the Cooper Drum VOC plume from the Jervis and SAIA VOC plumes. In all four transects, the Jervis Webb and/or SAIA plumes, on the right side of each transect, have much higher concentrations of *cis*-DCE than the Cooper Drum plume, in the range of an order of magnitude higher. This pattern corroborates the idea that these plumes differ significantly. As a result, it appears that there is some, albeit limited, commingling between the Cooper Drum VOC plume and the other two plumes, based on a data resolution/limitation of roughly 200-foot scale of the spacing between the wells typical of the Cooper Drum plume and those typical of the Jervis Webb and SAIA plumes.

Figure 4-22 shows the approximate plume boundaries based on the VOC fingerprint (ratios) and *cis*-DCE concentration patterns discussed above, along with considerations of hydraulic gradients. There are several lines of evidence that corroborate this evaluation:

- East of the Cooper Drum site, groundwater sampling analytical results indicate that contaminant concentrations are often somewhat lower in the areas between the Cooper Drum plume and the other two plumes. For example, Cooper Drum monitoring wells MW17, MW19, and MW23, located between the Jervis Webb and Cooper Drum plumes, have had relatively low analytical concentrations (< 50 ug/L TCE + *cis*-DCE) since at least 2011 (**Appendix A-4**). These results suggest evidence of minimal commingling in a narrow zone, where the plume boundaries overlap. However, the plumes still have distinctive characteristics distinguishing them.
- Though there are no non-detect wells between the SAIA and Cooper Drum plumes, data from the contaminant plume area that encompass the boundary between these plumes south of Southern Avenue indicate that concentrations tend to change abruptly along this

boundary, resulting in the plumes having separate lobes of contamination definable by differing concentrations of *cis*-DCE and 1,4-D. *cis*-DCE, in particular, is at much higher concentrations in SAIA plume wells located downgradient (south) of SAIA operations, along and east of a line from MW34 to MW50, than it is in wells just to the west within the Cooper Drum plume, such as along and west of the line from MW31 to MW54 (see **Figure 4-9** through **Figure 4-11**).

- Previous work for the Cooper Drum site shows a prior evaluation of commingling of VOC plumes resulting in a distribution of the contaminant plumes for the Cooper Drum, Jervis Webb, and SAIA sites (Figure 22 of ITSI [2010], provided in **Appendix A-5**) nearly identical to the areas we present in this report.

In much of the area south of Southern Avenue, the Cooper Drum VOC plume is either close to or in contact with the SAIA VOC plume, consistent with the somewhat variable hydraulic gradient directions in the Gaspur Aquifer in this area through the years (see **Section 4.3.5.1**). Based on the limited resolution afforded by the spacing between monitoring wells on the various sites, this investigation cannot be precise in assessing whether, and how much, commingling may have occurred on a scale less than about 200 feet. However, based on the evidence discussed above of contrasting fingerprints (e.g., 1,4-D / (*cis*-TCE + TCE) ratios) and differing contaminant concentration patterns (cis-DCE concentrations in the Cooper Drum compared to the SAIA plume), the zone of commingling is probably limited to an interface zone with a width of 200 feet or less. This zone of commingling does not affect a large proportion of any of the three plumes, because the transects presented on **Figure 4-19** and **Figure 4-20** show that the Cooper Drum VOC plume maintains its character in having distinctive contaminant concentrations and ratios that contrast markedly with those of the Jervis Webb and SAIA VOC plumes.

In the case of the Jervis Webb and SAIA VOC plumes, these plumes are much more similar to each other based on the parameters presented in the transects, and differ slightly in their daughter-to-parent ratios (*cis*-DCE to TCE), and in the Jervis Webb plume being located below the SAIA plume, with a low-concentration zone locally present between the two plumes (at wells SAIA-MW1B and SAIA-MW2B). These differences fade within approximately 500 feet south of Southern Avenue, likely due to a combination of a continuing decline in contaminant concentrations in the Jervis Webb plume, and commingling of the two plumes: in this area the Jervis Webb plume, limited to the lower Gaspur and Exposition Aquifers, has declined to concentrations below 100 ug/L for *cis*-DCE, while the SAIA plume in the same area contains

peak concentrations of *cis*-DCE of at least 4,500 ug/L (at intermediate Gaspur well SAIA-MW3B; **Table 4-5**); there is no low-concentration gap between the two plumes as there is on the SAIA property, at SAIA-MW1B and SAIA-MW2B (see the longitudinal hydrogeologic section of **Figure 3-2**). It appears that the two plumes effectively merge around 500 feet south of Southern Avenue, and the higher contaminant concentrations of the SAIA plume dominate the plume's composition from there downgradient and southward.

5.0 CONTAMINANT FATE AND TRANSPORT

EPA's characterization of Site soil, soil vapor, groundwater, and indoor air (**Section 4.0**) established the nature and extent of contamination at the SAIA Site. **Section 5.0** presents a description of the fate and transport of COPCs based on the nature and extent of contamination in the soil, soil gas, and groundwater media at the Site.

EPA analyzes contaminant fate and transport to identify potential routes and relative rates of contaminant migration or degradation in Site-specific environments. Various factors influence the fate and transport of chemical compounds released into the environment, including the chemical and physical properties of the contaminants, contaminant persistence in the environmental media, soil and groundwater characteristics, contaminant release mechanisms, and other Site-specific conditions. Evaluation of the mobility and persistence of contaminants, and of their potential to impact Site media depend on knowledge of physical, chemical, and biological properties of the contaminants, and the specific subsurface soil and groundwater environment of the Site.

VOC and 1,4-D contamination impacted the subsurface at the SAIA Site. The RI characterized groundwater from the Gaspur Aquifer near and downgradient of the SAIA property, and characterized the Exposition Aquifer in these areas to depths of about 140 feet. The RI did not delineate the lower limit of groundwater contamination in the Exposition Aquifer. The screen intervals of water-supply production wells in the area begin at or below 280 feet bgs, which is still some distance below the currently known depth of Site-derived contamination. The production wells have total depths up to at least 1,200 feet, and draw groundwater from the Gage Aquifer, the deepest aquifer of the Lakewood Formation, and from aquifers of the deeper San Pedro Formation. The Lynwood and Silverado Aquifers of the San Pedro Formation are the primary aquifers used for municipal, domestic, industrial, and commercial purposes near the Site.

VOCs are also present in the soil gas medium. However, based on the two events in which EPA sampled indoor air, the RI identified no COPCs as indoor air constituents that may have

originated from SAIA. The several compounds exceeding RSLs in indoor air sample analyses were likely due to outdoor air levels and materials stored inside the Site structures.

5.1 CHEMICAL RELEASES TO THE ENVIRONMENT AT THE SITE

The primary contaminant sources at the Site are industrial operations conducted at the former manufacturing facility on the SAIA property. A degreasing building that would have employed solvents and three associated sumps appear to be the sources of chlorinated solvents present as VOC contamination in shallow soils, with associated contaminants present in the source area down to at least the capillary zone just above the water table (**Section 4.1** and **Section 4.2**).

Groundwater plumes emanating from the former facility apparently resulted from the releases directly beneath the known VOC source area along the eastern side of the former main building on the SAIA property. Contamination by chlorinated VOCs remains within the source area, primarily as:

- Soil gas contamination as indicated in analytical samples across a wide area beneath the degreasing building and beneath most of the main building, extending to depths of at least 35 feet bgs;
- Locally high concentrations of soil contamination in one boring to 35 feet bgs as indicated in sample analyses; and
- High concentrations of *cis*-DCE and TCE as indicated in groundwater sample analyses at and near the source area.

Based on analytical sampling results, **Figure 4-1** displays the extent of impacted soil at the Site, **Figure 4-2** and **Figure 4-3** display impacted soil gas at the Site, and **Figure 4-5** through **Figure 4-16** display impacted groundwater. **Section 4.1.4**, **Section 4.1.6**, and **Section 4.3.4** describe the extent of contamination of these media.

Local concentrations of the SVOC 1,4-D are associated with the VOC concentrations in analyses of groundwater samples at and downgradient from the VOC source area. Other SVOCs have very limited distributions in site media, and EPA does not consider them to be COPCs. Except for lead in several shallow soil sample analyses, metals appear to be present in soil analyses primarily at natural background concentrations. PCB contamination is localized and limited to analyses of relatively shallow soil samples (the upper 15 feet bgs) at several locations.

In addition to releases at the former manufacturing facility, other chemical releases occurred because of former land uses and associated activities at the nearby Jervis Webb and Cooper Drum Superfund sites. Groundwater plumes of chlorinated VOCs are also present at both these sites, and there is likely some limited degree of mixing (commingling) of these plumes, as discussed in **Section 4.3.5**.

5.2 PROCESSES AFFECTING CONTAMINANT FATE AND TRANSPORT

Subsurface contaminant migration depends on site-specific environmental, physical, chemical, and biological characteristics, and contaminant properties and release characteristics. Migration pathways, mobility, and persistence are contaminant-dependent and impacted by environmental factors at a specific contaminated site. Examples of environmental factors that influence contaminant fate and transport include hydrogeological conditions, the pH and oxidation-reduction potential of groundwater, the concentrations and chemical properties/reactions of non-contaminant aqueous constituents, organic matter content, and the presence and concentration of microorganisms that can biodegrade contaminants. Mobility is the propensity of a contaminant to migrate from a source, or from one phase to another, while persistence is a measure of how long a contaminant remains in the environment.

The chemical properties of the contaminants, as well as the physical, chemical, and biological processes that occur in a site's specific subsurface environment affect the fate and transport of those contaminants. **Table 5-1** presents estimates of the relevant physical and chemical properties and process parameters associated with fate and transport for benzene, *cis*-DCE, PCE, TCE, and 1,4-D. Each of these contaminants has significantly exceeded an MCL, RSL, or other screening criterion in multiple samples of soil, soil gas, and/or groundwater in impacted areas attributable to releases at the SAIA Site.

5.2.1 Contaminant Properties

Physical and chemical properties that affect the fate and transport of contaminants in the environment include the following:

- **Aqueous Solubility** – The maximum concentration of a chemical that will dissolve in water at a specified temperature and pH is its aqueous solubility. Most chlorinated solvents and benzene have low solubility in water, with aqueous solubilities generally on

the order of several tens to the low thousands of milligrams per liter (mg/L; see **Table 5-1**). However, their aqueous solubilities are high relative to their established USEPA MCLs (Pankow and Cherry, 1996; Stroo and Ward, 2010). For chlorinated solvents such as TCE, a groundwater concentration of 1% of the effective solubility or higher is a likely indicator of the presence of dense, non-aqueous phase liquid (DNAPL) in or near the upgradient source location (Newell and Ross, 1992). The chemical 1,4-D is miscible in water; therefore, aqueous solubility does not limit concentrations of this contaminant. Contaminants with low solubility may be present in the vadose zone and/or the saturated zone as pools or droplets of "free-phase" (not dissolved in water) NAPL. Based on the highest analyzed TCE concentration of 7,400J ug/L in a groundwater sample from SAIA-MW1A in the VOC source area, TCE is present at up to about 1% of its effective aqueous solubility (based on solubility when a mixture of compounds is present, as stated in Raoult's Law), on the threshold of indicating its likely presence as part of a DNAPL in the source area or elsewhere at the Site. However, any DNAPL that may exist is probably limited to the VOC source area, as concentrations of TCE and other VOCs decline downgradient from well SAIA-MW1A.

- **Density** – The ratio of a substance's mass to its volume is its density (typically expressed in units of grams per milliliter [g/mL] or grams per cubic centimeter [g/cm^3]). Density indicates whether a liquid or solid will float or sink in water, with water having a density of 1.0 g/cm^3. Chlorinated solvents such as TCE are heavier than water, and thus can penetrate deeply into an aquifer. Considering its relatively low water solubility and high density, TCE can potentially exist as DNAPL in the subsurface environment.
- **Volatility** – The tendency of a chemical to vaporize at a given temperature is its volatility, which is directly related to a chemical's vapor pressure. Volatilization of a chemical can occur wherever a contaminant is exposed or partially exposed to the atmosphere, generally at the ground surface, in the vadose zone, or at (but not below) the water table. The Henry's Law constant (H) is a conventional measure of volatility, and defines the potential for a contaminant to vaporize from water. An H value greater than 10^{-3} atmosphere-cubic meter per mole (atm-m^3/mol) indicates a greater tendency for the dissolved contaminant to partition into the vapor phase; air stripping can readily remove such chemicals from water (Stroo and Ward, 2010). Chemicals with relatively high H and low solubility, such as TCE, PCE, and *cis*-DCE, can easily volatilize from water to air; 1,4-D is relatively non-volatile due to its low H value and high water solubility.
- **Viscosity** – The molecular friction within a fluid that produces resistance to flow is its viscosity; it is a measure of a fluid's resistance to gradual deformation by shear deformation, shear stress, and/or tensile stress. TCE and PCE DNAPLs have viscosity values less than water. Low viscosity and high density facilitate DNAPL movement in the vadose zone or in a zone saturated with groundwater.

5.2.2 Contaminant Fate and Transport Processes

The following processes can affect the transport of contaminants released to the environment:

- **Bulk product flow** – Movement of non-aqueous phase liquid (NAPL; typically made up of organic chemicals) in the environment, with the movement varying depending on

whether the organic mixture comprising the NAPL behaves as a light NAPL (LNAPL) or DNAPL.

- **Dissolution** – Transfer of a chemical phase from a solid form (e.g., salt), soil, or an organic chemical in a NAPL, to groundwater as a dissolved phase.
- **Advection and hydrodynamic dispersion** – Processes that describe the movement of contaminants in groundwater or the vapor phase, as follows:
    - Advection – Bulk movement of contaminants with groundwater or the vapor phase (soil vapor or air);
    - Hydrodynamic dispersion – Fluid mixing of contaminated groundwater or vapor, due to the different flow paths of the groundwater due to pore-scale tortuosity and aquifer heterogeneities. Note: Hydrodynamic dispersion typically includes both mechanical dispersion (described above) and molecular diffusion. Molecular diffusion, which is the movement of dissolved chemicals resulting from a concentration gradient, is typically minor compared to mechanical dispersion (except in clay-rich sediments).
- **Sorption** – Process by which chemicals partition between water (or air) and the surfaces of solid (soil) particles. Parameters used to predict the effect of sorption on chemical transport are the octanol-water partition coefficient (K_{ow}), the organic carbon-water partition coefficient (K_{oc}), and the fraction of organic carbon in the soil.
- **Volatilization** – Process by which a dissolved chemical vaporizes and is transferred from groundwater to the soil gas phase or the atmosphere. The release of a contaminant in the soil gas (vapor) phase to the atmosphere is also a type of volatilization.

The following processes can affect the ultimate fate of contaminants that have been released to the environment:

- **Abiotic degradation** – Process by which a chemical compound is converted to simpler chemical products by physical or chemical reaction mechanisms. Abiotic degradation processes associated with chlorinated ethenes and ethanes such as TCE, PCE, and TCA are chemical oxidation, chemical reduction, and hydrolysis.
- **Biodegradation** – Process by which a chemical compound is converted to simpler chemical products by biochemical reactions carried out by microorganisms.

5.3 CONTAMINANT FATE AND TRANSPORT AT SAIA

This section discusses fate and transport processes as they apply to the contaminants and different subsurface environments at and near the Site properties. As discussed below, processes and properties controlling contaminant fate and transport are commonly different in the vadose zone than in groundwater (e.g., saturated zones).

5.3.1 Contaminant Fate and Transport in the Vadose Zone

When chlorinated solvents are released to the environment, the extent of their movement and fate can differ depending on whether the contaminant is present as a non-aqueous liquid, a dissolved constituent, or sorbed onto soil particles. Typically, non-aqueous contaminants released from source areas infiltrate into the subsurface and migrate downward by gravity through the vadose zone. Some residual solvent is left behind as the contaminant migration follows the path of least resistance (higher hydraulic conductivity), and tends to pool on layers of lower permeability sediments, such as clays. The overall downward migration typically includes some lateral spreading due to the differing soil types, moisture, and other properties of the vadose zone. If sufficient solvent was released through time, the contamination may reach the water table and impact the quality of the groundwater that it contacts.

The VOCs present at SAIA may have been released as DNAPLs or as dissolved components in water. DNAPLs partition into pore water, soil, and soil gas. Equilibrium generally exists between all phases in the subsurface because the movement of the contaminants is slow relative to partitioning. TCE present as DNAPL can migrate through even low-permeability soils due to its low viscosity and high density (Pankow and Cherry, 1996), as the weight of DNAPL can overcome the pore entrance pressure of low-permeability soils. However, DNAPL migration decreases as the DNAPL's volume declines along its migration path due to some amounts being retained on or between soil particles; the DNAPL's distribution thus becomes discontinuous. Such discontinuous or residual DNAPL can remain in soil for an extended period and act as a continuing source of contamination through its dissolution into pore water. When the soil moisture content is low, pore water movement becomes limited and contamination dissolved in pore water and sorbed to soil can also remain in the vadose zone for extended time periods, if the contaminants do not degrade aerobically.

In these ways, vadose-zone contamination can present a long-term source of groundwater contamination. However, counteracting DNAPL persistence in the vadose zone, VOCs can also sorb readily to organic carbon, and can volatilize into the vapor phase of the soil, from which they may escape to the atmosphere. A limited amount of volatilization of VOCs to the atmosphere may have occurred in and near the contaminant source area, considering the shallow

depth of some of the TCE contamination (upper 5 feet) at boring SAIA-SB/SG09 beneath the former degreasing building on the SAIA property.

VOCs with high vapor pressures and high Henry's Law constants can volatilize from shallow groundwater and migrate with the soil gas through the vadose zone. VOCs present in soil gas can result in potential human exposure through vapor intrusion into the indoor air of buildings. Higher VOC vapor concentrations and higher contaminant mass flux into buildings would occur in areas of shallow groundwater containing high VOC concentrations, or areas with high VOC vapor concentrations in source material beneath the structures. Groundwater with low concentrations of VOCs, and deep or confined groundwater, is unlikely to pose a potential for substantial upward migration of VOC vapors. Volatilization from groundwater in areas away from contaminant sources is likely to be limited by the rate of the contaminant volatilization and diffusion from the water table. This limitation increases especially as a groundwater contaminant plume migrates downgradient, because the plume tends to sink as infiltrating recharge water (e.g., from precipitation) migrates down to the water table, tending to push the plume beneath the water table.

At the SAIA property, VOCs are present in the vadose zone (in both soil and soil gas) beneath the footprint of the former main building, not far from the location of their release (i.e., the former degreasing building and surrounding areas beneath and near the east side of the main building). In recent years and during RI sampling, the analytical concentrations of 1,4-D in this area have been much lower than those of the VOCs, based on the high aqueous solubility, very limited sorption, and high mobility of this compound.

There is evidence that reductive dechlorination has occurred within the vadose zone, based on the high cis-DCE analytical concentration in soil at depth (65,000 ug/kg 25 feet bgs) at SAIA-SB/SG09 (**Table 4-1**). Note that the shallow samples from this location had locally elevated TCE but not *cis*-DCE, as might be expected since degradation is unlikely to occur at shallower depth. At greater depth, conditions are likely more chemically-reducing and conducive to reductive dechlorination (discussed in greater detail in **Section 5.3.2.3**), consistent with the highest analytical concentrations at this depth of petroleum-associated organics (about 3,200

ug/kg of m,p-xylenes and others) that tend to consume oxygen as they degrade. Analyses also reported low concentrations of vinyl chloride in two vadose-zone soils; the presence of vinyl chloride is also consistent with reductive dechlorination within the soil. The analytical detections of both *cis*-DCE and vinyl chloride in a significant proportion of soil gas samples is consistent with their production in the vadose-zone soils through this method of biodegradation.

5.3.2 Saturated Zone

In the saturated zone, VOCs can be present as components sorbed to saturated-zone soils, as DNAPLs, or as dissolved compounds in groundwater. Only a few soil samples had greater than 100 ug/kg of chlorinated VOCs. Thus, it is likely that sorbed VOCs (and possibly DNAPL) are limited largely to the VOC source area, while dissolved VOCs and 1,4-D are present in groundwater beneath much of the SAIA Site and beyond (e.g., groundwater in downgradient areas). Groundwater flow controls the movement of contaminants dissolved in groundwater (i.e., advection and hydrodynamic dispersion) and sorption.

5.3.2.1 Advection and Hydrodynamic Dispersion

Advection, the bulk movement of contaminants with groundwater, is the dominant transport mechanism for contaminants in groundwater at and downgradient from the VOC source area in the degreasing building just east of the main facility building. For example, groundwater flow patterns indicate that contaminant flow tends to divert around clays and clay-rich units because of their lower hydraulic conductivity compared to coarser units. Hydrodynamic dispersion results in the lateral and vertical spreading of dissolved contaminants relative to the direction of groundwater flow. Higher dispersion results in a larger volume of contaminated aquifer, and lower contaminant concentrations.

5.3.2.2 Sorption

VOCs are known to adsorb readily to organic carbon and to mineral surfaces. Because the partitioning of the sorptive phase is fast relative to the advective transport of VOCs, local equilibrium (i.e., instantaneous sorption and desorption) is generally assumed. Sorption to organic carbon can be described by a linear partitioning coefficient, K_{oc}. Sorption reduces the rate of contaminant migration relative to groundwater flow, as the dissolved contaminants continuously sorb and desorb to maintain local equilibrium (i.e., they are temporarily removed

from the migrating groundwater phase). This reduction in migration rate is referred to as retardation of contaminant transport in groundwater. **Table 5-1** lists sorption properties of the major Site contaminants; higher sorption coefficients indicate greater sorption and retardation.

VOCs also adsorb to mineral surfaces, so some sorption occurs even where organic carbon content is low. For PCE, the threshold of organic carbon content is 0.0002 (mass of carbon per unit soil mass) for surfaces of organic materials to be the primary sorption sites. However, sorption onto mineral surfaces is difficult to quantify (Fetter, 2001). The RI report for the nearby Cooper Drum Superfund site provides analyses of total organic carbon (TOC) for three soils from the saturated zone at depths ranging from 45.5 to 175 feet, with results ranging from 200 to 2,100 parts per million (ppm; **Table 3-1** of URS, 2002) and an average TOC of 870 ppm. The distribution coefficient (K_d) is the product of the organic carbon partition coefficient (K_{oc}) and the fraction of organic carbon in the soil (870 ppm or 0.000870 for the Cooper Drum site). The calculated distribution coefficient for TCE in the shallow and intermediate Gaspur Aquifer is 0.075 milliliters per gram (mL/g), using a K_{oc} value of 86 mL/g (**Table 5-1**). Presuming that these results apply to the SAIA Site, and assuming a porosity value of 0.3 and bulk density of 1.66 g/cm^3 as used for the Cooper Drum site (URS, 2002), the calculated retardation factor (R) for TCE is 1.41. A retardation factor of 1.41 indicates that sorption would cause TCE to move at a rate about 41% slower than groundwater (discussed in **Section 5.4.3**). This retardation factor indicates that the sorption of TCE to organic carbon is significant in the groundwater at SAIA, and that sorption is one factor controlling TCE migration in groundwater.

A similar calculation for *cis*-DCE yields a retardation factor of 1.17. PCE, with a lower solubility and higher K_{oc} value than TCE, would have a higher retardation factor and would be significantly more retarded in its rate of migration in groundwater. However, for PCE and TCE, biodegradation is likely to have a greater effect in slowing contaminant migration than sorption, as documented by the progressively declining proportions of both PCE and TCE with distance as groundwater migrates downgradient in the SAIA VOC plume from the source area (see **Section 5.4.3**). This hypothesis is supported by the fact that *cis*-DCE, the primary degradation product of reductive dechlorination of TCE, increases quickly as a fraction of total VOCs in the downgradient direction.

The presence of two oxygen atoms in the molecular structure of 1,4-D results in this contaminant being hydrophilic and miscible in water. In addition, owing to its low K_{oc} (**Table 5-1**), 1,4-D does not sorb significantly to aquifer sediments or soil organic matter. Therefore, 1,4-D likely moves at a velocity close to that of groundwater.

5.3.2.3 Degradation

As discussed in **Section 5.2.2**, the degradation of contaminants at and near the SAIA Site may occur through biological and abiotic processes within the subsurface. Suitable conditions, as discussed below, must exist in the subsurface for either type of degradation to occur. For TCE and PCE, biological degradation is especially effective in attenuating these compounds, as we discuss in the following paragraph. Degradation processes affecting TCA are also relevant: while laboratory analyses did not detect TCA in groundwater samples from the Site, it was detected in soil samples from two source-area borings, and from one or more depths in seven soil gas borings analyzed for the RI. Thus, the RI considers TCA to have been formerly present in the media of source-area soils and groundwater; it is likely to have degraded in these media to below analytical reporting limits, by a biological method as described below, and by an abiotic method described under the subsequent heading. Laboratory analyses reported the compounds 1,1-DCA and 1,1-DCE, primary daughter products of these TCA degradation processes, in many groundwater and soil samples, and in some soil gas samples. The RI considers these detections as supporting evidence that TCA was formerly present more widely in the SAIA contaminant source area.

<u>Biological Degradation</u>

Environmental conditions, the presence and activity of suitable microorganisms, and other factors affect whether biological degradation will be significant, and these various factors are different for chlorinated solvents (i.e., PCE, TCE, TCA, and *cis*-DCE) and 1,4-D. The biological degradation processes for chlorinated solvents involve biochemical reactions that transfer electrons from an electron donor (e.g., organic food source) to an electron acceptor (the chlorinated solvent).

- PCE, TCE, TCA, and *cis*-DCE: Reductive dechlorination is the primary biological degradation process for PCE, TCE, TCA, and often, *cis*-DCE, and results in the formation of daughter products (chlorinated ethene and ethane molecules with fewer

chlorine atoms). When it proceeds to completion, the sequential reduction of chlorinated VOCs leads to the formation of innocuous end-products such as ethene, ethane, and carbon dioxide (Stroo and Ward, 2010). The other biological degradation processes that affect chlorinated ethenes–aerobic co-metabolism and direct oxidation–apply only to TCE and chlorinated ethenes with one or two chlorine atoms. Reductive dechlorination occurs only under anaerobic conditions (Stroo and Ward, 2010). Anaerobic conditions appear to prevail in much of the Gaspur and Exposition aquifers in the Site vicinity (see **Section 5.4.3**), and appear to exist at SAIA in the source area and for some distance downgradient. These Site conditions thus favor reductive dechlorination. Reductive dechlorination likely accounts for the lower concentrations of TCE (parent compound), and the relatively high ratios of *cis*-DCE (degradation daughter product) to TCE in samples collected downgradient from (south of) the Site properties (**Section 4.3.4.2**). In the case of TCA, reductive dechlorination primarily produces 1,1-DCA, which is present in many groundwater samples from across the Site. **Section 5.4.3** presents other evidence for reductive dechlorination in the plume.

- 1,4-D: Generally, 1,4-D does not biodegrade extensively in the aquatic environment (Mohr et al., 2010). Research has demonstrated the recalcitrance of 1,4-D to biological degradation, with only co-metabolism under specific conditions resulting in the microbial degradation of this compound.

Rates of biodegradation vary according to location-specific conditions, such as the abundance of carbon-containing substrates (used by microorganisms as energy sources while they can degrade chlorinated VOCs co-metabolically), the intensity of reducing chemical conditions, the presence and abundance of the proper consortium of microorganisms capable of degradation of chlorinated VOCs, and acclimatization of the microbial consortia to the contaminants. The increasing intensity and degree of these factors with time may account for the fact that TCE degradation in Site groundwater has been more extensive in recent years (after 2014) than previously, based on increases in the ratio of *cis*-DCE to TCE in the post-2014 time period at most monitoring well locations at the Site, as the table below indicates with ratios of analytical results from high-concentration wells in the SAIA plume.

Well ID	*cis*-DCE / TCE ratio, average, March and August 2014	*cis*-DCE / TCE ratio, July 2016
SAIA-MW1A	0.94	2.6
SAIA-MW2A	1.9	11
SAIA-MW3B	1.2	1.3
SAIA-MW4B	19	640
SAIA-MW5B	22	700
SAIA-MW9C	NA	360; 630 *

Source of data: **Table 4-4**
NA = not applicable because well had not been installed in 2014.
* Second value represents result for September 2016

Similar increases through time in daughter-to-parent degradation ratios occur in the groundwater analytical data for the nearby Jervis Webb site (Gilbane, 2018). The higher *cis*-DCE / TCE ratios in 2016 may indicate that degradation by reductive dechlorination is more complete with time (however, one cannot accurately assess rates of degradation). It also appears, considering the progressive increase in these degradation ratios proceeding downgradient (e.g., the last three wells listed above), that degradation appears to occur not only in the contaminant source area on-property, but within the plume at downgradient locations. Owing to variable rates of degradation ratios over time and space, these ratios cannot be used to calculate plume migration rates.

Abiotic Degradation

Abiotic processes lead to the degradation of contaminants by oxidation-reduction or hydrolysis reactions, and therefore require the presence of suitable oxidizing or reducing conditions, or sufficient water, which may or may not exist in the subsurface environment at a site.

- PCE, TCE and *cis*-DCE: The abiotic degradation of chlorinated VOCs can occur under either suitable oxidizing or reducing conditions, and without the production of the daughter products associated with the reductive dechlorination biodegradation pathway. Based on low dissolved oxygen in groundwater and other indicators (high iron and manganese, low ORP), chemical oxidation will likely not occur in the saturated zone at SAIA. However, iron sulfides, magnetite, and other naturally occurring reduced minerals in the aquifer zone can chemically reduce PCE and other chlorinated solvents. The iron-mediated abiotic reduction pathways are, in general, different from the biologically mediated reductive dechlorination pathways, in requiring the presence of specific minerals rather than specific microorganisms. While some abiotic reduction of

chlorinated VOCs may be occurring in the shallow groundwater, the amount may be limited; however, this RI cannot assess the extent of such reduction.

- TCA: The abiotic degradation of TCA has been reported by many investigators to proceed readily through hydrolysis, with the byproduct being 1,1-DCE. Gerkens and Franklin (1989) reported rates of this reaction to be on the order of 1.7 years at 20 ºC, suggesting that TCA, which may have been present in soil and groundwater, may have degraded rather readily. This degradation mechanism may have been more significant than the anaerobic degradation route producing 1,1-DCA, because the concentrations of 1,1-DCE in groundwater samples were generally twice those of 1,1-DCA.
- 1,4-D: Intrinsic abiotic reduction and hydrolysis has not been identified as a degradation pathway for 1,4-D.

5.4 CONTAMINANT MIGRATION

5.4.1 Volatilization

Volatilization from soil and/or groundwater can be an important transport mechanism for organic chemicals with Henry's Law Constants greater than 10^{-3} atm-m^3/mol and low water solubility (<several g/mol). In general, chlorinated VOCs in contact with soil and water (soil moisture or groundwater) will tend to establish an equilibrium distribution between the phases of soil, aqueous (dissolved in water), and soil vapor. Relatively high soil vapor detections of chlorinated VOCs at shallow depths (up to 5,800,000 ug/m^3 of TCE) in some RI analytical samples collected at 5 feet bgs support the RI team's hypothesis that VOC migration by volatilization may be significant in portions of the property, especially where VOC contamination exists at shallow depths. Even with a slab or pavement remaining at the surface of the property, some volatilization of chlorinated VOCs from shallow depths to the atmosphere is likely to occur.

5.4.2 Soil-to-Groundwater Migration

The primary factors that determine the migration of contaminants from soil to groundwater are the physical and chemical properties of the contaminants (e.g., solubility, density, viscosity, organic carbon partition coefficient [K_{oc}], and soil-water partition coefficient [K_d]), and the physical and chemical properties of the environment (e.g., soil type, permeability, porosity, particle size distribution, organic carbon content, pH, oxidation-reduction potential, and rainfall infiltration rate). Because of the numerous factors that interact to affect the rate of contaminant migration in soil, it is often difficult to predict the rate of contaminant movement from soil to groundwater. However, the mass of chlorinated VOCs currently remaining in the soil beneath

the Site property is relatively limited, confined to an area immediately beneath the former degreasing building in the eastern part of the SAIA property (SAIA-SB/SG08, -09, and -10). At most other locations, the primary COPCs (cis-DCE, PCE, and TCE) were either non-detect, or reported at less than 10 ug/kg. However, there is also a likely pathway from soil gas to groundwater, based on elevated COPCs at depth across much of the SAIA property. In such areas, COPCs appear to occupy deep parts of the vadose zone due to their high densities, where they can contact the capillary and saturated zones and migrate into the groundwater.

5.4.3 Migration in Groundwater

TCE and other chlorinated VOCs have the potential to enter and move through a groundwater system in two forms: as a liquid product in its original form, as DNAPL, or as a solute dissolved in groundwater. Laboratory analyses have not detected free-phase products at the Site. It is possible that accumulations of DNAPL are present locally, as the analytical concentrations of TCE in groundwater (e.g., at SAIA-MW1A) range up to 0.7% of its aqueous solubility, close to the threshold of 1% considered to be evidence of DNAPL. However, the elevated TCE analytical concentrations could also be due to sorption onto soils in the same area (the former degreasing building). Based on the patterns of TCE levels in groundwater, if DNAPL is present in the contaminant source area, it may be in small quantities and may not exist more than a short distance from well SAIA-MW1A, because TCE concentrations at other wells are considerably lower. Thus, it appears likely that DNAPL, if present, is a local feature in or near the immediate VOC source area near the northeastern corner of the former main building on the SAIA property. It is more likely that the elevated TCE concentrations in groundwater at SAIA-MW1A relate to elevated concentrations sorbed onto soils, as detected in analytical samples of the nearby borings beneath the former degreasing building (e.g., SAIA-SB/SG09).

Chemical and biological processes have the potential to control the fate and transport of solutes. While these processes can greatly affect the movement and concentration of a solute through a groundwater system, they are difficult to quantify and predict without detailed study. However, reductive dechlorination is one biological process that is very important for Site contaminants.

Through the biochemical process of reductive dechlorination in a favorable (anaerobic) geochemical environment, the chlorinated ethenes break down to degradation (or daughter) products through the sequential loss of chlorine atoms as follows (Stroo and Ward, 2010):

PCE → TCE → *cis*-DCE → vinyl chloride → ethene

At and near the SAIA property the presence of *cis*-DCE could indicate that biodegradation of TCE has occurred, or it may simply indicate that *cis*-DCE was also initially released. However, there is no clear evidence of a release of *cis*-DCE, based on moderate analytical detections of this compound in groundwater near the source area on the SAIA property (e.g., SAIA-MW1A and -MW2A). Instead, the peak concentrations of *cis*-DCE in groundwater occur downgradient from the source area (SAIA-MW3B), and *cis*-DCE steadily increases downgradient in its ratio to TCE (*cis*-DCE / TCE increases from <5 to >100). One would not expect these patterns if the *cis*-DCE were released at the contaminant source along with TCE.

It appears that the requisite geochemical environment for reductive dechlorination may be present throughout much of the plume. Dissolved oxygen (D.O.), measured with field instruments during well purging prior to sampling, was less than 1 mg/L in 84% to 100% of the wells sampled in three of the four sampling events: March 2014, August 2014, and September 2016, with the remainder having D.O. between 1 and 2 mg/L (**Table 5-2**). In the July 2016 event, 68% of the wells had D.O. between 1 and 2 mg/L, with most of the others having less than 1 mg/L. The U.S. Geological Survey (2006) considers values of D.O. less than 1 mg/L in groundwater to indicate anaerobic (anoxic) conditions, and they consider D.O. values between 1 and 2 mg/L to be chemically reducing. Consistent with the low D.O., oxidation-reduction potential (ORP) was low in most wells, being less than -100 mV in most wells in all four events. Dissolved iron analytical concentrations were also high nearly everywhere: iron concentrations were in the thousands of micrograms per liter in about 84% of monitoring well samples analyzed for metals (27 of 32 wells, analyzed in one event). Iron is a redox-sensitive element, and analytical concentrations greater than 1,000 ug/L (>1 mg/L) generally indicate anaerobic conditions (Dimkic et al., 2008). Taken together, these geochemical parameters indicate anaerobic to reducing conditions throughout nearly the entire volume of groundwater within the monitoring network.

It is somewhat unusual to have a plume in permeable materials, like sand and gravel, exist under predominantly anoxic conditions (the generally high rates of infiltration through these permeable materials delivers oxygen to the groundwater). However, there are two factors that probably account for this:

- Paved surfaces cover the clear majority of the area of the plume, as well as areas upgradient from the plume, such as the Jervis Webb VOC plume located about 600 to 1,500 feet upgradient of the SAIA property, and other industrial facilities in the neighborhood. Paved surfaces allow negligible infiltration of precipitation, and very little introduction of atmospheric oxygen in general.
- Labile organic compounds exist locally, and were probably much more abundant in the past. Various petroleum-associated compounds were reported in analyses of soils from the contaminant source area on the SAIA property, including ethylbenzene, isopropylbenzene (cumene), m,p-xylenes, o-xylene, and toluene, at most sampling depths from samples from the contaminant source beneath the degreasing building (SAIA-SB/SG08, -09, and -10); the summed analytical concentrations of these compounds ranged up to 3,200 ug/kg. It is also evident that there would have been larger quantities of these and other petroleum compounds in the source area in the past, owing to the use of oil in the manufacturing process (i.e., creating the need for a degreasing building). Oxidation relatively easily degrades these petroleum-associated compounds, and often create a significant oxygen demand during the process. This process in turn tends to produce more-reducing conditions in the subsurface, which would affect the oxidation levels in the saturated zone.

These factors probably help to explain both the reducing geochemistry in the saturated zone and the amenability of the groundwater to reductive dechlorination.

The analytical detection of PCE in groundwater at only one well (SAIA-MW1A, located in the contaminant source area, at 0.42J ug/L in August 2014), along with more numerous detections in both soil and soil gas samples in the eastern half of the SAIA property, indicates a likely release of this compound at the contaminant source area, but extensive biodegradation of this compound to TCE near the source area, possibly combined with some attenuation by sorption. As we discussed in the preceding paragraph, the source area is likely amenable to biodegradation by reductive dechlorination, based on various measures of redox conditions in groundwater, as well as patterns of daughter-to-parent contaminant ratios.

A portion of the contaminant mass in groundwater can become sorbed to the soil mass, particularly the organic carbon content; however, sorbed concentrations are not likely to be

especially high, based on the low VOC concentrations reported for most soil analytical results (**Section 4.1**). Instead, VOCs are relatively mobile in groundwater. At the locations with elevated TCE in soils (e.g., SAIA-SB/SG08 through -SB/SG10), some of the TCE is likely to remain in place for an extended period, either as sorbed concentrations or possibly in localized DNAPL accumulations that are not in direct contact with groundwater. This area will constitute an ongoing contaminant source to groundwater.

The coarse-grained deposits in the Gaspur and Exposition Aquifers are capable of conveying groundwater (and any solutes) over long distances, as evidenced by the length of the contiguous plume of *cis*-DCE in the shallow, intermediate, and lower Gaspur Aquifer and the Exposition Aquifer, to at least the southern boundary of the LAUSD property some 2,800 feet downgradient from the contaminant source area on the SAIA property. Along this path, downward hydraulic gradients within the Gaspur Aquifer, and from the Gaspur to the Exposition Aquifer, provide impetus for contaminants to migrate to a greater depth. The decreases in *cis*-DCE analytical concentrations in the shallow Gaspur Aquifer with distance downgradient, and progressive increases in the deeper intervals (intermediate Gaspur, lower Gaspur, and Exposition Aquifers) along the migration vector demonstrate this migration pattern.

Groundwater and Contaminant Migration Rates. Based on the May 2017 potentiometric surface of the shallow Gaspur Aquifer at and near the Site, with an average gradient of 0.0017 ft/ft (toward the south-southeast), and using a porosity of 0.3 and a hydraulic conductivity of 40.4 feet per day (ft/day) determined through aquifer testing performed for the Cooper Drum site (URS, 2009), EPA estimates the average linear groundwater velocity in the SAIA plume at 84 ft/year. While advection causes downgradient migration of contaminants in groundwater, biodegradation, along some sorption to clay and organic matter, retards movement of TCE/*cis*-DCE in groundwater relative to the estimated average linear groundwater velocity.

Assessing the velocity of the contaminant by dividing the average linear groundwater velocity by the retardation factor for TCE (1.41; see **Section 5.3.2.2**), EPA estimates the contaminant velocity for TCE in the shallow Gaspur Aquifer beneath the Site at 60 ft/year. A similar calculation for *cis*-DCE using a calculated retardation factor of 1.17 yields a migration rate of 72

ft/year for this contaminant, about 20% faster than for TCE. However, the migration velocity for TCE almost certainly errs on the high side because of demonstrated biodegradation of TCE to *cis*-DCE along the length of the plume, which–similar to sorption–serves to retard contaminant migration. A velocity for TCE of 60 ft/year would produce a plume reaching the 1,200 feet to its southern extent near Wood Avenue (Exposition Aquifer locations for SAIA-CPT10 and SAIA-MW8) within 20 years, if the same contaminant velocity applied to the entire Site. However, while *cis*-DCE from the SAIA VOC plume has traveled much farther at significant concentrations, the main mass of the TCE plume has not yet arrived at these locations: TCE is at least 99.8% attenuated at these two locations, to values of 15 ug/L or less, compared to 7,400 ug/L in the SAIA contaminant source area groundwater (at SAIA-MW1A). Thus, biodegradation has produced a large retardation effect in the TCE plume. Where biodegradation is active, accurate estimates of retardation factors and contaminant velocities are generally not possible, owing to limited information on the rates and locations of the biotransformation reactions.

For *cis*-DCE, a velocity of 72 ft/year would produce a plume reaching the 2,800 feet to its southern extent near Aldrich Avenue (lower Gaspur and Exposition Aquifer locations SAIA-MW12C and -MW13) within 39 years. These locations were first sampled for the RI in 2016, so the contaminant release date would have been in 1977 or earlier. The SAIA facility had been operating for a number of years by this time (since the early 1950s), so the release date and migration rate are plausible. However, there is uncertainty about where the leading edge of the *cis*-DCE plume is located; it could be some distance downgradient of well SAIA-MW13.

cis-DCE is also prone to biodegradation, although this process occurs under different conditions, locations, and rates than for TCE. In fact, based on its much longer plume compared to TCE, it appears that *cis*-DCE is not attenuating significantly through biodegradation. Also, *cis*-DCE has higher water-solubility and lower sorption than TCE (see **Table 5-1**). Considering these combined factors, *cis*-DCE likely migrates faster than TCE.

There is insufficient data for the Exposition Aquifer to calculate approximate groundwater or contaminant transport velocities for this unit. Contaminants derived from the SAIA VOC plume

affect the Exposition Aquifer only in the downgradient portion of the monitored area (at SAIA-MW10 and SAIA-MW13).

5.4.4 Fugitive Dust

Fugitive dust emissions caused by wind or mechanical disturbances are most likely to occur in unpaved and non-vegetated areas where soils are exposed at the surface. In addition to surface coverage by pavement, other factors such as wind speed, moisture content, and soil composition can influence dust migration. Because contaminated soil at the SAIA site is not currently exposed to the surface, fugitive dust entrainment is not a significant mechanism for contaminant migration at the Site.

5.4.5 Surface Water Runoff

The sub-pavement location of soil and groundwater contamination at the Site should eliminate the route of surface water runoff as a significant contaminant transport mechanism. The limited unpaved areas in the broader vicinity, such as South Gate Park (located side-gradient to the west), allow infiltration of precipitation and thus act as local recharge sources to groundwater.

5.5 POTENTIAL ROUTES OF FUTURE MIGRATION

This section discusses the potential routes of future migration for *cis*-DCE, PCE, TCE, benzene, and 1,4-D in subsurface soils, soil vapor, and groundwater at and near the Site. For each medium discussed below, the migration routes that are listed first are the more likely to occur.

5.5.1 Subsurface Soils

Laboratory analyses detected the compounds *cis*-DCE, PCE, TCE, along with several other chlorinated VOCs and several petroleum-associated VOCs, locally (four of 37 borings analyzed for soil VOCs) at significant levels (e.g., >100 ug/kg) in subsurface soil samples, with several of the concentrations above industrial RSLs. Under the current paved condition, the most likely potential future routes of migration for these VOCs are partitioning from soil to the soil vapor phase (and subsequent movement in soil vapor) and from soil to groundwater (limited desorption from vadose-zone soils to recharging or infiltrating water, and subsequent migration to groundwater). If future owners or operators unearth contaminated soil, VOC contaminants could migrate as vapors or in fugitive dust emissions, be carried away in surface water, or be more

easily dissolved and carried downward in infiltrating precipitation. Because of the low Henry's Law constant, partitioning of 1,4-D to the vapor phase is not a significant migration pathway.

Non-VOCs in soils are very localized in their distribution above typical background levels, with lead, copper, and several PCBs above screening levels in scattered locations. These contaminants are relatively insoluble and non-volatile, and are likely to remain where they are under pavement. However, removal of pavement, excavation, and/or site redevelopment or could result in mobilization of these localized soil contaminants, and/or human exposures to them.

5.5.2 Soil Vapor

From soil vapor, Site VOCs can partition back to the soil phase (and be rendered relatively immobile) or to groundwater. Within soil vapor, VOCs migrate primarily via advection (due to pressure gradients) and diffusion (from areas of high concentration to areas of low concentration). VOCs can migrate from subsurface sources into enclosed indoor spaces through a combination of diffusion and advection. Shallow soil vapors that are within the "building zone of influence" can ultimately enter the indoor air environment of buildings (i.e., by soil vapor intrusion) because of pressure differentials between the indoor and outdoor environments. Analytical results for soil gas sampling and one indoor air sampling event at six Site-area residential buildings have provided data for evaluation of the possibility of vapor intrusion into these structures. However, based on the indoor-air sampling results, there is very limited evidence that soil-vapor intrusion is an active migration pathway for Site VOCs. PCE was the only Site-related VOC detected above screening levels in analyses of indoor-air samples collected from the buildings for either event; however, its presence, limited to one building, is likely due to an indoor air source, because it was not detected in crawlspace air in the two sampling events.

One way in which soil gas will have future impacts is as an ongoing source of contamination to the groundwater contaminant plume. VOCs in soil gas are at relatively high concentrations that could potentially be dissolved in infiltrating water and eventually reach the underlying saturated zone. However, the amount of percolation from precipitation is limited under the current

presence of pavement at the SAIA property. Off-property, there is some potential for soil gas VOCs to be taken up by infiltrating water where pavement is not present (e.g., residential yards); however, soil gas concentrations are generally relatively low in these off-property areas.

Laboratory analyses detected 1,4-D in a single deep (35 feet bgs) soil gas sample on the SAIA property at above its screening level. Because of its high aqueous solubility and low Henry's Law constant, vapor concentrations are generally low for 1,4-D, and vapor intrusion is not a pathway of concern for this compound.

5.5.3 Groundwater

5.5.3.1 Future Contaminant Migration Routes in Groundwater

In groundwater at and near the Site, the most likely potential routes of future VOC contaminant migration are advection (movement with groundwater flow) and dispersion. These routes include migration by groundwater flow to greater depths and deeper aquifers, as demonstrated by downward *cis*-DCE migration in the downgradient portions of the SAIA VOC plume, which is enabled by downward hydraulic gradients. This migration is a current and ongoing migration route of concern, because in downgradient areas of the VOC plume, laboratory analyses reported *cis*-DCE at analytical concentrations above the MCL in the upper portions (upper 40 feet) of the Exposition Aquifer, which is in contact with an underlying water-supply aquifer. Contaminants in groundwater can also partition to the soil or soil vapor phases. Partitioning to soil tends to render contaminants less mobile, and below the water table, partitioning to soil vapor becomes insignificant.

Though biodegradation is not explicitly a migration process, the biodegradation of chlorinated VOCs affects migration, as the process produces compounds with fewer chlorine atoms that are typically somewhat more soluble (and more mobile) than the parent compounds. The existing monitoring well network cannot fully define the downgradient extent of the SAIA VOC plume, because groundwater samples from the farthest-downgradient locations still contain contaminants at analytical concentrations exceeding MCLs. Contaminants in groundwater could potentially also discharge to surface water via a spring or seep, but this is highly unlikely at or

near the Site given the depth to groundwater, depth of contamination, and absence of any discharge points in the vicinity.

In groundwater, the most likely potential routes of future contaminant migration for 1,4-D are advection and dispersion, including possible migration to greater depths and deeper aquifers, similar to VOCs; like *cis*-DCE, the compound 1,4-D has migrated into the lower Gaspur and Exposition Aquifers in the downgradient portion of the VOC plume. However, 1,4-D is also miscible in water and prone to dispersion, and it has very limited distribution in the Exposition Aquifer, reaching only slightly above the NL. In groundwater, 1,4-D also partitions to the soil or soil vapor phases, but due to its hydrophilic nature (high water solubility) and low Henry's Law constant, partitioning to the soil and vapor phases is insignificant. 1,4-D in groundwater can also eventually discharge to surface water via a spring or seep, but this is highly unlikely in the Site vicinity given the depth of contamination and absence of any discharge points.

5.5.3.2 Measures of Stability of the Contaminant Plume

It is useful to evaluate whether the SAIA VOC plume may be expanding, contracting, or at a steady state in terms of its advancement. However, the time span recorded by monitoring well sampling events within the SAIA plume is limited to just over two years. Furthermore, in the critical downgradient area, EPA only conducted two monitoring well sampling events, at just two months apart. In addition, EPA has not fully defined the downgradient extent of the VOC plume.

In the source-area and middle portions of the SAIA VOC plume, analytical concentrations increased from March 2014 to August 2014, and then decreased somewhat more from the August 2014 event to the July 2016 sampling event, especially in the shallow and intermediate Gaspur Aquifer. These are short-term trends that are not especially significant. However, a longer record of monitoring is available from wells installed for the Cooper Drum investigations. Analytical results for two lower-Gaspur wells sampled since 2009 (MW48 and MW51) show increases in *cis*-DCE concentrations by factors of two to eight from 2009 through 2017 (Haley and Aldrich, 2017; **Appendix A-4**). For the downgradient-area RI wells installed in 2016, the shallow and intermediate-Gaspur Aquifer wells were relatively constant in analytical

concentrations, while concentrations of *cis*-DCE in the lower Gaspur and Exposition Aquifer wells (SAIA-MW9C, -MW10, -MW11C, -MW12C, and -MW13) all increased during the same 2-1/2-month period. While little can be concluded for the short time records of SAIA RI groundwater monitoring, the Cooper Drum wells may indicate that the plume is expanding downgradient somewhat in the portions within the lower Gaspur and Exposition Aquifers.

In most of the SAIA plume, there is no sign of degradation of *cis*-DCE to other compounds. Reductive dechlorination of *cis*-DCE produces vinyl chloride. However, vinyl chloride is not especially abundant in the plume, with peak values (up to 47 ug/L at SAIA-MW3B) generally two orders of magnitude below those of *cis*-DCE. *cis*-DCE concentrations do not appear to be declining much along the length of the plume; witness the concentrations far above the MCL at the downgradient edge of the monitoring network at SAIA-MW13. Thus, it may be that reductive dechlorination is stalling out at *cis*-DCE. Bradley and Chappelle (2007) have reported a similar stall at *cis*-DCE for other VOC sites. If such stall is occurring for *cis*-DCE, it is likely that the *cis*-DCE plume may continue migrating for some time and distance beyond SAIA-MW13.

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6.0 HUMAN HEALTH BASELINE RISK ASSESSMENT

A human health risk assessment (HHRA) is a scientific method for determining the potential health risks for current and future receptors where a chemical release has or may have occurred (USEPA, 1989). A standard HHRA assumes evaluated receptors have a reasonable maximum exposure (RME) by applicable exposure routes. The assumption of potential exposure (by any complete and/or potentially complete exposure pathway) represents a conservative (e.g., health-protective) approach. Regulatory risk assessment guidance recommends this approach to make the HHRA sufficiently protective of the potential receptors (USEPA, 1989).

6.1 SCOPE OF THE HHRA

The HHRA consists of five primary components as the basis for identifying potential health risks posed to current and potential future receptors at a Site. These HHRA components are:

1. **Data Evaluation:** Evaluate site characterization data for risk assessment usability in terms of precision, accuracy, reproducibility, representativeness, and completeness.
2. **Chemicals of Potential Concern:** Identify the chemicals of potential concern (COPCs), which are those chemicals for which risk values are quantified.
3. **Exposure Assessment:** Identify the routes through which potential exposure to COPCs may occur. This also requires identifying potential human receptors, displaying them in a conceptual site exposure model (CSEM), and estimating the magnitude and duration of the receptor-specific exposures.
4. **Toxicity Assessment:** Identify relevant toxicity endpoints and dose-response criteria for the COPCs.
5. **Risk Characterization:** Employ the results of the toxicity assessment and exposure assessment to estimate the non-cancer hazard index (HI) and incremental lifetime cancer risk (ILCR) for each receptor.

This HHRA uses methods that are consistent with standard risk assessment practices and information provided in the following guidance documents:

- Risk Assessment Guidance for Superfund (RAGS), Volume I—Human Health Evaluation Manual, Part A, Interim Final (USEPA, 1989)
- Guidance for Data Usability in Risk Assessment (Part A), Final (USEPA, 1992a)
- Soil Screening Guidance: Technical Background Guidance Document (USEPA, 1996)
- Supplemental Guidance for Developing Soil Screening Levels at Superfund Sites (USEPA, 2002)
- Human Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil (CalEPA, 2005)

- Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (CalEPA, 2011)
- Guidelines for Exposure Assessment (USEPA, 1992b). Federal Register 57 (104): 22888-22938.
- Risk Assessment Guidance for Superfund (RAGS), Volume I—Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment, Interim (USEPA, 2004)
- Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment) (USEPA, 2009)
- Exposure Factors Handbook (USEPA, 2011)
- California Department of Toxic Substances Control (DTSC) Human and Ecological Risk (HERO)
    - Note 3: DTSC-modified Screening Levels (DTSC-SLs) (2018)
- ProUCL Version 5.1 Technical Guide (USEPA, 2015a,b)
- OEHHA Toxicity Criteria Database (CalEPA, 2018b)
- Integrated Risk Information System (IRIS) database (USEPA, 2018a)
- Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air (USEPA, 2015c).

6.2 DATA EVALUATION

This HHRA uses data collected through several phases of RI work as detailed in **Section 4.0**. The tested media include soil gas, indoor/crawlspace air, ambient (outdoor) air, soil, and groundwater. **Table 6-1** presents chemicals detected in at least one sample in any of these media. **Appendix E** presents the analytical data used in this HHRA. **Figure 1-4** shows the CPT and groundwater sample locations, while **Figure 2-1** shows the soil, soil-gas, indoor/crawlspace air, and ambient (outdoor) air sample locations.

The data usability (DU) evaluation for both the soil matrix and soil vapor data uses the *Guidance for Data Usability in Risk Assessment* (USEPA 1992a). The DU evaluation provides the basis for (1) identifying whether there are site characterization data gaps and (2) supporting the uncertainty analysis portion of the HHRA with respect to the selection of COPCs and exposure-point concentrations, both of which are dependent on the site data (USEPA, 1989, 1992a).

A specific guidance framework established by the USEPA provides risk assessors a consistent basis for making decisions about the minimum quality and quantity of environmental analytical data that are sufficient to support HHRA-based decisions (USEPA, 1992a). The USEPA DU guidance provides an explicit set of data quality criteria that are used to determine the usability of site characterization data in the HHRA process. These criteria include:

- **Criterion I — Reports:** Confirmation that report(s) relied upon are complete and appropriate for use in the HHRA. *The recent soil and soil vapor investigation data detailed in **Section 4.1** satisfy this requirement. As such, Criterion I is met.*
- **Criterion II — Documentation:** Confirmation that each analytical result is associated with a specific sample location and that the appropriate sampling procedure is documented. *Soil matrix and soil vapor sample locations are provided in **Figure 1-4** and **Figure 2-1**. As such, Criterion II is met.*
- **Criterion III — Data Sources:** Confirmation that the analytical methods used are appropriate to identify the COPCs for the media of interest. *As **Section 4.1** discusses, the broad analytical suite, including VOCs, SVOCs, metals, and PCBs, sufficiently captured all potential chemical contaminants at the site. As such, Criterion III is met.*
- **Criterion IV — Analytical Methods and Detection Limits:** Confirmation that analytical methods appropriately identify the chemical form or species and that the sample detection limit is at or below a concentration appropriate for the risk assessment application. *Detection limits for soil matrix and soil vapor samples are less than the human health screening levels (or at low levels consistent with the capabilities of current analytical methods), and a California state-certified laboratory employed appropriate USEPA laboratory methods. As such, Criterion IV is met.*
- **Criterion V — Data Review:** Confirmation that the quality of analytical results is assessed by a professional knowledgeable in field collection procedures and analytical chemistry and that data quality are adequate to estimate exposure concentrations. *Staff scientists of The Fehling Group, LLC, are qualified and experienced in the DU process. They conducted the DU evaluation. As such, Criterion V is met.*
- **Criterion VI — Data Quality Indicators:** Documentation that sampling and analysis data quality indicators (including precision, accuracy, reproducibility, representativeness, and completeness, and reproducibility) are evaluated using criteria specific to the risk assessment. *The data quality for the COPCs is summarized below. The summary focuses on COPCs for which the results of the quality control/quality assurance results have the potential to underestimate exposures. The Uncertainty Analysis (see **Section 6.8**) further discusses the uncertainty associated with these findings. As such, Criteria VI is met.*

Further, data gap analysis review of the sample locations indicates that, in general, the samples collected were biased towards areas of past industrial operations based upon the CSEM. Based upon the areal distribution of samples (as presented in **Figure 1-4** and **Figure 2-1**) and detected concentrations, there are no data gaps for this HHRA.

6.3 CONCEPTUAL SITE EXPOSURE MODEL (CSEM)

The CSEM shown in **Figure 6-1** employs available information about past and current site operations and the nature of the chemicals detected in various media. The CSEM identifies the known or suspected source(s), transport mechanisms, exposure media, and exposure routes through which human receptors potentially could contact released chemicals.

For a complete exposure pathway to exist, each of the following elements must be present (USEPA, 1989):

- Source(s) and mechanism(s) for chemical release(s);
- Transport medium/media and associated migration pathway(s);
- Exposure medium/media which provide a point of potential human contact with one or more chemicals; and
- A route of exposure for chemical uptake into the body.

If any one of these elements is missing, the exposure pathway is considered incomplete and is not evaluated in the HHRA. That is, the HHRA evaluates only exposure pathways that currently are complete or that may be complete in the future.

Section 4.0 and **Section 5.0** discuss the sources and release mechanisms depicted on **Figure 6-1**, which are therefore not recounted here. This HHRA considers the following potential transport media and associated migration pathways:

Transport Media	Migration Pathway(s)
Soil	Eroded contaminated soil may be transported as airborne particulates ('dust'). Volatile chemicals present in soil may partition into the vapor phase and subsequently be transported by diffusion and/or advection (collectively referred to as 'volatilization' for this HHRA)
Soil Gas	Chemicals present in soil gas and/or air/crawlspace air may be transported via 'volatilization'.
Air/Crawlspace Air	
Groundwater	Chemicals present in groundwater may migrate from beneath the Site to off-site locations and subsequently volatilize upward from groundwater.

This HHRA considers the following potential exposure media and associated exposure pathways:

Exposure Media	Exposure Pathway(s)
Indoor, Outdoor Air, Trench Air	Chemicals present in soil gas, crawlspace air, and/or groundwater may volatilize into: • the indoor air space of commercial and/or residential buildings where they subsequently may be inhaled; and/or • outdoor air or construction utility trench air where they subsequently may be inhaled.
Soil	On-site receptors may be exposed to chemicals via ingestion of and/or dermal contact with soil (ingestion and dermal contact are referred to as 'direct contact' exposure pathways). On-site receptors may also inhale windborne particulates ('dust') or volatilized chemicals. Exposure of off-site receptors to aerially-deposited windborne particulates via direct contact and/or inhalation is evaluated qualitatively in the uncertainty analysis.

Site-related chemicals may have potential impact on groundwater via downward migration through the unsaturated zone, through any capillary fringe, and ultimately into the saturated zone (i.e., 'leaching'). The HHRA evaluated these impacts through ongoing activities including, but not necessarily limited to, periodic groundwater monitoring and proposed groundwater remediation conducted with USEPA oversight. Therefore, this HHRA does not evaluate the leaching pathway – in which groundwater is the 'receptor' – through fate-and-transport modeling or similar analysis. The local groundwater aquifer that has been impacted by the Site is not used for any purpose (e.g., for drinking, cooking, or bathing – that is, as "tapwater"); therefore, groundwater is not an exposure medium for this HHRA. However, the State of California has identified the local groundwater aquifer to have beneficial use(s) as set forth in the Basin Plan developed by the Regional Water Quality Control Board (RWQCB; Los Angeles Region) of the California State Water Resources Control Board under the Porter-Cologne Act. As such,

USEPA has justified remediating groundwater within the local groundwater aquifer to maximum contaminant levels (MCLs).

Aerial imagery shows that Site has been vacant, other than for minimal vehicle parking/storage, since sometime between August 2013 and April 2014. Therefore, there are no current on-site receptors evaluated in this HHRA. The HHRA evaluated the following receptors and the associated exposure pathways:

- **Future On-Site Commercial/Industrial Worker:** This future receptor potentially may be exposed to soil in the upper 2 feet (i.e., from 0 to 2 feet below ground surface [ft bgs]). The evaluation assumes that the primary potential exposure pathway for this receptor is inhalation of volatile chemicals that may be present in soil gas and indoor air as well as volatile and non-volatile chemicals that may be present in soil.
- **Future On-Site Construction Worker:** This future receptor may undertake invasive activities which could result in exposure to soil and inhalation of volatile chemicals that may be present in utility trench air. This receptor potentially is exposed to soil in the upper 10 feet (i.e., from 0 to 10 ft bgs).
- **Current and Future Off-Site Residential Receptor:** The closest residential neighborhood is located approximately 150 feet south of the Site. Since it will remain as such into the foreseeable future, there is no difference between the current and future receptors for this HHRA. Given the distance from the Site and engineering controls that likely would be implemented to minimize dust migration during any future redevelopment, exposure to aerially deposited soil is not considered. The only residential exposure considered is inhalation of volatile chemicals that volatilize off groundwater and into indoor air.

The exposure assessment provides additional details regarding how the exposures for these receptors are quantified.

6.4 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN

COPCs are those chemicals for which risk values are calculated as part of the risk characterization for the various receptors and exposures identified in the CSEM. The HHRA retained as COPCs any detected chemicals whose presence could not be attributed to naturally-occurring processes. Except for metals, the tested chemical classes (e.g., VOCs, SVOCs, PAHs, and PCBs) are not naturally-occurring. Consequently, any chemical associated with these other classes detected in at least one sample in a given media was retained as a COPC for that media. For metals other than arsenic and lead, the HHRA assessed whether a release may have occurred by means of an outlier analysis based on concentration range and coefficient of variation (CV)

(CalEPA, 1997). Metals whose 0 to 2 ft bgs or 0 to 10 ft bgs sample concentration populations do not span more than two orders-of-magnitude or have a CV greater than unity[1] are attributed to naturally-occurring processes and were not assessed further. They include barium, beryllium, calcium, iron, manganese, potassium, and vanadium. Metals whose sample concentration populations exceed either of those criteria were assessed further. They are as follows:

- antimony (CV > 1);
- arsenic (CV > 1);
- cadmium (CV > 1);
- chromium (CV > 1);
- cobalt (CV > 1);
- copper (CV > 1);
- lead (CV > 1);
- manganese (CV > 1);
- mercury (CV > 1);
- nickel (CV > 1);
- selenium (CV > 1);
- silver (CV > 1);
- sodium (CV > 1);
- thallium (CV > 1); and
- zinc (CV > 1).

This list is identical for both the 0 to 2 ft bgs and 0 to 10 ft bgs populations. In several cases, the CV exceedances are driven largely by a low frequency of detection.

Antimony: The maximum detected concentration (64 mg/kg) exceeds the most stringent risk-based concentration (regional screening level [RSL], USEPA 2018) of 31 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, antimony is retained as a COPC.

Cadmium: The maximum detected concentration (40.5 mg/kg) is comparable to the most stringent RSL (USEPA 2018) of 71 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, cadmium is retained as a COPC.

Chromium: The maximum detected concentration (1,020 mg/kg) is well below the most stringent RSL (USEPA 2018) of 120,000 mg/kg (the non-cancer endpoint-based RSL for the child

[1] To provide a conservative analysis, non-detect results were assigned a concentration of zero.

resident using trivalent chromium as a surrogate); therefore, chromium is not retained as a COPC.

Cobalt: The maximum detected concentration (197 mg/kg) exceeds the most stringent RSL (USEPA 2018) of 23 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, cobalt is retained as a COPC.

Copper: The maximum detected concentration (4,350 mg/kg) exceeds the most stringent RSL (USEPA 2018) of 3,100 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, copper is retained as a COPC.

Manganese: The maximum detected concentration (5,260 mg/kg) exceeds the most stringent RSL (USEPA 2018) of 1,800 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, manganese is retained as a COPC.

Mercury: The maximum detected concentration (0.46 mg/kg) is well below the most stringent RSL (USEPA 2018) of 23 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, mercury is not retained as a COPC.

Nickel: The maximum detected concentration (585 mg/kg) is comparable to the most stringent RSL (USEPA 2018) of 1,500 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, nickel is retained as a COPC.

Selenium: The maximum detected concentration (7.5 mg/kg) is well below the most stringent RSL (USEPA 2018) of 390 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, selenium is not retained as a COPC.

Silver: The maximum detected concentration (2.7 mg/kg) is well below the most stringent RSL (USEPA 2018) of 390 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, silver is not retained as a COPC.

Sodium: The maximum detected concentration (1,520 mg/kg) is comparable to the most stringent RSL (USEPA 2018) of 2,300 mg/kg (the non-cancer endpoint-based RSL for the child

resident) for chlorite (sodium salt). The CV (approximately 1.1 for both populations) is attributed to the fact that sodium was not detected in 36 of the 82 samples collected from 0 to 2 ft bgs and 53 of 124 samples collected from 0 to 10 ft bgs. When the detected and estimated concentrations in both populations are considered, the CV is calculated to be approximately 0.5 for both populations; therefore, sodium is not retained as a COPC.

Thallium: The maximum detected concentration (12.6 mg/kg) exceeds the most stringent RSL (USEPA 2018) of 0.78 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, thallium is retained as a COPC.

Zinc: The maximum detected concentration (1,550 mg/kg) is well below the most stringent RSL (USEPA 2018) of 23,000 mg/kg (the non-cancer endpoint-based RSL for the child resident); therefore, zinc is not retained as a COPC.

Arsenic and Lead: A regional background concentration of 12 mg/kg for arsenic in Southern California has been established by CalEPA. Given that the maximum concentration of arsenic (43.8 mg/kg) for both populations exceeds this regional value, arsenic is retained as a COPC. For lead, CalEPA has established a residential soil level of 80 mg/kg. Given that the maximum concentration of lead (2,620 mg/kg) for both populations exceeds this lead level, lead is retained as a COPC.[2]

Table 6-2 summarizes the COPCs for the various media. As noted above, COPCs are those chemicals detected above a naturally-occurring level so not all detected metals in soil are retained as COPCs. However, all detected VOCs in any media and all detected 'non-VOCs' (i.e., SVOCs, PAHs, and PCBs) detected in soil are not considered to be naturally-occurring. Therefore, they were retained as COPCs consistent with the CSEM.

[2] It is noted that the CV for both arsenic and lead exceed 1 and that the range of lead concentrations spans more than two orders of magnitude (i.e., the minimum and maximum lead concentrations are 2.3 mg/kg and 2,620 mg/kg, respectively).

6.5 EXPOSURE ASSESSMENT, TOXICITY ASSESSMENT, AND AIR, SOIL GAS, AND SOIL RBCS

The exposure assessment and toxicity assessment establish air and soil RBCs. The risk characterization uses the air and soil RBCs to estimate the potential risks to human health posed by the COPCs.

6.5.1 Exposure Assessment

The exposure assessment measures or estimates the intensity, frequency, and duration of human exposure. The definition of exposure (USEPA, 1992b) is "a condition in which a chemical contacts the outer boundary of a human." The amount of chemical contacted is termed "potential dose." Potential dose generally is determined by incorporating assumptions regarding the contact rate with the outer boundary of a human. In the HHRA process, actual exposure cannot be determined. Accordingly, the risk assessor estimates potential dose by assuming and evaluating a conservative hypothetical exposure based on default regulatory guidance. Superfund risk assessment guidance specifies that risks are to be assessed for an RME scenario. The guidance defines the RME as "the highest exposure that reasonably is expected to occur at a site". An RME exposure scenario is then based on the upper end of the distribution of human activities that impact exposure (e.g., inhalation rate, frequency and duration of exposure based on the number of days per year and years per lifetime a person is present at any one residence). A Superfund risk assessment relies upon conservative RME exposure assumptions to ensure that the potential exposure is not underestimated (USEPA, 1989). As such, the RME is designed to be the highest exposure that reasonably is expected to occur for any member of the potentially exposed population (USEPA, 1989). The receptor-specific RME exposure parameters include body weight, exposure frequency, exposure duration, exposure time, inhalation and ingestion rates, skin surface area and soil adherence factors, and volatilization and particulate emission factors. USEPA (2018b) has published the values of these parameters, and the risk-based concentrations (along with toxicity criteria) incorporate the parameter values, as described below.

6.5.2 Toxicity Assessment

The toxicity assessment identifies adverse human health effects potentially caused by exposure to a chemical. The manifestation of these adverse health effects depends on the extent of

chemical intake. The toxicity assessment comprises the characterization and quantification of: 1) the cancer risks from exposure to a carcinogenic COPC, and 2) the non-cancer hazards from exposure to a COPC.

6.5.2.1 Cancer Effects

There are two steps to the toxicity assessment of a chemical with the potential to cause cancer or increase the incidence of cancer in humans. In the first step, the risk assessor uses evidence from laboratory toxicity and human epidemiology studies to determine the likelihood that a chemical is a carcinogen. Based on the weight of evidence from these studies, the chemical is then ranked on a scale from "not likely to be carcinogenic" to "human carcinogen." In the second step, the risk assessor uses dose-response data, usually from one or more animal carcinogenicity studies, to develop cancer potency factors which can be used to estimate cancer risks for humans exposed to the chemical in question. Similar to the non-cancer hazard assessment, quantification of cancer risks is accomplished using cancer risk-based concentrations for each COPC, as **Section 6.5.3** describes below. These values incorporate the cancer potency factor derived from animal carcinogenicity studies, along with the RME exposure assumptions noted above. For each analyte, its cancer risk-based concentration corresponds to an ILCR equivalent of 1E-06 (1-in-one-million), which USEPA considers to be a *de minimis* level of risk. For carcinogens, risk assessors generally assume that any level of exposure has a finite possibility of causing cancer. As stated previously, the HHRA incorporates the cancer toxicity value (known as the inhalation unit risk or 'IUR') into the USEPA and CalEPA risk-based concentrations used in this assessment.

6.5.2.2 Non-Cancer Hazards

To be health-protective, the HHRA based non-cancer risk evaluations on the noncancer air risk-based concentrations, as **Section 6.5.3** describes below. These values incorporate reference values that are health-protective for inhalation exposures (referred to as the reference concentration [RfC]). These reference values are estimates of a daily exposure to the human population (including sensitive subgroups) that USEPA considers to be without an appreciable risk of deleterious effects during a lifetime of exposure. Reference values are not exact or absolute thresholds above which health effects are expected in many, most, or all exposed

individuals. Rather, reference values represent a level of exposure using a margin of safety above which the potential for health effects to occur begins to increase enough that USEPA deems it prudent to consider measures to protect those exposed, especially members of more vulnerable or sensitive sub-populations (e.g., children, the elderly, the infirm).

6.5.3 Air, Soil Gas, Groundwater and Soil RBCs

This HHRA used USEPA RSLs and CalEPA DTSC-SLs for the air and soil RBCs as the basis for all receptors. These RBCs incorporate the latest toxicity values and latest exposure parameters from these agencies. The more stringent of the USEPA and CalEPA values was used to evaluate the potential cancer and non-cancer hazards. **Table 6-3a**, **Table 6-3b**, and **Table 6-3c** list the air RBCs for the commercial/industrial, construction worker[3], and residential receptors, respectively.

Soil gas sampling events were conducted in April 2013 (SG1 through SG18), April/May 2014 (SG19 through SG43), and April 2017 (SG44 through SG47). These sampling rounds involved collection of soil gas samples from depths of 5, 15, 25, and 35 ft bgs. At the direction of USEPA, given their understanding and interpretation of the vapor intrusion pathway for this site, the HHRA calculated soil gas RBCs for all soil gas COPC sample depths and receptors by assuming an attenuation factor of 0.03. That is, concentrations in indoor air for the commercial/industrial and residential receptors and in trench air for the construction worker receptor were assumed to be 33 times lower than those detected in the subsurface regardless of depth, soil type, and COPC. **Table 6-4** lists the soil gas RBCs for the commercial/industrial, construction worker, and residential receptors.

The most recent round of groundwater samples was collected in July and September of 2016. Several SAIA designated wells associated with the Los Angeles Unified School District parcel to

[3] The air RBCs for the construction worker are based on the commercial/industrial air RBCs. Specifically, the HHRA calculated construction worker RBCs by adjusting the commercial cancer RBCs upward by a factor of 25 given the 25-fold shorter exposure duration, and downward by a factor of 2 to account for the 2-fold higher inhalation rate associated with the IUR. No adjustment is made for the non-cancer RBCs and chronic toxicity criteria – as opposed to subchronic toxicity criteria – conservatively used for this comparatively short-term (1-year) receptor.

the south[4] were sampled in both months. The depth to groundwater is consistently on the order of 60 ft bgs. At the direction of USEPA, given their understanding and interpretation of the vapor intrusion pathway for this site, the HHRA calculated soil gas RBCs for all groundwater COPCs, depths, and receptors by assuming an attenuation factor of 0.001 after correction for COPC-specific Henry's constants to convert groundwater concentrations to soil gas concentrations at the water table. That is, the HHRA assumed concentrations in indoor air for the residential receptor to be 1,000 times lower than soil gas concentrations in equilibrium with groundwater concentrations at the water table regardless of depth and soil type. The residential receptor is the only receptor evaluated using groundwater in accordance with the CSEM. **Table 6-5** lists the groundwater RBCs for residential receptors.

The RI sampling team collected indoor/crawlspace air analytical samples in September 2017[5]. As these are direct measurements at the exposure point, no attenuation factor correction is needed. As such, the air RBCs listed in **Table 6-3a** through **Table 6-3c** are the indoor air RBCs for the various receptors considered in this HHRA.

Finally, **Table 6-6a** and **Table 6-6b** list the soil RBCs for the commercial/industrial and construction worker[6] receptors, respectively.

6.6 RISK CHARACTERIZATION

The last step of the HHRA is the risk characterization. The risk characterization estimates the potential risks to human health posed by the assumed exposure to the COPCs. These risk values are the ILCR (for carcinogenic COPCs only) and the HI for non-cancer health effects. Risk value calculations (i.e., ILCR and HI values) use sample-specific soil gas, indoor/crawlspace air, groundwater, and soil concentrations as summarized in **Table 6-7,** in

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[4] These wells include SAIA-MW9A, SAIA-MW9C, SAIA-MW10, SAIA-MW11A, SAIA-MW11B, SAIA-MW12A, SAIA-MW12B, SAIA-MW12C, and SAIA-MW13.

[5] The RI team collected ambient air analytical samples concurrently with indoor air samples in September 2017.

[6] The soil RBCs for the construction worker are the RWQCB ESLs (CalEPA, 2016).

conjunction with the RBCs consistent with the ratio approach set forth in USEPA guidance (USEPA, 2018b).

Eqn. 1:

$$ILCR = RR \times \left(\frac{C_{COPC1}}{RBC_{C,COPC1}} + \frac{C_{COPC2}}{RBC_{C,COPC2}} + \ldots + \frac{C_{COPCn}}{RBC_{C,COPCn}} \right)$$

Eqn. 2:

$$HI = RHQ \times \left(\frac{C_{COPC1}}{RBC_{NC,COPC1}} + \frac{C_{COPC2}}{RBC_{NC,COPC2}} + \ldots + \frac{C_{COPCn}}{RBC_{NC,COPCn}} \right)$$

where:

ILCR	incremental lifetime cancer risk (unitless);
RR	reference incremental lifetime cancer risk (1E-06; unitless);
C_{COPC1}	concentration for first of "n" COPCs (µg/m^3 or mg/kg);
C_{COPC2}	concentration for second of "n" COPCs (µg/m^3 or mg/kg);
C_{COPCn}	concentration for last of "n" COPCs (µg/m^3 or mg/kg);
$RBC_{C,COPC1}$	RBC for cancer endpoint for first of "n" COPCs (µg/m^3 or mg/kg;
$RBC_{C,COPC2}$	RBC for cancer endpoint for second of "n" COPCs (µg/m^3 or mg/kg); and
$RBC_{C,COPCn}$	RBC for cancer endpoint for last of "n" COPCs (µg/m^3 or mg/kg).
HI	hazard index (unitless);
RHQ	reference hazard quotient (1; unitless)[7];
$RBC_{NC,COPC1}$	RBC for non-cancer endpoint for first of "n" COPCs (µg/m^3 or mg/kg);
$RBC_{NC,COPC2}$	RBC for non-cancer endpoint for second of "n" COPCs (µg/m^3 or mg/kg); and
$RBC_{NC,COPCn}$	RBC for non-cancer endpoint for last of "n" COPCs (µg/m^3 or mg/kg).

The concentration ("C_{COPC}") terms in these risk characterization equations are the sample-specific measured concentrations for soil gas, indoor air, and groundwater. For soil, the C_{COPC} terms are average concentrations over the exposure area, which is defined as the trapezoidal-shaped SAIA site for this HHRA. That is, soil samples collected from the ELG Metals site to the north (SB18 and SB36-SB39) and the Union Pacific Railroad right-of-way/Flood Control

[7] The ratios in the parenthetical term of Eq. 2 are referred to as the hazard quotient (HQ).

District easement to the east (SB44-SB47) are not included as they are considered 'off-site'. The average concentration is calculated as the 95% upper confidence level (95% UCL) of the mean concentration of the remaining soil boring locations as calculated using USEPA's guidance and statistical software (USEPA, 2015). This approach results in a 95% UCL for arsenic (5.1 mg/kg) that is less than the background concentration of 12 mg/kg; therefore, arsenic is eliminated as a COPC. In accordance with the CSEM, soil exposures are assessed for the commercial/industrial receptor for soil from 0 to 2 ft bgs and for the construction worker receptor for soil from 0 to 10 ft bgs. For 'non-detect' results for the metals soil COPCs, the laboratory reporting limit was used for the UCL calculations. For the non-metals soil COPCs, a value of 0 was used for the UCL calculations. For the metals soil COPCs, the laboratory reporting limit was used for the UCL calculations.

6.6.1 Commercial/Industrial Receptor

Table 6-8a lists the risk values associated with the inhalation exposure pathway due to predicted vapor intrusion of the soil gas COPCs into indoor air for this future receptor using a default attenuation factor. **Table 6-8b** lists the risk values associated with the soil exposure pathways.

6.6.1.1 Soil Gas COPCs (Vapor Intrusion)

Of the 234 soil gas samples:

- 190 have an ILCR that exceeds the *de minimis* ('risk benchmark') level of 1E-06 (these values are shaded orange or red in the table);
- 68 have an ILCR that exceeds 1E-04, which generally is considered to be the upper bound of the risk management range (these values are shaded red in the table); and
- 44 have an ILCR less than 1E-06 (24 of which had no detectable concentrations of any COPCs);
- The most-frequent risk-driving COPCs for the cancer endpoint are, in order of frequency: TCE (150 samples), PCE (107 samples), benzene (89 samples), vinyl chloride (77 samples), and 1,1-DCA (53 samples);
- 130 have an HI that exceeds the commonly-applied HI benchmark level of 1;
- 104 have an HI equal to or less than 1 (20 of which have no detectable concentrations of any COPCs);
- The most-frequent risk-driving COPCs for the non-cancer endpoint are, in order of frequency: TCE (128 samples), cis-1,2-DCE (79 samples), and vinyl chloride (30 samples).

6.6.1.2 Soil COPCs

Risk values are presented based on both the 95% UCL and maximum concentration for the soil COPCs so the impact of high outliers ('hot spots') is more readily apparent and due to the commonly infrequent detection of non-metal COPCs. As shown in **Table 6-8b**, the risk values associated with the following soil COPCs exceed the *de minimis* ILCR of 1E-06 and/or an HQ of 1 for the future commercial/industrial receptor:

- Cadmium: HQ > 1 for maximum concentration;
- Lead: Soil lead level exceeded for both maximum and 95% UCL concentrations;
- Manganese: HQ > 1 for maximum concentration only;
- Aroclor 1248: ILCR > 1E-06 for both maximum and 95% UCL concentrations;
- Aroclor 1260: ILCR > 1E-06 for maximum concentration; and
- TCE: ILCR > 1E-06 and HQ > 1 for maximum concentration only.

6.6.2 Construction Worker Receptor

Table 6-9a lists the risk values associated with the inhalation exposure pathway due to vapor intrusion of the soil gas COPCs into utility trench air for this future receptor using a default attenuation factor. **Table 6-9b** lists the risk values associated with the soil exposure pathways.

6.6.2.1 Soil Gas COPCs (Vapor Intrusion)

Of the 234 soil gas samples:

- 116 have an ILCR that exceeds the *de minimis* ('risk benchmark') level of 1E-06 (these values are shaded in orange or red in the table);
- 38 have an ILCR that exceeds 1E-04, which generally is considered to be the upper bound of the risk management range (these values are shaded red in the table); and
- 118 have an ILCR less than 1E-06 (24 of which had no detectable concentrations of any COPCs);
- The most-frequent risk-driving COPCs for the cancer endpoint are, in order of frequency: TCE (91 samples), vinyl chloride (56 samples), PCE (34 samples), 1,1-DCA (32 samples), and benzene (11 samples);
- Because the soil gas RBCs and attenuation factor are identical to those used for the commercial/industrial receptor, 130 have an HI that exceeds the commonly-applied HI benchmark level of 1, 104 have an HI equal to or less than 1 (20 of which have no detectable concentrations of any COPCs), and the most-frequent risk-driving COPCs for the non-cancer endpoint are, in order of frequency: TCE (128 samples), cis-1,2-DCE (79 samples), and vinyl chloride (30 samples).

6.6.2.2 Soil COPCs

As for the commercial/industrial receptor, risk values are presented based on both the 95% UCL and maximum concentration for the soil COPCs so the impact of high outliers ('hot spots') is more readily apparent and due to the commonly infrequent detection of non-metal COPCs. As shown in **Table 6-9b**, the risk values associated with the following soil COPCs exceed the *de minimis* ILCR of 1E-06 and/or an HQ of 1 for the future commercial/industrial receptor:

- Cobalt: ILCR > 1E-06 and HQ > 1 for the maximum concentration only;
- Lead: Soil lead level exceeded for both maximum and 95% UCL concentrations;
- Nickel: HQ > 1 for maximum concentration only;
- Aroclor 1248: ILCR > 1E-06 for maximum concentration only; and
- Thallium: HQ > 1 for maximum concentration only.

6.6.3 Indoor Air (Residential Receptor) Risk Values

Risk values associated with the inhalation exposure pathway for indoor air are based on soil gas, indoor air/crawlspace, and groundwater concentrations.

Table 6-10a lists the risk values associated with the inhalation exposure pathway due to predicted vapor intrusion of the soil gas COPCs into indoor air for this receptor using a default attenuation factor. These values are applicable to the current receptor given that they are associated with the 23 soil gas samples collected in the residential area (i.e., those from SG-15, SG-16, SG-17, SG-40, and SG-41):

- 22 have an ILCR that exceeds the *de minimis* ('risk benchmark') level of 1E-06 (these values are shaded orange or red in the table);
- 3 have an ILCR that exceeds 1E-04, which generally is considered to be the upper bound of the risk management range (these values are shaded red in the table); and
- 1 has an ILCR equal to or less than 1E-06;
- The most-frequent risk-driving COPCs for the cancer endpoint are, in order of frequency: TCE (21 samples), PCE (18 samples), benzene (9 samples), 1,1-DCA (1 samples), and vinyl chloride (1 samples);
- 16 have an HI that exceeds the commonly-applied HI benchmark level of 1;
- 7 have an HI equal to or less than 1; and
- The most-frequent risk-driving COPCs for the non-cancer endpoint are, in order of frequency: TCE (16 samples), cis-1,2-DCE (7 samples), PCE (2 samples), and benzene (1 sample).

Table 6-10b lists the risk values associated with the inhalation exposure pathway due to measured COPC concentrations in indoor and crawlspace air[8]. By their very nature, these are applicable solely to the current receptor. Of the 23 indoor air/crawlspace samples:

- All 23 have an ILCR that exceeds the *de minimis* ('risk benchmark') level of 1E-06 (these values are shaded orange in the table);
- None of the 23 samples have an ILCR that exceeds 1E-04, which generally is considered to be the upper bound of the risk management range;
- None of the 23 samples has an ILCR less than 1E-06;
- The most-frequent risk-driving COPCs for the cancer endpoint are, in order of frequency: benzene (all 23 samples), 1,2-DCA (6 samples), ethylbenzene and PCE (2 samples), and naphthalene (1 sample);
- TCE is not a risk driver in any of the samples despite being the most frequent risk driver for the soil gas samples;
- TCE is either not detected or detected at estimated concentrations[9] in the indoor air/crawlspace samples;
- None of the 23 samples have an HI that exceeds the commonly-applied HI benchmark level of 1.

Table 6-10c lists the risk values associated with the inhalation exposure pathway due to predicted vapor intrusion of the groundwater COPCs into indoor air for this receptor using a default attenuation factor. Since all wells are considered here, these values are applicable to both current and future receptors. As noted above, there is no computational difference between the current and future receptors; as such, the risk values are identical for both scenarios. As shown in this table, several wells are screened at depths exceeding 60 ft bgs; therefore, the risk values associated with these deeper wells are likely to significantly be overestimated as the COPCs would have to diffuse upward through the groundwater before reaching the bottom of the vadose zone, where vapor-phase diffusion could then occur. Of the 55 groundwater samples:

- 34 have an ILCR that exceeds the *de minimis* ('risk benchmark') level of 1E-06 (these values are shaded orange in the table);
- 5 have an ILCR that exceeds 1E-04, which generally is considered to be the upper bound of the risk management range (these values are shaded red in the table);
- 21 have an ILCR equal to or less than 1E-06;

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[8] Crawlspace air is considered to be equivalent to indoor air for this assessment. That is, a crawlspace-to-indoor air attenuation factor of 1 is assumed.

[9] Estimated ("J flagged") concentrations generally are low concentrations below the laboratory equipment calibration range that lie between the method detection limit and the reporting limit.

- The most-frequent risk-driving COPCs for the cancer endpoint are, in order of frequency: TCE (36 samples), vinyl chloride (11 samples), 1,2-DCA (8 samples), and benzene (4 samples);
- TCE is the most frequent risk driver despite not being a risk driver for any of the indoor air/crawlspace samples;
- PCE is not a risk driver for any of the groundwater samples;
- 13 samples have an HI that exceeds the commonly-applied HI benchmark level of 1 (these values are shaded red in the table);
- 42 have an HI equal to or less than 1;
- The most-frequent risk-driving COPCs for the non-cancer endpoint are, in order of frequency: cis-1,2-DCE (27 samples), TCE (16 samples), and trans-1,2-DCE (1 sample).

The ILCR associated with TCE in those wells within the residential area (i.e., MW-3A,B,C; MW-4A,B,C; and MW-45, MW-46, and MW-47) are as follows:

- MW-3A-C: ILCR ranges from 2E-07 to 3E-03;
- MW-4A-C: ILCR ranges from 0 to 6E-06; and
- MW-45,-46,-47: ILCR ranges from 1E-06 to 5E-05.

Assuming that the measured indoor air/crawlspace air concentrations of TCE are representative of actual conditions, this analysis shows that those calculated using a default attenuation factor may overestimate the ILCR by several orders of magnitude.

6.7 SUMMARY

The risk values for the various receptors are summarized below.

6.7.1 Future Commercial/Industrial Receptor

1. Vapor intrusion of soil gas COPCs and subsequent inhalation of indoor air:
    a. 81% of the samples (190 of 234 samples) exceed the *de minimis* ILCR of 1E-06;
    b. 29% of the samples (68 of 234 samples) exceed the upper bound risk management ILCR of 1E-04;
    c. The risk-drivers for the ILCR values are TCE, PCE, benzene, vinyl chloride, and 1,1-DCA;
    d. 56% of the samples (130 of 234 samples) exceed the risk benchmark HI of 1; and
    e. The risk-drivers for the HI values are TCE, cis-1,2-DCE, and vinyl chloride.
2. Ingestion, dermal contact, and particulate inhalation of soil COPCs:
    a. Cadmium: The maximum concentration exceeds the risk benchmark HI of 1;
    b. Lead: Both the maximum and 95% UCL concentrations exceed the soil lead level;
    c. Manganese: The maximum concentration exceeds the risk benchmark HI of 1 (the 95% UCL concentration does not exceed this benchmark level);
    d. Aroclor 1248: Both the maximum and 95% UCL concentrations exceed the *de minimis* ILCR of 1E-06; and

e. Aroclor 1260: The maximum concentration exceeds the *de minimis* ILCR of 1E-06.

6.7.2 Future Construction Worker Receptor

1. Vapor intrusion of soil gas COPCs and subsequent inhalation of trench air:
    a. 50% of the samples (116 of 234 samples) exceed the *de minimis* ILCR of 1E-06;
    b. 16% of the samples (38 of 234 samples) exceed the upper bound risk management ILCR of 1E-04;
    c. The risk-drivers for the ILCR values are TCE, vinyl chloride, PCE, 1,1-DCA, and benzene;
    d. 56% of the samples (130 of 234 samples) exceed the risk benchmark HI of 1; and
    e. The risk-drivers for the HI values are TCE, cis-1,2-DCE, and vinyl chloride.
2. Ingestion, dermal contact, and particulate inhalation of soil COPCs:
    a. Cobalt: The maximum concentration exceeds the *de minimis* ILCR of 1E-06 and the risk benchmark HI of 1 (the 95% UCL concentration does not exceed these benchmark levels);
    b. Lead: Both the maximum and 95% concentrations exceed the soil lead level;
    c. Nickel: The maximum concentration exceeds the risk benchmark HI of 1 (the 95% UCL concentration does not exceed this benchmark level);
    d. Aroclor 1248: The maximum concentration exceeds the *de minimis* ILCR of 1E-06 (the 95% UCL concentration does not exceed this benchmark level);
    e. Aroclor 1260: The maximum concentration exceeds the *de minimis* ILCR of 1E-06 (the 95% UCL concentration does not exceed this benchmark level); and
    f. Thallium: The maximum concentration exceeds the risk benchmark of 1.

6.7.3 Residential Receptor

1. <u>Current/Future Receptor:</u> Vapor intrusion of soil gas COPCs and subsequent inhalation of indoor air for samples collected in the current residential area south of the former facility parcel:
    a. 96% of the samples (22 of 23 samples) exceed the *de minimis* ILCR of 1E-06;
    b. 13% of the samples (3 of 23 samples) exceed the upper bound risk management ILCR of 1E-04;
    c. The risk-drivers for the ILCR values are TCE, PCE, benzene, 1,1-DCA, and vinyl chloride;
    d. 70% of the samples (16 of 23 samples) exceed the risk benchmark HI of 1; and
    e. The risk-drivers for the HI values are TCE, cis-1,2-DCE, PCE, and benzene.
2. <u>Current Receptor only:</u> Vapor intrusion of crawlspace COPCs and subsequent inhalation of indoor air (and inhalation of the indoor air COPCs) for samples collected in the current residential area south of the former facility parcel:
    a. 100% of the samples (23 of 23 samples) exceed the *de minimis* ILCR of 1E-06;
    b. None of the samples (0 of 23 samples) exceed the upper bound risk management ILCR of 1E-04;
    c. The risk-drivers for the ILCR values are benzene, 1,2-DCA, ethylbenzene, PCE, and naphthalene;

   d. TCE is either not detected or detected at low concentrations such that is not a risk driver in any of the samples despite being detected in, and being the most frequent risk driver for the soil gas samples as noted above and for the groundwater samples as noted below;
   e. None of the samples (0 of 23 samples) exceed the risk benchmark HI of 1.
3. Current/Future Receptor: Vapor intrusion of groundwater COPCs and subsequent inhalation of indoor air for samples collected in the current residential area south of the former facility parcel:
   a. 62% of the samples (34 of 55 samples) exceed the *de minimis* ILCR of 1E-06;
   b. 9% of the samples (5 of 55 samples) exceed the upper bound risk management ILCR of 1E-04;
   c. The risk-drivers for the ILCR values are TCE, vinyl chloride, 1,2-DCA, and benzene;
   d. 24% of the samples (13 of 55 samples) exceed the risk benchmark HI of 1; and
   e. The risk-drivers for the HI values are cis-1,2-DCE, TCE, and trans-1,2-DCE.

6.8 UNCERTAINTY ANALYSIS

Uncertainty is inherent in many aspects of the risk assessment process. Uncertainty generally arises from a lack of knowledge, as well as variability of (1) site conditions and future site use, (2) toxicity and exposure parameters associated with the RBCs, and/or (3) the extent to which an individual may be exposed (if at all) to the chemicals and an individual's response to the exposure. This lack of knowledge means that the risk assessor must make assumptions based on information presented in the scientific literature or on professional judgment. Although some assumptions have a significant scientific basis, many do not. The following sections further discuss the assumptions that introduce the greatest amount of uncertainty, and their effects on the findings of this HHRA. This discussion is qualitative in nature, reflecting the difficulty of quantifying the uncertainty in specific assumptions. In general, the selected assumptions purposely bias the process toward health protection.

6.8.1 Uncertainty Associated with Site Characterization Data

Samples cannot be collected from every possible location and time; therefore, there is always some uncertainty associated with the representativeness of site characterization data. Soil and soil gas analytical samples provided reasonable lateral and vertical spatial coverage of the Site, were generally targeted to known or suspected source areas, and were tested for representative analytical suites given the history of the Site. Accordingly, the relative uncertainty in the site characterization data is low.

6.8.2 Uncertainty Associated with Risk-Based Concentrations

As mentioned earlier, the RBCs are based on toxicity parameters and exposure parameters published by CalEPA and USEPA. A large source of uncertainty in any risk assessment is the limited understanding of toxicity to humans who are exposed to the low concentrations that generally are encountered in the environment. Most toxicity data are from animal studies; these data generally are extrapolated using mathematical models or multiple uncertainty factors to predict what might occur in humans. Sources of conservatism in the toxicity criteria used in this HHRA include:

- the use of conservative (i.e., health-protective) methods and assumptions to extrapolate from high-dose animal studies to predict the possible response in humans at exposure levels far below those administered to animals;
- the assumption that chemicals considered to be carcinogens do not have thresholds (i.e., for all doses greater than zero, some risk is assumed to be present); and
- the fact that epidemiological studies (i.e., human exposure studies) are limited and generally are not considered quantitatively in deriving toxicity values.

The exposure assessment for this HHRA employs an RME scenario, which is defined by USEPA as the highest exposure that reasonably could be expected to occur for a given exposure pathway at a site (USEPA, 1989). To achieve this goal, the RME scenario uses highly conservative exposure assumptions. For example, this HHRA assumes that a future resident receptor is present at home 24 hours per day, 350 days per year, for 26 years. These and other upper-bound, default estimates of exposure (particularly the use of what are highly conservative attenuation factors for TCE given the indoor/crawlspace air data) most likely overestimate the potential health risks associated with the site. Therefore, the likelihood of underestimating exposure and the potential health risks is low.

In aggregate, the toxicological and exposure assumptions lead to overestimates of risk such that the actual risk is unlikely to be higher than the estimated risk. The actual risk could be considerably lower and, in fact, could be zero.

6.8.3 Uncertainty Associated with Risk Characterization

The uncertainties associated with risk characterization are generally the result of the combined uncertainties in the site conditions, exposure assumptions, and toxicity criteria. This HHRA quantified potential health risks for future commercial/industrial workers, construction workers, and current/future residents. Given the conservative nature of the exposure parameters used to

characterize these scenarios, it is highly unlikely that the same receptor would be exposed over the entire duration of the assumed exposure. The HHRA then combined these conservative estimates of exposure with even more conservative estimates of acceptable exposure or carcinogenic potency to estimate the magnitude (non-cancer) or likelihood (cancer) of potential effects.

One source of uncertainty that is unique to risk characterization is the assumption that the total risk associated with exposure to multiple chemicals is equal to the sum of the individual risks for each chemical (i.e., the risks are additive). Other possible interactions include synergism, where the total risk is higher than the sum of the individual risks, and antagonism, where the total risk is lower than the sum of the individual risks. Relatively few data are available regarding potential chemical interactions following environmental exposure to chemical mixtures. Studies carried out of rodents that were given simultaneous doses of multiple chemicals indicated no interactive effects for mixtures of chemicals that affect different target organs (i.e., each chemical acted independently), whereas antagonism was observed for mixtures of chemicals that affect the same target organ, but by different mechanisms (Risk Commission, 1997).

While there are no data on chemical interactions in humans exposed to chemical mixtures at the dose levels typically observed in environmental exposures, animal studies suggest that synergistic effects will not occur at levels of exposure below their individual effect levels (Seed et al., 1995). As exposure levels approach the individual effect levels, a variety of interactions may occur, including additive, synergistic, and antagonistic interactions (Seed et al., 1995). USEPA guidance for risk assessment of chemical mixtures (USEPA, 1986) recommends assuming an additive effect following exposure to multiple chemicals. Subsequent recommendations by other parties, such as the National Research Council (1988) and the Presidential/Congressional Commission on Risk Assessment and Risk Management (Risk Commission, 1997), also have advocated a default assumption of additivity. As currently practiced, risk assessments of chemical mixtures generally sum cancer risks regardless of tumor type and sum non-cancer hazard indices regardless of toxic endpoint or mode of action. Given the available experimental data, this approach likely overestimates potential risks associated with simultaneous exposure to multiple chemicals.

There is also uncertainty as to the origin of various COPCs detected in indoor air at risk levels of concern. Some of the COPCs listed in **Section 6.7** do not appear to be attributable to operations formerly conducted at the SAIA property. Specifically, 1,2-DCA, benzene, and ethylbenzene were detected in most or all outdoor-air samples at concentrations similar to those found in residential indoor air samples, and their presence in indoor air likely reflects the result of outdoor air exchanging with indoor air (see **Section 4.2.3.1**). The COPCs 1,2-DCA, ethylbenzene, and naphthalene were very localized in their occurrence in soil gas, and were not detected at significant concentrations in any of the soil-gas samples collected near the residences, which are located south of the SAIA property; similarly, these compounds are not significant components in the groundwater contaminant plume. The petroleum-associated compounds benzene, ethylbenzene, and naphthalene appear to not be attributable to operations at the SAIA property, but to instead be present in indoor air due to the influx of outdoor air and/or their possible presence in household products.

There is also uncertainty about the origin of PCE in indoor air at the one residence where it was reported at concentrations greater than the RSL. The two crawlspace samples at this residence contained concentrations typical of outdoor (ambient) air, suggesting that the PCE inside the residence most likely originated from a household product present inside the structure, rather than originating from soil-vapor intrusion of site-related compounds. Considering these factors, it appears that the majority of compounds posing risks via indoor air (1,2-DCA, benzene, ethylbenzene, naphthalene, and PCE) are not attributable to operations at the SAIA property.

In summary, these and other assumptions contribute to the overall uncertainty in the results of the HHRA. However, given that the largest sources of uncertainty generally result in overestimates of exposure or risk, it is likely that the non-carcinogenic and carcinogenic risks presented in this HHRA represent conservative estimates of the risks, if any, posed by residual chemicals at the site.

7.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This section summarizes the results and observations from the RI field investigations to identify and evaluate contaminants present at the SAIA Site. This RI identified the contaminants, contaminant sources, fate and transport of contaminants, and associated potential health risks resulting from exposures to soil, soil gas, indoor air, and groundwater containing the COPCs. Following the summary are conclusions and recommendations.

7.1 SUMMARY

7.1.1 Remedial Investigation Activities

The field team carried out RI activities for SAIA from 2013 to 2016, with multiple sampling events conducted separately for soil, soil gas, indoor air, and groundwater media. These field tasks included:

- Using CPT and discrete-depth (Hydropunch) groundwater sampling methods to define the lithology and provide preliminary analytical results to assess the extent of groundwater contamination, and to identify optimal locations for permanent monitoring wells.
- Installing thirteen permanent groundwater monitoring wells, consisting of nine triple-completion wells for the Gaspur Aquifer and four single-completion wells for the Exposition Aquifer, located across the Site based on the preliminary groundwater analytical results obtained from discrete-depth Hydropunch groundwater samples.
- Collecting groundwater samples from a network of 31 wells designed to evaluate the SAIA plume, including the permanent wells installed during the SAIA RI along with 13 selected existing wells that either EPA or the Cooper Drum Cooperating Parties Group installed for the Cooper Drum site investigations. The field team completed sampling of the monitoring wells installed for the SAIA RI and Cooper Drum wells in two to three rounds per well (in four separate events).
- Collecting soil and soil gas samples focused on areas of concern based on operational history at the former manufacturing facility on the SAIA property, and collecting several soil samples from off-site areas a short distance to the east and north as well.
- Collecting a few off-site soil gas samples to the north, east and south, to delineate contamination found along the perimeter of the SAIA property. In the downgradient area, the soil gas sampling extended to Duncan Avenue, approximately 700 feet south from the Southern Avenue property boundary.
- Collecting indoor air, outdoor air, and crawlspace air samples at eight apartments or homes in six buildings located along McCallum Avenue and the alley between

Southern and McCallum avenues, within approximately 500 feet south of the SAIA contaminant source area, to evaluate the existence and extent of vapor intrusion.

7.1.2 Physical Characteristics

Based on CPT profiling, regional studies, and investigations at the Cooper Drum site, the RI team characterized the following physical attributes of the subsurface soils:

- The Bellflower Aquiclude extends from just below the ground surface to a maximum depth of 70 feet bgs. A sandy layer characterized as a perched aquifer consistently occurs at depths between 30 and 40 feet bgs within the Bellflower. The thickness of the sandy layer appears to decrease gradually from the SAIA property to the downgradient area at Aldrich Road.
- The sediments of the three depth intervals of the Gaspur Aquifer are moderately well sorted and consist of predominantly coarse materials (sands and gravels), interbedded with subordinate proportions of finer units (silts and clays) across the Site.
- The stratigraphic contact between the Gaspur and Exposition Aquifers is gradational. This transition is characterized by a predominance of finer sediment types (fine sands, silts and clays) occurring from 100 to 125 feet bgs, below which are the coarse sand and gravels of the Exposition Aquifer.
- The sediment layers of Bellflower Aquiclude and Gaspur Aquifer appear to dip slightly from the SAIA property toward the south (downgradient), conforming with the natural local topography of gentle north-to-south slopes.

7.1.3 Nature and Extent of Contamination

Based on field sampling and analysis of soil, soil gas, air, and groundwater, the RI team characterized the following features of the nature and extent of contaminated media at the Site:

- VOCs in soils are present at significant concentrations beneath the area of the former degreasing area and sumps (contaminant source area) along the northeast side of the former main building on the SAIA property. TCE was the only analyte to exceed industrial screening levels in soil samples collected for the RI.
- Metals contamination in soil, specifically lead, arsenic, and thallium from historical activities, exceeds industrial RSLs (at seven, one, and two locations, respectively). These metals occur mainly in the shallow soils (less than 2.5 feet bgs). Lead, along with the one exceedance of arsenic and one residential RSL exceedance of copper, is present along the northeastern and eastern perimeters of SAIA property, and in isolated areas beneath the former main building. The two thallium exceedances are at widely separated locations at 2 and 35 feet, and are not associated with other contaminants.
- PCBs in soils are present in two main areas within the SAIA property: the area of the former degreasing building, and the area of the former oil recovery building, both near the northeastern corner of the SAIA property. PCB concentrations above industrial RSLs

were mainly limited to shallow soils in the upper 5 feet bgs, but were detected in one sample as deep as 15 feet bgs.

- Considering the most-relevant (shallow) depths of 5 feet bgs, the highest soil-gas analytical concentrations by far are primarily in the northeastern portion of the SAIA property, near the former degreasing building. From that contaminant source area, VOCs in shallow soil gas exceeding RSLs extend throughout the eastern two-thirds of the SAIA property; locally into adjoining southern portions of the ELG Metals facility, near the northern SAIA property boundary; and off-site to the south as far as Duncan Avenue, approximately 700 feet south of the SAIA property boundary.
- Vapor intrusion does not appear to be introducing concentrations of COPCs above the RSLs into residential structures near the SAIA property, based on analytical results from the two sampling rounds at indoor-air sampling locations. The several VOCs that exceeded residential RSLs are likely attributable to exchange with outdoor air, or from household products stored inside the structures, rather than infiltrating upward into the structures from underlying soil gas. PCE concentrations above RSLs are present in one building, however this PCE occurrence appears more likely accounted for by an indoor household source, because the crawlspace samples at this structure had the very low PCE concentrations typical of outdoor air.
- *cis*-DCE, 1,4-D, and TCE were the most widespread contaminants identified in groundwater analyses at concentrations exceeding MCLs or NLs (in the case of 1,4-D) in the SAIA plume.
- The footprint of the VOC plume in groundwater extends from the source area on the SAIA property to 2,800 feet south on Aldrich Road. The portion attributable to the contaminant source on the SAIA property is about 1,100 feet wide, extending from approximately 600 feet east of Atlantic Avenue to the western side of the Los Angeles River channel. The Cooper Drum and Atlantic Avenue plumes border the SAIA plume on its west side.
- Groundwater impacts of VOCs attributable to the SAIA property, mainly as *cis*-DCE, extend vertically at a few locations from the Gaspur Aquifer into the upper Exposition Aquifer, to the maximum investigated depth of 140 feet bgs.
- There are several other groundwater VOC plumes near the SAIA groundwater VOC plume, and they come in contact with and locally commingle with the SAIA plume:
    - The Jervis Webb VOC plume has migrated southward to locations below the SAIA VOC plume, to at least approximately 500 feet south of Southern Avenue. At this point it probably contacts and partly commingles with the SAIA plume. However, from that point onward (south), the SAIA plume dominates the character of the locally commingled Jervis Webb/SAIA plume—based on the fact that, just before their contact, concentrations of total VOCs in the Jervis Webb plume peak at about 800 ug/L, while total VOCs in the SAIA plume peak at about 10,000 ug/L of total VOCs.

  - The Cooper Drum VOC plume appears to contact and likely commingle with the SAIA and Jervis Webb VOC plumes in a relatively narrow interval (on the order of 200 feet)
  - The relatively small LAUSD plume appears to contact the southern end of the SAIA plume in the intermediate and lower Gaspur Aquifer, while commingling may be minimal. The Atlantic Avenue plume is largely separate from the SAIA VOC plume.

- The SAIA VOC plume has proportions of the minor contaminants 1,1-DCA, 1,1-DCE, and 1,4-D at analytical concentrations generally similar to those in the Jervis Webb VOC plume. Using these proportions, one can distinguish both plumes from the Cooper Drum VOC plume, located to the west, which has proportionally higher levels of these compounds than the other two plumes. It appears that the SAIA, Jervis Webb, and Cooper plumes contact each other, but that there is limited commingling of the Cooper Drum plume with these two plumes. The distribution of *cis*-DCE supports this conclusion, because concentrations of *cis*-DCE (generally the most abundant VOC in all three plumes) in groundwater sample analyses from the SAIA and Jervis Webb plumes are notably higher compared to neighboring wells in the Cooper plume.

7.1.4 Contaminant Fate and Transport

7.1.4.1 Soil

- Based on the presence of TCE at high analytical concentrations (>1,000 ug/kg) from the 0.5-foot to 25-foot sampling depths in boring SAIA-SB/SG09, and moderate concentrations of TCE and other VOCs at various depths in borings SAIA-SB/SG08 and SAIA-SB/SG10, former operators released VOCs in large quantities from the area of the former degreasing building. The high concentrations are either in the form of localized DNAPL retained in pore spaces between soil particles, or as quantities sorbed onto soil particles, or–more likely–a combination of the two. Also present in soil in this area are high analytical concentrations of the TCE degradation daughter product (through reductive dechlorination), cis-DCE. The existence of this degradation pathway is fostered by the continued presence of oxidatively degradable petroleum-associated compounds at moderate concentrations (hundreds to low-thousands of ug/kg) in these same three borings; the microbial respiration produced during degradation of these compounds produces the anoxic conditions that enable reductive dechlorination to proceed. Petroleum-associated compounds were not reported at more than negligible concentrations in soil sample analyses from other locations.

- The other COPCs that exceeded RSLs (in one or more samples) and are apparently attributable to facility operations, such as PCBs, lead, copper (one residential RSL exceedance only), arsenic and thallium in soil sample analyses, are non-volatile and have low aqueous solubility. Thus, they appear to have remained at their sites of release beneath or near the former oil recovery facility (PCBs), and largely in the upper two feet of the subsurface beneath the main building of the former facility on the SAIA property. The metals contamination is most likely associated with the historical operations of screw manufacturing.

7.1.4.2 Soil Gas

- Soil-gas analytical samples have analytical concentrations at levels of concern (greatly exceeding RSLs) in a much wider area than the soil sample analytical detections. The entire eastern portion of the property has analytical concentrations in soil-gas samples that exceed RSLs at one or more depths, generally for several compounds (e.g., cis-DCE, PCE, TCE, 1,1-DCE, 1,1,1-TCA, and/or vinyl chloride). Beneath the contaminant source area, very high (>1,000 ug/m^3) concentrations of TCE and other VOCs are present starting at shallow depths (5 feet), continuing at high concentrations to the lowest depth sampled (35 feet). Outward from the source area, soil-gas concentrations are notably lower in near-surface intervals, somewhat reducing the potential soil-vapor intrusion threats in those areas.

- TCE degradation daughter products cis-DCE and vinyl chloride are present at up to millions of ug/m^3 in soil-gas analyses from within and near the contaminant source area. These compounds, formed by reductive dechlorination, require anaerobic or strongly reducing conditions to form. Such anaerobic conditions are fostered by petroleum-associated compounds (a carbon source that is degraded by microbes that consume available oxygen) that were probably more abundant in the past, having been used during manufacturing and released along with the chlorinated solvents such as TCE and PCE at the former degreasing building.

7.1.4.3 Groundwater

- The geochemical environment of the SAIA VOC plume is generally reducing, and commonly anoxic. Anoxic conditions are indicated in the majority of the Site's monitoring wells, where D.O. values were less than 1 mg/L and ORP less than -100 mV. Low redox conditions are probably due to (1) pavement covering a large proportion of the ground surface of the largely industrial facilities upgradient and near the SAIA property, which reduces infiltration of oxygen-saturated infiltration, and (2) the presence of petroleum-associated hydrocarbons in the contaminant source area that are labile and thus sustain microbes that respire and serve to deplete the subsurface of oxygen, creating reducing to anoxic conditions.

- SL exceedances for metals in groundwater appear to be either limited in extent (aluminum, lead, and nickel), or ubiquitous and related to the reducing geochemical conditions typical of the surrounding area (arsenic, manganese). Thus, the metal SL exceedances do not represent significant groundwater impacts attributable to the SAIA property.

- Strongly reducing conditions in the groundwater are amenable to reductive dechlorination, the bacterially-mediated process that can remove chlorine from PCE, TCE, and other chlorinated VOCs. Reductive dechlorination likely accounts for the fact that PCE, abundant in soil-gas analyses on the property, is nearly absent from groundwater analytical samples throughout the SAIA plume, while TCE concentrations decline in groundwater analytical samples within about 1,200 feet downgradient from the contaminant source area.

- In contrast to TCE, the SAIA plume of *cis*-DCE does not appear to be attenuating significantly, based both on its greater downgradient extent and the fact that its primary degradation product, vinyl chloride, was detected seldom and at low analytical concentrations. These patterns for TCE and cis-DCE are consistent with observations reported for both the Cooper Drum and Jervis Webb sites (Haley and Aldrich, 2018b; Gilbane, 2018). *cis*-DCE has migrated into the upper portion of the Exposition Aquifer, the lowest unit investigated for the RI.
- Contaminant migration rates in groundwater are not well constrained, but a rate of 72 ft/year is a plausible estimate for cis-DCE, considering possible release dates based on site operational history. The migration rate for TCE was calculated as 60 ft/year, but this is likely low because the effects of degradation are not considered. Degradation rates vary according to locations/conditions, and are not well-enough constrained to use to accurately estimate TCE migration rates in groundwater.
- While the timespan of monitoring is not long enough (2-1/2 years) to conclude whether the SAIA groundwater plume is contracting or expanding, monitoring at wells installed for Cooper Drum investigations but located within the SAIA plume suggest some increased downward migration into the lower Gaspur and Exposition Aquifers.

7.1.5 Human Health Risk Assessment (HHRA) and Identification of Site COPCs

The HHRA determined the risk values for various receptors as summarized below.

<u>Future Commercial/Industrial Receptor</u>

- Vapor intrusion of soil gas COPCs and subsequent inhalation of indoor air:
    - 81% of the samples (190 of 234 samples) exceed the de minimis ILCR of 1E-06;
    - 29% of the samples (68 of 234 samples) exceed the upper bound risk management ILCR of 1E-04;
    - The risk-drivers for the ILCR values are TCE, PCE, benzene, vinyl chloride, and 1,1-DCA;
    - 56% of the samples (130 of 234 samples) exceed the risk benchmark HI of 1; and
    - The risk-drivers for the HI values are TCE, cis-1,2-DCE, and vinyl chloride.
- Ingestion, dermal contact, and particulate inhalation of soil COPCs:
    - Cadmium: The maximum concentration exceeds the risk benchmark HI of 1;
    - Lead: Both the maximum and 95% UCL concentrations exceed the soil lead level;
    - Manganese: The maximum concentration exceeds the risk benchmark HI of 1 (the 95% UCL concentration does not exceed this benchmark level);
    - Aroclor 1248: Both the maximum and 95% UCL concentrations exceed the de minimis ILCR of 1E-06; and

- Aroclor 1260: The maximum concentration exceeds the de minimis ILCR of 1E-06.

Future Construction Worker Receptor

- Vapor intrusion of soil gas COPCs and subsequent inhalation of trench air:
  - 50% of the samples (116 of 234 samples) exceed the de minimis ILCR of 1E-06;
  - 16% of the samples (38 of 234 samples) exceed the upper bound risk management ILCR of 1E-04;
  - The risk-drivers for the ILCR values are TCE, vinyl chloride, PCE, 1,1-DCA, and benzene;
  - 56% of the samples (130 of 234 samples) exceed the risk benchmark HI of 1; and
  - The risk-drivers for the HI values are TCE, cis-1,2-DCE, and vinyl chloride.
- Ingestion, dermal contact, and particulate inhalation of soil COPCs:
  - Cobalt: The maximum concentration exceeds the de minimis ILCR of 1E-06 and the risk benchmark HI of 1 (the 95% UCL concentration does not exceed these benchmark levels);
  - Lead: Both the maximum and 95% concentrations exceed the soil lead level;
  - Nickel: The maximum concentration exceeds the risk benchmark HI of 1 (the 95% UCL concentration does not exceed this benchmark level);
  - Aroclor 1248: The maximum concentration exceeds the de minimis ILCR of 1E 06 (the 95% UCL concentration does not exceed this benchmark level);
  - Aroclor 1260: The maximum concentration exceeds the de minimis ILCR of 1E 06 (the 95% UCL concentration does not exceed this benchmark level); and
  - Thallium: The maximum concentration exceeds the risk benchmark of 1.

Residential Receptor

- Current/Future Receptor: Vapor intrusion of soil gas COPCs and subsequent inhalation of indoor air for samples collected in the current residential area south of the former facility parcel:
  - 96% of the samples (22 of 23 samples) exceed the de minimis ILCR of 1E-06;
  - 13% of the samples (3 of 23 samples) exceed the upper bound risk management ILCR of 1E-04;
  - The risk-drivers for the ILCR values are TCE, PCE, benzene, 1,1-DCA, and vinyl chloride;
  - 70% of the samples (16 of 23 samples) exceed the risk benchmark HI of 1; and

  - The risk-drivers for the HI values are TCE, cis-1,2-DCE, PCE, and benzene.

- Current Receptor only: Vapor intrusion of crawlspace COPCs and subsequent inhalation of indoor air (and inhalation of the indoor air COPCs) for samples collected in the current residential area south of the former facility parcel:
  - 100% of the samples (23 of 23 samples) exceed the de minimis ILCR of 1E-06;
  - None of the samples (0 of 23 samples) exceed the upper bound risk management ILCR of 1E-04;
  - The risk-drivers for the ILCR values are benzene, 1,2-DCA, ethylbenzene, PCE, and naphthalene;
  - TCE is either not detected or detected at low concentrations such that is not a risk driver in any of the samples despite being detected in, and being the most frequent risk driver for the soil gas samples as noted above and for the groundwater samples as noted below;
  - None of the samples (0 of 23 samples) exceed the risk benchmark HI of 1.
- Current/Future Receptor: Vapor intrusion of groundwater COPCs and subsequent inhalation of indoor air for samples collected in the current residential area south of the former facility parcel:
  - 62% of the samples (34 of 55 samples) exceed the de minimis ILCR of 1E-06;
  - 9% of the samples (5 of 55 samples) exceed the upper bound risk management ILCR of 1E-04;
  - The risk-drivers for the ILCR values are TCE, vinyl chloride, 1,2-DCA, and benzene;
  - 24% of the samples (13 of 55 samples) exceed the risk benchmark HI of 1; and
  - The risk-drivers for the HI values are cis-1,2-DCE, TCE, and trans-1,2-DCE.

There is unavoidable uncertainty intrinsic to the risk values listed above. Uncertainty generally arises from a lack of sufficiently detailed knowledge, as well as variability of (1) site conditions and future site use, (2) toxicity and exposure parameters associated with the RBCs, and/or (3) the extent to which an individual may be exposed (if at all) to the chemicals and an individual's response to the exposure.

There is also uncertainty as to the origin of various COPCs detected in indoor air at risk levels of concern. In fact, most of the COPCs listed above for risk concerns related to inhalation hazards do not appear to be attributable to operations formerly conducted at the SAIA property. Specifically, 1,2-DCA, benzene, ethylbenzene, naphthalene, and PCE were found to be not likely attributable to former SAIA operations, either because they (1) were detected at similar levels in outdoor air as in indoor air; (2) were not detected in soil gas at any sampling locations near the indoor air detections; or (3) were not detected in crawlspace air samples beneath the indoor air detections.

7.2 CONCLUSIONS

- The widespread presence of VOCs at the SAIA Site is attributable to contamination caused by historical operations at the former facility on the SAIA property. These past operations have impacted the soil, soil gas, and groundwater media. Other contaminants such as metals and PCBs occur locally in soils on the SAIA property only.
- The horizontal and vertical extent of the SAIA VOC plume in groundwater within the Gaspur Aquifer and Exposition Aquifer has been adequately characterized pursuant to the planned RI scope. Some data gaps, however, still exist to fully define the horizontal and vertical extent of the VOC plume in the Exposition Aquifer in the downgradient area, and to determine whether the VOC plume is a threat to water quality in a nearby production well (South Gate Well No. 23) screened starting at 600 feet bgs (i.e., below the bottom of the Exposition Aquifer). Shallower production wells are located at least 0.6 miles upgradient from where the plume enters the Exposition Aquifer.
- Soil analyses indicated contamination with VOCs, mainly TCE and *cis*-DCE, directly beneath the former degreasing building and its sumps, from near-surface to a depth of 35 feet bgs (results greatly exceeded industrial RSLs in some samples down to 25 feet bgs). This area is the contaminant source for the VOC release at the Site.
- TCE, PCE, *cis*-DCE, 1,1-DCA, and VC were the most prevalent VOCs detected in soil gas analyses, and exceeded RSLs in an area much larger than soil RSL exceedances. Laboratory analyses reported one or more of these compounds in samples from the shallowest depth sampled (5 feet bgs) (and the depth of most concern) beneath the entire former SAIA facility buildings, and along the eastern and northern sides of the SAIA property. VOCs in soil gas migrating off the SAIA property were found to extend less than 100 feet north of the property beneath an industrial building, but approximately 500 feet to the south, beneath residential buildings. The off-site VOC exceedances of RSLs are at least a factor of five times less than the levels encountered in the source area.
- Vapor intrusion in residences located above the VOC soil-gas plume does not appear to be occurring at the buildings sampled, based on comparing the results for indoor air, crawlspace air, and soil gas results. Analytical results for indoor air samples indicated some benzene and 1,2-DCA values exceeding RSLs, but these results are due to unrelated sources such as freeways or household products.
- VOCs in groundwater beneath the SAIA Site also originated from the former degreasing area of the former facility. The VOCs TCE and cis-DCE are the two compounds most widespread in the contaminant plume. Other VOCs less widespread, with significantly lower concentrations, include 1,1-DCA, 1,2-DCA, trans-DCE, and VC.
- The center of mass of the groundwater contaminant plume moves downward as it migrates downgradient (south), from the shallow Gaspur Aquifer on the SAIA property, to the Exposition Aquifer at and south of the LAUSD property.
- The SAIA VOC plume is near several other VOC plumes originating from neighboring sites, and may contact and commingle with some of these plumes. These other plumes and their relationship to the SAIA plume are:

1) The Jervis Webb plume: extends beneath the SAIA property in the lower Gaspur and Exposition Aquifers, and slightly commingles with the SAIA plume in the lower Gaspur Aquifer near McCallum Avenue.
2) The Cooper Drum plume: located west of the SAIA plume, and probably commingles marginally with the SAIA plume near the intersection of Adella and Southern Avenues and at points directly to the south, in the intermediate and lower zones of the Gaspur Aquifer.
3) The Atlantic plume: located cross-gradient and about 200 feet west of the SAIA plume at Duncan Way, mainly within the shallow Gaspur Aquifer, it does not appear to contact the SAIA plume.
4) The LAUSD plume: located in the shallow, intermediate, and lower Gaspur near the downgradient portion of the SAIA plume (in the westernmost part of the LAUSD property), and appears to marginally contact the SAIA plume.

- Groundwater data provide strong evidence that anaerobic degradation and reductive dechlorination of VOCs is occurring within the groundwater plume beneath the Site. The high analytical results for cis-DCE downgradient of the Site and relatively low detections of other VOCs suggest that the transformation (through reductive dechlorination) of other VOCs (e.g., PCE and TCE) proceeds relatively easily. However, this dechlorination may be stalling at *cis*-DCE, as has been reported at a number of other VOC groundwater contamination sites (Bradley and Chappelle, 2007).

7.3 RECOMMENDATIONS

This section recommends the next steps to address contamination concerns at the Site:

Soil Gas:

- The industrial-use buildings at ELG Metals and in the first block south of the SAIA property have not yet been sampled to determine whether vapor intrusion is occurring. The RI field team was unable to complete planned sampling at industrial buildings south of the SAIA property due to access issues. This is a data gap in the vapor intrusion evaluation. EPA should also consider a vapor intrusion sampling event at the ELG Metals property.
- The impacts on-property, where soil-gas concentrations are highest, are minimal under current circumstances, due to the site being paved and without any structures. However, redevelopment of the property would likely present risks to the occupants of any future structures on-property, owing to the very high soil-gas VOC concentrations. Any future operator should take this into consideration and conduct or arrange for appropriate sampling of indoor air.

Groundwater:

- Groundwater contaminants at levels of concern (exceeding MCLs) are present in the SAIA VOC plume across an extensive area downgradient (south) of the SAIA property. The contaminant plume extends downward to at least 140 feet bgs in the upper part of the

Exposition Aquifer, at about 2,800 feet south (downgradient) of the contaminant source area. Contamination of the Exposition Aquifer is of concern because it immediately overlies the Gage Aquifer, in which municipal water-supply wells are screened at depths as shallow as 310 and 280 feet (City of South Gate wells 24 and 25, located about 0.4 miles east [hydraulically cross-gradient] of the SAIA property); where the SAIA contaminant plume reaches the Exposition Aquifer, it is about 0.6 miles southwest of these two wells, and is migrating away from them. Other water-supply wells are screened at depths starting at 600 feet, and thus may be too deep to be impacted by Site-derived contaminants, which occur at much shallower depths (shallower than 150 feet). Thus, the SAIA plume likely does not pose a significant threat to the municipal wells. However, at least three new monitoring wells should be advanced into the Exposition Aquifer downgradient and below the current extent of the monitoring network, to determine the extent and depth of contamination in the SAIA plume.

- Collect discrete-depth groundwater samples at four additional groundwater profile borings, collecting groundwater samples every 20 feet beginning at 130 feet bgs down to 230 feet bgs.
- Collect a continuous core of subsurface lithology to define area stratigraphy.
- Following the above data collection and analysis, install additional groundwater monitoring wells to define the horizontal and vertical limits of the cis-1,2-DCE plume within the Exposition Aquifer migrating downgradient from the Site.
- Remedial alternatives should take into account the possible effects of remediation on nearby contaminant plumes, and on current and future uses of the Site and other nearby facilities.

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TABLES

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Table 2-1
Groundwater Monitoring Well Installation Data
Southern Avenue Industrial Area Superfund Site
South Gate, California

Monitoring Well ID	Northing	Easting	Top of Casing (feet msl)	Top of Screen (feet bgs)	Bottom of Screen (feet bgs)
SAIA-MW10	1800992.94	6507504.81	97.38	128	138
SAIA-MW11A	1800660.89	6507020.24	97.78	74	79
SAIA-MW11B	1800660.89	6507020.24	97.88	96	106
SAIA-MW11C	1800660.89	6507020.24	97.85	116	121
SAIA-MW12A	1800103.57	6507403.62	96.51	70	80
SAIA-MW12B	1800103.57	6507403.62	96.53	94	99
SAIA-MW12C	1800103.57	6507403.62	96.51	110	115
SAIA-MW13	1800104.7	6507389.77	96.6	128	138
SAIA-MW1A	1802835.8	6508007.66	104.92	60	65
SAIA-MW1B	1802835.8	6508007.66	104.76	75	85
SAIA-MW1C	1802835.8	6508007.66	104.71	94	104
SAIA-MW2A	1802791.74	6507926.09	104.76	60	65
SAIA-MW2B	1802791.74	6507926.09	104.75	76	86
SAIA-MW2C	1802791.74	6507926.09	104.76	96	106
SAIA-MW3A	1802347.53	6507982.62	102.12	58	68
SAIA-MW3B	1802347.53	6507982.62	102.1	76	86
SAIA-MW3C	1802347.53	6507982.62	102.12	96	106
SAIA-MW4A	1801997.48	6507983.98	100.89	58	68
SAIA-MW4B	1801997.48	6507983.98	101.04	74	84
SAIA-MW4C	1801997.48	6507983.98	100.86	92	102
SAIA-MW5A	1801648.05	6507783.8	99.84	58	68
SAIA-MW5B	1801648.05	6507783.8	99.91	76	86
SAIA-MW5C	1801648.05	6507783.8	99.84	96	106
SAIA-MW6A	1801560.92	6508477.6	100.34	58	68
SAIA-MW6B	1801560.92	6508477.6	100.1	76	81
SAIA-MW6C	1801560.92	6508477.6	100.19	90	100
SAIA-MW7	1802778.32	6507931.05	104.64	122	132
SAIA-MW8	1801659.23	6507681.99	100.15	124	134
SAIA-MW9A	1800995.07	6507491.13	97.51	55	60
SAIA-MW9B	1800995.07	6507491.13	97.41	73	78
SAIA-MW9C	1800995.07	6507491.13	97.59	94	104

Notes:

msl - mean sea level

bgs - below ground surface

Survey Coordinates in NAD_1983; StatePlane; California V FIPS 0405 Feet

Table 2-2
Groundwater Elevations
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Measurement Point Elevation (feet MSL)	Water Level Measurement Date	Depth to Water from TOC (feet)	Groundwater Elevation (feet MSL)
MW15	104.27	03/27/2014	54.6	49.67
	104.27	07/26/2016	60.02	44.25
	104.27	09/23/2016	60.23	44.04
MW15B	104.71	03/27/2014	54.52	50.19
	104.71	07/26/2016	60.14	44.57
	104.71	09/23/2016	60.38	44.33
MW16	104.67	07/26/2016	64.72	39.95
	104.67	09/23/2016	65.02	39.65
MW24	103.96	03/27/2014	54.08	49.88
	103.96	07/26/2016	59.6	44.36
	103.96	09/23/2016	59.85	44.11
MW25	103.74	03/27/2014	54.02	49.72
	103.74	07/26/2016	59.6	44.14
	103.74	09/23/2016	59.78	43.96
MW25B	103.54	03/27/2014	53.98	49.56
	103.54	07/26/2016	59.62	43.92
	103.54	09/23/2016	59.83	43.71
MW26	103.86	03/27/2014	59.3	44.56
	103.86	09/23/2016	66.22	37.64
MW27	103.6	03/27/2014	54.07	49.53
	103.6	07/26/2016	59.72	43.88
	103.6	09/23/2016	59.88	43.72
MW28	103.53	03/27/2014	54.17	49.36
	103.53	07/26/2016	59.85	43.68
	103.53	09/23/2016	60.09	43.44
MW29	102.95	03/27/2014	53.52	49.43
	102.95	07/26/2016	59.1	43.85
	102.95	09/23/2016	59.4	43.55
MW29A	102.95	03/27/2014	53.44	49.51
	102.95	07/26/2016	58.89	44.06
	102.95	09/23/2016	59.1	43.85
MW30	103.09	03/27/2014	54.23	48.86
	103.09	07/26/2016	60	43.09
	103.09	09/23/2016	60.09	43
MW31	103.3	03/27/2014	53.73	49.57
	103.3	07/26/2016	59.22	44.08
	103.3	09/23/2016	59.53	43.77
MW31A	103.07	03/27/2014	53.23	49.84
	103.07	07/26/2016	58.64	44.43
	103.07	09/23/2016	58.98	44.09
MW31B	103.15	03/27/2014	53.92	49.23
	103.15	07/26/2016	59.5	43.65
	103.15	09/23/2016	59.75	43.4
MW32	103.27	03/27/2014	58.7	44.57
	103.27	07/26/2016	65.33	37.94
	103.27	09/23/2016	65.76	37.51

Table 2-2
Groundwater Elevations
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Measurement Point Elevation (feet MSL)	Water Level Measurement Date	Depth to Water from TOC (feet)	Groundwater Elevation (feet MSL)
MW34	103.24	03/27/2014	53.55	49.69
	103.24	07/26/2016	58.64	44.6
	103.24	09/23/2016	59.06	44.18
MW35	103.25	03/27/2014	53.81	49.44
	103.25	07/26/2016	59.25	44
	103.25	09/23/2016	59.54	43.71
MW36	102.73	03/27/2014	53.3	49.43
	102.73	07/26/2016	58.82	43.91
	102.73	09/23/2016	59.03	43.7
MW37	102.5	03/27/2014	53.4	49.1
	102.5	07/26/2016	58.91	43.59
	102.5	09/23/2016	59.22	43.28
MW38	102.28	03/27/2014	52.89	49.39
	102.28	07/26/2016	58.23	44.05
	102.28	09/23/2016	58.64	43.64
MW39	102.34	03/27/2014	52.99	49.35
	102.34	07/26/2016	58.55	43.79
	102.34	09/23/2016	58.88	43.46
MW40	102.06	03/27/2014	52.81	49.25
	102.06	07/26/2016	58.45	43.61
	102.06	09/23/2016	58.75	43.31
MW41	104.34	03/27/2014	54.67	49.67
	104.34	07/26/2016	60.31	44.03
	104.34	09/23/2016	60.41	43.93
MW42	104.36	03/27/2014	54.4	49.96
	104.36	07/26/2016	60.1	44.26
	104.36	09/23/2016	60.25	44.11
MW43	104.25	03/27/2014	54.3	49.95
	104.25	07/26/2016	59.92	44.33
	104.25	09/23/2016	60.15	44.1
MW44	104.17	03/27/2014	54.3	49.87
	104.17	07/26/2016	60.2	43.97
	104.17	09/23/2016	60.1	44.07
MW45	102.47	03/27/2014	53	49.47
	102.47	07/26/2016	58.49	43.98
	102.47	09/23/2016	58.85	43.62
MW46	101.87	03/27/2014	52.5	49.37
	101.87	07/26/2016	58.14	43.73
	101.87	09/23/2016	58.44	43.43
MW47	101.74	03/27/2014	52.36	49.38
	101.74	07/26/2016	57.93	43.81
	101.74	09/23/2016	58.31	43.43
MW48	101.68	03/27/2014	52.35	49.33
	101.68	07/26/2016	57.95	43.73
	101.68	09/23/2016	58.28	43.4

Table 2-2
Groundwater Elevations
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Measurement Point Elevation (feet MSL)	Water Level Measurement Date	Depth to Water from TOC (feet)	Groundwater Elevation (feet MSL)
MW49	100.53	03/27/2014	51.05	49.48
	100.53	07/26/2016	57.33	43.2
	100.53	09/23/2016	57.58	42.95
MW50	100.65	03/27/2014	51.77	48.88
	100.65	07/26/2016	57.45	43.2
	100.65	09/23/2016	57.73	42.92
MW51	100.64	03/27/2014	51.82	48.82
	100.64	07/26/2016	57.48	43.16
	100.64	09/23/2016	57.75	42.89
MW52	100.77	03/27/2014	51.78	48.99
	100.77	07/26/2016	57.5	43.27
	100.77	09/23/2016	57.7	43.07
MW53	100.73	03/27/2014	51.95	48.78
	100.73	07/26/2016	57.5	43.23
	100.73	09/23/2016	57.81	42.92
MW54	100.88	03/27/2014	52.5	48.38
	100.88	07/26/2016	58.22	42.66
	100.88	09/23/2016	58.25	42.63
MW55	102.57	03/27/2014	57.75	44.82
	102.57	07/26/2016	64.73	37.84
	102.57	09/23/2016	64.75	37.82
MW56	101.73	03/27/2014	52.6	49.13
	101.73	07/26/2016	58.14	43.59
	101.73	09/23/2016	58.46	43.27
MW62A	105.22	03/27/2014	55.13	50.09
	105.22	07/26/2016	60.75	44.47
	105.22	09/23/2016	61.54	43.68
MW62B	105.22	03/27/2014	55.22	50
	105.22	07/26/2016	60.82	44.4
	105.22	09/23/2016	61.6	43.62
PZ7A	105.67	03/27/2014	55.73	49.94
	105.67	07/26/2016	61.34	44.33
	105.67	09/23/2016	61	44.67
PZ7B	105.66	03/27/2014	55.71	49.95
	105.66	07/26/2016	61.42	44.24
	105.66	09/23/2016	61.06	44.6
SAIA-MW1A	104.92	03/27/2014	54.5	50.42
	104.92	08/25/2014	55.65	49.27
	104.92	07/26/2016	61.35	43.57
	104.92	09/23/2016	60.11	44.81
SAIA-MW1B	104.76	03/27/2014	54.6	50.16
	104.76	08/25/2014	55.53	49.23
	104.76	07/26/2016	59.94	44.82
	104.76	09/23/2016	60.22	44.54

Table 2-2
Groundwater Elevations
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Measurement Point Elevation (feet MSL)	Water Level Measurement Date	Depth to Water from TOC (feet)	Groundwater Elevation (feet MSL)
SAIA-MW1C	104.71	03/27/2014	54.6	50.11
	104.71	08/25/2014	55.62	49.09
	104.71	07/26/2016	60	44.71
	104.71	09/23/2016	60.2	44.51
SAIA-MW2A	104.76	03/27/2014	54.5	50.26
	104.76	08/25/2014	55.62	49.14
	104.76	07/26/2016	59.92	44.84
	104.76	09/23/2016	60.3	44.46
SAIA-MW2B	104.75	03/27/2014	54.4	50.35
	104.75	08/25/2014	55.57	49.18
	104.75	07/26/2016	60	44.75
	104.75	09/23/2016	60.28	44.47
SAIA-MW2C	104.76	03/27/2014	54.6	50.16
	104.76	08/25/2014	55.64	49.12
	104.76	07/26/2016	59.93	44.83
	104.76	09/23/2016	60.45	44.31
SAIA-MW3A	102.12	03/27/2014	52.31	49.81
	102.12	08/25/2014	53.5	48.62
	102.12	07/26/2016	58.22	43.9
	102.12	09/23/2016	58.38	43.74
SAIA-MW3B	102.1	03/27/2014	52.29	49.81
	102.1	08/25/2014	53.42	48.68
	102.1	07/26/2016	57.85	44.25
	102.1	09/23/2016	58.18	43.92
SAIA-MW3C	102.12	03/27/2014	53.09	49.03
	102.12	08/25/2014	53.5	48.62
	102.12	07/26/2016	58.65	43.47
	102.12	09/23/2016	58.31	43.81
SAIA-MW4A	100.89	03/27/2014	51.58	49.31
	100.89	08/25/2014	52.56	48.33
	100.89	07/26/2016	57.42	43.47
	100.89	09/23/2016	57.42	43.47
SAIA-MW4B	101.04	03/27/2014	51.54	49.5
	101.04	08/25/2014	52.73	48.31
	101.04	07/26/2016	57.15	43.89
	101.04	09/23/2016	57.55	43.49
SAIA-MW4C	100.86	03/27/2014	51.43	49.43
	100.86	08/25/2014	52.48	48.38
	100.86	07/26/2016	57.02	43.84
	100.86	09/23/2016	53.37	47.49
SAIA-MW5A	99.84	03/27/2014	50.91	48.93
	99.84	08/25/2014	52.19	47.65
	99.84	07/26/2016	56.65	43.19
	99.84	09/23/2016	56.97	42.87

Table 2-2
Groundwater Elevations
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Measurement Point Elevation (feet MSL)	Water Level Measurement Date	Depth to Water from TOC (feet)	Groundwater Elevation (feet MSL)
SAIA-MW5B	99.91	03/27/2014	50.98	48.93
	99.91	08/25/2014	52.28	47.63
	99.91	07/26/2016	56.75	43.16
	99.91	09/23/2016	57.04	42.87
SAIA-MW5C	99.84	03/27/2014	51.06	48.78
	99.84	08/25/2014	52.24	47.6
	99.84	07/26/2016	56.78	43.06
	99.84	09/23/2016	57.07	42.77
SAIA-MW6A	100.34	03/27/2014	51.26	49.08
	100.34	08/25/2014	52.32	48.02
	100.34	07/26/2016	57.5	42.84
	100.34	09/23/2016	57.3	43.04
SAIA-MW6B	100.1	03/27/2014	51.18	48.92
	100.1	08/25/2014	52.38	47.72
	100.1	07/26/2016	57	43.1
	100.1	09/23/2016	57.23	42.87
SAIA-MW6C	100.19	03/27/2014	51.21	48.98
	100.19	08/25/2014	52.6	47.59
	100.19	07/26/2016	57.11	43.08
	100.19	09/23/2016	57.33	42.86
SAIA-MW7	104.64	03/27/2014	59.7	44.94
	104.64	08/25/2014	61.27	43.37
	104.64	07/26/2016	66.62	38.02
SAIA-MW8	100.15	03/27/2014	55.16	44.99
	100.15	08/25/2014	56.5	43.65
	100.15	07/26/2016	61.62	38.53
	100.15	09/23/2016	61.98	38.17
SAIA-MW9A	97.51	07/26/2016	48.15	49.36
	97.51	09/23/2016	48.55	48.96
SAIA-MW9B	97.41	07/26/2016	55.82	41.59
	97.41	09/23/2016	56.1	41.31
SAIA-MW9C	97.59	07/26/2016	55.95	41.64
	97.59	09/23/2016	56.27	41.32
SAIA-MW10	97.38	07/26/2016	59.23	38.15
	97.38	09/23/2016	59.6	37.78
SAIA-MW11A	97.78	07/26/2016	56.52	41.26
	97.78	09/23/2016	56.79	40.99
SAIA-MW11B	97.88	07/26/2016	56.5	41.38
	97.88	09/23/2016	56.9	40.98
SAIA-MW11C	97.85	07/26/2016	58.8	39.05
	97.85	09/23/2016	59.18	38.67
SAIA-MW12A	96.51	07/26/2016	54.71	41.8
	96.51	09/23/2016	55.19	41.32
SAIA-MW12B	96.53	07/26/2016	55.11	41.42
	96.53	09/23/2016	55.16	41.37
SAIA-MW12C	96.51	07/26/2016	56.25	40.26
	96.51	09/23/2016	56.48	40.03
SAIA-MW13	96.6	07/26/2016	58.38	38.22
	96.6	09/23/2016	58.68	37.92

Notes:

MSL - Mean Sea Level

TOC - Top-of-casing

Table 3-1
Vertical Gradients in Gaspur and Exposition Aquifers
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Aquifer	Measurement Point Elevation (feet above MSL)	Water Level Measurement Date	Groundwater Elevation (feet above MSL)	Difference in Water Level	Calculated Potential Vertical Gradient (feet/foot)[1]
SAIA-MW1A	Shallow Gaspur	104.92	07/26/2016	44.42	-0.4	-0.02
SAIA-MW1B	Intermediate Gaspur	104.76	07/26/2016	44.82		
SAIA-MW1C	Lower Gaspur	104.71	07/26/2016	44.71	0.11	0.01
SAIA-MW4A	Shallow Gaspur	100.89	07/26/2016	43.47	-0.42	-0.03
SAIA-MW4B	Intermediate Gaspur	101.04	07/26/2016	43.89		
SAIA-MW4C	Lower Gaspur	100.86	07/26/2016	43.84	0.05	0.00
SAIA-MW11A	Shallow Gaspur	97.78	07/26/2016	41.26	-0.12	-0.01
SAIA-MW11B	Intermediate Gaspur	97.88	07/26/2016	41.38		
SAIA-MW11C	Lower Gaspur	97.85	07/26/2016	39.05	2.33	0.12
SAIA-MW12A	Shallow Gaspur	96.51	07/26/2016	41.8	3.58	0.06
SAIA-MW13	Exposition	96.6	07/26/2016	38.22		
SAIA-MW2C	Lower Gaspur	104.76	07/26/2016	44.83	6.81	0.25
SAIA-MW7	Exposition	104.64	07/26/2016	38.02		
SAIA-MW5C	Lower Gaspur	99.84	07/26/2016	43.09	4.56	0.16
SAIA-MW8	Exposition	100.15	07/26/2016	38.53		
SAIA-MW9C	Lower Gaspur	97.59	07/26/2016	41.64	3.49	0.10
SAIA-MW10	Exposition	97.38	07/26/2016	38.15		
SAIA-MW12C	Lower Gaspur	96.51	07/26/2016	40.26	3.58	0.17
SAIA-MW13	Exposition	96.6	07/26/2016	38.22		

Notes:

MSL - Mean Sea Level

[1] Positive value indicates downward vertical gradient between well pairs.

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Bottom Sample Depth	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-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichloroethane	Acetone	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform
SAIA-SB/SG01	SAIA-SB/SG01-0.5	04/05/2013	N	0.5	1	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG01	SAIA-SB/SG01-02	04/05/2013	N	2	2.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG01	SAIA-SB/SG01-05	04/05/2013	N	5	5.5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG01	SAIA-SB/SG01-06	04/05/2013	FD	6	6.5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG01	SAIA-SB/SG01-15	04/05/2013	N	15	15.5	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG01	SAIA-SB/SG01-25	04/05/2013	N	25	25.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG01	SAIA-SB/SG01-35	04/05/2013	N	35	35.5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG02	SAIA-SB/SG02-0.5	04/01/2013	N	0.5	1	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG02	SAIA-SB/SG02-02	04/01/2013	N	2	2.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG02	SAIA-SB/SG02-05	04/01/2013	N	5	5.5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG02	SAIA-SB/SG02-15	04/01/2013	N	15	15.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG02	SAIA-SB/SG02-25	04/01/2013	N	25	25.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG02	SAIA-SB/SG02-35	04/01/2013	N	35	35.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG03	SAIA-SB/SG03-0.5	04/01/2013	N	0.5	1	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG03	SAIA-SB/SG03-02	04/01/2013	N	2	2.5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG03	SAIA-SB/SG03-03	04/01/2013	FD	3	3.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG03	SAIA-SB/SG03-05	04/01/2013	N	5	5.5	<6.1	<6.1	<6.1	<6.1	**4.7 J**	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG03	SAIA-SB/SG03-15	04/01/2013	N	15	15.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG03	SAIA-SB/SG03-25	04/01/2013	N	25	25.5	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<14	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
SAIA-SB/SG03	SAIA-SB/SG03-35	04/01/2013	N	35	35.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	**2.2 J**	<5.5	<5.5	<5.5
SAIA-SB/SG04	SAIA-SB/SG04-0.5	04/01/2013	N	0.5	1	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG04	SAIA-SB/SG04-02	04/01/2013	N	2	2.5	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG04	SAIA-SB/SG04-05	04/01/2013	N	5	5.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<15	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
SAIA-SB/SG04	SAIA-SB/SG04-15	04/01/2013	N	15	15.5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG04	SAIA-SB/SG04-25	04/01/2013	N	25	25.5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG04	SAIA-SB/SG04-35	04/01/2013	N	35	35.5	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<9.2	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6
SAIA-SB/SG05	SAIA-SB/SG05-0.5	04/02/2013	N	0.5	1	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG05	SAIA-SB/SG05-02	04/02/2013	N	2	2.5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG05	SAIA-SB/SG05-05	04/02/2013	N	5	5.5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG05	SAIA-SB/SG05-15	04/02/2013	N	15	15.5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG05	SAIA-SB/SG05-25	04/02/2013	N	25	25.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG05	SAIA-SB/SG05-35	04/02/2013	N	35	35.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG06	SAIA-SB/SG06-0.5	04/03/2013	N	0.5	1	<6.2	<6.2	<6.2	<6.2	**1.4 J**	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	**54**	<6.2	<6.2	<6.2	<6.2	<6.2	**0.95 J**	<6.2
SAIA-SB/SG06	SAIA-SB/SG06-02	04/03/2013	N	2	2.5	<5.3	<5.3	<5.3	<5.3	**0.85 J**	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	**22**	<5.3	**1 J**	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG06	SAIA-SB/SG06-05	04/03/2013	N	5	5.5	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	**28**	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
SAIA-SB/SG06	SAIA-SB/SG11-06	04/03/2013	FD	6	6.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG06	SAIA-SB/SG06-15	04/03/2013	N	15	15.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG06	SAIA-SB/SG06-25	04/03/2013	N	25	25.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG06	SAIA-SB/SG06-35	04/03/2013	N	35	35.5	<6	<6	<6	<6	**0.93 J**	<6	<6	<6	<6	<6	<6	<12	<6	**1.2 J**	<6	<6	<6	<6	<6
SAIA-SB/SG07	SAIA-SB/SG07-0.5	04/02/2013	N	0.5	1	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG07	SAIA-SB/SG07-02	04/02/2013	N	2	2.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG07	SAIA-SB/SG07-05	04/02/2013	N	5	5.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG07	SAIA-SB/SG07-15	04/02/2013	N	15	15.5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG07	SAIA-SB/SG07-25	04/02/2013	N	25	25.5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG07	SAIA-SB/SG07-35	04/02/2013	N	35	35.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG08	SAIA-SB/SG08-0.5	04/03/2013	N	0.5	1	<5.5	<5.5	<5.5	<5.5	**8.2**	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG08	SAIA-SB/SG08-02	04/03/2013	FD	2	2.5	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG08	SAIA-SB/SG08-05	04/03/2013	N	5	5.5	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<8.9	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Cyclohexane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride
SAIA-SB/SG01	SAIA-SB/SG01-0.5	04/05/2013	N	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG01	SAIA-SB/SG01-02	04/05/2013	N	2	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG01	SAIA-SB/SG01-05	04/05/2013	N	5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG01	SAIA-SB/SG01-06	04/05/2013	FD	6	<5.1	<5.1	**1.9 J**	**3 J**	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	**1.5 J**	<5.1	<5.1	<5.1
SAIA-SB/SG01	SAIA-SB/SG01-15	04/05/2013	N	15	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG01	SAIA-SB/SG01-25	04/05/2013	N	25	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG01	SAIA-SB/SG01-35	04/05/2013	N	35	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG02	SAIA-SB/SG02-0.5	04/01/2013	N	0.5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG02	SAIA-SB/SG02-02	04/01/2013	N	2	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	**4.6 J**	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG02	SAIA-SB/SG02-05	04/01/2013	N	5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG02	SAIA-SB/SG02-15	04/01/2013	N	15	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG02	SAIA-SB/SG02-25	04/01/2013	N	25	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG02	SAIA-SB/SG02-35	04/01/2013	N	35	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG03	SAIA-SB/SG03-0.5	04/01/2013	N	0.5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG03	SAIA-SB/SG03-02	04/01/2013	N	2	<5.9	<5.9	<5.9	<5.9	**1.9 J**	**3.1 J**	**4.8 J**	<5.9	<5.9	<5.9	**7.8 J**	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG03	SAIA-SB/SG03-03	04/01/2013	FD	3	<6	<6	<6	<6	**2.1 J**	**2.9 J**	**5 J**	<6	<6	<6	**8.3 J**	<6	<6	<6	**2 J**	<6	<6	<6	<6	<6
SAIA-SB/SG03	SAIA-SB/SG03-05	04/01/2013	N	5	<6.1	**5.9 J**	<6.1	<6.1	**7.6 J**	**11 J**	**25 J**	<6.1	**4.3 J**	<6.1	**34 J**	<6.1	<6.1	<6.1	**3.2 J**	<6.1	<6.1	**2.3 J**	<6.1	<6.1
SAIA-SB/SG03	SAIA-SB/SG03-15	04/01/2013	N	15	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	**5.7**	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG03	SAIA-SB/SG03-25	04/01/2013	N	25	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
SAIA-SB/SG03	SAIA-SB/SG03-35	04/01/2013	N	35	<5.5	**4.6 J**	<5.5	<5.5	**2.4 J**	**3.9 J**	**7**	<5.5	<5.5	<5.5	**10 J**	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	**4.1 J**	<5.5	<5.5
SAIA-SB/SG04	SAIA-SB/SG04-0.5	04/01/2013	N	0.5	<6	<6	<6	<6	<6	<6	<6	**5.3 J**	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG04	SAIA-SB/SG04-02	04/01/2013	N	2	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG04	SAIA-SB/SG04-05	04/01/2013	N	5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	**4.3 J**	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
SAIA-SB/SG04	SAIA-SB/SG04-15	04/01/2013	N	15	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG04	SAIA-SB/SG04-25	04/01/2013	N	25	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG04	SAIA-SB/SG04-35	04/01/2013	N	35	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	**1.5 J**	<4.6	<4.6
SAIA-SB/SG05	SAIA-SB/SG05-0.5	04/02/2013	N	0.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG05	SAIA-SB/SG05-02	04/02/2013	N	2	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG05	SAIA-SB/SG05-05	04/02/2013	N	5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG05	SAIA-SB/SG05-15	04/02/2013	N	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG05	SAIA-SB/SG05-25	04/02/2013	N	25	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG05	SAIA-SB/SG05-35	04/02/2013	N	35	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG06	SAIA-SB/SG06-0.5	04/03/2013	N	0.5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG06	SAIA-SB/SG06-02	04/03/2013	N	2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	**5.7**	**0.98 J**	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG06	SAIA-SB/SG06-05	04/03/2013	N	5	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	**2.8 J**	<6.6	<6.6	<6.6	**2.1 J**	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
SAIA-SB/SG06	SAIA-SB/SG11-06	04/03/2013	FD	6	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	**1 J**	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG06	SAIA-SB/SG06-15	04/03/2013	N	15	**2.5 J**	**120**	<5.4	<5.4	<5.4	<5.4	<5.4	**3.7 J**	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG06	SAIA-SB/SG06-25	04/03/2013	N	25	<5	<5	<5	<5	<5	<5	<5	<5	<5	**23**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG06	SAIA-SB/SG06-35	04/03/2013	N	35	<6	<6	<6	<6	<6	<6	<6	**7.9**	**1.1 J**	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG07	SAIA-SB/SG07-0.5	04/02/2013	N	0.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG07	SAIA-SB/SG07-02	04/02/2013	N	2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG07	SAIA-SB/SG07-05	04/02/2013	N	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG07	SAIA-SB/SG07-15	04/02/2013	N	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG07	SAIA-SB/SG07-25	04/02/2013	N	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG07	SAIA-SB/SG07-35	04/02/2013	N	35	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG08	SAIA-SB/SG08-0.5	04/03/2013	N	0.5	<5.5	**34**	<5.5	<5.5	**4.2 J**	**2.2 J**	**15**	<5.5	**2.7 J**	<5.5	**11**	<5.5	<5.5	**2.6 J**	**4.6 J**	<5.5	**2 J**	<5.5	<5.5	<5.5
SAIA-SB/SG08	SAIA-SB/SG08-02	04/03/2013	FD	2	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	**4.9 J**	<6.4	<6.4	<6.4	**3.9 J**	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG08	SAIA-SB/SG08-05	04/03/2013	N	5	<4.4	**2.4 J**	<4.4	<4.4	**1.5 J**	<4.4	**6.1**	<4.4	<4.4	<4.4	**4.7**	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Bottom Sample Depth	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-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichloroethane	Acetone	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform
SAIA-SB/SG08	SAIA-SB/SG08-06	04/03/2013	FD	6	6.5	<4.9	<4.9	<4.9	<4.9	**1.8 J**	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
SAIA-SB/SG08	SAIA-SB/SG08-15	04/03/2013	N	15	15.5	<6.9	<6.9	<6.9	<6.9	**27**	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<14	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
SAIA-SB/SG08	SAIA-SB/SG08-25	04/03/2013	N	25	25.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<13	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG08	SAIA-SB/SG08-35	04/03/2013	N	35	35.5	<6.6	<6.6	<6.6	**1 J**	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<13	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
SAIA-SB/SG09	SAIA-SB/SG09-0.5	04/05/2013	N	0.5	1	**240 J**	<54	<54	**110 J**	<54	<54	<54	<54	<54	<54	<54	**260 J**	<54	<54	<54	<54	<54	<54	<54
SAIA-SB/SG09	SAIA-SB/SG09-02	04/05/2013	N	2	2.5	**4.5 J**	<13	<13	**18 J**	<13	<13	<13	<13	<13	<13	<13	**62 J**	<13	<13	<13	<13	<13	<13	<13
SAIA-SB/SG09	SAIA-SB/SG09-05	04/05/2013	N	5	5.5	**13 J**	<14	<14	**16**	**18**	<14	<14	<14	<14	<14	<14	**180**	<14	<14	<14	<14	<14	<14	<14
SAIA-SB/SG09	SAIA-SB/SG09-15	04/05/2013	N	15	15.5	**11 J**	<5.7	<5.7	<5.7	**100 J**	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	**34 J**	<5.7	<5.7	<5.7	<5.7	**0.96 J**	<5.7	<5.7
SAIA-SB/SG09	SAIA-SB/SG09-25	04/05/2013	N	25	25.5	<7.2	<7.2	<7.2	<7.2	**270 J**	**19 J**	<7.2	<7.2	<7.2	<7.2	**4.1 J**	<14	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
SAIA-SB/SG09	SAIA-SB/SG09-35	04/05/2013	N	35	35.5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	**1.1 J**	<5.8	<5.8	**26**	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG10	SAIA-SB/SG10-0.5	04/05/2013	N	0.5	1	**31**	<25	<25	<25	**7.1 J**	<25	<25	<25	<25	<25	<25	<51	<25	<25	<25	<25	<25	<25	<25
SAIA-SB/SG10	SAIA-SB/SG10-01	04/05/2013	FD	1	1.5	**7.6**	<5.4	<5.4	<5.4	**1.6 J**	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG10	SAIA-SB/SG10-02	04/05/2013	N	2	2.5	**26**	<7	<7	<7	**9.7 J**	<7	<7	<7	<7	<7	<7	<14	<7	<7	<7	<7	<7	<7	<7
SAIA-SB/SG10	SAIA-SB/SG10-05	04/05/2013	N	5	5.5	**19**	<6.9	<6.9	<6.9	**4.6 J**	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	**31**	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
SAIA-SB/SG10	SAIA-SB/SG10-15	04/05/2013	N	15	15.5	**59**	<14	<14	<14	**77 J**	<14	<14	<14	<14	<14	<14	<29	<14	<14	<14	<14	<14	<14	<14
SAIA-SB/SG10	SAIA-SB/SG10-25	04/05/2013	N	25	25.5	<6.4	<6.4	<6.4	<6.4	**16**	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG10	SAIA-SB/SG10-35	04/05/2013	N	35	35.5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG11	SAIA-SB/SG11-0.5	04/03/2013	N	0.5	1	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG11	SAIA-SB/SG11-02	04/03/2013	N	2	2.5	<5.6	**0.75 J**	**0.71 J**	<5.6	<5.6	<5.6	<5.6	<5.6	**0.76 J**	**0.71 J**	**0.69 J**	<11	<5.6	<5.6	**0.68 J**	<5.6	**0.69 J**	**0.68 J**	<5.6
SAIA-SB/SG11	SAIA-SB/SG11-05	04/03/2013	N	5	5.5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG11	SAIA-SB/SG11-15	04/03/2013	N	15	15.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG11	SAIA-SB/SG11-25	04/03/2013	N	25	25.5	<5.3	<5.3	**0.75 J**	<5.3	**0.69 J**	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	**0.76 J**	<5.3	<5.3	**0.72 J**	**0.75 J**	<5.3
SAIA-SB/SG11	SAIA-SB/SG11-35	04/03/2013	N	35	35.5	<5.1	<5.1	**0.8 J**	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB12	SAIA-SB12-0.5	04/02/2013	N	0.5	1	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB12	SAIA-SB12-02	04/02/2013	N	2	2.5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB12	SAIA-SB12-05	04/02/2013	N	5	5.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB12	SAIA-SB12-15	04/02/2013	N	15	15.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB12	SAIA-SB12-25	04/02/2013	N	25	25.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB12	SAIA-SB12-35	04/02/2013	N	35	35.5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG19	SAIA-SB19-0.5	04/16/2014	N	0.5	0.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG19	SAIA-SB19-0.6	04/16/2014	FD	0.5	0.5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG19	SAIA-SB19-2	04/16/2014	N	2	2	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	**0.62 J**	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG19	SAIA-SB19-5	04/16/2014	N	5	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<9.9	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG19	SAIA-SB19-6	04/16/2014	FD	5	5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG19	SAIA-SB19-15	04/16/2014	N	15	15	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG19	SAIA-SB19-25	04/16/2014	N	25	25	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG19	SAIA-SB19-35	04/16/2014	N	35	35	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG21	SAIA-SB21-5	04/18/2014	N	5	5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG21	SAIA-SB21-15	04/18/2014	N	15	15	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG21	SAIA-SB21-16	04/18/2014	FD	15	15	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG21	SAIA-SB21-25	04/18/2014	N	25	25	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<13	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG21	SAIA-SB21-35	04/18/2014	N	35	35	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Cyclohexane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride
SAIA-SB/SG08	SAIA-SB/SG08-06	04/03/2013	FD	6	<4.9	**12**	<4.9	<4.9	**2.9 J**	**2.1 J**	**11**	<4.9	<4.9	<4.9	**8.7**	<4.9	<4.9	<4.9	**2.1 J**	<4.9	<4.9	<4.9	<4.9	<4.9
SAIA-SB/SG08	SAIA-SB/SG08-15	04/03/2013	N	15	<6.9	**720 J**	<6.9	<6.9	**54 J**	**55**	**140**	<6.9	<6.9	<6.9	**130**	**3.7 J**	<6.9	**14**	**30**	<6.9	<6.9	**2,000**	<6.9	<6.9
SAIA-SB/SG08	SAIA-SB/SG08-25	04/03/2013	N	25	<6.5	**21**	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG08	SAIA-SB/SG08-35	04/03/2013	N	35	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	**18**	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
SAIA-SB/SG09	SAIA-SB/SG09-0.5	04/05/2013	N	0.5	<54	<54	<54	<54	**96 J**	**89 J**	**190 J**	<54	<54	<54	**170 J**	<54	<54	**330 J**	**57 J**	<54	<54	**32,000 J**	<54	<54
SAIA-SB/SG09	SAIA-SB/SG09-02	04/05/2013	N	2	<13	**32 J**	<13	<13	**13 J**	**12 J**	**34 J**	<13	<13	<13	**31 J**	<13	<13	**50 J**	<13	<13	<13	**4,000 J**	<13	<13
SAIA-SB/SG09	SAIA-SB/SG09-05	04/05/2013	N	5	<14	**430**	<14	**5.4 J**	**8 J**	**8.1 J**	**20 J**	<14	<14	<14	**20 J**	<14	<14	**34 J**	<14	<14	<14	**3,000 J**	<14	<14
SAIA-SB/SG09	SAIA-SB/SG09-15	04/05/2013	N	15	<5.7	**590 J**	<5.7	**2.4 J**	**46 J**	**100 J**	**80 J**	<5.7	<5.7	<5.7	**190 J**	**5.5 J**	<5.7	**34 J**	**31 J**	**2.8 J**	<5.7	**2,700 J**	<5.7	<5.7
SAIA-SB/SG09	SAIA-SB/SG09-25	04/05/2013	N	25	<7.2	**65,000 J**	<7.2	<7.2	**76 J**	**120 J**	**2,600 J**	<7.2	<7.2	<7.2	**280 J**	**8 J**	<7.2	**27 J**	**88 J**	**33 J**	<7.2	**60,000 J**	<7.2	<7.2
SAIA-SB/SG09	SAIA-SB/SG09-35	04/05/2013	N	35	<5.8	**4.8 J**	<5.8	<5.8	<5.8	<5.8	<5.8	**6.3**	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	**26**	<5.8	<5.8
SAIA-SB/SG10	SAIA-SB/SG10-0.5	04/05/2013	N	0.5	<25	**360**	<25	<25	**4 J**	<25	**11 J**	**9.7 J**	<25	<25	**7.9 J**	<25	<25	**19 J**	<25	<25	<25	**480**	<25	<25
SAIA-SB/SG10	SAIA-SB/SG10-01	04/05/2013	FD	1	<5.4	**86**	<5.4	**1.2 J**	**1.1 J**	**0.68 J**	**2.5 J**	<5.4	<5.4	<5.4	**1.9 J**	<5.4	<5.4	**4.1 J**	<5.4	<5.4	<5.4	**120**	<5.4	<5.4
SAIA-SB/SG10	SAIA-SB/SG10-02	04/05/2013	N	2	<7	**1,200 J**	<7	<7	**2.1 J**	**1.3 J**	**5.6 J**	<7	<7	<7	**3.9 J**	<7	<7	**7.4**	<7	<7	<7	**210**	<7	<7
SAIA-SB/SG10	SAIA-SB/SG10-05	04/05/2013	N	5	<6.9	**220**	<6.9	<6.9	**3.2 J**	**1.8 J**	**9.4**	**5.9 J**	<6.9	<6.9	**6.2 J**	<6.9	<6.9	**4.7 J**	<6.9	<6.9	<6.9	**40**	<6.9	<6.9
SAIA-SB/SG10	SAIA-SB/SG10-15	04/05/2013	N	15	<14	**9,900 J**	<14	<14	**4.9 J**	**5.9 J**	**17**	<14	**3 J**	<14	**14**	<14	<14	<14	<14	**4.3 J**	<14	**5.2 J**	<14	<14
SAIA-SB/SG10	SAIA-SB/SG10-25	04/05/2013	N	25	<6.4	<6.4	<6.4	**7.5**	**6 J**	**9.7**	**4 J**	<6.4	**30**	<6.4	**11**	<6.4	<6.4	**4.6 J**	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG10	SAIA-SB/SG10-35	04/05/2013	N	35	<6.1	**42**	<6.1	<6.1	<6.1	<6.1	<6.1	**5.8 J**	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG11	SAIA-SB/SG11-0.5	04/03/2013	N	0.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	**4.7 J**	**1.1 J**	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG11	SAIA-SB/SG11-02	04/03/2013	N	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	**5.1 J**	**1 J**	<5.6	<5.6	<5.6	**0.76 J**	<5.6	<5.6	<5.6	<5.6	<5.6	**0.73 J**	**0.84 J**
SAIA-SB/SG11	SAIA-SB/SG11-05	04/03/2013	N	5	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	**6.4 J**	**1.1 J**	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG11	SAIA-SB/SG11-15	04/03/2013	N	15	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	**0.92 J**	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG11	SAIA-SB/SG11-25	04/03/2013	N	25	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	**0.71 J**	**0.73 J**	<5.3	<5.3	<5.3	**0.75 J**	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG11	SAIA-SB/SG11-35	04/03/2013	N	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	**0.97 J**
SAIA-SB12	SAIA-SB12-0.5	04/02/2013	N	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB12	SAIA-SB12-02	04/02/2013	N	2	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB12	SAIA-SB12-05	04/02/2013	N	5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB12	SAIA-SB12-15	04/02/2013	N	15	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB12	SAIA-SB12-25	04/02/2013	N	25	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB12	SAIA-SB12-35	04/02/2013	N	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG19	SAIA-SB19-0.5	04/16/2014	N	0.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG19	SAIA-SB19-0.6	04/16/2014	FD	0.5	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG19	SAIA-SB19-2	04/16/2014	N	2	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG19	SAIA-SB19-5	04/16/2014	N	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG19	SAIA-SB19-6	04/16/2014	FD	5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG19	SAIA-SB19-15	04/16/2014	N	15	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG19	SAIA-SB19-25	04/16/2014	N	25	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	**1.3 J**	<6.4	**1.5 J**	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG19	SAIA-SB19-35	04/16/2014	N	35	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG21	SAIA-SB21-5	04/18/2014	N	5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG21	SAIA-SB21-15	04/18/2014	N	15	<6.3	**1.9 J**	<6.3	<6.3	**1.2 J**	<6.3	**4 J**	<6.3	<6.3	<6.3	**1.5 J**	<6.3	<6.3	**1.1 J**	<6.3	<6.3	<6.3	**2.1 J**	<6.3	<6.3
SAIA-SB/SG21	SAIA-SB21-16	04/18/2014	FD	15	<5.8	<5.8	<5.8	<5.8	**0.94 J**	<5.8	**3.3 J**	<5.8	<5.8	<5.8	**1.1 J**	<5.8	<5.8	**0.95 J**	<5.8	<5.8	<5.8	**1.2 J**	<5.8	<5.8
SAIA-SB/SG21	SAIA-SB21-25	04/18/2014	N	25	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG21	SAIA-SB21-35	04/18/2014	N	35	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Bottom Sample Depth	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-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichloroethane	Acetone	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform
SAIA-SB/SG22	SAIA-SB22-0.5	04/18/2014	N	0.5	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG22	SAIA-SB22-2	04/18/2014	N	2	2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG22	SAIA-SB22-5	04/18/2014	N	5	5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG22	SAIA-SB22-15	04/18/2014	N	15	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG22	SAIA-SB22-25	04/18/2014	N	25	25	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG22	SAIA-SB22-35	04/18/2014	N	35	35	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG24	SAIA-SB24-0.5	04/16/2014	N	0.5	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG24	SAIA-SB24-2	04/16/2014	N	2	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG24	SAIA-SB24-5	04/16/2014	N	5	5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG24	SAIA-SB24-15	04/16/2014	N	15	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG24	SAIA-SB24-25	04/16/2014	N	25	25	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG24	SAIA-SB24-35	04/16/2014	N	35	35	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG26	SAIA-SB26-0.5	04/16/2014	N	0.5	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	**6.6**	**48**	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG26	SAIA-SB26-0.6	04/16/2014	FD	0.5	0.5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG26	SAIA-SB26-2	04/16/2014	N	2	2	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG26	SAIA-SB26-5	04/16/2014	N	5	5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG26	SAIA-SB26-15	04/16/2014	N	15	15	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG26	SAIA-SB26-16	04/16/2014	FD	15	15	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG26	SAIA-SB26-25	04/16/2014	N	25	25	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG28	SAIA-SB28-5	04/14/2014	N	5	5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG28	SAIA-SB28-15	04/14/2014	N	15	15	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG28	SAIA-SB28-25	04/14/2014	N	25	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG28	SAIA-SB28-35	04/14/2014	N	35	35	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG29	SAIA-SB29-0.5	04/16/2014	N	0.5	0.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG29	SAIA-SB29-2	04/16/2014	N	2	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG29	SAIA-SB29-5	04/16/2014	N	5	5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG29	SAIA-SB29-6	04/16/2014	FD	5	5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG29	SAIA-SB29-15	04/16/2014	N	15	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG29	SAIA-SB29-25	04/16/2014	N	25	25	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<14	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
SAIA-SB/SG29	SAIA-SB29-35	04/16/2014	N	35	35	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG30	SAIA-SB30-0.5	04/15/2014	N	0.5	0.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG30	SAIA-SB30-2	04/15/2014	N	2	2	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG30	SAIA-SB30-5	04/15/2014	N	5	5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG30	SAIA-SB30-15	04/15/2014	N	15	15	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<14	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
SAIA-SB/SG30	SAIA-SB30-25	04/15/2014	N	25	25	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG30	SAIA-SB30-35	04/15/2014	N	35	35	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
SAIA-SB/SG31	SAIA-SB31-0.5	04/15/2014	N	0.5	0.5	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG31	SAIA-SB31-2	04/15/2014	N	2	2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG31	SAIA-SB31-5	04/15/2014	N	5	5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG31	SAIA-SB31-15	04/15/2014	N	15	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG31	SAIA-SB31-25	04/15/2014	N	25	25	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG31	SAIA-SB31-35	04/15/2014	N	35	35	<5.6	<5.6	**1 J**	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG31	SAIA-SB31-36	04/15/2014	FD	35	35	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Cyclohexane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride
SAIA-SB/SG22	SAIA-SB22-0.5	04/18/2014	N	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG22	SAIA-SB22-2	04/18/2014	N	2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG22	SAIA-SB22-5	04/18/2014	N	5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG22	SAIA-SB22-15	04/18/2014	N	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG22	SAIA-SB22-25	04/18/2014	N	25	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG22	SAIA-SB22-35	04/18/2014	N	35	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG24	SAIA-SB24-0.5	04/16/2014	N	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG24	SAIA-SB24-2	04/16/2014	N	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG24	SAIA-SB24-5	04/16/2014	N	5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG24	SAIA-SB24-15	04/16/2014	N	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG24	SAIA-SB24-25	04/16/2014	N	25	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG24	SAIA-SB24-35	04/16/2014	N	35	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG26	SAIA-SB26-0.5	04/16/2014	N	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG26	SAIA-SB26-0.6	04/16/2014	FD	0.5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG26	SAIA-SB26-2	04/16/2014	N	2	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG26	SAIA-SB26-5	04/16/2014	N	5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG26	SAIA-SB26-15	04/16/2014	N	15	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG26	SAIA-SB26-16	04/16/2014	FD	15	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG26	SAIA-SB26-25	04/16/2014	N	25	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG28	SAIA-SB28-5	04/14/2014	N	5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG28	SAIA-SB28-15	04/14/2014	N	15	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG28	SAIA-SB28-25	04/14/2014	N	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG28	SAIA-SB28-35	04/14/2014	N	35	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG29	SAIA-SB29-0.5	04/16/2014	N	0.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG29	SAIA-SB29-2	04/16/2014	N	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG29	SAIA-SB29-5	04/16/2014	N	5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG29	SAIA-SB29-6	04/16/2014	FD	5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	**1.2 J**	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG29	SAIA-SB29-15	04/16/2014	N	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG29	SAIA-SB29-25	04/16/2014	N	25	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
SAIA-SB/SG29	SAIA-SB29-35	04/16/2014	N	35	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG30	SAIA-SB30-0.5	04/15/2014	N	0.5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG30	SAIA-SB30-2	04/15/2014	N	2	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG30	SAIA-SB30-5	04/15/2014	N	5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG30	SAIA-SB30-15	04/15/2014	N	15	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
SAIA-SB/SG30	SAIA-SB30-25	04/15/2014	N	25	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG30	SAIA-SB30-35	04/15/2014	N	35	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
SAIA-SB/SG31	SAIA-SB31-0.5	04/15/2014	N	0.5	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG31	SAIA-SB31-2	04/15/2014	N	2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG31	SAIA-SB31-5	04/15/2014	N	5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG31	SAIA-SB31-15	04/15/2014	N	15	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG31	SAIA-SB31-25	04/15/2014	N	25	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG31	SAIA-SB31-35	04/15/2014	N	35	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG31	SAIA-SB31-36	04/15/2014	FD	35	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Bottom Sample Depth	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-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichloroethane	Acetone	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform
SAIA-SB/SG32	SAIA-SB32-0.5	04/15/2014	N	0.5	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG32	SAIA-SB32-2	04/15/2014	N	2	2	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG32	SAIA-SB32-5	04/15/2014	N	5	5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG32	SAIA-SB32-15	04/15/2014	N	15	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	**13**
SAIA-SB/SG32	SAIA-SB32-25	04/15/2014	N	25	25	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG32	SAIA-SB32-35	04/15/2014	N	35	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG33	SAIA-SB33-0.5	04/15/2014	N	0.5	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG33	SAIA-SB33-2	04/15/2014	N	2	2	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG33	SAIA-SB33-5	04/15/2014	N	5	5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	**7.6 J**
SAIA-SB/SG33	SAIA-SB33-15	04/15/2014	N	15	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG33	SAIA-SB33-25	04/15/2014	N	25	25	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG33	SAIA-SB33-35	04/15/2014	N	35	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	**10 J**
SAIA-SB/SG34	SAIA-SB34-0.5	04/15/2014	N	0.5	0.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<9.9	<5	<5	<5	<5	<5	<5	**8.7**
SAIA-SB/SG34	SAIA-SB34-2	04/15/2014	N	2	2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG34	SAIA-SB34-5	04/15/2014	N	5	5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG34	SAIA-SB34-15	04/15/2014	N	15	15	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG34	SAIA-SB34-16	04/15/2014	FD	15	15	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG34	SAIA-SB34-25	04/15/2014	N	25	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG34	SAIA-SB34-35	04/15/2014	N	35	35	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG35	SAIA-SB35-0.5	04/18/2014	N	0.5	0.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG35	SAIA-SB35-2	04/18/2014	N	2	2	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG35	SAIA-SB35-3	04/18/2014	FD	2	2	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG35	SAIA-SB35-5	04/18/2014	N	5	5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG35	SAIA-SB35-15	04/18/2014	N	15	15	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG35	SAIA-SB35-25	04/18/2014	N	25	25	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG35	SAIA-SB35-35	04/18/2014	N	35	35	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG36	SAIA-SB36-0.5	04/17/2014	N	0.5	0.5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG36	SAIA-SB36-2	04/17/2014	N	2	2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG36	SAIA-SB36-5	04/17/2014	N	5	5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG36	SAIA-SB36-15	04/17/2014	N	15	15	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG36	SAIA-SB36-25	04/17/2014	N	25	25	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<13	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG36	SAIA-SB36-26	04/17/2014	FD	25	25	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<13	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG36	SAIA-SB36-35	04/17/2014	N	35	35	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG37	SAIA-SB37-0.5	04/17/2014	N	0.5	0.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<9.9	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG37	SAIA-SB37-2	04/17/2014	N	2	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG37	SAIA-SB37-5	04/17/2014	N	5	5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG37	SAIA-SB37-6	04/17/2014	FD	5	5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG37	SAIA-SB37-15	04/17/2014	N	15	15	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<13	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
SAIA-SB/SG37	SAIA-SB37-25	04/17/2014	N	25	25	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<13	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG37	SAIA-SB37-35	04/17/2014	N	35	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG38	SAIA-SB38-0.5	04/17/2014	N	0.5	0.5	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<13	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG38	SAIA-SB38-2	04/17/2014	N	2	2	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Cyclohexane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride
SAIA-SB/SG32	SAIA-SB32-0.5	04/15/2014	N	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG32	SAIA-SB32-2	04/15/2014	N	2	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG32	SAIA-SB32-5	04/15/2014	N	5	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG32	SAIA-SB32-15	04/15/2014	N	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG32	SAIA-SB32-25	04/15/2014	N	25	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG32	SAIA-SB32-35	04/15/2014	N	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG33	SAIA-SB33-0.5	04/15/2014	N	0.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG33	SAIA-SB33-2	04/15/2014	N	2	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG33	SAIA-SB33-5	04/15/2014	N	5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG33	SAIA-SB33-15	04/15/2014	N	15	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG33	SAIA-SB33-25	04/15/2014	N	25	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG33	SAIA-SB33-35	04/15/2014	N	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG34	SAIA-SB34-0.5	04/15/2014	N	0.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG34	SAIA-SB34-2	04/15/2014	N	2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG34	SAIA-SB34-5	04/15/2014	N	5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG34	SAIA-SB34-15	04/15/2014	N	15	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG34	SAIA-SB34-16	04/15/2014	FD	15	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG34	SAIA-SB34-25	04/15/2014	N	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG34	SAIA-SB34-35	04/15/2014	N	35	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG35	SAIA-SB35-0.5	04/18/2014	N	0.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG35	SAIA-SB35-2	04/18/2014	N	2	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG35	SAIA-SB35-3	04/18/2014	FD	2	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG35	SAIA-SB35-5	04/18/2014	N	5	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
SAIA-SB/SG35	SAIA-SB35-15	04/18/2014	N	15	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG35	SAIA-SB35-25	04/18/2014	N	25	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG35	SAIA-SB35-35	04/18/2014	N	35	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
SAIA-SB/SG36	SAIA-SB36-0.5	04/17/2014	N	0.5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG36	SAIA-SB36-2	04/17/2014	N	2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG36	SAIA-SB36-5	04/17/2014	N	5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG36	SAIA-SB36-15	04/17/2014	N	15	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG36	SAIA-SB36-25	04/17/2014	N	25	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG36	SAIA-SB36-26	04/17/2014	FD	25	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG36	SAIA-SB36-35	04/17/2014	N	35	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG37	SAIA-SB37-0.5	04/17/2014	N	0.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SAIA-SB/SG37	SAIA-SB37-2	04/17/2014	N	2	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6
SAIA-SB/SG37	SAIA-SB37-5	04/17/2014	N	5	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG37	SAIA-SB37-6	04/17/2014	FD	5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG37	SAIA-SB37-15	04/17/2014	N	15	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
SAIA-SB/SG37	SAIA-SB37-25	04/17/2014	N	25	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG37	SAIA-SB37-35	04/17/2014	N	35	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
SAIA-SB/SG38	SAIA-SB38-0.5	04/17/2014	N	0.5	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
SAIA-SB/SG38	SAIA-SB38-2	04/17/2014	N	2	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Bottom Sample Depth	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-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichloroethane	Acetone	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform
SAIA-SB/SG44	SAIA-SB44-0.5	04/25/2017	N	0	0.5	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG44	SAIA-SB44-2	04/25/2017	N	1	2	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG44	SAIA-SB44-5	04/25/2017	N	4	5	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<13	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG44	SAIA-SB44-15	04/25/2017	N	14	15	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG44	SAIA-SB44-25	04/25/2017	N	24	25	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG44	SAIA-SB44-26	04/25/2017	FD	24	25	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG44	SAIA-SB44-35	04/25/2017	N	34	35	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<12	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG45	SAIA-SB45-0.5	04/25/2017	N	0	0.5	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<15	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3
SAIA-SB/SG45	SAIA-SB45-2	04/25/2017	N	1	2	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<15	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4
SAIA-SB/SG45	SAIA-SB45-5	04/25/2017	N	4	5	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG45	SAIA-SB45-15	04/25/2017	N	14	15	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<14	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8
SAIA-SB/SG45	SAIA-SB45-25	04/25/2017	N	24	25	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG45	SAIA-SB45-35	04/25/2017	N	34	35	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG46	SAIA-SB46-0.5	04/26/2017	N	0	0.5	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<18	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9
SAIA-SB/SG46	SAIA-SB46-0.6	04/26/2017	FD	0	0.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<15	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
SAIA-SB/SG46	SAIA-SB46-2	04/26/2017	N	1	2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG46	SAIA-SB46-5	04/26/2017	N	4	5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<13	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG46	SAIA-SB46-15	04/26/2017	N	14	15	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG46	SAIA-SB46-25	04/26/2017	N	24	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG46	SAIA-SB46-35	04/26/2017	N	34	35	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG47	SAIA-SB47-0.5	04/26/2017	N	0	0.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<13	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG47	SAIA-SB47-2	04/26/2017	N	1	2	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG47	SAIA-SB47-3	04/26/2017	FD	1	2	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<14	<7	<7	<7	<7	<7	<7	<7
SAIA-SB/SG47	SAIA-SB47-5	04/26/2017	N	4	5	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<19	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3
SAIA-SB/SG47	SAIA-SB47-15	04/26/2017	N	14	15	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG47	SAIA-SB47-25	04/26/2017	N	24	25	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG47	SAIA-SB47-35	04/26/2017	N	34	35	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<13	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
Screening Criteria																								
RSL for Soil - Residential [1]						1.7E+06 [2]	600	6.7E+06	1,100	3,600	2.3E+05	63,000	24,000	5.3	37	460	6.1E+07	330 [2]	300 [2]	20,000	6,800	7.7E+05	99 [2]	320
RSL for Soil - Industrial [1]						7.3E+06 [2]	2,700	2.8E+07	5,000	16,000	1.0E+06	3.1E+05 [2]	1.1E+05	64	160	2,000	6.7E+08	1,400 [2]	1,300 [2]	87,000	30,000	3.5E+06	430 [2]	1,400

Notes:

All results provided in ug/kg (micrograms per kilogram)

exceeds RSL for Soil -Residential

exceeds RSL for Soil - Industrial

[1] Based on USEPA Regional Screening Levels for Residential and Industrial Soils, Hazard Quotient = 1.0 (EPA RSLs, May 2018).

[2] Based on California-modified RSLs (DTSC, 2018 - Table 1 Screening Levels for Soil, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs] [June 2018 release date])

-- = Not analyzed

Detected results shown in bold

bgs = Below ground surface

FD = Field duplicate sample results

ID _ Identification number

J = Concentration is estimated

N = Normal sample results

NA = Not available

R = Rejected results

RSL = Regional Screening Level

ug/kg = Micrograms per kilogram

Table 4-1
Summary of VOCs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

Location ID	Sample ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Cyclohexane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride
SAIA-SB/SG44	SAIA-SB44-0.5	04/25/2017	N	0	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG44	SAIA-SB44-2	04/25/2017	N	1	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG44	SAIA-SB44-5	04/25/2017	N	4	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SAIA-SB/SG44	SAIA-SB44-15	04/25/2017	N	14	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3
SAIA-SB/SG44	SAIA-SB44-25	04/25/2017	N	24	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG44	SAIA-SB44-26	04/25/2017	FD	24	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4
SAIA-SB/SG44	SAIA-SB44-35	04/25/2017	N	34	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
SAIA-SB/SG45	SAIA-SB45-0.5	04/25/2017	N	0	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3
SAIA-SB/SG45	SAIA-SB45-2	04/25/2017	N	1	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4
SAIA-SB/SG45	SAIA-SB45-5	04/25/2017	N	4	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8
SAIA-SB/SG45	SAIA-SB45-15	04/25/2017	N	14	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8
SAIA-SB/SG45	SAIA-SB45-25	04/25/2017	N	24	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
SAIA-SB/SG45	SAIA-SB45-35	04/25/2017	N	34	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG46	SAIA-SB46-0.5	04/26/2017	N	0	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9	<8.9
SAIA-SB/SG46	SAIA-SB46-0.6	04/26/2017	FD	0	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
SAIA-SB/SG46	SAIA-SB46-2	04/26/2017	N	1	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
SAIA-SB/SG46	SAIA-SB46-5	04/26/2017	N	4	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG46	SAIA-SB46-15	04/26/2017	N	14	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
SAIA-SB/SG46	SAIA-SB46-25	04/26/2017	N	24	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG46	SAIA-SB46-35	04/26/2017	N	34	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	**7.1**	<5.9	<5.9
SAIA-SB/SG47	SAIA-SB47-0.5	04/26/2017	N	0	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
SAIA-SB/SG47	SAIA-SB47-2	04/26/2017	N	1	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
SAIA-SB/SG47	SAIA-SB47-3	04/26/2017	FD	1	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
SAIA-SB/SG47	SAIA-SB47-5	04/26/2017	N	4	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3
SAIA-SB/SG47	SAIA-SB47-15	04/26/2017	N	14	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG47	SAIA-SB47-25	04/26/2017	N	24	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1
SAIA-SB/SG47	SAIA-SB47-35	04/26/2017	N	34	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5
Screening Criteria																								
RSL for Soil - Residential [1]					1.1E+05	19,000 [2]	1,800	6.5E+06	5,800	1.9E+06	5.5E+05	2.4E+07 [2]	5.5E+06 [2]	1,900 [2]	6.5E+05	6.0E+06	47,000	590 [2]	1.1E+06 [2]	1.3E+05 [2]	1,800	940	1.2E+06 [2]	8.8 [2]
RSL for Soil - Industrial [1]					4.6E+05	86,000 [2]	8,200	2.7E+07	25,000	9.9E+06	2.4E+06	1.3E+08 [2]	2.3E+07 [2]	24,000 [2]	2.8E+06	3.5E+07	2.1E+05	2,700 [2]	5.4E+06 [2]	6.0E+05 [2]	8.200	6,000	5.4E+06 [2]	150 [2]

Notes:

All results provided in ug/kg (micrograms per kilogram)

exceeds RSL for Soil -Residential

exceeds RSL for Soil - Industrial

[1] Based on USEPA Regional Screening Levels for Residential and Industrial Soils, Hazard Quotient = 1.0 (

[2] Based on California-modified RSLs (DTSC, 2018 - Table 1 Screening Levels for Soil, HERO HHRA Not

-- = Not analyzed

Detected results shown in bold

bgs = Below ground surface

FD = Field duplicate sample results

ID _ Identification number

J = Concentration is estimated

N = Normal sample results

NA = Not available

R = Rejected results

RSL = Regional Screening Level

ug/kg = Micrograms per kilogram

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Semivolatiles (in ug/kg)																							
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl (Diphenyl)	bis(2-Ethylhexyl) Phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Diethyl Phthalate	Dimethyl Phthalate	Di-n-Butyl Phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
SAIA-SB/SG01	04/05/2013	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG01	04/05/2013	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	**130 J**	<180	<180	<180	<180	<180	**130 J**
SAIA-SB/SG01	04/05/2013	N	5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG01	04/05/2013	FD	6	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG01	04/05/2013	N	15	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220
SAIA-SB/SG01	04/05/2013	FD	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG01	04/05/2013	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG01	04/05/2013	N	35	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG02	04/01/2013	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG02	04/01/2013	N	2	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG02	04/01/2013	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG02	04/01/2013	N	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG02	04/01/2013	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG02	04/01/2013	N	35	<190	<190	<190	<190	<190	<190	<190	<190	<190	**94 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG03	04/01/2013	N	0.5	**150 J**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	**78 J**	**95 J**	<200	<200
SAIA-SB/SG03	04/01/2013	N	2	**4,500 J**	**220**	<180	<180	<180	<180	<180	<180	**280**	<180	<180	<180	<180	<180	<180	<180	<180	<180	**720**	<180	**1,500 J**	**1,900 J**	<180	<180
SAIA-SB/SG03	04/01/2013	FD	3	**4,200 J**	**190 J**	<180	<180	<180	<180	<180	<180	**230 J**	<180	<180	<180	<180	<180	<180	<180	<180	<180	**670 J**	<180	**1,400 J**	**1,500 J**	<180	<180
SAIA-SB/SG03	04/01/2013	N	5	**21,000 J**	**560 J**	<220	<220	<220	<220	<220	<220	**1,000 J**	<220	<220	<220	<220	<220	<220	<220	<220	<220	**1,500 J**	<220	**7,300 J**	**3,700 J**	<220	<220
SAIA-SB/SG03	04/01/2013	N	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG03	04/01/2013	N	25	**6,500**	<230	<230	<230	<230	<230	<230	<230	**380**	<230	<230	<230	<230	<230	<230	<230	<230	<230	**820**	<230	**2,100**	**2,300**	<230	<230
SAIA-SB/SG03	04/01/2013	N	35	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG04	04/01/2013	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG04	04/01/2013	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG04	04/01/2013	N	5	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220
SAIA-SB/SG04	04/01/2013	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG04	04/01/2013	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	**84 J**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG04	04/01/2013	N	35	<190	<190	<190	<190	<190	<190	<190	<190	<190	**130 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG05	04/02/2013	N	0.5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG05	04/02/2013	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG05	04/02/2013	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG05	04/02/2013	N	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG05	04/02/2013	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG05	04/02/2013	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG06	04/03/2013	N	0.5	**1,400**	**120 J**	<190	<190	<190	<190	<190	<190	**98 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	**250**	<190	**250**	**420**	<190	<190
SAIA-SB/SG06	04/03/2013	N	2	**1,200 J**	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	**230**	<180	**230 J**	**330**	<180	<180
SAIA-SB/SG06	04/03/2013	N	5	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG06	04/03/2013	FD	6	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG06	04/03/2013	N	15	**2,400**	<200	<200	<200	<200	<200	<200	<200	**290**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	**630**	<200	<200	<200
SAIA-SB/SG06	04/03/2013	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG06	04/03/2013	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG07	04/02/2013	N	0.5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG07	04/02/2013	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG07	04/02/2013	N	5	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG07	04/02/2013	N	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG07	04/02/2013	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG07	04/02/2013	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG08	04/03/2013	N	0.5	**420**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**190**	**2,900 J**	<190	<190
SAIA-SB/SG08	04/03/2013	FD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG08	04/03/2013	FD	2	**450**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**180 J**	**500**	<190	<190
SAIA-SB/SG08	04/03/2013	N	5	**2,100**	<170	<170	<170	<170	<170	<170	<170	**150 J**	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	**680**	**490**	<170	<170
SAIA-SB/SG08	04/03/2013	FD	6	**2,000**	<200	<200	<200	<200	<200	<200	<200	**150 J**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	**730**	**500**	<200	<200
SAIA-SB/SG08	04/03/2013	N	15	**430**	<200	<200	<200	<200	<200	<200	<200	**170 J**	<200	<200	<200	<200	<200	<200	<200	<200	<200	**170 J**	<200	**340**	**340 J**	<200	<200
SAIA-SB/SG08	04/03/2013	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG08	04/03/2013	N	35	**2,300**	**240**	<210	<210	<210	<210	<210	<210	**270**	<210	<210	<210	<210	<210	<210	<210	<210	<210	**520**	<210	**520**	**900**	<210	<210
SAIA-SB/SG09	04/05/2013	N	0.5	**2,700**	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	**860**	<180	**810**	**1,300**	<180	<180
SAIA-SB/SG09	04/05/2013	N	2	**1,500**	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG09	04/05/2013	N	5	**2,200**	<190	<190	<190	<190	<190	<190	<190	**170 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**600**	**490**	<190	<190
SAIA-SB/SG09	04/05/2013	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG09	04/05/2013	N	25	**110 J**	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	**120 J**	<220	<220

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Metals (in mg/kg)																						PCBs (in ug/kg)			
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	PCB-1016 (Arochlor 1016)	PCB-1248 (Arochlor 1248)	PCB-1254 (Arochlor 1254)	PCB-1260 (Arochlor 1260)
SAIA-SB/SG01	04/05/2013	N	0.5	14,000	<5.8	2.8	130	0.34 J	0.13 J	11,100	23.7	10.5	26.7	25,300 J	69.6 J	7,570	355	16.4	4,570	<3.44	<0.982	<491	<2.45	45.3	77.3	0.078 J	<36	<36	<36	<36
SAIA-SB/SG01	04/05/2013	N	2	15,100	<6.2	2.8	133	0.31 J	0.1 J	8,230	27.4	11.1	23.9	27,400 J	6.1 J	7,940	364	16.6	4,430	<3.65	<1.04	<522	<2.61	51	72.3	0.027 J	<36	<36	<36	<36
SAIA-SB/SG01	04/05/2013	N	5	13,600	<5.2	1.9	118	0.32 J	0.095 J	7,610	18.2	9.8	18.8	22,700 J	3.9 J	7,200	325	12.3	4,020	<3.07	<0.876	<438	<2.19	42.5	60	0.059 J	<35	<35	<35	<35
SAIA-SB/SG01	04/05/2013	FD	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<34	<34	<34	<34
SAIA-SB/SG01	04/05/2013	N	15	34,400	<7.6	4	251	1.1	0.29 J	14,400	39.9	19.1	61.9	38,600 J	12.4 J	14,500	502	28.9	5,490	<4.49	<1.28	2,750	<3.21	74.8	106	0.14 J	<43	<43	<43	<43
SAIA-SB/SG01	04/05/2013	FD	16	13,200	<5.2	1.8	120	0.3 J	0.091 J	6,970	18.3	9.7	17.6	22,800 J	4.4 J	7,070	325	12.2	4,000	<3.07	<0.877	<438	<2.19	43.3	57.9	0.026 J	--	--	--	--
SAIA-SB/SG01	04/05/2013	N	25	19,800	<6.2	3.7	203	0.45 J	<0.5	9,200	27.7	14.4	24.5	31,800 J	4.2 J	11,200	567	18.9	5,720	<3.66	<1.05	870	<2.61	52.3	79.7	0.072 J	<41	<41	<41	<41
SAIA-SB/SG01	04/05/2013	N	35	7,580	<5.9	10.5	77.6	0.17 J	<0.4	3,860	9.8	5.8	8.5	15,800 J	1.6 J	4,430	218	6	2,170	<3.47	<0.993	<496	<2.48	28.4	33.2	0.022 J	<34	<34	<34	<34
SAIA-SB/SG02	04/01/2013	N	0.5	15,200	2.5 J	4.4	146	<0.4	0.81	7,980	20.2	10.5	19.3	25,700	70.6	8,150	368	13.4	5,340	<3.47	<0.991	583	<2.48	47.9	86.3	0.1 J	<35	<35	<35	<35
SAIA-SB/SG02	04/01/2013	N	2	11,000	0.93 J	2.3	108	<0.5	0.59	5,580	13.9	7.7	12.8	19,900	20.4	6,030	276	9.4	3,660	<3.69	<1.05	<527	<2.63	39.2	53.7	0.032 J	<34	<34	<34	<34
SAIA-SB/SG02	04/01/2013	N	5	25,000	1.3 J	4.4	217	0.59	1.2	13,100	32.4	15.9	29	36,600	6.3	12,500	565	22.6	6,810	<3.76	<1.08	632	<2.69	69.4	92.9	0.057 J	<36	<36	<36	<36
SAIA-SB/SG02	04/01/2013	N	15	16,200	1.5 J	3.2	163	<0.5	0.88	8,730	22.8	11.7	20.9	27,200	41.6	9,010	412	15.3	5,290	<3.89	<1.11	<556	<2.78	50.9	92.7	0.038 J	<40	<40	<40	<40
SAIA-SB/SG02	04/01/2013	N	25	26,800	1.1 J	7.6	216	0.68	1.2	16,600	35.6	17.4	35.1	38,900	6.4	13,100	713	24.6	5,860	<3.39	<0.969	1,750	<2.42	65	89.7	0.078 J	<39	<39	<39	<39
SAIA-SB/SG02	04/01/2013	N	35	11,000	<8.0	8.3	92.9	<0.6	<0.67	7,660	23.9	6.8	12.6	19,800	3.3	5,470	271	9.1	2,710	<4.69	<1.34	<670	<3.35	37.7	46.5	0.02 J	<37	<37	<37	<37
SAIA-SB/SG03	04/01/2013	N	0.5	11,300	2.7 J	3.1	102	<0.4	0.69	10,300	23.6	8.3	228	20,800	94.6	5,850	280	19	3,600	<3.47	<0.991	<496	<2.48	35.6	107	0.024 J	<38	<38	<38	<38
SAIA-SB/SG03	04/01/2013	N	2	9,640	0.98 J	2.2	86.6	<0.4	0.58	7,710	18.5	7	13.5	19,400	4	5,140	245	8.4	2,920	<3.14	<0.898	<449	<2.25	37.2	42.1	0.013 J	<36	<36	<36	<36
SAIA-SB/SG03	04/01/2013	FD	3	10,000	1.3 J	2.5	88.9	<0.5	0.58	7,140	17.7	7	15.5	18,900	3.9	5,260	250	8.7	3,000	<3.54	<1.01	<505	<2.53	35.4	44.5	0.012 J	<36	<36	<36	<36
SAIA-SB/SG03	04/01/2013	N	5	23,300	1.5 J	4.5	186	0.59	1.1	13,000	29.4	14.6	34.1	31,500	7.3	11,300	513	21.4	5,310	<3.69	<1.05	585	<2.64	60.7	80.8	0.028 J	<41	<41	<41	<41
SAIA-SB/SG03	04/01/2013	N	15	20,600	1.3 J	2.7	162	<0.5	0.89	12,800	25.6	12.1	33.2	27,900	4.4	10,000	386	17.1	4,860	<3.82	<1.09	1,020	<2.73	55	71	0.036 J	<40	<40	<40	<40
SAIA-SB/SG03	04/01/2013	N	25	18,800	1.1 J	7.2	165	<0.4	0.79	8,520	26.3	12.1	25	27,500	4.9	9,530	460	18.9	4,130	<3.22	<0.920	1,060	<2.30	47.4	66.9	0.17 J	<44	<44	<44	<44
SAIA-SB/SG03	04/01/2013	N	35	9,910	0.69 J	7.8	91.5	<0.5	<0.51	5,060	13.2	6.7	12.1	17,400	1.8	5,270	242	7.8	2,810	<3.60	<1.03	<514	<2.57	31.9	50	0.021 J	<40	<40	<40	<40
SAIA-SB/SG04	04/01/2013	N	0.5	15,900	2.2 J	4.3	143	<0.4	0.87	8,310	24.7	10.6	30.1	27,500	116	9,520	702	21.9	5,150	<3.14	<0.896	<448	<2.24	48	78.6	0.025 J	<35	<35	<35	<35
SAIA-SB/SG04	04/01/2013	N	2	11,900	0.67 J	2.2	106	<0.4	0.65	7,090	16.7	8.3	13.4	22,300	4.7	6,650	326	11	3,630	<3.34	<0.953	<477	<2.38	42.5	49.8	0.027 J	<35	<35	<35	<35
SAIA-SB/SG04	04/01/2013	N	5	27,900	1.1 J	4.7	227	0.79	1.2	12,900	36.1	16.3	40.8	36,200	9	12,500	693	25.1	5,280	<3.93	<1.12	714	<2.81	65.6	90.6	0.11 J	<43	<43	<43	<43
SAIA-SB/SG04	04/01/2013	N	15	19,300	1.6 J	3.8	162	<0.5	0.99	14,300	35.7	13.2	27.8	30,300	4.8	9,980	478	26.9	4,730	<4.17	<1.19	1,690	<2.98	59.4	75.7	0.059 J	<38	<38	<38	<38
SAIA-SB/SG04	04/01/2013	N	25	26,300	1.5 J	13.6	236	0.64	1.4	31,300	31.2	15.3	34.7	34,500	6.6	12,600	713	21.6	5,610	<4.28	<1.22	1,960	<3.06	69.6	84.1	0.06 J	<39	<39	<39	<39
SAIA-SB/SG04	04/01/2013	N	35	8,960	0.95 J	4.1	92	<0.4	0.51	4,470	13.8	6.5	10.5	17,400	1.9	5,280	230	7.7	2,950	<3.27	<0.933	<467	<2.33	31.8	63.5	0.02 J	<37	<37	<37	<37
SAIA-SB/SG05	04/02/2013	N	0.5	14,900	<6.3	3.5	141	<0.5	0.047 J	9,660	20.2	10.3	30.5	25,100	128	8,070	361	13.7	5,200	<3.73	<1.07	<533	<2.67	45	76	0.025 J	<36	<36	<36	<36
SAIA-SB/SG05	04/02/2013	N	2	9,860	<5.4	1.8	95.4	<0.4	<0.46	5,340	11.5	6.6	11.6	17,100	4.4	5,220	231	7.6	3,270	<3.20	<0.915	<457	<2.29	31.1	40.8	0.034 J	<35	<35	<35	<35
SAIA-SB/SG05	04/02/2013	N	5	17,400	<5.6	2.9	165	<0.4	0.054 J	9,170	22.9	12.3	22	27,000	4.6	9,390	439	16	5,300	<3.31	<0.945	<472	<2.36	51.2	71.7	0.034 J	<37	<37	<37	<37
SAIA-SB/SG05	04/02/2013	N	15	17,500	<5.6	2.8	127	<0.4	<0.47	8,070	21.8	10.8	19.7	27,300	4.4	8,850	360	14.9	4,040	<3.30	<0.942	1,470	<2.35	49.6	63.9	0.056 J	<41	<41	<41	<41
SAIA-SB/SG05	04/02/2013	N	25	17,100	<5.9	4.3	164	<0.4	0.12 J	7,090	25.4	11.8	31.6 J	26,400	5.7	8,540	431	18.2	3,880	<3.46	<0.988	1,730	<2.47	47.9	63.1	0.086 J	<39	<39	<39	<39
SAIA-SB/SG05	04/02/2013	N	35	7,610	<6.3	8.7	63.9	<0.5	<0.53	4,310	9.1	5 J	8.8 J	13,600	1.8	3,920	190	5.6	1,880	<3.72	<1.06	540	<2.66	25.6	30.8	0.024 J	<35	<35	<35	<35
SAIA-SB/SG06	04/03/2013	N	0.5	14,600	<6.4	2.5	130	<0.5	<0.54	7,030	20.3	10.3	18.4	23,700	3.3	7,610	340	13.2	4,210	<3.78	<1.08	<540	<2.70	44.6	59.6	0.049 J	<36	310	320	<36
SAIA-SB/SG06	04/03/2013	N	2	15,100	<4.7	1.6	168	<0.3	<0.39	5,940	18.4	12	15.1	24,600	3.8	9,090	417	13.7	5,770	<2.74	<0.784	<392	<1.96	45.8	67.5	0.034 J	<35	<35	16 J	<35
SAIA-SB/SG06	04/03/2013	N	5	19,800	<6.5	4.1	170	<0.5	<0.54	16,700	26.1	12.3	25.7	29,600	6.1	9,470	635	17.5	4,200	<3.79	<1.08	<542	<2.71	54.7	69	0.069 J	<39	<39	3.7 J	<39
SAIA-SB/SG06	04/03/2013	FD	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<37	<37	<37	<37
SAIA-SB/SG06	04/03/2013	N	15	20,000	<7.2	3.6	163	<0.6	<0.60	18,100	25.2	13	25.6	30,200	5.1	10,700	596	17.7	5,100	<4.23	<1.21	<604	<3.02	54.6	75.2	0.036 J	<38	<38	79	<38
SAIA-SB/SG06	04/03/2013	N	25	17,300	<6.5	11.2	170	<0.5	<0.55	8,310	31.5	14.1	32.2	30,800	7.2	10,800	534	25.2	3,940	<3.83	<1.10	<548	<2.74	47.9	73.9	0.14	<38	<38	<38	<38
SAIA-SB/SG06	04/03/2013	N	35	11,400	<4.7	10.5	103	<0.3	<0.40	5,290	12.9	8	11.6	16,800	2.2	5,980	261	9	2,940	<2.77	<0.793	<396	<1.98	28.7	45.9	0.038 J	<35	<35	<35	<35
SAIA-SB/SG07	04/02/2013	N	0.5	15,900	<6.1	2.5	144	<0.5	0.038 J	7,240	21.4	11.1	19.7	25,900	4.7	8,300	377	14.6	5,040	<3.57	<1.02	<510	<2.55	47.3	66.3	0.026 J	<37	<37	<37	<37
SAIA-SB/SG07	04/02/2013	N	2	10,600	<5.3	2.3	102	<0.4	0.035 J	5,370	12.9	7.5	12.9	17,200	2.7	5,780	266	9.6	3,490	<3.12	<0.890	<445	<2.23	30.8	45.4	0.024 J	<35	<35	<35	<35
SAIA-SB/SG07	04/02/2013	N	5	19,200	<6.8	3.2	157	<0.5	0.059 J	12,800	24.7	12.2	25.1	28,700	5.3	9,040	481	17	4,580	<3.99	<1.14	<571	<2.85	52.4	69.4	0.063 J	<39	<39	<39	<39
SAIA-SB/SG07	04/02/2013	N	15	24,000	<5.7	3.2	178	0.61	0.083 J	23,000	29.2	14.4	32.6	31,500	6.6	12,300	587	20.3	4,920	<3.34	<0.955	603	<2.39	59.6	82.2	0.047 J	<40	<40	<40	<40
SAIA-SB/SG07	04/02/2013	N	25	24,600	<5.5	9.9	204	0.72	0.019 J	11,700	38.4	19.4	53	36,500	12.3	12,200	621	29.5	3,800	<3.22	<0.921	1,130	<2.30	65.2	83	0.064 J	<40	<40	<40	<40
SAIA-SB/SG07	04/02/2013	N	35	9,440	<6.3	10.1	81	<0.53	<0.53	4,540	11	6.1	9.9	16,900	2.2	4,990	233	7.1	2,640	<3.73	<1.07	<533	<2.66	30.6	37.9	0.024 J	<35	<35	<35	<35
SAIA-SB/SG08	04/03/2013	N	0.5	13,700	<6.4	1.7	123	<0.54	0.11 J	6,550	19.1	9.8	56.6	24,000	18.2	7,320	316	12.4	4,800	<3.76	<1.07	<537	<2.68	43	68	0.021 J	<37	24,000	<37	<37
SAIA-SB/SG08	04/03/2013	FD	1	9,180	<5.7	1.8	96.3	<0.48	<0.48	4,120	10.9	6.7	16.5	15,700	2.3	5,100	233	7.5	3,300	<3.38	<0.966	<483	<2.42	28.8	40.9	0.03 J	--	--	--	--
SAIA-SB/SG08	04/03/2013	FD	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<38	2,000	<38	<38
SAIA-SB/SG08	04/03/2013	N	5	16,900	<4.9	3.1	136	<0.41	0.085 J	9,440	21.9	10.4	23	24,800	5.1	7,510	387	14.5	4,000	<2.89	<0.827	<413	<2.07	45.7	57.8	0.034 J	<34	330 J	<34	<34
SAIA-SB/SG08	04/03/2013	FD	6	22,500	<6.6	4.8	185	0.58	0.14 J	13,100	29	13.9	35	32,900	6.9	10,000	513	20	5,140	<3.86	<1.10	<552	<2.76	60.3	78.2	0.077 J	<39	340 J	<39	<39
SAIA-SB/SG08	04/03/2013	N	15	22,200	<6.3	3.3	179	0.53	<0.53	9,040	28.7	14.6	27.3	33,300	5.9	11,700	432	19.6	5,730	<3.69	<1.05	539	<2.64	63.3	85.9	0.033 J	<38	<38	<38	<38
SAIA-SB/SG08	04/03/2013	N	25	18,900	<6.0	5.5	152	<0.50	<0.50	9,250	26.5	12.1	24.5	30,800	4.7	8,720	447	16.1	3,880	<3.51	<1.00	520	<2.50	54.4	60.8	0.054 J	<38	<38	<38	<38
SAIA-SB/SG08	04/03/2013	N	35	7,610	<5.5	11.9	74.2	<0.47	<0.47	5,100	8.3	5.3	8.5	14,100	1.8	4,130	209	5.4	2,000	<3.26	<0.933	<466	<2.33	24.5	29.9	0.022 J	<40	<40	<40	<40
SAIA-SB/SG09	04/05/2013	N	0.5	12,600	0.56 J	2.7	117	0.29 J	0.31 J	7,760	20.1	9.1	351	22,100 J	39.4 J	6,640	290	12.8	4,170	<3.16	<0.902	<451	<2.25	40	156	0.4 J	<36	<36	<36	<36
SAIA-SB/SG09	04/05/2013	N	2	11,700	<5.4	2.2	107	0.28 J	0.078 J	5,900	15.8	8.2	14.8	20,400 J	3.4 J	6,250	297	10.4	3,790	<3.16	<0.902	<451	<2.26	37.9	48.8	0.026 J	<36	<36	<36	<36
SAIA-SB/SG09	04/05/2013	N	5	18,700	<6.8	3.3	154	0.48 J	0.14 J	14,000	23.9	11.7	27.6	27,600 J	6.2 J	8,960	487	16.1	4,360	<3.99	<1.14	<569	<2.85	50.7	67.1	0.032 J	<37	<37	<37	<37
SAIA-SB/SG09	04/05/2013	N	15	23,500	<6.9	3.9	189	0.59	0.13 J	11,000	29.9	15.3	33.4	33,900 J	6.8 J	11,800	481	20.9	5,540	<4.06	<1.16	<580	<2.90	66	88.2	0.043 J	<39	<39	<39	<39
SAIA-SB/SG09	04/05/2013	N	25	14,300	<6.8	6.6	127	0.31 J	0.094 J	10,700	22.3	10.7	20.8	26,200 J	4.2 J	7,260	405	14.1	3,180	<3.97	<1.13	<567	<2.84	46.2	54	0.027 J	<43	<43	<43	<43

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Semivolatiles (in ug/kg)																							
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl (Diphenyl)	bis(2-Ethylhexyl) Phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Diethyl Phthalate	Dimethyl Phthalate	Di-n-Butyl Phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
SAIA-SB/SG09	04/05/2013	N	35	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG10	04/05/2013	N	0.5	**690**	<190	<190	<190	<190	<190	**93 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**190**	<190	<190	<190
SAIA-SB/SG10	04/05/2013	FD	1	**630**	<190	<190	<190	<190	<190	**110 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**180 J**	<190	<190	<190
SAIA-SB/SG10	04/05/2013	N	2	**1,500**	<180	<180	<180	<180	<180	<180	<180	**240 J**	<180	<180	<180	<180	<180	<180	<180	<180	<180	**160 J**	<180	**320**	**280**	<180	<180
SAIA-SB/SG10	04/05/2013	N	5	**2,800 J**	<190	<190	<190	<190	<190	<190	<190	**350 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**710 J**	**670 J**	<190	<190
SAIA-SB/SG10	04/05/2013	N	15	**1,700**	<210	<210	<210	<210	<210	<210	<210	**100 J**	<210	<210	<210	<210	<210	<210	<210	<210	<210	**120 J**	<210	**480**	**280**	<210	<210
SAIA-SB/SG10	04/05/2013	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG10	04/05/2013	N	35	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG11	04/03/2013	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG11	04/03/2013	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG11	04/03/2013	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG11	04/03/2013	N	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG11	04/03/2013	FD	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG11	04/03/2013	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG11	04/03/2013	N	35	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB12	04/02/2013	N	0.5	**120 J**	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB12	04/02/2013	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB12	04/02/2013	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB12	04/02/2013	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB12	04/02/2013	N	25	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230
SAIA-SB12	04/02/2013	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG19	04/16/2014	N	0.5	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG19	04/16/2014	FD	0.5	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	**84 J**	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG19	04/16/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	**100 J**	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG19	04/16/2014	N	5	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	**99 J**	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG19	04/16/2014	FD	5	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	**85 J**	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG19	04/16/2014	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	**98 J**	<200	<200	<200	<200	<200
SAIA-SB/SG19	04/16/2014	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	**220**	<200	<200	<200	<200	<200
SAIA-SB/SG19	04/16/2014	N	35	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG20	04/18/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG21	04/18/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG21	04/18/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG21	04/18/2014	FD	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG21	04/18/2014	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	**370**	<190	<190	<190	<190	<190	<190	**93 J**	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG21	04/18/2014	N	15	**200**	**81 J**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	**150 J**	<200	**110 J**	**510**	<200	<200
SAIA-SB/SG21	04/18/2014	FD	15	**240**	**92 J**	**92 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**190**	<190	**140 J**	**650**	<190	<190
SAIA-SB/SG21	04/18/2014	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG21	04/18/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG22	04/18/2014	N	0.5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG22	04/18/2014	N	2	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG22	04/18/2014	N	5	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG22	04/18/2014	N	15	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	**91 J**	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG22	04/18/2014	N	25	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220
SAIA-SB/SG22	04/18/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG23	04/14/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG24	04/16/2014	N	0.5	<180	<180	<180	**55 J**	**74 J**	**44 J**	**79 J**	**68 J**	<180	<180	<180	**74 J**	<180	<180	<180	<180	**32 J**	**100 J**	<180	**59 J**	<180	**36 J**	<180	**120 J**
SAIA-SB/SG24	04/16/2014	N	2	<180	<180	<180	<180	**87 J**	<180	**99 J**	<180	<180	<180	<180	**86 J**	<180	<180	<180	<180	<180	**120 J**	<180	<180	<180	<180	<180	**150 J**
SAIA-SB/SG24	04/16/2014	N	5	<200	<200	<200	<200	**24 J**	**19 J**	**42 J**	**20 J**	<200	**22 J**	<200	<200	**38 J**	<200	<200	<200	**24 J**	<200	<200	**34 J**	<200	<200	<200	<200
SAIA-SB/SG24	04/16/2014	N	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Metals (in mg/kg)																							PCBs (in ug/kg)			
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	PCB-1016 (Arochlor 1016)	PCB-1248 (Arochlor 1248)	PCB-1254 (Arochlor 1254)	PCB-1260 (Arochlor 1260)
SAIA-SB/SG09	04/05/2013	N	35	30,200	<7.0	15.5	199	0.93	0.091 J	13,500	33.5	17.7	51.5	38,700 J	8.7 J	18,500	567	24.5	5,690	<4.10	<1.17	691	<2.93	71.6	96.4	0.12 J	<40	<40	<40	<40
SAIA-SB/SG10	04/05/2013	N	0.5	13,100	<5.3	1.7	110	0.28 J	0.095 J	7,060	17.5	9	15.8	21,900 J	19.5 J	6,640	289	11.3	4,230	<3.07	<0.878	<439	<2.19	41.3	55.8	0.016 J	<36	400	<36	<36
SAIA-SB/SG10	04/05/2013	FD	1	12,400	<5.8	1.7	108	0.24 J	0.076 J	6,230	17.5	8.9	14.8	21,900 J	11.4 J	6,510	289	11.2	4,170	<3.39	<0.969	<485	<2.42	40.4	53.9	0.044 J	<37	360	<37	<37
SAIA-SB/SG10	04/05/2013	N	2	9,270	<5.9	1.6	87.3	0.22 J	0.072 J	4,350	10.7	6.6	10.7	15,400 J	5.4 J	4,860	250	7.6	3,090	<3.47	<0.991	<495	<2.48	29.7	40.7	0.058 J	<35	68	<35	<35
SAIA-SB/SG10	04/05/2013	N	5	13,900	<5.3	2.5	123	0.34 J	0.12 J	7,460	18.9	9.5	19.7	22,400 J	6.9 J	6,830	326	12.4	3,710	<3.11	<0.889	<445	<2.22	41.7	54.7	0.023 J	<37	310	<37	<37
SAIA-SB/SG10	04/05/2013	N	15	18,900	<5.7	3.1	158	0.46 J	<0.47	8,210	24.5	12.3	23.1	28,900 J	4.6 J	9,730	397	16.9	4,650	<3.30	<0.944	<472	<2.36	52.5	70.2	0.03 J	<39	<39	<39	<39
SAIA-SB/SG10	04/05/2013	N	25	20,500	<6.4	12.5	192	0.51 J	0.038 J	11,900	26.9	13.5	26.4	29,200 J	5.9 J	10,700	479	19.4	4,740	<3.76	<1.07	<537	<2.68	49.4	73.9	0.16 J	<41	<41	<41	<41
SAIA-SB/SG10	04/05/2013	N	35	19,500	<7.2	5	171	0.49 J	0.18 J	10,000	25.8	12.7	30.5 J	28,700 J	4.8 J	10,800	431 J	17.6	5,830	<4.18	<1.19	<597	<2.98	59.4	77	0.12 J	<41	<41	<41	<41
SAIA-SB/SG11	04/03/2013	N	0.5	10,100	1.1 J	8.1	85.5	<0.51	0.78	3,760	57	6.4	288	47,100	80	3,720	298	24.5	2,590	<3.57	<1.02	<510	<2.55	42.8	145	0.017 J	<35	28 J	<35	<35
SAIA-SB/SG11	04/03/2013	N	2	12,200	<5.7	3.5	111	<0.48	<0.48	5,170	20.4	10.2	56.7	25,300	13.1	6,100	360	20.2	3,950	<3.33	<0.953	<476	<2.38	39	92.6	0.015 J	<35	<35	<35	<35
SAIA-SB/SG11	04/03/2013	N	5	19,200	<6.6	2.9	182	<0.55	<0.55	8,590	25.5	14	20.9	30,300	5.7	10,700	499	18.1	6,350	<3.87	<1.11	<553	<2.77	55.5	84.1	0.031 J	<37	<37	<37	<37
SAIA-SB/SG11	04/03/2013	N	15	26,900	<7.2	5	170	0.72	<0.60	11,400	32	15.8	30	36,800	6.8	12,500	526	22	5,610	<4.19	<1.20	896 J	<2.99	69.1	90.2	0.075 J	<42	<42	<42	<42
SAIA-SB/SG11	04/03/2013	FD	16	19,100	<6.8	3.6	175	<0.56	<0.56	8,510	26.6	13.4	26.6	30,600	6.6	10,400	480	19.8	6,180	<3.94	<1.13	<563	<2.82	55.4	85.4	0.03 J	--	--	--	--
SAIA-SB/SG11	04/03/2013	N	25	23,500	<5.6	3.6	229	0.5	<0.47	11,500	32.1	15.7	30.3	32,900	5.6	12,000	561	22.8	5,900	<3.27	<0.933	1,780 J	<2.33	60	85.2	0.12	<40	<40	<40	<40
SAIA-SB/SG11	04/03/2013	N	35	7,900	<5.9	8.4	71	<0.49	<0.49	4,170	10.6	5.8	6.7	16,400	2	4,390	206	6.3	2,230	<3.45	<0.986	<493	<2.46	30	33.3	0.033 J	<36	<36	<36	<36
SAIA-SB12	04/02/2013	N	0.5	13,300	8 J	2.7	126	<0.51	<0.51	7,550	18	9.6	15.5	23,300	446	7,290	334	12.6	4,720	<3.55	<1.01	<507	<2.54	41	64.5	0.032 J	<35	15 J	<35	<35
SAIA-SB12	04/02/2013	N	2	11,600	<5.5	2.1	109	<0.46	<0.46	6,290	14.6	8.2	11.8	19,300	7.6	6,260	280	10	3,860	<3.22	<0.919	<459	<2.30	36	50.5	0.032 J	<35	<35	<35	<35
SAIA-SB12	04/02/2013	N	5	21,200	R	2.9	198	<0.53	<0.53	9,990	28.1	15	23.8 J	32,200	7.4	11,600	510	20	6,150	<3.73	<1.07	<533	<2.66	59.6	86.9	0.075 J	<38	9.8 J	<38	<38
SAIA-SB12	04/02/2013	N	15	18,600	<6.3	3	160	<0.53	<0.53	10,300	24.8	12.4	21.4	28,500	4.8	9,520	448	17	4,610	<3.70	<1.06	1,300 J	<2.64	57.1	69.7	0.057 J	<39	<39	<39	<39
SAIA-SB12	04/02/2013	N	25	14,300	<6.3	10.3	141	<0.53	<0.53	7,480	25.9	11.7	23.3	27,000	5.3	8,860	462	20.4	3,050	<3.69	<1.05	687 J	<2.63	44.2	60.3	0.005 J	<45	<45	<45	<45
SAIA-SB12	04/02/2013	N	35	9,990	<4.5	11.8	92.5	<0.37	<0.37	4,450	12.3	7.6	9.8	17,800	2.4	5,910	264	8.6	3,240	<2.62	<0.749	424 J	<1.87	30.7	44.5	0.019 J	<34	12 J	<34	<34
SAIA-SB/SG19	04/16/2014	N	0.5	11,600	<4.2	3.3	108	0.47	0.71	8,200	20.3	9.9	4,350	21,700	198	5,740	278	46.3	3,600	2.6	<0.7	332 J	<1.8	37.8	891	0.032 J	<34	<34	30 J	11 J
SAIA-SB/SG19	04/16/2014	FD	0.5	10,900	<4.5	3.4	104	0.44	0.8	8,680	47.5	9.8	1,690	22,700	196	5,510	287	32.8	3,430	2.8	<0.75	326 J	<1.9	37.2	885	0.034 J	<34	<34	26 J	11 J
SAIA-SB/SG19	04/16/2014	N	2	13,900	<4.8	3.9	121	0.59	1	5,560	35.8	11	3,080	24,500	337	5,800	293	36.1	3,860	2.8	<0.8	281 J	<2	42.4	1,250	0.031 J	<35	<35	13 J	<35
SAIA-SB/SG19	04/16/2014	N	5	9,800	<4.2	2.5	97.1	0.41	<0.35	5,060	19.9	7.8	192	18,200	40.3	5,250	239	11	3,410	2.2 J	<0.71	244 J	<1.8	32	98.6	0.023 J	<34	<34	<34	<34
SAIA-SB/SG19	04/16/2014	FD	5	10,100	<4.6	2.4	96.7	0.41	<0.38	4,890	12.5	7.8	140	17,200	23.6 J	5,200	239	9.4	3,470	1.9 J	<0.76	307 J	<1.9	31.6	80.9	0.02 J	<34	<34	<34	<34
SAIA-SB/SG19	04/16/2014	N	15	17,200	<5.3	4.7	156	0.71	<0.44	10,200	24.9	13.2	99.6	26,700	21.2 J	8,600	425	20	4,180	2.8 J	<0.88	431 J	<2.2	52.6	94.6	0.057 J	<39	<39	<39	<39
SAIA-SB/SG19	04/16/2014	N	25	18,500	<4.9	4.5	164	0.78	<0.41	10,100	23.3	14	23.8	27,100	5.3 J	9,170	410	17.4	4,690	2.8 J	<0.82	477	<2	56	66.9	0.037 J	<39	<39	<39	<39
SAIA-SB/SG19	04/16/2014	N	35	11,200	<4.6	3	94.5	0.47	<0.39	5,900	15.5	8.8	14.4	19,600	3.3 J	5,470	273	10.5	3,330	2 J	<0.77	272 J	<1.9	38.5	43.1	0.021 J	<39	<39	<39	<39
SAIA-SB/SG20	04/18/2014	N	0.5	10,500	<5	12.7	101	0.5	0.92	8,620	289	11.6	1,690	42,800	420	5,720	477	196	3,880	1.7 J	<0.83	481	<2.1	36.6	241	0.015 J	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	2	11,000	<5	3.5	105	0.37 J	<0.41	9,620	39.4	8.7	138	21,600	24	6,130	326	19.7	4,170	0.93 J	<0.83	420	<2.1	36.2	67.9	0.015 J	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	5	18,600	<5.4	5.5	160	0.68	0.56	15,700	28.2	13.8	30.4	28,300	8	8,960	864	19.8	3,860	0.74 J	<0.89	494	<2.2	52.7	76	0.046 J	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	15	20,000	<4.8	7.7	177	0.74	0.45	12,600	27.3	14.9	26	30,300	6.4	10,700	555	19.5	4,830	1.1 J	<0.8	584	<2	57	78.6	0.21	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	25	13,800	<4.9	9	138	0.51	<0.41	11,600	24.8	12.5	26.3	25,200	6.1	8,550	541	19.8	3,110	0.84 J	<0.82	348 J	<2.1	43.1	57.6	0.058 J	--	--	--	--
SAIA-SB/SG20	04/18/2014	N	35	10,200	<4.4	27.1	96.3	0.38	<0.37	4,790	14.4	8.2	10	19,700	3	6,120	328	9.4	3,070	0.33 J	<0.74	351 J	<1.8	34.8	44.8	0.025 J	--	--	--	--
SAIA-SB/SG21	04/18/2014	N	0.5	12,200	<4.8	5.2	122	0.43	1.4	5,090	79.8	11.3	108	26,400	31.5	6,640	535	100	4,410	1.6 J	<0.8	311 J	<2	39.6	138	0.031 J	--	--	--	--
SAIA-SB/SG21	04/18/2014	N	2	11,700	<4.8	5.3	115	0.44	2.4	4,900	357	12.6	176	29,200	20.9	6,610	432	223	4,230	4.3	<0.8	314 J	<2	36.9	142	0.024 J	--	--	--	--
SAIA-SB/SG21	04/18/2014	FD	2	11,700	<4.7	5.2	114	0.41	2.3	4,910	210	11.4	246	28,400	26.5	6,540	420	103	4,190	2.5 J	<0.78	304 J	<1.9	35.7	170	0.023 J	--	--	--	--
SAIA-SB/SG21	04/18/2014	N	5	13,500	0.59 J	3	118	0.51	0.38 J	8,360	30.2	9.2	40.9	22,300	5	6,430	395	43.6	3,500	3.2	<0.83	321 J	<2.1	40.8	54.3	<0.11	<38	<38	170	150
SAIA-SB/SG21	04/18/2014	N	15	14,900	0.82 J	4.2	142	0.57	0.59	9,990	40.5	11.2	53.8	31,300	7.7	7,840	461	30.3	4,390	4.8	<0.82	427	<2	44.9	74.8	<0.1	<38	7,200	<38	<38
SAIA-SB/SG21	04/18/2014	FD	15	14,500	0.76 J	3.9	137	0.6	0.87	9,420	79.4	10.8	74.4	29,600	9.7	7,760	434	43.6	4,390	5.2	<0.86	412 J	<2.2	47.9	88.3	<0.098	<37	9,000 J	<37	2,400 J
SAIA-SB/SG21	04/18/2014	N	25	16,900	1.2 J	11.9	202	0.66	0.14 J	21,200	28.2	13.7	32.6	30,200	6.4	10,600	624	24.3	4,400	4.4	<0.84	383 J	<2.1	50.9	65.4	<0.1	<39	<39	<39	<39
SAIA-SB/SG21	04/18/2014	N	35	9,200	0.48 J	20.6	95.8	0.39 J	0.02 J	4,640	11.9	6.9	11.5	18,200	2.2	5,520	275	8	2,850	2.8 J	<0.82	292 J	<2.1	39.8	37.1	<0.1	<36	<36	<36	<36
SAIA-SB/SG22	04/18/2014	N	0.5	13,400	0.55 J	2	131	0.47	0.18 J	7,060	19.1	9.6	76.2	22,500	12	7,420	330	13.3	5,190	3.4	<0.82	305 J	<2.1	43.9	65.1	<0.1	<37	<37	260	<37
SAIA-SB/SG22	04/18/2014	N	2	14,200	0.71 J	2.1	144	0.49	0.18 J	6,940 J	19.2 J	10.3	28.1	24,500 J	6.2	7,960	349 J	14	5,550 J	3.7	<0.83	316 J	<2.1	45.8 J	63.4	<0.11	<36	<36	130	<36
SAIA-SB/SG22	04/18/2014	N	5	14,900	0.69 J	3.5	142	0.55	0.22 J	10,500	19.3	9.7	24.7	23,700	5	7,430	467	14.2	4,130	3.5	<0.86	326 J	<2.1	43.9	53.8	<0.11	<39	<39	140 J	<39
SAIA-SB/SG22	04/18/2014	N	15	13,100	0.55 J	3.6	122	0.49	0.19 J	9,740	19.2	9.1	60.9	22,600	7.7	7,290	410	12.9	4,100	3.3	<0.77	405	<1.9	42.7	60.7	0.32	<37	<37	45	<37
SAIA-SB/SG22	04/18/2014	N	25	23,500	0.8 J	5.1	203	0.89	0.34 J	10,700	27.7	14.9	35.9	31,900	7.1	11,400	459	21.9	5,160	4.4	<0.99	648	<2.5	64.4	73.8	<0.12	<42	<42	<42	<42
SAIA-SB/SG22	04/18/2014	N	35	8,810	0.43 J	19.2	88.8	0.33 J	0.04 J	4,750	11.3	6.3	10.2	17,200	2.1	5,300	253	7.5	2,750	2.4 J	<0.79	308 J	<2	31.7	35.5	<0.093	<36	<36	<36	<36
SAIA-SB/SG23	04/14/2014	N	0.5	14,600	0.42 J	3.9	147	0.57	<0.41	6,860	19.1	11.9	20.1	26,100	6.2	8,410	384	15.3	5,640	2.9	<0.82	475	<2.1	46.1	67.7	<0.11	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	2	14,300	0.49 J	3.6	132	0.56	<0.41	8,210	17.9	11.1	18.8	25,000	4.6	7,400	356	13.9	4,310	2.5 J	<0.82	415	<2	45.7	57.1	<0.1	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	5	12,800	0.34 J	3.6	113	0.54	<0.42	9,220	16.6	10.1	17.9	22,300	3.9	6,900	382	13.1	4,020	2.1 J	<0.84	382 J	<2.1	40.4	52.3	<0.11	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	15	26,100	0.66 J	5.4	213	1.1	<0.48	24,400	28.9	18.4	38.2	36,100	9	13,100	676	25.4	5,910	3.6	<0.95	665	<2.4	68.2	89.5	<0.12	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	25	19,700	0.34 J	5.9	178	0.75	<0.44	8,110	24.6	15.1	29.3	29,100	5.1	10,900	482	20.4	5,260	2.9 J	<0.89	478	<2.2	53.8	75.5	<0.11	--	--	--	--
SAIA-SB/SG23	04/14/2014	N	35	7,760	0.2 J	9.1	75.7	0.36 J	<0.39	5,600	9.3	6.1	9.6	15,600	2.2	4,690	235	6.9	2,380	1.6 J	<0.78	260 J	<1.9	27.6	34	<0.11	--	--	--	--
SAIA-SB/SG24	04/16/2014	N	0.5	12,200	27.8 J	5.2	337	0.49	1.3	7,890	26.9	12.4	692	25,300	792 J	6,020	362	19.4	3,840	2.7	<0.78	371 J	<2	42.3	440	0.035 J	<35	<35	<35	<35
SAIA-SB/SG24	04/16/2014	N	2	12,500	10 J	3.7	125	0.49	<0.4	9,390	17.4	9.6	26.3	22,200	227 J	6,460	334	12.1	4,040	2.4 J	<0.81	371 J	<2	43	63.9	0.015 J	<36	<36	<36	<36
SAIA-SB/SG24	04/16/2014	N	5	21,500	<5.3	4.7	176	0.84	<0.45	10,400	26.8	14.5	32	29,400	25.9 J	8,830	452	20.3	5,300	2.7 J	<0.89	424 J	<2.2	58	76.5	0.093 J	<38	<38	<38	<38
SAIA-SB/SG24	04/16/2014	N	15	20,700	<5.5	5	184	0.87	<0.45	11,900	25.3	14.7	26	29,500	5.8 J	10,000	451	18.5	4,900	3.1 J	<0.91	472	<2.3	59.9	72.9	0.062 J	<41	<41	<41	<41

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Semivolatiles (in ug/kg)																							
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl (Diphenyl)	bis(2-Ethylhexyl) Phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Diethyl Phthalate	Dimethyl Phthalate	Di-n-Butyl Phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
SAIA-SB/SG24	04/16/2014	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG24	04/16/2014	N	35	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG25	04/14/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG26	04/16/2014	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG26	04/16/2014	FD	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG26	04/16/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG26	04/16/2014	N	5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG26	04/16/2014	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG26	04/16/2014	FD	15	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG26	04/16/2014	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG27	04/14/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG28	04/14/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG28	04/14/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG28	04/14/2014	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG28	04/14/2014	N	15	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220
SAIA-SB/SG28	04/14/2014	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG28	04/14/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG29	04/16/2014	N	0.5	<180	<180	<180	**85 J**	**130 J**	<180	**120 J**	**120 J**	<180	**150 J**	<180	**120 J**	<180	<180	<180	<180	**85 J**	**140 J**	<180	**86 J**	<180	<180	<180	**180**
SAIA-SB/SG29	04/16/2014	N	2	<180	<180	<180	**12 J**	<180	<180	<180	<180	<180	**49 J**	<180	**16 J**	<180	<180	**17 J**	<180	**30 J**	**12 J**	<180	<180	<180	<180	<180	**19 J**
SAIA-SB/SG29	04/16/2014	N	5	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG29	04/16/2014	FD	5	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG29	04/16/2014	N	15	<190	<190	<190	<190	<190	<190	<190	<190	<190	**100 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG29	04/16/2014	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG29	04/16/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG30	04/15/2014	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG30	04/15/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG30	04/15/2014	N	5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG30	04/15/2014	N	15	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG30	04/15/2014	N	25	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG30	04/15/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG31	04/15/2014	N	0.5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG31	04/15/2014	N	2	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG31	04/15/2014	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG31	04/15/2014	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG31	04/15/2014	N	25	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220
SAIA-SB/SG31	04/15/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG31	04/15/2014	FD	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG32	04/15/2014	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG32	04/15/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG32	04/15/2014	N	5	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG32	04/15/2014	N	15	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG32	04/15/2014	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	**340**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG32	04/15/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG33	04/15/2014	N	0.5	<180	<180	<180	<180	**88 J**	<180	<180	**80 J**	<180	<180	<180	**110 J**	<180	<180	<180	<180	<180	**80 J**	<180	<180	<180	<180	<180	**94 J**
SAIA-SB/SG33	04/15/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG33	04/15/2014	N	5	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG33	04/15/2014	N	15	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG33	04/15/2014	N	25	**590**	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	**150 J**	<210	<210	<210
SAIA-SB/SG33	04/15/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Metals (in mg/kg)																							PCBs (in ug/kg)			
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	PCB-1016 (Arochlor 1016)	PCB-1248 (Arochlor 1248)	PCB-1254 (Arochlor 1254)	PCB-1260 (Arochlor 1260)
SAIA-SB/SG24	04/16/2014	N	25	17,500	<5.3	7	168	0.66	<0.44	12,100	25.6	13.2	34.1	27,500	48.6 J	8,680	475	18.4	4,200	2.6 J	<0.88	442	<2.2	54	68.9	0.072 J	<39	<39	<39	<39
SAIA-SB/SG24	04/16/2014	N	35	12,300	<5.4	21.4	105	<0.45	<0.45	18,300	18.1	9.8	14.9	22,400	3.4 J	6,810	385	12	3,670	2.4 J	<0.89	478	<2.2	46.8	47.8	0.18	<38	<38	<38	<38
SAIA-SB/SG25	04/14/2014	N	0.5	11,800	1.4 J	4.1	122	0.47	<0.38	15,400	16.6	9.4	23.6	21,100	107	6,360	313	13	3,740	2.1 J	<0.76	285 J	<1.9	36.8	78.2	<0.11	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	2	16,800	11.8	<0.87	165	0.66	<0.43	9,380	21.6	11.4	23.1	28,600	4.8	8,970	419	18.4	5,230	7.5	<0.87	376 J	12.6	49.8	68.7	<0.11	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	5	20,200	0.47 J	5.2	195	0.82	<0.42	12,500	26	16.6	28.5	31,800	5.8	11,100	506	22.4	5,770	2.9 J	<0.85	453	<2.1	59.5	81.5	<0.11	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	15	18,400	0.59 J	5.4	159	0.76	<0.42	12,000	22.6	13.7	25	28,700	5.4	9,990	488	18.4	5,050	2.9 J	<0.85	658	<2.1	53	69.9	<0.1	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	25	21,500	0.43 J	6.7	205	0.88	<0.43	8,910	28.2	17.8	31.6	35,200	6.8	11,700	578	24.6	5,900	4.1	<0.86	1,610	<2.1	59.9	81.1	<0.11	--	--	--	--
SAIA-SB/SG25	04/14/2014	N	35	8,300	<4.8	11.1	91.5	0.38 J	<0.4	4,340	10.3	6.7	9.8	16,800	2.4	4,790	233	7.2	2,450	1.5 J	<0.8	520	<2	30	35	<0.11	--	--	--	--
SAIA-SB/SG26	04/16/2014	N	0.5	9,650	20.1 J	6.2	189	0.47	26.7	4,150	240	21.6	187	22,100	1,360 J	4,310	404	152	2,080	2.9	1.9	334 J	<2	39.1	1,350	0.21	<35	<35	<35	7,300 J
SAIA-SB/SG26	04/16/2014	FD	0.5	10,200	29.3 J	6.7	211	0.44	31	6,970	234	21.3	199	22,000	1,850 J	4,490	418	136	2,450	2.7	2.4	331 J	<2	41.6	1,550	0.15	<34	<34	<34	3,000 J
SAIA-SB/SG26	04/16/2014	N	2	11,900	64.1 J	6.5	169	0.44	40.5	5,590	200	17.2	359	26,800	2,620 J	5,560	364	77.6	3,320	3.7	2.4	<389	<1.9	48.4	1,240	0.1	<35	<35	<35	5,700 J
SAIA-SB/SG26	04/16/2014	N	5	11,800	10 J	2.1	115	0.41	3.2	6,800	19.9	8.1	20.5	22,700	41.6 J	5,860	384	13.1	3,790	2.6 J	<0.77	<386	<1.9	44.2	150	0.024 J	<35	<35	<35	25 J
SAIA-SB/SG26	04/16/2014	N	15	21,700	<5	4.2	170	0.73	0.89	14,300	24.2	13.2	26.3	31,400	6.8 J	9,300	452	19.5	4,660	3.2	<0.84	561	<2.1	63.3	70.1	0.14	<39	<39	<39	<39
SAIA-SB/SG26	04/16/2014	FD	15	20,600	<5.2	3.9	167	0.71	0.91	13,700	24	13.3	25.3	31,500	6.2 J	9,000	448	19.1	4,520	3	<0.86	524	<2.2	63.3	66.6	0.048 J	<41	<41	<41	<41
SAIA-SB/SG26	04/16/2014	N	25	22,300	<5.1	4	198	0.77	0.86	14,100	23.6	14	27.6	30,600	6.4 J	10,400	466	20	5,460	3	<0.86	649	<2.1	59.2	72.8	0.051 J	2.4 J	<40	<40	3.7 J
SAIA-SB/SG27	04/14/2014	N	0.5	9,650	21	11	320	0.41	<0.39	7,110	35.8	8.4	36.1	22,900	906	4,780	286	14.6	3,410	2.7	<0.77	752	<1.9	50.7	531	<0.094	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	2	14,600	0.55 J	3.5	148	0.58	<0.38	7,870	19.4	11.9	19.5	25,600	6.7	8,050	365	15.5	5,040	2.5 J	<0.77	555	<1.9	45.7	64.2	<0.1	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	5	17,900	0.43 J	4.5	186	0.68	<0.37	8,710	23.5	14.6	23.7	29,700	7.7	10,500	469	19.2	6,290	2.7	<0.73	523	<1.8	54.2	76.9	<0.093	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	15	16,500	0.44 J	5.1	142	0.69	<0.42	10,200	22.7	12.8	23	29,200	10.2	9,000	407	18.2	4,270	3.1	<0.83	1,690	<2.1	55.5	67.9	<0.1	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	25	27,100	0.33 J	7	233	1.1	<0.46	11,700	31.9	18.5	42.3	36,600	9.2	12,600	531	27.1	5,230	3.5	<0.93	2,020	<2.3	74.3	88.2	0.23	--	--	--	--
SAIA-SB/SG27	04/14/2014	N	35	9,560	0.14 J	13.1	104	0.4	<0.38	5,120	11.4	7.4	11.9	17,600	2.3	5,740	279	8.5	3,030	1.8 J	<0.76	615	<1.9	30.6	40.6	<0.095	--	--	--	--
SAIA-SB/SG28	04/14/2014	N	0.5	13,000	4 J	3.9	128	0.51	<0.42	8,690	17.9	10	19.3	24,200	93.9	6,890	305	13.6	4,760	2.6 J	<0.85	523	<2.1	43.4	70.6	<0.1	--	--	--	--
SAIA-SB/SG28	04/14/2014	N	2	11,900	0.32 J	3.4	115	0.47	<0.38	7,530	16	9.2	14.3	21,800	6.7	6,360	288	11.9	3,980	2.5 J	<0.75	407	<1.9	40.5	49.4	<0.097	--	--	--	--
SAIA-SB/SG28	04/14/2014	N	5	14,700	0.34 J	4	131	0.61	<0.44	9,810	17.9	11.5	20.3	23,400	6.3	7,700	369	14.9	4,480	2.2 J	<0.88	592	<2.2	44.2	58.5	<0.11	<37	<37	<37	<37
SAIA-SB/SG28	04/14/2014	N	15	32,000	0.78 J	9.6	270	1.3	<0.47	19,400	33.7	21.3	51.5	41,700	11.1	13,900	643	31.6	5,230	4.3	<0.95	2,340	<2.4	82.4	99.7	0.18	<44	<44	<44	<44
SAIA-SB/SG28	04/14/2014	N	25	19,300	0.4 J	15.3	180	0.72	<0.45	22,400	22.9	14.1	26.8	28,900	5.8	10,500	659	19.2	4,960	3 J	<0.91	1,020	<2.3	53.4	68.2	<0.11	<40	<40	<40	<40
SAIA-SB/SG28	04/14/2014	N	35	10,800	0.19 J	13.7	105	0.42	<0.39	13,800	12.7	8.6	11.7	18,900	2.6	6,790	342	10.2	3,650	2.1 J	<0.77	577	<1.9	32.8	45.7	<0.1	<35	<35	<35	<35
SAIA-SB/SG29	04/16/2014	N	0.5	11,300	<4.9	5.1	119	0.49	0.58 J	5,500	158 J	197 J	89.9	30,600	209	5,960	944	49.8	3,450	6	2.7	297 J	<2	84.1	441	0.041 J	<35	<35	29 J	29 J
SAIA-SB/SG29	04/16/2014	N	2	13,200	<4.7	2.6	124	0.48	0.7	7,130	24.2	13.7	20.5	24,700	13.8 J	6,470	344	13.9	4,420	2.9	<0.78	<388	<1.9	47.3	75.3	0.023 J	<36	<36	<36	10 J
SAIA-SB/SG29	04/16/2014	N	5	19,100	<5.2	3.5	176	0.68	1	9,500	46.8	25	28.9	31,700	18.3 J	8,540	444	20.4	5,300	4.2	1	<435	<2.2	66.8	86.6	0.032 J	<39	<39	<39	5.3 J
SAIA-SB/SG29	04/16/2014	FD	5	14,700	<5.4	2.8	138	0.5	0.62	7,720	21.3	10.1	17.9	23,800	5.5 J	6,570	321	13.3	4,140	2.5 J	<0.89	<446	<2.2	46	54.4	0.082 J	<40	<40	<40	15 J
SAIA-SB/SG29	04/16/2014	N	15	14,100	<4.7	2.9	120	0.59	<0.39	8,130	53	25.2	27.4	23,900	32.3	7,050	340	19.6	3,890	2.9	0.71 J	410	<1.9	54.2	110	0.037 J	<37	<37	91	72
SAIA-SB/SG29	04/16/2014	N	25	21,300	<5.3	4.7	188	0.81	<0.44	15,300	26.7	15.5	28.8	33,000	6	11,100	550	21.1	5,460	3 J	0.31 J	932	<2.2	63	77.4	0.066 J	<40	<40	<40	<40
SAIA-SB/SG29	04/16/2014	N	35	11,100	<4.7	12.9	104	0.42	<0.4	9,900	13.7	8.3	11.2	19,500	2.7	6,630	337	9.8	3,780	1.9 J	0.23 J	432	<2	35.2	46.2	0.015 J	<35	<35	<35	390
SAIA-SB/SG30	04/15/2014	N	0.5	16,800	0.99 J	4.1	152	0.62	<0.39	11,600	22.1	13.1	21.3	28,000	16.6	8,610	421	17.4	5,320	3.5	<0.79	428	<2	52.8	71.9	0.11	<35	<35	<35	<35
SAIA-SB/SG30	04/15/2014	N	2	15,800	0.7 J	4.3	156	0.61	<0.38	9,900	19.1	12.1	21	25,300 J	14.9	8,360	397 J	16.3	4,960	2.6	<0.75	603	<1.9	45.6 J	64.9 J	<0.11	<34	<34	<34	<34
SAIA-SB/SG30	04/15/2014	N	5	14,300	0.6 J	3.8	143	0.58	<0.37	8,890	18	11.4	18.5	23,900	11.9	7,900	345	15.3	4,700	2.3 J	<0.73	491	<1.8	42.8	62.8	<0.09	<34	<34	<34	<34
SAIA-SB/SG30	04/15/2014	N	15	20,400	0.45 J	5.5	167	0.81	<0.39	13,500	23.5	15.3	26.9	30,000	6.5	9,850	440	20.2	5,030	2.8	<0.78	1,850	<1.9	55.7	72.9	<0.095	<37	<37	<37	<37
SAIA-SB/SG30	04/15/2014	N	25	21,500	0.6 J	6.2	182	0.8	<0.4	19,500	25.9	16.5	31.4	31,200	6.4	10,800	570	23	5,170	2.9	<0.8	1,430	<2	54.8	77.9	<0.1	<37	<37	<37	<37
SAIA-SB/SG30	04/15/2014	N	35	8,380	<4.6	10	76.6	0.36 J	<0.39	5,660	10.1	6.7	10.3	15,700	2.3	4,990	233	7.6	2,620	1.8 J	<0.77	449	<1.9	27.9	34.9	<0.094	<34	<34	<34	<34
SAIA-SB/SG31	04/15/2014	N	0.5	13,900	1.5 J	5	141	0.52	<0.41	6,990	17	10.8	20	22,500	47.6	7,420	352	14.3	4,970	2.3 J	<0.82	328 J	<2.1	39.3	68.7	<0.1	<36	<36	<36	<36
SAIA-SB/SG31	04/15/2014	N	2	14,400	0.43 J	4.7	144	0.53	<0.41	7,480	17.6	11.3	19.2	22,900	9.9	7,670	353	14.8	5,060	2.1 J	<0.82	353 J	<2.1	40.4	59.6	<0.097	<36	<36	<36	<36
SAIA-SB/SG31	04/15/2014	N	5	15,900	0.36 J	4	152	0.63	<0.42	9,460	19.2	11.7	21	24,600	6.3	7,820	368	15.1	4,120	2.3 J	<0.85	450	<2.1	44.5	59.1	<0.11	<37	<37	<37	<37
SAIA-SB/SG31	04/15/2014	N	15	22,200	0.33 J	5.9	199	0.94	<0.44	10,800	24.4	15.1	30.4	29,900	8	10,100	393	20.5	4,780	2.9 J	<0.88	955	<2.2	57.9	74.9	<0.11	<39	<39	<39	<39
SAIA-SB/SG31	04/15/2014	N	25	29,300	0.85 J	10.2	250	1.3	<0.47	13,100	36.8	22	49.4	40,000	12.4	13,300	581	33	4,940	3.5	<0.95	1,740	<2.4	76.8	94.4	<0.11	<43	<43	<43	<43
SAIA-SB/SG31	04/15/2014	N	35	8,090	<4.7	10	84	0.33 J	<0.39	4,710	8.8	6.2	8.5	14,100	2.1	4,560	221	7	2,400	1.4 J	<0.78	376 J	<1.9	24.3	33.7	<0.09	<34	<34	<34	<34
SAIA-SB/SG31	04/15/2014	FD	35	7,570	0.16 J	9.1	75.6	0.32 J	<0.38	4,260	7.9	5.7	8.2	13,000	2.1	4,230	200	6.4	2,230	1.2 J	<0.75	371 J	<1.9	22.3	31.3	<0.099	<34	<34	<34	<34
SAIA-SB/SG32	04/15/2014	N	0.5	12,600	1.1 J	4.2	138	0.49	0.99	5,530	16.3	11.9	18.3	20,900	45.1	6,800	411	24.1	4,780	1.8 J	<0.77	272 J	<1.9	36.3	470	<0.11	<36	<36	47 J	12 J
SAIA-SB/SG32	04/15/2014	N	2	11,600	0.2 J	3.7	114	0.43	<0.38	6,060	14.3	9.2	13.8	19,500	5.1	6,180	285	11.9	4,100	1.9 J	<0.76	281 J	<1.9	35.6	54.5	<0.096	<36	<36	49 J	12 J
SAIA-SB/SG32	04/15/2014	N	5	18,600	0.34 J	4.3	181	0.74	<0.44	10,500	22.9	14.5	24	28,300	6.7	10,200	461	19.6	5,920	2.6 J	<0.88	492	<2.2	50.8	85.3	<0.1	<40	<40	16 J	<40
SAIA-SB/SG32	04/15/2014	N	15	15,600	<4.7	3.1	146	0.66	<0.39	7,340	22	12.2	20.9	24,800	4.8	8,140	323	15.8	4,260	2.8	<0.79	783	<2	47	60.4	0.031 J	<35	<35	20 J	<35
SAIA-SB/SG32	04/15/2014	N	25	20,700	<5.2	5.7	211	0.85	<0.43	11,600	28.4	16.9	34.6	30,800	7.3	10,700	508	25.1	4,560	3.2	<0.86	1,220	<2.2	53.7	75.5	0.12	<40	<40	<40	<40
SAIA-SB/SG32	04/15/2014	N	35	7,840	<4.4	8.9	73.8	<0.37	<0.37	4,340	10.2	6.7	9.4	15,500	2	4,540	224	7.1	2,440	1.9 J	<0.73	325 J	<1.8	28.7	33.2	0.032 J	<35	<35	<35	<35
SAIA-SB/SG33	04/15/2014	N	0.5	10,500	<4.7	3.3	115	0.41	<0.39	6,050	15.3	8.7	25.8	20,300	59	5,710	323	12.4	4,000	2.3 J	<0.79	337 J	<2	34.4	103	0.017 J	<36	<36	<36	<36
SAIA-SB/SG33	04/15/2014	N	2	10,600	<4.4	2.8	111	0.42	<0.36	6,450	14.4	8.6	14.9	18,700	12.5	5,910	291	11	4,090	2 J	<0.73	286 J	<1.8	34	56	0.021 J	<36	<36	<36	<36
SAIA-SB/SG33	04/15/2014	N	5	18,000	<4.5	3.9	178	0.73	<0.37	9,800	22.3	14.1 J	22.7	27,500	5.1 J	10,000	460	18 J	5,560	3.2	<0.74	531	<1.9	50.5	72.7	0.041 J	<37	<37	<37	<37
SAIA-SB/SG33	04/15/2014	N	15	13,900	<4.6	2.8	128	0.57	<0.38	6,640	18.6	11.1	17.6	23,400	4.1	8,030	323	14.5	4,450	2.6 J	<0.77	462	<1.9	44.2	57.9	0.026 J	<37	<37	<37	<37
SAIA-SB/SG33	04/15/2014	N	25	25,000	<5.3	10.3	239	1.1	<0.44	14,400	33.9	19.8	43.8	35,600	11.1	12,200	596	29.5	4,970	3.9	<0.88	1,460	<2.2	64.9	84.9	0.1 J	<40	<40	<40	<40
SAIA-SB/SG33	04/15/2014	N	35	9,910	<4.8	10.1	101	<0.4	<0.4	8,470	12	8.2	11.9	17,100	2	6,260	291	9	3,540	2.3 J	<0.8	502	<2	30.6	43.5	0.027 J	<34	<34	<34	<34

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Semivolatiles (in ug/kg)																							
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl (Diphenyl)	bis(2-Ethylhexyl) Phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Diethyl Phthalate	Dimethyl Phthalate	Di-n-Butyl Phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
SAIA-SB/SG34	04/15/2014	N	0.5	<170	<170	<170	<170	**81 J**	<170	<170	**73 J**	<170	<170	<170	**100 J**	<170	<170	<170	<170	<170	**71 J**	<170	<170	<170	<170	<170	**81 J**
SAIA-SB/SG34	04/15/2014	N	2	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG34	04/15/2014	N	5	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG34	04/15/2014	N	15	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG34	04/15/2014	FD	15	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG34	04/15/2014	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG34	04/15/2014	N	35	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170	<170
SAIA-SB/SG35	04/18/2014	N	0.5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG35	04/18/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG35	04/18/2014	FD	2	<190	<190	<190	<190	<190	<190	<190	<190	<190	**87 J**	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG35	04/18/2014	N	5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG35	04/18/2014	N	15	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
SAIA-SB/SG35	04/18/2014	N	25	<200	<200	<200	<200	<200	<200	<200	<200	<200	**120 J**	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG35	04/18/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG36	04/17/2014	N	0.5	<180	<180	<180	**79 J**	**110 J**	**90 J**	<180	**100 J**	<180	<180	<180	**120 J**	<180	<180	<180	<180	<180	**120 J**	<180	**73 J**	<180	<180	<180	**120 J**
SAIA-SB/SG36	04/17/2014	N	2	<180	<180	<180	**610**	**1,100**	**910**	**800**	**940**	<180	<180	<180	**1,100**	<180	<180	<180	<180	<180	**590**	<180	**700**	<180	**86 J**	<180	**760**
SAIA-SB/SG36	04/17/2014	N	5	<180	<180	<180	**370**	**630**	**430**	**510**	**500**	<180	<180	<180	**620**	**190**	<180	<180	<180	**84 J**	**320**	<180	**420**	<180	<180	<180	**420**
SAIA-SB/SG36	04/17/2014	N	15	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230
SAIA-SB/SG36	04/17/2014	N	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG36	04/17/2014	FD	25	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
SAIA-SB/SG36	04/17/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG37	04/17/2014	N	0.5	<180	<180	<180	**54 J**	**70 J**	**55 J**	**55 J**	**60 J**	<180	<180	<180	**78 J**	<180	<180	<180	<180	<180	**70 J**	<180	<180	<180	<180	<180	**79 J**
SAIA-SB/SG37	04/17/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG37	04/17/2014	N	5	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG37	04/17/2014	FD	5	<180	<180	<180	<180	<180	<180	<180	<180	<180	**100 J**	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG37	04/17/2014	N	15	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SAIA-SB/SG37	04/17/2014	N	25	<220	<220	<220	<220	<220	<220	<220	<220	<220	**360**	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220
SAIA-SB/SG37	04/17/2014	N	35	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG38	04/17/2014	N	0.5	<190	<190	**140 J**	**330**	**390**	**250**	**230**	**310**	<190	<190	<190	**510**	**120 J**	<190	<190	<190	<190	**480**	<190	**220**	<190	**410**	<190	**570**
SAIA-SB/SG38	04/17/2014	N	2	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	**89 J**	<180	<180	<180	<180	<180	<180	<180
SAIA-SB/SG38	04/17/2014	N	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG38	04/17/2014	N	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG38	04/17/2014	N	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG38	04/17/2014	N	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	FD	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-SB/SG44	04/25/2017	N	0	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<390	<200	<200	<200	<200	**220**	<200	<390	<200	<200	<200	<200	<390	<200
SAIA-SB/SG44	04/25/2017	N	1	<190	<190	<190	**45 J**	<190	<190	<190	<190	<190	<190	<370	**120 J**	<190	<190	<190	**240**	<190	**120 J**	<190	<190	<190	**80 J**	<370	**150 J**
SAIA-SB/SG44	04/25/2017	N	4	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<420	<220	<220	<220	<220	**350**	<220	<420	<220	<220	<220	<220	<420	<220
SAIA-SB/SG44	04/25/2017	N	14	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	**540**	<200	<400	<200	<200	<200	<200	**48 J**	<200
SAIA-SB/SG44	04/25/2017	N	24	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<430	<220	<220	<220	<220	**530**	<220	<430	<220	<220	<220	<220	<430	<220
SAIA-SB/SG44	04/25/2017	FD	24	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<390	<200	<200	<200	<200	**400**	<200	<390	<200	<200	<200	<200	<390	<200
SAIA-SB/SG44	04/25/2017	N	34	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<430	<220	<220	<220	<220	**390**	<220	<430	<220	<220	<220	<220	<430	<220
SAIA-SB/SG45	04/25/2017	N	0	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<370	**56 J**	<190	<190	<190	**210**	<190	**42 J**	<190	<190	<190	<190	<370	**64 J**
SAIA-SB/SG45	04/25/2017	N	1	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<380	<200	<200	<200	<200	**250**	<200	<380	<200	<200	<200	<200	<380	<200
SAIA-SB/SG45	04/25/2017	N	4	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<400	<210	<210	<210	<210	**710**	<210	<400	<210	<210	<210	<210	**60 J**	<210
SAIA-SB/SG45	04/25/2017	N	14	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<440	<230	<230	<230	<230	**430**	<230	<440	<230	<230	<230	<230	**57 J**	<230
SAIA-SB/SG45	04/25/2017	N	24	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<450	<230	<230	<230	<230	**320**	<230	<450	<230	<230	<230	<230	**49 J**	<230
SAIA-SB/SG45	04/25/2017	N	34	<230	<230	<230	<230	<230	<230	<230	<230	<230	<230	<440	<230	<230	<230	<230	**320**	<230	<440	<230	<230	<230	<230	**50 J**	<230
SAIA-SB/SG46	04/26/2017	N	0	<180	<180	<180	<180	<180	<180	<180	<180	<180	<180	<350	<180	<180	<180	<180	**77 J**	<180	<350	<180	<180	<180	<180	<350	<180
SAIA-SB/SG46	04/26/2017	FD	0	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<370	<190	<190	<190	<190	**100 J**	<190	<370	<190	<190	<190	<190	<370	<190
SAIA-SB/SG46	04/26/2017	N	1	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<370	<190	<190	<190	<190	**160**	<190	<370	<190	<190	<190	<190	<370	<190
SAIA-SB/SG46	04/26/2017	N	4	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<390	<200	<200	<200	<200	**230**	<200	<390	<200	<200	<200	<200	<390	<200
SAIA-SB/SG46	04/26/2017	N	14	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<410	<210	<210	<210	<210	**360 J**	<210	<410	<210	<210	<210	<210	**51 J**	<210

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Metals (in mg/kg)																							PCBs (in ug/kg)			
Location ID	Sample Date	Sample Type	Sample Depth (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	PCB-1016 (Arochlor 1016)	PCB-1248 (Arochlor 1248)	PCB-1254 (Arochlor 1254)	PCB-1260 (Arochlor 1260)
SAIA-SB/SG34	04/15/2014	N	0.5	9,600	10	12.1	156	0.88	<0.39	14,300	1,020	16.3	212	55,400	184	2,460	1,920	585	1,470	5.9	<0.77	566	0.36 J	39.6	268	0.016 J	<34	<34	<34	<34
SAIA-SB/SG34	04/15/2014	N	2	11,600	<4.2	3	118	0.44	<0.35	7,910	17.5	9.9	18.9	21,300	22.1	6,360	350	13.4	4,600	2.4	<0.7	277 J	<1.7	38	70.2	0.025 J	<34	<34	<34	<34
SAIA-SB/SG34	04/15/2014	N	5	17,100	<4.8	3.5	174	0.69	<0.4	8,390	22.4	13.8	22.1	28,100	8.6	9,820	475	18.1	7,750	3.2	<0.81	338 J	<2	51.6	80.8	0.024 J	<34	<34	<34	<34
SAIA-SB/SG34	04/15/2014	N	15	12,100	<4.7	3.4	111	0.52	<0.39	20,200	16.4	9.6	14	21,200	3.1	7,370	343	12.6	3,690	2.5 J	<0.79	1,170	<2	40.9	49.9	0.027 J	<35	<35	<35	<35
SAIA-SB/SG34	04/15/2014	FD	15	13,900	<4.4	3.7	129	0.58	<0.37	12,300	18.8	11.3	16.2	23,200	3.6	7,960	344	15	4,070	2.9	<0.73	1,360	<1.8	44.9	56.1	0.027 J	<37	<37	<37	<37
SAIA-SB/SG34	04/15/2014	N	25	28,800	<5.7	10.7	240	1.3	<0.47	15,500	36.1	24.6	55.2	41,900	13.9	13,500	751	36.1	4,560	4.5	<0.95	2,200	<2.4	79.3	92.2	0.02 J	<41	<41	<41	<41
SAIA-SB/SG34	04/15/2014	N	35	7,760	19.1	<0.71	73.8	0.36	0.28 J	3,730	9.3	4.4	8	13,700	<0.71	4,410	214	8.7	2,510	11.3	<0.71	407	26.2	24.2	31	0.066 J	<34	<34	<34	<34
SAIA-SB/SG35	04/18/2014	N	0.5	14,400	0.92 J	2.8	151	0.51	0.29 J	8,030	19.5	10.7	20.5	24,700	16.2	7,760	385	15	5,330	3.7	<0.76	324 J	<1.9	45.3	79.7	<0.1	<35	<35	<35	<35
SAIA-SB/SG35	04/18/2014	N	2	13,100	0.69 J	2.6	131	0.45	0.21 J	7,280	17.7	9.3	19.7	22,100	6.5	6,830	330	13.3	4,570	3.4	<0.78	299 J	<1.9	41.6	52.3	<0.11	<35	<35	<35	<35
SAIA-SB/SG35	04/18/2014	FD	2	14,400	0.69 J	2.6	143	0.51	0.22 J	7,960	19.3	10.2	18.3	24,200	5.4	7,560	361	14.2	5,110	3.8	<0.84	334 J	<2.1	44.5	59	<0.1	<36	<36	<36	<36
SAIA-SB/SG35	04/18/2014	N	5	14,300	0.65 J	2.8	127	0.55	0.18 J	7,930	17.5	9.4	17.5	23,000	4.4	7,130	354	12.9	4,050	3.3	<0.83	388 J	<2.1	44.7	51.5	<0.1	<35	<35	<35	<35
SAIA-SB/SG35	04/18/2014	N	15	14,100	0.59 J	2.9	136	0.5	0.17 J	6,660	18.3	10	15.6	24,400	3.3	8,260	330	12.9	4,480	3.7	<0.77	1,270	<1.9	49.2	53.6	<0.095	<37	<37	<37	<37
SAIA-SB/SG35	04/18/2014	N	25	17,600	0.58 J	3	159	0.65	0.23 J	9,050	22.9	10.8	24.1	24,700	4.9	8,750	383	15.9	4,150	3.5	<0.91	1,670	<2.3	48.7	57.6	<0.1	<39	<39	<39	<39
SAIA-SB/SG35	04/18/2014	N	35	6,810	0.39 J	6.8	56	0.24 J	0.02 J	4,740	9	4.6	6.7	13,400	1.8	3,860	190	5.6	2,020	2.1 J	<0.72	385	<1.8	25.1	25.8	<0.1	<34	<34	<34	<34
SAIA-SB/SG36	04/17/2014	N	0.5	10,700	<4.8	4.9	104	0.52	0.51	9,730	19.8	8.1	46.1	24,200	237	5,480	413	16.3	2,990	2.4 J	0.33 J	522	<2	38.2	257	0.13	<35	<35	12 J	<35
SAIA-SB/SG36	04/17/2014	N	2	4,520	<4.7	4.7	41.2	0.45	<0.39	3,920	19.2	5.4	60.2	32,900	57	1,740	467	26.5	853	3.5	0.25 J	300 J	0.49 J	19.7	72.8	0.046 J	<35	<35	<35	19 J
SAIA-SB/SG36	04/17/2014	N	5	6,920	<4.5	9.3	48.6	0.6	<0.37	2,310	38.6	6.8	128	50,200	45.3	1,810	503	37.9	994	4.9	0.4 J	428	1.5 J	29.2	59.1	<0.095	<35	<35	<35	<35
SAIA-SB/SG36	04/17/2014	N	15	33,400	<5.9	7.2	260	1.4	<0.49	15,500	38	21.2	51.4	41,100	13	14,200	600	30.9	5,130	3.4	0.37 J	700	<2.4	78.4	98	0.13	<46	<46	<46	<46
SAIA-SB/SG36	04/17/2014	N	25	20,000	<5.2	6.4	197	0.82	<0.43	13,100	26.3	14.3	29.8	30,400	7.3	10,100	593	20.4	4,930	2.6 J	0.27 J	482	<2.1	57.2	72.4	0.065 J	<41	<41	<41	<41
SAIA-SB/SG36	04/17/2014	FD	25	20,400	<5.8	8.3	195	0.85	<0.48	14,300	27.7	14.4	33.8	31,200	8.4	10,300	573	22.2	4,580	3.1 J	0.29 J	481 J	<2.4	58.1	71.9	0.1 J	<41	<41	<41	<41
SAIA-SB/SG36	04/17/2014	N	35	8,310	<4.8	8.7	72.4	0.4	<0.4	4,720	11.2	5.8	13.1	17,700	4.4	4,260	248	7.5	2,320	1.7 J	0.13 J	317 J	<2	27.7	32.6	0.058 J	<36	<36	<36	<36
SAIA-SB/SG37	04/17/2014	N	0.5	15,000	48.9	43.8	345	2.1	<0.38	33,300	147	21.4	463	206,000	543	3,860	5,120	170	2,060	7.4	0.42 J	1,520	5	81.7	127	0.019 J	<35	<35	<35	<35
SAIA-SB/SG37	04/17/2014	N	2	17,700	13.2	12.1	313	1.4	<0.39	34,800	103	10.6	204	93,100	451	3,720	5,260	76	2,750	5.1	0.64 J	1,350	1.6 J	56.3	308	0.17	<35	<35	<35	41
SAIA-SB/SG37	04/17/2014	N	5	11,600	<5.1	2.7	111	0.44	<0.42	11,800	16.6	8.5	14.2	22,100	3.5	6,480	370	10.9	3,870	1.9 J	0.14 J	347 J	<2.1	44.2	47.2	0.038 J	<35	<35	<35	<35
SAIA-SB/SG37	04/17/2014	FD	5	11,100	<4.9	2.5	102	0.48	<0.4	11,800	16	8.4	13.4	22,200	3.2	6,340	370	10.6	3,700	2.1 J	0.13 J	337 J	<2	44.5	46.3	0.021 J	<35	<35	<35	<35
SAIA-SB/SG37	04/17/2014	N	15	17,400	<5.4	3.6	149	0.73	<0.45	9,520	22	12.1	22.5	26,500	5.1	8,700	415	15.8	4,370	2.4 J	0.1 J	454	<2.3	52.4	63.6	0.068 J	<39	<39	<39	<39
SAIA-SB/SG37	04/17/2014	N	25	24,200	<5.2	7	219	0.94	<0.43	21,200	33.9	15.1	35.4	32,600	18	10,800	1,080	21.1	5,350	2.8 J	0.17 J	1,190	<2.2	66.9	85.9	0.04 J	<42	<42	<42	<42
SAIA-SB/SG37	04/17/2014	N	35	8,260	<4.6	9.2	73.9	0.36 J	<0.38	4,570	11	6	8.4	16,100	2.3	4,290	226	6.8	2,440	1.5 J	0.09 J	397	<1.9	32.3	33	0.039 J	<35	<35	<35	<35
SAIA-SB/SG38	04/17/2014	N	0.5	14,200	<4.9	5.5	130	0.65	<0.41	17,400	105	9.8	33.4	25,600	112	6,600	635	19.4	3,960	2 J	0.21 J	725	<2.1	43.8	130	0.071 J	<36	<36	<36	9.9 J
SAIA-SB/SG38	04/17/2014	N	2	12,200	<4.6	2.5	112	0.49	<0.38	7,140	19.4	8.6	17	22,100	11	6,150	449	12.2	4,060	1.7 J	0.06 J	391	<1.9	41.9	49.6	0.047 J	<35	<35	<35	<35
SAIA-SB/SG38	04/17/2014	N	5	25,800	<5.5	7.1	220	0.92	0.88	13,600	33.6	19.5	37.4	36,600	10.3	11,600	556	27.2	5,970	1.2 J	<0.92	842	<2.3	66.5	92.6	0.071 J	--	--	--	--
SAIA-SB/SG38	04/17/2014	N	15	20,000	<5.5	7.1	184	0.72	0.54 J	16,300	26.2 J	14.8	26.9	30,700 J	6.4	10,100	588	20.1	4,690	1.7 J	0.06 J	1,240	<2.3	59.2	74.7	0.079 J	--	--	--	--
SAIA-SB/SG38	04/17/2014	N	25	21,500	<5.3	7.4	186	0.83	0.59	10,200	32.4	16	33	31,600	9	9,920	468	23	4,470	1.7 J	<0.88	1,180	<2.2	59.6	81.1	0.12	--	--	--	--
SAIA-SB/SG38	04/17/2014	N	35	6,870	<4.4	10	61.7	0.25 J	<0.36	6,190	10.4	5.6	7	16,000	2	4,240	231	6.3	2,060	0.96 J	<0.73	352 J	<1.8	29.7	41.9	0.015 J	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	0.5	9,880	5.3	9.5	106	0.48	1.9	14,600	26.5	9	55.8	34,000	205	5,170	540	20.8	2,650	1.3 J	<0.76	579	<1.9	37.3	369	0.11	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	2	8,490	<4.7	7.4	95.4	0.38 J	1.1	10,800	28.9	7.4	50.5	20,900	200	4,250	510	20.5	2,090	0.73 J	<0.78	396	<1.9	31.9	207	0.46	--	--	--	--
SAIA-SB/SG39	04/17/2014	FD	2	8,330	<4.5	7.1	94	0.37	1.6	12,500	25.2	7	47.4	22,200	213	4,190	467	17.6	2,090	0.83 J	0.07 J	441	<1.9	30.8	257	0.11	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	5	12,600	<4.6	4	117	0.44	0.4	8,870	19.4	10.2	15.2	23,100	10.4	6,980	429	13.4	4,190	0.75 J	<0.77	426	<1.9	42.6	60.7	0.045 J	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	15	18,800	<5.4	5.7	163	0.66	0.52	8,170	25.9	14.1	25.3	28,700	7.6	9,830	442	19.9	4,950	0.88 J	<0.89	607	<2.2	54.5	75.5	0.072 J	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	25	27,000	<5.8	9	244	1	0.78	11,300	50.3	24.3	61.4	38,900	17.6	14,100	693	40.8	4,070	0.98 J	<0.96	1,190	<2.4	71.4	93.7	0.07 J	--	--	--	--
SAIA-SB/SG39	04/17/2014	N	35	8,380	<4.4	11.4	73.7	0.32 J	<0.37	9,930	12.2	6.8	8.8	16,700	2.4	5,160	286	7.9	2,600	0.79 J	<0.73	391	<1.8	30.1	37.9	0.02 J	--	--	--	--
SAIA-SB/SG44	04/25/2017	N	0	10,100	1.4 J	4 J	88.8	<0.54	0.7	4,370	21.7	8.5	27.1	17,900	116	4,620	285	15.9	2,260	<3.8	<1.1	<537	<2.7	35.6	217	0.039 J	<39	<39	<39	<39
SAIA-SB/SG44	04/25/2017	N	1	15,400	1.3 J	2.6 J	116	<0.58	<0.58	11,100	21.5	11.5	20	22,500	23.6	7,460	376	15.7	3,870	0.73 J	<1.2	<577	<2.9	45.3	96.5	0.042 J	<37	<37	<37	4.5 J
SAIA-SB/SG44	04/25/2017	N	4	21,200	1.7 J	2.8 J	162	<0.62	<0.62	14,200	26.9	15.3	23.9	28,900	5.9	10,500	451	18	5,380	0.67 J	<1.2	638	<3.1	59.6	81	0.068 J	<42	<42	<42	<42
SAIA-SB/SG44	04/25/2017	N	14	17,400	1.4 J	2 J	123	<0.59	<0.59	12,800	21.5	13.1	18.9	24,600	4.1	8,990	392	13.8	4,190	0.41 J	<1.2	<588	<2.9	52.2	67.7	0.042 J	<39	<39	<39	<39
SAIA-SB/SG44	04/25/2017	N	24	29,700	1.7 J	3.8 J	194	0.82 J	<0.65	12,500	33.3	17.8	38.4	33,700	8.4 J	11,800	439	23.3	4,700	<4.5	<1.3	1,340	<3.2	68.5	93.5	0.097 J	<43	<43	<43	<43
SAIA-SB/SG44	04/25/2017	FD	24	23,800	1.8 J	3.8 J	167	0.64 J	<0.63	23,200	27.7	16.1	25.7	30,400	6.2	10,700	559	18.4	4,800	0.81 J	<1.3	1,100	<3.2	64.6	83.3	0.078 J	<39	<39	<39	<39
SAIA-SB/SG44	04/25/2017	N	34	29,000	1.9 J	4.3 J	195	0.77 J	<0.64	9,200	33.7	17.9	46.2	33,500	8.2 J	11,800	419	23.3	4,730	2.1 J	<1.3	1,230	<3.2	71.7	91.3	0.12 J	<43	<43	<43	<43
SAIA-SB/SG45	04/25/2017	N	0	14,100	2.3 J	3.9 J	127	<0.56	1.5	7,620	30.5	12	47.1	32,600	306	6,370	496	23.2	3,470	0.73 J	<1.1	<561	<2.8	44.5	308	0.14	<37	<37	<37	23 J
SAIA-SB/SG45	04/25/2017	N	1	19,000	1.3 J	2.4 J	138	<0.6	<0.6	9,570	23.8	13.8	21.2	26,400	6.3	8,370	392	15.3	4,400	<4.2	<1.2	<595	<3	55.4	72.8	0.063 J	<39	<39	<39	<39
SAIA-SB/SG45	04/25/2017	N	4	16,500	2.5 J	5.2 J	131	<0.58	0.68	9,230	28	13	45.7	29,100	122	7,570	412	19.7	3,840	<4.1	<1.2	<579	<2.9	52.4	212	0.13	<40	<40	<40	<40
SAIA-SB/SG45	04/25/2017	N	14	23,200	1.5 J	1.9 J	145	0.62 J	<0.61	11,600	26.8	14.8	26.7	28,300	6.4	9,760	466	17.3	4,540	<4.3	<1.2	716	<3.1	62.2	78	0.081 J	<44	<44	<44	<44
SAIA-SB/SG45	04/25/2017	N	24	36,900	2.1 J	4.2 J	223	0.94 J	<0.68	23,100	38.7	22	46.8	40,300	9.3 J	14,700	572	27.6	5,170	<4.7	<1.4	1,480	<3.4	88.8	108	0.12 J	<45	<45	<45	<45
SAIA-SB/SG45	04/25/2017	N	34	28,500	2.1 J	8 J	189	0.81 J	<0.65	17,200	37.3	19.8	42	35,200	10.1 J	12,600	615	27.4	4,410	0.85 J	<1.3	<654	<3.3	75.1	94.1	0.15	<44	<44	<44	<44
SAIA-SB/SG46	04/26/2017	N	0	11,200	1.7 J	4.1	117	<0.54	1.4	7,930	22.4	9.7	33.3 J	21,900	305	5,660	484	21.3	3,040	<3.8	<1.1	<539	<2.7	37.5	306	0.082 J	<35	<35	<35	8 J
SAIA-SB/SG46	04/26/2017	FD	0	10,400	1.6 J	3.7	103	<0.54	1.1	6,700	19.6	10.2	28.8 J	21,300	243	5,440	388	17.8	2,870	0.38 J	<1.1	<543	<2.7	35.2	245	0.087 J	<38	<38	<38	13 J
SAIA-SB/SG46	04/26/2017	N	1	15,000	0.55 J	1.3	127	<0.6	<0.6	9,840	18.7	12.1	16 J	23,100	8.3	7,730	381	12.9	4,510	<4.2	<1.2	<599	<3	44.9	68.9	0.053 J	<37	<37	<37	<37
SAIA-SB/SG46	04/26/2017	N	4	13,200	0.36 J	1.1	118	<0.57	<0.57	9,340	17.1	10.8	15 J	20,900	18.6	6,950	344	11.5	4,030	0.49 J	<1.1	<569	<2.8	40.6	72.3	0.046 J	<39	<39	<39	<39
SAIA-SB/SG46	04/26/2017	N	14	25,000	0.57 J	3.7	173	0.69	<0.64	15,000	28.7	16.1	30.7 J	30,300	6.7	11,100	522	20.9	5,280	0.71 J	<1.3	921	<3.2	62.9	93.7	0.064 J	<41	<41	<41	<41

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Semivolatiles (in ug/kg)																							
Location ID	**Sample Date**	**Sample Type**	**Sample Depth (feet bgs)**	**2-Methylnaphthalene**	**Acenaphthene**	**Anthracene**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(g,h,i)perylene**	**Benzo(k)fluoranthene**	**Biphenyl (Diphenyl)**	**bis(2-Ethylhexyl) Phthalate**	**Carbazole**	**Chrysene**	**Dibenz(a,h)anthracene**	**Dibenzofuran**	**Diethyl Phthalate**	**Dimethyl Phthalate**	**Di-n-Butyl Phthalate**	**Fluoranthene**	**Fluorene**	**Indeno(1,2,3-c,d)pyrene**	**Naphthalene**	**Phenanthrene**	**Phenol**	**Pyrene**
SAIA-SB/SG46	04/26/2017	N	24	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<430	<220	<220	<220	<220	**360**	<220	<430	<220	<220	<220	<220	**53 J**	<220
SAIA-SB/SG46	04/26/2017	N	34	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<420	<220	<220	<220	<220	**280**	<220	<420	<220	<220	<220	<220	**46 J**	<220
SAIA-SB/SG47	04/26/2017	N	0	<180	**42 J**	**78 J**	**370**	**360**	**390**	**110 J**	**270**	<180	<180	**83 J**	**510**	**43 J**	**69 J**	<180	**220**	<180	**1,000**	**94 J**	**130 J**	**66 J**	**1,000**	**43 J**	**860**
SAIA-SB/SG47	04/26/2017	N	1	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<360	<190	<190	<190	<190	**330**	<190	<360	<190	<190	<190	<190	**67 J**	<190
SAIA-SB/SG47	04/26/2017	FD	1	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<370	<190	<190	<190	<190	**300**	<190	<370	<190	<190	<190	<190	**65 J**	<190
SAIA-SB/SG47	04/26/2017	N	4	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<380	<190	<190	<190	<190	**340**	<190	<380	<190	<190	<190	<190	**78 J**	<190
SAIA-SB/SG47	04/26/2017	N	14	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<410	<210	<210	<210	<210	**360**	<210	<410	<210	<210	<210	<210	**97 J**	<210
SAIA-SB/SG47	04/26/2017	N	24	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<430	<220	<220	<220	<220	**500**	<220	<430	<220	<220	<220	<220	**100 J**	<220
SAIA-SB/SG47	04/26/2017	N	34	<220	<220	<220	<220	<220	<220	<220	<220	<220	<220	<430	<220	<220	<220	<220	**510**	<220	<430	<220	<220	<220	<220	**120 J**	<220
Screening Criteria																											
RSL for Soil -Residential [1]				240,000	3.6E+06	1.8E+07	1,100	110	1,100	NA	11,000	47,000	39,000	NA	110,000	110	73,000	5.1E+06	5.1E+06	6.3E+06	2.4E+06	2.4E+06	1,100	3,800	NA	1.9E+07	1.8E+06
RSL for Soil - Industrial [1]				3.0E+06	4.5E+07	2.3E+08	21,000	2,100	21,000	NA	210,000	200,000	160,000	NA	2.1E+06	2,100	1.0E+06	6.6E+07	6.6E+07	8.2E+07	3.0E+07	3.0E+07	21,000	17,000	NA	250000000	2.3E+07

Notes:

exceeds RSL for Soil - Residential

exceeds RSL for Soil - Industrial

[1] Based on USEPA Regional Screening Levels for Residential and Industrial Soils, Hazard Quotient = 1.0 (EPA RSLs, May 2018).

[2] Based on California-modified RSLs (DTSC, 2018 - Table 1 Screening Levels for Soil, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs] [June 2018 release date])

Detected results shown in bold

bgs = below ground surface

FD = Field duplicate sample results

J = Concentration is estimated

mg/kg = Milligrams per kilogram

N = Normal sample results

NA = Not available

R = Rejected results

RSL = Regional Screening Level

ug/kg = Micrograms per kilogram

-- = Not analyzed

Table 4-2
Summary of SVOC, Metals, and PCBs Detected in Soil
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

				Metals (in mg/kg)																							PCBs (in ug/kg)			
Location ID	**Sample Date**	**Sample Type**	**Sample Depth (feet bgs)**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Nickel**	**Potassium**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**	**Mercury**	**PCB-1016 (Arochlor 1016)**	**PCB-1248 (Arochlor 1248)**	**PCB-1254 (Arochlor 1254)**	**PCB-1260 (Arochlor 1260)**
SAIA-SB/SG46	04/26/2017	N	24	**32,600**	**0.5 J**	**9.5**	**218**	**0.89**	<0.65	**13,400**	**35.5**	**20.7**	**40.7 J**	**38,400**	**8.5**	**14,100**	**572**	**26.9**	**5,510**	<4.6	<1.3	**1,280**	<3.2	**76.5**	**112**	**0.048 J**	<43	<43	<43	<43
SAIA-SB/SG46	04/26/2017	N	34	**25,500**	**0.52 J**	**22.1**	**179**	**0.71**	<0.62	**21,400**	**28.7**	**16.7**	**29.9 J**	**32,700**	**7.1**	**11,700**	**578**	**21.4**	**4,800**	<4.4	<1.2	**678**	<3.1	**63.8**	**90.4**	**0.18**	<42	<42	<42	<42
SAIA-SB/SG47	04/26/2017	N	0	**12,500**	**1.4 J**	**2.6**	**116**	<0.55	**0.92**	**7,460**	**23.1**	**10.6**	**55.7 J**	**20,800**	**137**	**6,190**	**359**	**20.3**	**3,550**	**0.52 J**	<1.1	<546	<2.7	**39.5**	**176**	**0.064 J**	<36	<36	<36	**27 J**
SAIA-SB/SG47	04/26/2017	N	1	**13,300**	**0.51 J**	**0.93 J**	**115**	<0.56	<0.56	**7,420**	**17**	**11.1**	**13.9 J**	**21,200**	**8**	**6,950**	**346**	**11.2**	**4,240**	**0.45 J**	<1.1	<559	<2.8	**41.5**	**64.6**	**0.032 J**	<36	<36	<36	<36
SAIA-SB/SG47	04/26/2017	FD	1	**14,500**	**0.38 J**	**1.5**	**121**	<0.58	<0.58	**8,050**	**18.5**	**11.8**	**15.8 J**	**22,800**	**19.1**	**7,470**	**388**	**12.5**	**4,490**	<4.1	<1.2	<580	<2.9	**44.5**	**79.7**	**0.045 J**	<37	<37	<37	<37
SAIA-SB/SG47	04/26/2017	N	4	**14,500**	**0.35 J**	**1.3**	**120**	<0.56	<0.56	**7,950**	**18.2**	**11.8**	**16.4 J**	**22,300**	**8.8**	**7,400**	**357**	**12.6**	**4,280**	<3.9	<1.1	<560	<2.8	**43.6**	**69.4**	**0.04 J**	<38	<38	<38	<38
SAIA-SB/SG47	04/26/2017	N	14	**17,600**	**0.36 J**	**1.8**	**131**	<0.61	<0.61	**15,200**	**22.1**	**13.4**	**18.2 J**	**26,000**	**7.6**	**8,970**	**500**	**14.8**	**4,850**	**0.44 J**	<1.2	**767**	<3	**54.1**	**75.1**	**0.052 J**	<41	<41	<41	<41
SAIA-SB/SG47	04/26/2017	N	24	**33,100**	**0.53 J**	**2.6**	**235**	**0.94**	<0.67	**20,600**	**34.9**	**20.5**	**42.1 J**	**37,200**	**9.3**	**13,800**	**667**	**26.2**	**5,540**	**0.65 J**	<1.3	**941**	<3.3	**75.6**	**115**	**0.17**	<43	<43	<43	<43
SAIA-SB/SG47	04/26/2017	N	34	**26,000**	**0.37 J**	**13.6**	**211**	**0.68**	<0.66	**13,200**	**30**	**20**	**28.5 J**	**35,900**	**6**	**13,200**	**604**	**22.5**	**6,340**	**3 J**	<1.3	<661	<3.3	**71.2**	**104**	**0.082 J**	<43	<43	<43	<43
Screening Criteria																														
RSL for Soil -Residential [1]				77,000	31	0.11 [2]	15,000	160	71	NA	120,000	23	3,100	55,000	80 [2]	NA	1,800	1,500	NA	39	39	NA	0.78	390	23,000	11	4,100	230	120	240
RSL for Soil - Industrial [1]				1.1E+06	470	0.36 [2]	220,000	2,300	980	NA	1.8E+06	350	47,000	820,000	320 [2]	NA	26,000	22,000	NA	580	580	NA	12	5,800	350,000	46	27,000	950	970	990

Notes:

exceeds RSL for Soil - Residential

exceeds RSL for Soil - Industrial

[1] Based on USEPA Regional Screening Levels for Residential and Industrial Soils, Hazard Quotient = 1.0 (EPA RSLs, May 2018).

[2] Based on California-modified RSLs (DTSC, 2018 - Table 1 Screening Levels for Soil, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs] [June 2018 release date])

Detected results shown in bold

bgs = below ground surface

FD = Field duplicate sample results

J = Concentration is estimated

mg/kg = Milligrams per kilogram

N = Normal sample results

NA = Not available

R = Rejected results

RSL = Regional Screening Level

ug/kg = Micrograms per kilogram

-- = Not analyzed

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m3)																				
Location ID	Sample Depth (feet bgs)	Sample Date	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-Dichloroethene	1,1-Difluoroethane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane (p-Dioxane)	Benzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	Dichlorodifluoromethane	Ethylbenzene
SAIA-SB/SG01	5	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG01	15	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**44**	<25	<22
SAIA-SB/SG01	25	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**250**	<25	<22
SAIA-SB/SG01	35	04/12/2013	<280	<350	<390	<280	<410	<200	<270	<380	<250	<210	<250	<300	<360	<160	--	<270	<250	<210	**1,900**	<250	<220
SAIA-SB/SG02	5	04/11/2013	<69	<87	<96	<69	<100	<50	<68	<94	<62	<51	<62	<76	<91	<40	--	<67	<62	<52	**1,600**	<63	<55
SAIA-SB/SG02	5 Dup	04/11/2013	<69	<87	<96	<69	<100	<50	<68	<94	<62	<51	<62	<76	<91	<40	--	<67	<62	<52	**790**	<63	<55
SAIA-SB/SG02	15	04/11/2013	<28	<35	<39	<28	**110**	<20	<27	<38	**26**	<21	<25	<30	<36	**41**	--	<27	<25	<21	**2,700**	<25	<22
SAIA-SB/SG02	25	04/11/2013	<69	<87	<96	<69	**280**	**320**	<68	<94	<62	<51	<62	<76	<91	<40	--	<67	<62	<52	**6,700**	<63	<55
SAIA-SB/SG02	35	04/11/2013	<69	<87	<96	<69	**8,100**	**1,300**	<68	<94	<62	**75**	<62	<76	<91	**75**	--	<67	<62	<52	**360,000**	<63	<55
SAIA-SB/SG03	5	04/10/2013	<2800	<3500	<3900	<2800	**17,000**	<2000	<2700	<3800	**14,000**	<2100	**4,300**	<3000	<3600	<1600	--	<2700	<2500	<2100	**210,000**	<2500	<2200
SAIA-SB/SG03	5 Dup	04/10/2013	<2800	<3500	<3900	<2800	**21,000**	<2000	<2700	<3800	**23,000**	<2100	**6,100**	<3000	<3600	<1600	--	<2700	<2500	<2100	**330,000**	<2500	<2200
SAIA-SB/SG03	15	04/11/2013	<690	<870	<960	<690	<1000	<500	<680	<940	<620	<510	<620	<760	<910	<400	--	<670	<620	<520	**8,400**	<630	<550
SAIA-SB/SG03	25	04/10/2013	<2800	<3500	<3900	<2800	**16,000**	**3,400**	<2700	<3800	**5,800**	<2100	<2500	<3000	<3600	<1600	--	<2700	<2500	<2100	**130,000**	<2500	<2200
SAIA-SB/SG03	35	04/11/2013	<34000	<44000	<48000	<34000	**190,000**	<25000	<34000	<47000	<31000	<26000	<31000	<38000	<46000	<20000	--	<33000	<31000	<26000	**4,900,000**	<31000	<27000
SAIA-SB/SG04	5	04/11/2013	**160**	<35	<39	<28	**1,900**	**120**	<27	<38	**320**	<21	**79**	<30	<36	**70**	--	<27	**120**	<21	**40,000**	<25	**26**
SAIA-SB/SG04	15	04/11/2013	<1400	<1700	<1900	<1400	**2,800**	<1000	<1400	<1900	<1200	<1000	<1200	<1500	<1800	<810	--	<1300	<1200	<1000	**13,000**	<1300	<1100
SAIA-SB/SG04	25	04/11/2013	<1400	<1700	<1900	<1400	**11,000**	<1000	<1400	<1900	<1200	<1000	<1200	<1500	<1800	<810	--	<1300	<1200	<1000	**77,000**	<1300	<1100
SAIA-SB/SG04	35	04/11/2013	<3400	<4400	<4800	<3400	**23,000**	<2500	<3400	<4700	<3100	<2600	<3100	<3800	<4600	<2000	--	<3300	<3100	<2600	**650,000**	<3100	<2700
SAIA-SB/SG05	5	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**210**	<25	<22
SAIA-SB/SG05	5 Dup	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**240**	<25	<22
SAIA-SB/SG05	15	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**70**	--	<27	<25	<21	**80**	<25	<22
SAIA-SB/SG05	25	04/16/2013	<28	<35	<39	<28	<41	**30**	<27	<38	<25	<21	<25	<30	<36	**170**	--	<27	<25	<21	**200**	<25	<22
SAIA-SB/SG05	35	04/16/2013	<280	<350	<390	<280	<410	<200	<270	<380	<250	<210	<250	<300	<360	<160	--	<270	<250	<210	**810**	<250	<220
SAIA-SB/SG06	5	04/08/2013	<28	<35	<39	<28	**220**	**44**	<27	<38	**1,600**	<21	**540**	<30	<36	**43**	--	<27	<25	<21	**1,500**	**33**	**160**
SAIA-SB/SG06	15	04/08/2013	<28	<35	<39	<28	<41	**39**	<27	<38	**120**	<21	**34**	<30	<36	<16	--	<27	<25	<21	**3,800**	<25	<22
SAIA-SB/SG06	25	04/08/2013	<28	<35	<39	<28	**890**	**2,900**	<27	<38	**480**	<21	**160**	<30	<36	**170**	--	<27	<25	<21	**430,000**	**85**	**50**
SAIA-SB/SG06	35	04/09/2013	<28	<35	<39	<28	**530**	**2,700**	<27	<38	**200**	<21	**58**	<30	**100**	**81**	--	<27	<25	<21	**41,000**	**230**	<22
SAIA-SB/SG07	5	04/15/2013	<1400	<1700	<1900	<1400	<2100	<1000	<1400	<1900	<1200	<1000	<1200	<1500	<1800	<810	--	<1300	<1200	<1000	**6,300**	<1300	<1100
SAIA-SB/SG07	5 Dup	04/15/2013	<1400	<1700	<1900	<1400	<2100	<1000	<1400	<1900	<1200	<1000	<1200	<1500	<1800	<810	--	<1300	<1200	<1000	**2,200**	<1300	<1100
SAIA-SB/SG07	15	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**89**	--	<27	<25	<21	**600**	<25	<22
SAIA-SB/SG07	25	04/16/2013	<28	<35	<39	<28	**1,300**	**280**	<27	<38	<25	<21	<25	<30	<36	**120**	--	<27	<25	<21	**24,000**	**34**	<22
SAIA-SB/SG07	35	04/16/2013	<690	<870	<960	<690	**5,400**	**4,100**	<680	<940	<620	<510	<620	<760	<910	<400	--	<670	<620	<520	**200,000**	<630	<550
SAIA-SB/SG08	5	04/15/2013	<14000	<17000	<19000	<14000	**83,000**	<10000	<14000	<19000	<12000	<10000	<12000	<15000	<18000	<8100	--	<13000	<12000	<10000	**230,000**	<13000	<11000
SAIA-SB/SG08	15	04/15/2013	<14000	<17000	<19000	<14000	**180,000**	**14,000**	<14000	<19000	<12000	<10000	<12000	<15000	<18000	<8100	--	<13000	<12000	<10000	**2,400,000**	<13000	<11000
SAIA-SB/SG08	25	04/15/2013	<17000	<22000	<24000	<17000	**130,000**	**23,000**	<17000	<23000	<16000	<13000	<16000	<19000	<23000	<10000	--	<17000	<15000	<13000	**4,000,000**	<16000	<14000
SAIA-SB/SG08	35	04/15/2013	<28000	<35000	<39000	<28000	**110,000**	<20000	<27000	<38000	<25000	<21000	<25000	<30000	<36000	<16000	--	<27000	<25000	<21000	**3,100,000**	<25000	<22000
SAIA-SB/SG09	5	04/10/2013	**100,000**	<44000	<48000	<34000	**430,000**	<25000	<34000	<47000	<31000	<26000	<31000	<38000	<46000	<20000	--	<33000	<31000	<26000	**3,700,000**	<31000	<27000
SAIA-SB/SG09	15	04/10/2013	<34000	<44000	<48000	<34000	**240,000**	<25000	<34000	<47000	<31000	<26000	<31000	<38000	<46000	<20000	--	<33000	<31000	<26000	**1,800,000**	<31000	<27000
SAIA-SB/SG09	25	04/10/2013	<34000	<44000	<48000	<34000	**420,000**	**140,000**	<34000	<47000	**46,000**	<26000	<31000	<38000	<46000	<20000	--	<33000	<31000	<26000	**9,100,000**	<31000	<27000
SAIA-SB/SG09	35	04/10/2013	<690	<870	<960	**1,700**	**170,000**	**30,000**	<680	<940	**2,400**	**900**	<620	<760	<910	**850**	--	<670	<620	<520	**8,400,000**	<630	**580**
SAIA-SB/SG10	5	04/10/2013	**190,000**	<870	<960	<690	**250,000**	**16,000**	<680	<940	**1,100**	<510	<620	<760	<910	<400	--	**1,800**	<620	<520	**4,400,000**	<630	<550
SAIA-SB/SG10	15	04/10/2013	**70,000**	<44000	<48000	<34000	**380,000**	**40,000**	<34000	<47000	<31000	<26000	<31000	<38000	<46000	<20000	--	<33000	<31000	<26000	**4,000,000**	<31000	<27000
SAIA-SB/SG10	25	04/10/2013	<34000	<44000	<48000	<34000	**650,000**	**86,000**	<34000	<47000	<31000	<26000	<31000	<38000	<46000	<20000	--	<33000	<31000	<26000	**2,600,000**	<31000	<27000
SAIA-SB/SG10	35	04/10/2013	<2800	<3500	<3900	<2800	<4100	<2000	<2700	<3800	<2500	<2100	<2500	<3000	<3600	<1600	--	<2700	<2500	<2100	**42,000**	<2500	<2200

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m^3)																
Location ID	Sample Depth (feet bgs)	Sample Date	Isopropanol	Isopropylbenzene (Cumene)	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride
SAIA-SB/SG01	5	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	13,000	<19	<40	130	<13
SAIA-SB/SG01	15	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	720	<19	<40	100	<13
SAIA-SB/SG01	25	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	42,000	<19	<40	18,000	<13
SAIA-SB/SG01	35	04/12/2013	--	<250	<440	<180	<270	<280	<250	<220	<280	<280	--	<280	6,100	<190	<400	8,100	<130
SAIA-SB/SG02	5	04/11/2013	--	<62	<110	<44	<66	<70	<62	<55	<70	<70	--	<70	3,400	<48	<100	1,700	<32
SAIA-SB/SG02	5 Dup	04/11/2013	--	<62	<110	<44	<66	<70	<62	<55	<70	<70	--	<70	3,200	<48	<100	2,400	<32
SAIA-SB/SG02	15	04/11/2013	--	<25	<44	<18	<27	<28	<25	<22	47	<28	--	<28	4,400	<19	41	8,400	<13
SAIA-SB/SG02	25	04/11/2013	--	<62	<110	<44	<66	<70	<62	<55	<70	<70	--	<70	220	<48	610	18,000	73
SAIA-SB/SG02	35	04/11/2013	--	<62	<110	<44	<66	<70	<62	<55	<70	<70	--	<70	610	<48	7,700	280,000	2,500
SAIA-SB/SG03	5	04/10/2013	--	<2500	<4400	<1800	<2700	<2800	<2500	3,200	4,400	<2800	--	<2800	<3400	2,500	<4000	140,000	88,000
SAIA-SB/SG03	5 Dup	04/10/2013	--	<2500	4,800	<1800	<2700	<2800	<2500	3,400	7,800	<2800	--	<2800	<3400	2,900	<4000	270,000	91,000
SAIA-SB/SG03	15	04/11/2013	--	<620	<1100	<440	<660	<700	<620	<550	<700	<700	--	<700	<860	<480	<1000	3,900	610
SAIA-SB/SG03	25	04/10/2013	--	<2500	<4400	<1800	<2700	<2800	<2500	<2200	<2800	<2800	--	<2800	<3400	3,200	<4000	89,000	75,000
SAIA-SB/SG03	35	04/11/2013	--	<31000	<55000	<22000	<33000	<35000	<31000	<27000	<35000	<35000	--	<35000	<43000	<24000	<50000	7,800,000	130,000
SAIA-SB/SG04	5	04/11/2013	--	54	53	<18	<27	<28	<25	32	100	96	--	<28	6,700	44	260	130,000	390
SAIA-SB/SG04	15	04/11/2013	--	<1200	<2200	<880	<1300	<1400	<1200	<1100	<1400	<1400	--	<1400	8,200	<950	<2000	130,000	<650
SAIA-SB/SG04	25	04/11/2013	--	<1200	<2200	<880	<1300	<1400	<1200	<1100	<1400	<1400	--	<1400	5,300	<950	2,100	310,000	<650
SAIA-SB/SG04	35	04/11/2013	--	<3100	<5500	<2200	<3300	<3500	<3100	<2700	<3500	<3500	--	<3500	<4300	<2400	11,000	650,000	6,300
SAIA-SB/SG05	5	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	990	<19	<40	1,200	<13
SAIA-SB/SG05	5 Dup	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	970	<19	<40	1,200	<13
SAIA-SB/SG05	15	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	770	<19	<40	2,500	<13
SAIA-SB/SG05	25	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	130	<19	83	11,000	<13
SAIA-SB/SG05	35	04/16/2013	--	<250	<440	<180	<270	<280	<250	<220	<280	<280	--	<280	<340	<190	<400	20,000	<130
SAIA-SB/SG06	5	04/08/2013	--	130	570	<18	<27	350	150	300	280 J	220	--	210	190	110	62	440	5,000
SAIA-SB/SG06	15	04/08/2013	--	<25	<44	<18	<27	44	<25	<22	29 J	<28	--	<28	<34	<19	<40	43	500
SAIA-SB/SG06	25	04/08/2013	--	<25	160	<18	<27	<28	53	71	120 J	83	--	64	78	110	1,900	3,200	120,000
SAIA-SB/SG06	35	04/09/2013	--	<25	<44	<18	46	<28	<25	<22	51	74	--	<28	<34	24	2,000	21,000	4,900
SAIA-SB/SG07	5	04/15/2013	--	<1200	<2200	<880	<1300	<1400	<1200	<1100	<1400	<1400	--	<1400	<1700	<950	<2000	12,000	<650
SAIA-SB/SG07	5 Dup	04/15/2013	--	<1200	<2200	<880	<1300	<1400	<1200	<1100	<1400	<1400	--	<1400	<1700	<950	<2000	18,000	<650
SAIA-SB/SG07	15	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	23	<40	6,100	<13
SAIA-SB/SG07	25	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	90	27	630	120,000	130
SAIA-SB/SG07	35	04/16/2013	--	<620	<1100	<440	<660	<700	<620	<550	<700	<700	--	<700	<860	<480	7,300	340,000	6,800
SAIA-SB/SG08	5	04/15/2013	--	<12000	<22000	<8800	<13000	<14000	<12000	<11000	<14000	<14000	--	<14000	<17000	<9500	<20000	<14000	450,000
SAIA-SB/SG08	15	04/15/2013	--	<12000	<22000	<8800	<13000	<14000	<12000	<11000	<14000	<14000	--	<14000	<17000	<9500	<20000	880,000	480,000
SAIA-SB/SG08	25	04/15/2013	--	<16000	<27000	<11000	<17000	<17000	<16000	<14000	<17000	<17000	--	<17000	<22000	<12000	<25000	85,000	400,000
SAIA-SB/SG08	35	04/15/2013	--	<25000	<44000	<18000	<27000	<28000	<25000	<22000	<28000	<28000	--	<28000	<34000	<19000	65,000	770,000	200,000
SAIA-SB/SG09	5	04/10/2013	--	<31000	<55000	<22000	<33000	<35000	<31000	<27000	<35000	<35000	--	<35000	<43000	<24000	<50000	5,800,000	93,000
SAIA-SB/SG09	15	04/10/2013	--	<31000	<55000	<22000	<33000	<35000	<31000	<27000	<35000	<35000	--	<35000	<43000	<24000	<50000	3,200,000	51,000
SAIA-SB/SG09	25	04/10/2013	--	<31000	<55000	<22000	<33000	45,000	<31000	<27000	<35000	<35000	--	<35000	<43000	<24000	63,000	3,000,000	200,000
SAIA-SB/SG09	35	04/10/2013	--	890	<1100	<440	<660	1,900	650	<550	780	1,000	--	<700	5,200	990	29,000	6,600,000	300,000
SAIA-SB/SG10	5	04/10/2013	--	<620	<1100	<440	<660	<700	<620	640	<700	<700	--	<700	1,100	1,500	52,000	63,000	520,000
SAIA-SB/SG10	15	04/10/2013	--	<31000	<55000	<22000	<33000	<35000	<31000	<27000	<35000	<35000	--	<35000	<43000	<24000	<50000	<34000	1,900,000
SAIA-SB/SG10	25	04/10/2013	--	<31000	<55000	<22000	<33000	<35000	<31000	<27000	<35000	<35000	--	<35000	<43000	<24000	<50000	<34000	6,100,000
SAIA-SB/SG10	35	04/10/2013	--	<2500	<4400	<1800	<2700	<2800	<2500	<2200	<2800	<2800	--	<2800	<3400	<1900	<4000	16,000	9,100

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m3)																				
Location ID	Sample Depth (feet bgs)	Sample Date	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-Dichloroethene	1,1-Difluoroethane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane (p-Dioxane)	Benzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	Dichlorodifluoromethane	Ethylbenzene
SAIA-SB/SG11	5	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	200	<25	<22
SAIA-SB/SG11	15	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	21	--	<27	<25	<21	74	<25	<22
SAIA-SB/SG11	25	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	43	<21	<25	<30	<36	<16	--	<27	<25	<21	590	<25	<22
SAIA-SB/SG11	35	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG12	5	04/11/2013	<3400	<4400	<4800	<3400	<5100	<2500	<3400	<4700	<3100	<2600	<3100	<3800	<4600	<2000	--	<3300	<3100	<2600	15,000	<3100	<2700
SAIA-SB/SG12	15	04/12/2013	<28	<35	<39	<28	130	<20	<27	<38	80	<21	32	<30	<36	57	--	<27	<25	<21	5,200	<25	<22
SAIA-SB/SG12	25	04/12/2013	<28	<35	<39	<28	160	190	<27	<38	110	<21	29	<30	<36	96	--	<27	<25	<21	6,600	<25	<22
SAIA-SB/SG12	35	04/12/2013	<28	<35	<39	<28	110	<20	<27	<38	110	<21	31	<30	<36	46	--	<27	<25	<21	5,200	<25	<22
SAIA-SB/SG13	5	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	180	<25	<22
SAIA-SB/SG13	15	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	44	--	<27	<25	<21	160	<25	<22
SAIA-SB/SG13	25	04/09/2013	<28	<35	<39	<28	<41	<20	190	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG13	35	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	72	<25	<22
SAIA-SB/SG14	5	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	30	<22
SAIA-SB/SG14	15	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG14	15 Dup	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG14	25	04/09/2013	<28	<35	<39	<28	<41	<20	<27	<38	54	<21	25	<30	<36	31	--	<27	<25	<21	230	200	24
SAIA-SB/SG14	35	04/09/2013	<28	<35	<39	<28	<41	44	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	150	150	<22
SAIA-SB/SG15	5	04/15/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG15	15	04/15/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	110	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG15	25	04/15/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	23	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG15	35	04/15/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG16	5	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	120	<25	<22
SAIA-SB/SG16	5 Dup	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	66	<25	<22
SAIA-SB/SG16	15	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	29	--	<27	<25	<21	55	<25	<22
SAIA-SB/SG16	25	04/15/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	72	--	<27	<25	<21	870	<25	<22
SAIA-SB/SG16	35	04/15/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG17	5	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG17	15	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	38	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG17	25	04/12/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	100	--	<27	<25	<21	270	<25	<22
SAIA-SB/SG17	35	04/12/2013	<28	<35	<39	<28	130	<20	<27	<38	<25	<21	<25	<30	<36	36	--	<27	<25	<21	3,000	<25	<22
SAIA-SB/SG18	5	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG18	15	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	82	<25	<22
SAIA-SB/SG18	25	04/16/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG18	35	04/17/2013	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG19	5	04/29/2014	2,400	<35	<39	<28	2,000	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	85	<21	17,000	<25	<22
SAIA-SB/SG19	15	04/29/2014	64	<35	<39	<28	1,700	85	<27	<38	<25	<21	43	<30	<36	350	--	<27	<25	<21	5,300	<25	100
SAIA-SB/SG19	25	04/29/2014	150	<35	<39	<28	18,000	660	<27	<38	91	110	200	<30	<36	600	--	440	<25	<21	22,000	<25	270
SAIA-SB/SG19	35	04/29/2014	38	<35	<39	<28	820	700	<27	<38	<25	<21	<25	<30	<36	98	--	<27	<25	<21	6,800	<25	70
SAIA-SB/SG20	5	04/30/2014	76	<35	<39	<28	22,000	710	<27	<38	260	72	39	<30	<36	340	--	650	<25	<21	610,000 J	<25	150
SAIA-SB/SG20	15	04/30/2014	<28	<35	<39	<28	20,000	9,400	<27	<38	180	440	32	<30	<36	910	--	8,800	<25	<21	3,000,000 J	<25	<22
SAIA-SB/SG20	25	04/30/2014	<28	<35	<39	<28	5,900	55,000	<27	<38	280	<21	35	<30	<36	430	--	19,000	<25	<21	23,000,000 J	<25	94
SAIA-SB/SG20	35	05/01/2014	<28	<35	<39	<28	62,000	20,000	<27	<38	38	230	91	<30	<36	310	--	730	<25	<21	5,200,000	<25	110
SAIA-SB/SG21	5	04/30/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m^3)																
Location ID	Sample Depth (feet bgs)	Sample Date	Isopropanol	Isopropylbenzene (Cumene)	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride
SAIA-SB/SG11	5	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	170	<13
SAIA-SB/SG11	15	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	53	<13
SAIA-SB/SG11	25	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	70	<28	--	<28	130	26	<40	830	21
SAIA-SB/SG11	35	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG12	5	04/11/2013	--	<3100	<5500	<2200	<3300	<3500	<3100	<2700	<3500	<3500	--	<3500	<4300	<2400	<5000	22,000	<1600
SAIA-SB/SG12	15	04/12/2013	--	<25	<44	<18	<27	32	<25	<22	36	<28	--	<28	81	<19	46	8,900	<13
SAIA-SB/SG12	25	04/12/2013	--	<25	45	<18	<27	<28	<25	32	<28	<28	--	<28	120	34	91	15,000	66
SAIA-SB/SG12	35	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	44	<28	--	<28	80	23	<40	9,900	<13
SAIA-SB/SG13	5	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	2,900	<19	<40	61	53
SAIA-SB/SG13	15	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	170	<28	--	<28	3,600	94	<40	110	35
SAIA-SB/SG13	25	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	61	<19	<40	43	<13
SAIA-SB/SG13	35	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	65	<28	--	<28	550	<19	<40	290	<13
SAIA-SB/SG14	5	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	46	<19	<40	110	<13
SAIA-SB/SG14	15	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG14	15 Dup	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	30	<28	--	<28	<34	34	<40	35	<13
SAIA-SB/SG14	25	04/09/2013	--	<25	54	<18	<27	<28	<25	23	70	<28	--	<28	140	91	<40	480	18
SAIA-SB/SG14	35	04/09/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	570	<13
SAIA-SB/SG15	5	04/15/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	750	<19	<40	<27	<13
SAIA-SB/SG15	15	04/15/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	810	40	<40	32	<13
SAIA-SB/SG15	25	04/15/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	1,600	<19	<40	460	<13
SAIA-SB/SG15	35	04/15/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	1,200	<19	<40	580	<13
SAIA-SB/SG16	5	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	280	<19	<40	110	<13
SAIA-SB/SG16	5 Dup	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	390	<19	<40	49	<13
SAIA-SB/SG16	15	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	38	<28	--	<28	820	35	<40	72	<13
SAIA-SB/SG16	25	04/15/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	1,100	<19	<40	880	<13
SAIA-SB/SG16	35	04/15/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	610	<19	<40	170	<13
SAIA-SB/SG17	5	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	190	27	<40	82	<13
SAIA-SB/SG17	15	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	35	<28	--	<28	210	44	<40	39	<13
SAIA-SB/SG17	25	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	1,400	53	<40	1,700	<13
SAIA-SB/SG17	35	04/12/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	480	19	69	6,800	27
SAIA-SB/SG18	5	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	65	<13
SAIA-SB/SG18	15	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	200	<13
SAIA-SB/SG18	25	04/16/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	280	<13
SAIA-SB/SG18	35	04/17/2013	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	25	<40	<27	<13
SAIA-SB/SG19	5	04/29/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	1,100	<19	370	30,000	<13
SAIA-SB/SG19	15	04/29/2014	--	43	<44	<18	<27	34	34	150	43	56	--	<28	1,200	210	500	35,000	13,000
SAIA-SB/SG19	25	04/29/2014	--	200	290	<18	<27	270	170	490	180	290	--	<28	410	1,900	6,400	230,000	810,000
SAIA-SB/SG19	35	04/29/2014	--	<25	63	<18	<27	<28	<25	38	<28	<28	--	<28	2,200	87	460	21,000	38,000
SAIA-SB/SG20	5	04/30/2014	--	39	390	<18	<27	41	45	<22	69	34	--	41	290	460	1,700	17,000	170,000
SAIA-SB/SG20	15	04/30/2014	--	32	240	<18	<27	37	36	<22	58	31	--	<28	440	740	19,000	7,700	85,000
SAIA-SB/SG20	25	04/30/2014	--	35	290	<18	<27	52	41	140	74	44	--	38	140	240	90,000	270,000	98,000
SAIA-SB/SG20	35	05/01/2014	--	90	91	<18	<27	99	74	110	<28	120	--	<28	2,000	360	93,000	4,100,000	80,000
SAIA-SB/SG21	5	04/30/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	93	<19	<40	160	<13

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m3)																				
Location ID	Sample Depth (feet bgs)	Sample Date	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-Dichloroethene	1,1-Difluoroethane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane (p-Dioxane)	Benzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	Dichlorodifluoromethane	Ethylbenzene
SAIA-SB/SG21	15	04/30/2014	<28	<35	<39	<28	510	<20	<27	<38	<25	<21	<25	<30	<36	40	--	<27	<25	<21	32,000 J	<25	<22
SAIA-SB/SG21	25	04/30/2014	<28	<35	<39	<28	2,200	1,100	<27	<38	<25	<21	<25	<30	<36	120	--	<27	<25	<21	50,000 J	<25	<22
SAIA-SB/SG21	35	04/30/2014	<28	<35	<39	<28	930	1,700	<27	<38	<25	<21	<25	<30	<36	59	--	<27	<25	<21	52,000 J	<25	<22
SAIA-SB/SG22	5	04/29/2014	<28	<35	<39	<28	<41	<20	<27	<38	69	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG22	5 Dup	04/29/2014	<28	<35	<39	<28	<41	<20	<27	<38	43	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG22	15	04/29/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	25	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG22	25	04/29/2014	<28	<35	<39	<28	<41	<20	<27	<38	78	<21	<25	<30	<36	120	--	<27	<25	<21	120	<25	<22
SAIA-SB/SG22	35	04/30/2014	<28	<35	<39	<28	<41	26	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	190 J	47	<22
SAIA-SB/SG22	35 Dup	04/30/2014	<28	<35	<39	<28	<41	40	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	210 J	51	<22
SAIA-SB/SG23	5	04/21/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG23	15	04/21/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG23	25	04/21/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	43	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG23	35	04/21/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	55	<25	<22
SAIA-SB/SG24	5	04/23/2014	50	<35	<39	<28	180	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	170	<25	<22
SAIA-SB/SG24	15	04/23/2014	56	<35	<39	<28	360	81	<27	<38	<25	<21	<25	<30	<36	19	--	<27	<25	<21	3,900	<25	<22
SAIA-SB/SG24	25	04/23/2014	<28	<35	43	<28	<41	110	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	1,200	<25	40
SAIA-SB/SG24	35	04/23/2014	610	<35	<39	<28	53,000 J	35,000 J	<27	<38	<25	<21	<25	<30	<36	840	--	<27	120	<21	420,000	<25	93
SAIA-SB/SG25	5	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG25	15	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	20	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG25	15 Dup	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	26	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG25	25	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	28	--	<27	<25	58	81 J	<25	<22
SAIA-SB/SG25	35	04/28/2014	<28	<35	<39	<28	<41	100	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	6,700 J	<25	<22
SAIA-SB/SG26	5	04/23/2014	<28	<35	<39	<28	<41	<20	<27	65 J	<25	<21	<25	770	<36	41	--	<27	<25	<21	290	<25	<22
SAIA-SB/SG26	5 Dup	04/23/2014	<28	<35	<39	<28	<41	<20	<27	72 J	<25	<21	<25	770	<36	46	--	<27	<25	<21	240	<25	<22
SAIA-SB/SG26	15	04/23/2014	<28	<35	<39	<28	900	110	<27	<38	<25	<21	<25	<30	<36	42	--	<27	<25	<21	17,000	<25	<22
SAIA-SB/SG26	25	04/24/2014	30	<35	<39	<28	4,400	1,100	<27	<38	<25	<21	<25	<30	<36	71	--	<27	<25	<21	98,000	<25	<22
SAIA-SB/SG27	5	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	29	--	<27	<25	<21	57 J	<25	<22
SAIA-SB/SG27	15	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	25	--	<27	<25	<21	340 J	<25	<22
SAIA-SB/SG27	25	04/28/2014	<28	<35	<39	<28	220	<20	<27	<38	<25	<21	<25	<30	<36	49	--	<27	<25	<21	4,000 J	<25	<22
SAIA-SB/SG27	35	04/29/2014	<28	<35	<39	<28	58	99	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	14,000	<25	<22
SAIA-SB/SG28	5	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG28	15	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG28	15 Dup	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG28	35	04/24/2014	<28	<35	<39	50	220	130	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	24,000	<25	<22
SAIA-SB/SG29	5	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	1,200	<25	<22
SAIA-SB/SG29	15	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG29	25	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	170	--	<27	<25	<21	83	<25	<22
SAIA-SB/SG29	35	04/24/2014	<28	<35	<39	<28	120	74	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	7,600	<25	<22
SAIA-SB/SG30	5	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG30	15	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG30	25	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	28	--	<27	<25	<21	240	<25	<22
SAIA-SB/SG30	35	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	290	<25	<22
SAIA-SB/SG31	5	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG31	15	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m^3)																
Location ID	Sample Depth (feet bgs)	Sample Date	Isopropanol	Isopropylbenzene (Cumene)	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride
SAIA-SB/SG21	15	04/30/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	570	67	150	8,500	<13
SAIA-SB/SG21	25	04/30/2014	--	<25	96	<18	<27	<28	<25	<22	<28	<28	--	<28	360	90	5,400	7,000	1,600
SAIA-SB/SG21	35	04/30/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	38	<19	4,700	21,000	4,300
SAIA-SB/SG22	5	04/29/2014	--	<25	<44	<18	<27	76	<25	<22	61	44	--	<28	35	<19	<40	86	64
SAIA-SB/SG22	5 Dup	04/29/2014	--	<25	<44	<18	<27	59	<25	<22	46	<28	--	<28	<34	<19	<40	100	32
SAIA-SB/SG22	15	04/29/2014	--	<25	<44	<18	<27	45	<25	<22	40	<28	--	<28	39	<19	<40	180	<13
SAIA-SB/SG22	25	04/29/2014	--	<25	<44	<18	<27	110	<25	<22	97	43	--	<28	43	50	<40	310	<13
SAIA-SB/SG22	35	04/30/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	23	<40	120	90
SAIA-SB/SG22	35 Dup	04/30/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	20	<40	110	73
SAIA-SB/SG23	5	04/21/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	63	<19	<40	260	<13
SAIA-SB/SG23	15	04/21/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	91	<19	<40	440	<13
SAIA-SB/SG23	25	04/21/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	89	55	<40	320	<13
SAIA-SB/SG23	35	04/21/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	82	<19	<40	1,500	<13
SAIA-SB/SG24	5	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	93	<19	<40	920	<13
SAIA-SB/SG24	15	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	93	<19	120	19,000	<13
SAIA-SB/SG24	25	04/23/2014	--	<25	51	<18	<27	<28	<25	<22	<28	<28	--	<28	760	44	45	5,500	<13
SAIA-SB/SG24	35	04/23/2014	--	<25	<44	<18	<27	<28	<25	24	50	<28	--	<28	950	63	72,000 J	980,000	17,000 J
SAIA-SB/SG25	5	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	3,000 J	<19	<40	<27	<13
SAIA-SB/SG25	15	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	4,100 J	<19	<40	<27	<13
SAIA-SB/SG25	15 Dup	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	3,400 J	<19	<40	<27	<13
SAIA-SB/SG25	25	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	580 J	29 J	<40	620	<13
SAIA-SB/SG25	35	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	6,400 J	<19	690	25,000	26
SAIA-SB/SG26	5	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	65	<19	<40	950	<13
SAIA-SB/SG26	5 Dup	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	36	<19	<40	740	<13
SAIA-SB/SG26	15	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	37	<19	240	33,000	230
SAIA-SB/SG26	25	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	75	30	1,200	150,000	6,500
SAIA-SB/SG27	5	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	53,000 J	20 J	<40	970	<13
SAIA-SB/SG27	15	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	30,000 J	<19	100	5,300	<13
SAIA-SB/SG27	25	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	15,000 J	<19	460	23,000	<13
SAIA-SB/SG27	35	04/29/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	210	<19	1,200	10,000	<13
SAIA-SB/SG28	5	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	590	<19	<40	<27	<13
SAIA-SB/SG28	15	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	690	<19	<40	<27	<13
SAIA-SB/SG28	15 Dup	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	540	<19	<40	<27	<13
SAIA-SB/SG28	35	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	310	<19	1,600	11,000	64
SAIA-SB/SG29	5	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	5,700	<13
SAIA-SB/SG29	15	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	61	<19	<40	<27	<13
SAIA-SB/SG29	25	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	35	<40	320	13
SAIA-SB/SG29	35	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	680	<19	530	9,500	<13
SAIA-SB/SG30	5	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	400	<19	<40	<27	<13
SAIA-SB/SG30	15	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	590	<19	<40	<27	<13
SAIA-SB/SG30	25	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	740	<19	<40	1,300	<13
SAIA-SB/SG30	35	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	490	<19	59	250	<13
SAIA-SB/SG31	5	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	490	<19	<40	<27	<13
SAIA-SB/SG31	15	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	34	<28	--	<28	750	<19	<40	57	<13

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m3)																				
Location ID	Sample Depth (feet bgs)	Sample Date	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-Dichloroethene	1,1-Difluoroethane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane (p-Dioxane)	Benzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	Dichlorodifluoromethane	Ethylbenzene
SAIA-SB/SG31	25	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**24**	--	<27	<25	<21	**170**	<25	<22
SAIA-SB/SG31	35	04/24/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**1,600**	<25	<22
SAIA-SB/SG32	5	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG32	15	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**21**	--	<27	<25	<21	**150**	<25	<22
SAIA-SB/SG32	25	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG32	35	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**47**	<25	<22
SAIA-SB/SG33	5	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG33	5 Dup	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG33	15	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	**2,700**	<21	**420**	<30	<36	<16	--	<27	<25	<21	<40	<25	**270**
SAIA-SB/SG33	25	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	**600**	<21	**230**	<30	<36	**35**	--	<27	<25	<21	<40	<25	**170**
SAIA-SB/SG33	35	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**29**	--	<27	<25	<21	**630**	<25	<22
SAIA-SB/SG34	5	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG34	15	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG34	25	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG34	35	04/25/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG35	5	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG35	15	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG35	25	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**79**	--	<27	<25	<21	**51 J**	<25	<22
SAIA-SB/SG35	35	04/28/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG36	5	04/23/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG36	15	04/23/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**21**	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG36	25	04/23/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG36	35	04/23/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG37	5	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**380**	<25	<22
SAIA-SB/SG37	15	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**58**	--	<27	<25	<21	**83**	<25	<22
SAIA-SB/SG38	5	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG38	15	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**52**	--	<27	<25	<21	**350**	<25	<22
SAIA-SB/SG38	15 Dup	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**49**	--	<27	<25	<21	**330**	<25	<22
SAIA-SB/SG38	25	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**55**	--	<27	<25	<21	**510**	<25	<22
SAIA-SB/SG38	35	04/22/2014	**120**	<35	<39	<28	**45,000**	**4,400**	<27	<38	<25	**65**	**190**	<30	<36	**230**	--	<27	**44**	<21	**1,100,000**	<25	**25**
SAIA-SB/SG39	5	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG39	15	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG39	25	04/22/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**90**	--	<27	<25	<21	**140**	<25	<22
SAIA-SB/SG39	35	04/22/2014	<28	<35	<39	<28	**380**	**160**	**92**	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**34,000**	<25	<22
SAIA-SB/SG40	5	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**410**	<25	<22
SAIA-SB/SG40	15	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**23**	--	<27	<25	<21	**340**	<25	<22
SAIA-SB/SG40	25	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**200**	<25	<22
SAIA-SB/SG40	35	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**900**	<25	<22
SAIA-SB/SG40	35 Dup	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**730**	<25	<22
SAIA-SB/SG41	5	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG41	15	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**160**	<25	<22
SAIA-SB/SG41	25	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**60**	<25	<22
SAIA-SB/SG41	35	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**69**	<25	<22
SAIA-SB/SG42	5	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**21**	--	<27	<25	<21	**190**	<25	<22

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m^3)																
Location ID	Sample Depth (feet bgs)	Sample Date	Isopropanol	Isopropylbenzene (Cumene)	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride
SAIA-SB/SG31	25	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	**110**	<28	--	<28	**580**	<19	<40	**2,300**	<13
SAIA-SB/SG31	35	04/24/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**560**	<19	**110**	**1,500**	<13
SAIA-SB/SG32	5	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**76**	<19	<40	<27	<13
SAIA-SB/SG32	15	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**230**	<19	<40	**980**	<13
SAIA-SB/SG32	25	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG32	35	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	**120**	<13
SAIA-SB/SG33	5	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**470**	<19	<40	<27	<13
SAIA-SB/SG33	5 Dup	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**410**	<19	<40	<27	<13
SAIA-SB/SG33	15	04/25/2014	--	**420**	**120**	<18	**260**	<28	**320**	**300**	**940**	**1,300**	--	**400**	**190**	<19	<40	<27	<13
SAIA-SB/SG33	25	04/25/2014	--	**230**	**140**	<18	**33**	<28	**110**	**46**	**3,400**	**650**	--	<28	<34	**39**	<40	<27	<13
SAIA-SB/SG33	35	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	**51**	**1,900**	<13
SAIA-SB/SG34	5	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG34	15	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG34	25	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG34	35	04/25/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG35	5	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG35	15	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG35	25	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	**34 J**	<40	**530**	<13
SAIA-SB/SG35	35	04/28/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG36	5	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG36	15	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG36	25	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG36	35	04/23/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	**40**	<13
SAIA-SB/SG37	5	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**45**	<19	<40	**400**	<13
SAIA-SB/SG37	15	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	**35**	<40	**160**	<13
SAIA-SB/SG38	5	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**46**	<19	<40	<27	<13
SAIA-SB/SG38	15	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	**53**	<40	**330**	<13
SAIA-SB/SG38	15 Dup	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**57**	**37**	<40	**270**	<13
SAIA-SB/SG38	25	04/22/2014	--	<25	**47**	<18	<27	<28	<25	<22	**74**	<28	--	<28	<34	**38**	<40	**200**	<13
SAIA-SB/SG38	35	04/22/2014	--	**190**	<44	<18	<27	<28	<25	<22	<28	**300**	--	<28	**3,100**	**180**	<10000	**940,000**	**52,000**
SAIA-SB/SG39	5	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG39	15	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG39	25	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	**47**	<40	**78**	<13
SAIA-SB/SG39	35	04/22/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**160**	<19	**1,700**	**13,000**	**76**
SAIA-SB/SG40	5	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**240**	<19	<40	**200**	<13
SAIA-SB/SG40	15	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**330**	<19	<40	**140**	<13
SAIA-SB/SG40	25	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**1,200**	<19	<40	**380**	<13
SAIA-SB/SG40	35	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	**96**	**430**	<13
SAIA-SB/SG40	35 Dup	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	**88**	**320 J**	<13
SAIA-SB/SG41	5	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	**51**	<13
SAIA-SB/SG41	15	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	**45**	<19	<40	**94**	<13
SAIA-SB/SG41	25	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	**34**	<13
SAIA-SB/SG41	35	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG42	5	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	**53**	<13

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m3)																				
Location ID	**Sample Depth (feet bgs)**	**Sample Date**	**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-Dichloroethene**	**1,1-Difluoroethane**	**1,2,4-Trichlorobenzene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane (p-Dioxane)**	**Benzene**	**Chlorobenzene**	**Chloroethane**	**Chloroform**	**Chloromethane**	**cis-1,2-Dichloroethylene**	**Dichlorodifluoromethane**	**Ethylbenzene**
SAIA-SB/SG42	15	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG42	25	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG42	35	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	**17**	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG43	5	05/01/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**62**	<25	<22
SAIA-SB/SG43	15	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG43	25	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	**60**	<25	<22
SAIA-SB/SG43	35	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG43	35 Dup	05/02/2014	<28	<35	<39	<28	<41	<20	<27	<38	<25	<21	<25	<30	<36	<16	--	<27	<25	<21	<40	<25	<22
SAIA-SB/SG44	5	04/27/2017	<10	<10	<10	<10	<8	<8	--	<10	<10	<8	<10	<10	<7	<6	<9	<5	**5 J**	<4	<8	--	**5 J**
SAIA-SB/SG44	15	04/27/2017	<10	<20	<20	<10	<9	**10**	--	<20	**7 J**	<9	<10	<10	<8	**40**	<10	<6	<10	<5	**10**	--	**9 J**
SAIA-SB/SG44	25	04/27/2017	<10	<10	<10	<10	<8	**10**	--	<10	**10 J**	<8	<9	<10	<7	**10**	**5 J**	<5	<9	**2 J**	**30**	--	**6 J**
SAIA-SB/SG44	35	04/27/2017	<10	<20	<20	<10	<10	**7 J**	--	<20	<10	<10	<10	<20	<9	**10**	<10	<7	<10	<5	**20**	--	<10
SAIA-SB/SG45	5	04/27/2017	<10	<20	<20	<10	<10	<10	--	<20	<10	<10	<10	<20	<9	**6 J**	<10	<7	<10	<5	<10	--	<10
SAIA-SB/SG45	15	04/27/2017	<10	<20	<20	<10	<9	<9	--	<20	<10	<9	<10	<10	<8	**30**	<10	<6	**30**	<5	<9	--	**6 J**
SAIA-SB/SG45	15 Dup	04/27/2017	<10	<10	<20	<10	<8	<8	--	<20	<10	<8	<10	<10	<8	**40**	<10	<6	**40**	<4	<8	--	**8 J**
SAIA-SB/SG45	25	04/27/2017	<10	<20	<20	<10	**30**	**100**	--	<20	<10	<10	<10	<10	<9	**9**	<10	<6	<10	<5	**900**	--	<10
SAIA-SB/SG45	35	04/27/2017	<10	<20	<20	<10	**30**	**100**	--	<20	<10	<10	<10	<10	<9	**5 J**	<10	<6	<10	<5	**1,100**	--	<10
SAIA-SB/SG46	5	04/27/2017	<10	<10	<20	<10	<8	<8	--	<20	<10	<8	<10	<10	<8	<7	<10	<6	<10	<4	<8	--	<9
SAIA-SB/SG46	15	04/27/2017	<10	<20	<20	<10	<10	<10	--	<20	<10	<10	<10	<20	<9	**20**	<10	<7	**10**	**3 J**	**20**	--	<10
SAIA-SB/SG46	25	04/27/2017	<10	<20	<20	<10	<9	<9	--	<20	<10	<9	<10	<10	<8	**20**	<10	<6	**10**	**2 J**	**10**	--	**5 J**
SAIA-SB/SG46	35	04/27/2017	<10	<10	<20	<10	**70**	**90**	--	<20	<10	<8	<10	<10	<7	**30**	<9	<5	<10	**7 J**	**1,900**	--	<9
SAIA-SB/SG47	5	04/27/2017	<10	<10	<20	<10	<9	<9	--	<20	<10	<9	<10	<10	<8	<7	<10	<6	**7 J**	<4	<9	--	<9
SAIA-SB/SG47	15	04/27/2017	<10	<20	<20	<10	<10	<10	--	<20	<10	<10	<10	<20	<10	**8 J**	<10	<7	<10	<6	<10	--	<10
SAIA-SB/SG47	25	04/27/2017	<10	<20	<20	<10	<9	<9	--	<20	<10	<9	<10	<10	<8	**20**	<10	<6	**10**	**3 J**	<9	--	<10
SAIA-SB/SG47	35	04/27/2017	<10	<20	<20	<10	<10	<10	--	<20	<10	<10	<10	<20	<10	**60**	<10	<7	<10	<5	**7 J**	--	<10
Screening Criteria																							
RSL for Soilgas -Residential [1]			170,000	1.6	170,000	6	60	7,000	1,400,000	70	2,100	3.7	2100	8.7	19	12	1,700	330,000	4	3,100	280 [2]	330	37
RSL for Soilgas - Industrial [1]			730,000	7	730,000	26	260	29,000	6,000,000	290	8,700	16	8700	37	83	53	7,300	1,500,000	18	13,000	1,200 [2]	15,000	160

Notes on last page of table.

Table 4-3
VOCs Detected in Soil Gas Samples
Southern Avenue Industrial Area
South Gate, California

			Volatiles (in ug/m^3)																
Location ID	**Sample Depth (feet bgs)**	**Sample Date**	**Isopropanol**	**Isopropylbenzene (Cumene)**	**m,p-Xylene**	**Methylene Chloride**	**Naphthalene**	**n-Butylbenzene**	**n-Propylbenzene**	**o-Xylene**	**p-Cymene (p-Isopropyltoluene)**	**sec-Butylbenzene**	**Styrene**	**tert-Butylbenzene**	**Tetrachloroethene (PCE)**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene (TCE)**	**Vinyl Chloride**
SAIA-SB/SG42	15	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG42	25	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG42	35	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	**33**	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG43	5	05/01/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	**55**	<13
SAIA-SB/SG43	15	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG43	25	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG43	35	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG43	35 Dup	05/02/2014	--	<25	<44	<18	<27	<28	<25	<22	<28	<28	--	<28	<34	<19	<40	<27	<13
SAIA-SB/SG44	5	04/27/2017	**90 J**	--	**20**	**4 J**	--	--	--	**6 J**	--	--	<8	--	<10	**40**	--	<10	<5
SAIA-SB/SG44	15	04/27/2017	**20 J**	--	**30**	**6 J**	--	--	--	**9 J**	--	--	<10	--	**30**	**80**	--	**40**	**40**
SAIA-SB/SG44	25	04/27/2017	**20 J**	--	**20**	**4 J**	--	--	--	**8**	--	--	<8	--	<10	**60**	--	**50**	**30**
SAIA-SB/SG44	35	04/27/2017	**20 J**	--	<20	<9	--	--	--	<10	--	--	<10	--	**20**	**40**	--	**40**	**20**
SAIA-SB/SG45	5	04/27/2017	**20 J**	--	<20	<9	--	--	--	<10	--	--	<10	--	**10 J**	**10**	--	<10	<7
SAIA-SB/SG45	15	04/27/2017	**20 J**	--	**20**	**6 J**	--	--	--	**7 J**	--	--	<9	--	**10 J**	**100**	--	**20**	<6
SAIA-SB/SG45	15 Dup	04/27/2017	**10 J**	--	**20**	**6 J**	--	--	--	**8 J**	--	--	<9	--	**10**	**200**	--	**20**	<5
SAIA-SB/SG45	25	04/27/2017	**6 J**	--	**10 J**	**4 J**	--	--	--	<10	--	--	<10	--	**20**	**200**	--	**3,500**	**60**
SAIA-SB/SG45	35	04/27/2017	**20 J**	--	<20	<8	--	--	--	<10	--	--	<10	--	**30**	**100**	--	**3,900**	**50**
SAIA-SB/SG46	5	04/27/2017	**4 J**	--	<20	<7	--	--	--	<9	--	--	<9	--	<10	**7 J**	--	<10	<5
SAIA-SB/SG46	15	04/27/2017	**20 J**	--	**10 J**	**6 J**	--	--	--	<10	--	--	<10	--	<20	**40**	--	**100**	<6
SAIA-SB/SG46	25	04/27/2017	**10 J**	--	**10 J**	**5 J**	--	--	--	**5 J**	--	--	<10	--	**10 J**	**60**	--	**500**	<6
SAIA-SB/SG46	35	04/27/2017	**10 J**	--	<20	**5 J**	--	--	--	<9	--	--	<9	--	**8 J**	**60**	--	**16,000**	**20**
SAIA-SB/SG47	5	04/27/2017	**4 J**	--	<20	**4 J**	--	--	--	<9	--	--	<9	--	**9 J**	**8**	--	<10	<6
SAIA-SB/SG47	15	04/27/2017	**3 J**	--	**10 J**	**5 J**	--	--	--	<10	--	--	<10	--	**10 J**	**80**	--	<10	<7
SAIA-SB/SG47	25	04/27/2017	**6 J**	--	**10 J**	**6 J**	--	--	--	**5 J**	--	--	<9	--	**8 J**	**60**	--	**40**	<6
SAIA-SB/SG47	35	04/27/2017	**8 J**	--	**10 J**	**9**	--	--	--	<10	--	--	<10	--	**10 J**	**600**	--	**50**	**30**
Screening Criteria																			
RSL for Soilgas -Residential [1]			7,000	14,000	3,300	33	2.8	NA	33,000	3,300	NA	NA	33,000	NA	15 [2]	170,000	2800 [2]	16	0.32 [2]
RSL for Soilgas - Industrial [1]			29,000	60,000	15,000	400	12	NA	150,000	15,000	NA	NA	150,000	NA	67 [2]	730,000	12000 [2]	100	5.3 [2]

[1] Based on USEPA Regional Screening Levels for Air, Hazard Quotient = 1.0 (RSLs, May 2018) for Residential and Industrial. Calculated using a default indoor air to soil gas attenuation factor of 0.03 for Residential and Industrial RSLs (EPA, 2018).
[2] Based on California-modified RSLs (DTSC, 2018 - Table 3 Screening Levels for Ambient Air, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs] [June 2018 release date])

Notes on last page of table.

Table 4-4
VOCs Detected in Outdoor, Crawlspace, and Indoor Air Samples
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location ID	Sample Date	Sample Type	Volatiles (in ug/m^3)											
			1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	Benzene	Ethylbenzene	m,p-Xylene	Naphthalene	o-Xylene	Tetrachloroethene (PCE)	Toluene	Trichloroethene (TCE)
Outdoor Air														
RES01-OA	01/27/2016	N	<0.17	**1.6**	**0.07 J**	**0.35 J**	**1.6**	**1.1**	**3.7**	<0.42	**1.3**	**0.24**	**5.3**	<0.15
	01/27/2016	FD	<0.16	**1.6**	<0.13	**0.33 J**	**1.2**	**0.97**	**3.3**	<0.4	**1.2**	**0.21**	**4.4**	<0.14
RES06-OA	04/24/2015	N	<0.16	**0.32**	<0.13	**0.094 J**	**0.48 J**	**0.22**	**0.68**	<0.41	**0.25**	**0.08 J**	**1.3**	<0.15
	01/28/2016	N	**0.08 J**	**1.3**	**0.07 J**	**0.28 J**	**1.6**	**0.87**	**2.9**	<0.4	**1**	**0.23**	**5**	<0.14
RES07-OA	04/16/2015	N	<0.15	**0.39**	**0.059 J**	**0.11 J**	**0.66**	**0.29**	**0.96**	<0.38	**0.32**	**0.086 J**	**1.7**	<0.14
Crawlspace Air														
RES01-CS	04/17/2015	N	<0.15	**0.47**	**0.054 J**	**0.13 J**	**0.86**	**0.34**	**1.1**	<0.38	**0.37**	**0.11 J**	**2**	<0.14
	01/27/2016	N	<0.16	**0.93 J**	<0.13	**0.19 J**	**0.89 J**	**0.59 J**	**2 J**	<0.41	**0.71 J**	**0.14 J**	**2.9 J**	<0.15
RES02-CS	04/17/2015	N	<0.15	**0.36**	**0.051 J**	**0.099 J**	**0.71**	**0.3**	**0.96**	<0.38	**0.32**	**0.089 J**	**1.8**	<0.14
	01/27/2016	N	<0.16	**1.4**	<0.13	**0.27 J**	**1.2**	**0.82**	**2.7**	<0.41	**0.97**	**0.2**	**4.2**	<0.15
RES08-CS	04/17/2015	N	<0.15	**0.38**	**0.051 J**	**0.11 J**	**0.69**	**0.29**	**0.96**	<0.38	**0.33**	**0.11 J**	**1.7**	**0.05 J**
	01/27/2016	N	<0.16	**1.2**	<0.13	**0.26 J**	**1.3**	**0.79**	**2.6**	<0.41	**0.95**	**0.21**	**4.4**	<0.15
Indoor Air														
RES01-IA	04/17/2015	N	<0.15	**0.4**	**0.19**	**0.11 J**	**0.63**	**0.34**	**1**	<0.38	**0.35**	**1.4**	**3.3**	**0.054 J**
	01/27/2016	N	<0.17	**1.4**	**0.08 J**	**0.27 J**	**1.2**	**0.98**	**3.3**	<0.41	**1.1**	**1.3**	**4.3**	**0.09 J**
RES02-IA	04/24/2015	N	<0.16	**0.37**	**0.043 J**	**0.094 J**	**0.55**	**0.21**	**0.65**	<0.4	**0.23**	**0.078 J**	**1.3**	**0.018 J**
	01/27/2016	N	<0.16	**1.1 J**	**0.07 J**	**0.22 J**	**1.5 J**	**0.67 J**	**2.2 J**	<0.4	**0.79 J**	**0.18 J**	**3.8 J**	<0.15
RES03-IA	04/23/2015	N	<0.16	**0.54**	**0.099 J**	**0.16 J**	**0.66**	**0.31**	**0.92**	<0.4	**0.34**	**0.084 J**	**3.6**	**0.059 J**
	01/27/2016	N	<0.16	**1.8**	**0.09 J**	**0.34 J**	**1.8**	**0.84**	**2.7**	<0.41	**0.98**	**0.18**	**4.7**	<0.15
RES04-IA	04/23/2015	N	<0.16	**0.68**	**0.068 J**	**0.18 J**	**0.78**	**0.37**	**1**	<0.4	**0.41**	**0.14 J**	**2.1**	**0.07 J**
	01/28/2016	N	<0.17	**13**	**0.08 J**	**1.9 J**	**1.3**	**2.4**	**4.9**	**0.24 J**	**2.1**	**0.31**	**5.9**	**0.08 J**
RES05-IA	04/24/2015	N	<0.16	**0.5**	**0.27**	**0.13 J**	**0.88**	**0.42**	**1.2**	<0.4	**0.43**	**0.093 J**	**2.5**	**0.06 J**
	01/27/2016	N	<0.16	**1.3 J**	**0.43 J**	**0.25 J**	**2.7 J**	**0.66 J**	**2.1 J**	<0.4	**0.74 J**	**0.25 J**	**4.2 J**	<0.14
RES06-IA	04/16/2015	N	<0.15	**0.4**	**0.11 J**	**0.11 J**	**0.61**	**0.44**	**1**	<0.38	**0.36**	**0.12 J**	**1.8**	<0.14
	01/28/2016	N	<0.16	**1.9**	**0.16**	**0.41 J**	**1.6**	**1.1**	**3.6**	<0.4	**1.3**	**0.29**	**5.9**	<0.14
	01/28/2016	FD	<0.16	**1.9**	**0.17**	**0.41 J**	**1.6**	**1.1**	**3.6**	<0.4	**1.3**	**0.28**	**5.7**	<0.14
RES07-IA	04/16/2015	N	<0.15	**0.51**	**0.09 J**	**0.14 J**	**0.76**	**0.67**	**2.2**	<0.38	**0.6**	**0.14 J**	**2.6**	**0.052 J**
	01/28/2016	N	**0.08 J**	**1.7**	**0.36**	**0.33 J**	**1.7**	**1.3**	**4.2**	<0.41	**1.3**	**0.25**	**5.5**	**0.07 J**
RES08-IA	04/17/2015	N	<0.15	**0.41**	**0.077 J**	**0.1 J**	**0.75**	**0.3**	**1**	<0.38	**0.36**	**0.094 J**	**2**	**0.05 J**
	01/27/2016	N	<0.16	**1.2**	<0.13	**0.26 J**	**1.5**	**0.8**	**2.6**	<0.4	**0.94**	**0.21**	**4.5**	<0.15
Screening Criteria														
RSL for Air -Residential [1]			5200	63	0.11	63	0.36	1.1	100	0.083	100	0.46 [2]	310 [2]	0.48
RSL for Air - Industrial [1]			22000	260	0.47	260	1.6	4.9	440	0.36	440	2 [2]	1300 [2]	3

Notes:

exceeds RSL for Air -Residential

exceeds RSL for Air - Industrial

[1] Based on USEPA Regional Screening Levels for Air, Hazard Quotient = 1.0 (RSLs, May 2018) for Residential and Industrial.

[2] Based on California-modified RSLs (DTSC, 2018 - Table 3 Screening Levels for Ambient Air, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs; June])

Detected results shown in bold

ID = Identification number

J = Concentration is estimated because it falls between the method detection limit and the laboratory reporting limit.

N = Normal sample results

RSL = Regional Screening Level

ug/m^3 = Micrograms per cubic meter

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)																						
Location ID	**Aquifer**	**Sample Date**	**Sample Type**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,3-Trichlorobenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,3-Dichlorobenzene**	**1,4-Dichlorobenzene**	**4-Methyl-2-pentanone (MIBK)**	**Acetone**	**Benzene**	**Bromomethane**	**Carbon Disulfide**	**Chlorobenzene**	**Chloroethane**	**Chloroform**	**Chloromethane**	**cis-1,2-Dichloroethylene**	**Cyclohexane**	**Ethylbenzene**	**Isopropylbenzene (Cumene)**	**m,p-Xylene**
MW32	Exposition Aquifer	07/13/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.63**	<0.50	<0.50	<0.50	<0.50
MW32	Exposition Aquifer	07/13/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.67**	<0.50	<0.50	<0.50	<0.50
MW34	Shallow Gaspur	03/26/2014	N	<2.5	**1.6 J**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	**470**	<2.5	<2.5	<2.5	<2.5
MW34	Shallow Gaspur	03/26/2014	FD	<2.0	**1.3 J**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**450**	<2.0	<2.0	<2.0	<2.0
MW34	Shallow Gaspur	07/12/2016	N	<0.50	<0.50	**0.94**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**50**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**170**	<0.50	<0.50	<0.50	<0.50
MW35	Lower Gaspur	03/26/2014	N	<0.50	**0.33 J**	<0.50	<0.50	<0.50	**5.8**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**58**	**0.69**	<0.50	<0.50	<0.50
MW35	Lower Gaspur	07/12/2016	N	<0.50	**3**	**4**	<0.50	<0.50	**6.8**	<0.50	<0.50	<0.50	<5.0	<5.0	**0.7**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**330**	**0.92**	<0.50	<0.50	<0.50
MW42	Shallow Gaspur	03/05/2013	N	<40	<40	<40	<40	<40	<40	<40	<40	<40	<400	<400	<40	<40	<40	<40	<40	<40	<40	**2,600**	<40	<40	<40	<40
MW42	Shallow Gaspur	03/26/2014	N	<10	**25**	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	<10	<10	<10	**4,000**	<10	<10	<10	<10
MW42	Shallow Gaspur	07/12/2016	N	<2.5	**18**	**3.7 J**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	**1,100 J**	<2.5	<2.5	<2.5	<2.5
MW43	Intermediate Gaspur	03/05/2013	N	<0.50	**0.53**	**2.5**	<0.50	<0.50	**10**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**55**	**1.4**	<0.50	<0.50	<0.50
MW43	Intermediate Gaspur	03/26/2014	N	<0.50	**0.22 J**	<0.50	<0.50	<0.50	**7.6**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**25**	**1.2**	<0.50	<0.50	<0.50
MW43	Intermediate Gaspur	07/12/2016	N	<0.50	**1**	**3.4**	<0.50	<0.50	**44**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**42**	**2.5**	<0.50	<0.50	<0.50
MW44	Lower Gaspur	03/26/2014	N	<0.50	**0.2 J**	<0.50	<0.50	<0.50	**4**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**21**	**0.42 J**	<0.50	<0.50	<0.50
MW44	Lower Gaspur	07/12/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.37 J**	<0.50	<0.50	<0.50	<0.50
MW45	Intermediate Gaspur	03/05/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.73**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**51**	<0.50	<0.50	<0.50	<0.50
MW45	Intermediate Gaspur	03/25/2014	N	<0.50	**0.21**	<0.50	<0.50	<0.50	**0.84**	<0.50	**0.07**	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**39**	<0.50	<0.50	<0.50	<0.50
MW45	Intermediate Gaspur	07/14/2016	N	<0.50	**0.45 J**	**0.99**	<0.50	<0.50	**5.4**	<0.50	<0.50	<0.50	<5.0	<5.0	**0.43 J**	<0.50	**0.27 J**	<0.50	<0.50	<0.50	<0.50	**76**	**0.3 J**	<0.50	<0.50	<0.50
MW46	Shallow Gaspur	03/05/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**54**	<0.50	<0.50	<0.50	<0.50
MW46	Shallow Gaspur	03/05/2013	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**44**	<0.50	<0.50	<0.50	<0.50
MW46	Shallow Gaspur	03/24/2014	N	<0.50	**0.097 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.36 J**	<5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**47**	<0.50	<0.50	<0.50	<0.50
MW46	Shallow Gaspur	07/19/2016	N	<1.0	**7.5**	**2.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW47	Intermediate Gaspur	03/05/2013	N	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	<10	<10	<10	**780**	<10	<10	<10	<10
MW47	Intermediate Gaspur	03/24/2014	N	<4.0	**1.3 J**	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<40	<40	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**700**	<4.0	<4.0	<4.0	<4.0
MW47	Intermediate Gaspur	07/19/2016	N	<5.0	**6.1**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<5.0	**3.2 J**	<5.0	<5.0	<5.0	<5.0	<5.0	**490**	<5.0	<5.0	<5.0	<5.0
MW48	Lower Gaspur	03/06/2013	N	<0.50	**1.1**	**1.1**	<0.50	<0.50	**7.5**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**29**	**0.51**	<0.50	<0.50	<0.50
MW48	Lower Gaspur	03/24/2014	N	<0.50	**1.6**	**2.1**	<0.50	<0.50	**6.9**	**0.12**	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**82**	**0.87**	<0.50	<0.50	<0.50
MW48	Lower Gaspur	07/19/2016	N	<0.50	**1.3**	**1.9**	<0.50	<0.50	**15**	<0.50	<0.50	<0.50	<5.0	**12**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**100**	**0.88**	<0.50	<0.50	<0.50
MW49	Shallow Gaspur	03/06/2013	N	<0.50	<0.50	**0.28 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**51**	<0.50	<0.50	<0.50	<0.50
MW49	Shallow Gaspur	03/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**41**	<0.50	<0.50	<0.50	<0.50
MW49	Shallow Gaspur	07/15/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**55**	<0.50	<0.50	<0.50	<0.50
MW49	Shallow Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**49**	<0.50	<0.50	<0.50	<0.50
MW52	Shallow Gaspur	03/06/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**8.9**	**0.3 J**	<0.50	<0.50	<0.50
MW52	Shallow Gaspur	03/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	**2.4**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**18**	**0.96**	<0.50	<0.50	<0.50
MW52	Shallow Gaspur	03/25/2014	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	**2.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**16**	**0.78**	<0.50	<0.50	<0.50
MW52	Shallow Gaspur	07/19/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**15**	**0.84**	<0.50	<0.50	<0.50
MW56	Shallow Gaspur	03/26/2014	N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**450**	<2.0	<2.0	<2.0	<2.0
MW56	Shallow Gaspur	07/18/2016	N	<1.0	<1.0	<1.0	<1.0	R	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**260**	<1.0	<1.0	<1.0	<1.0
SAIA-MW1A	Shallow Gaspur	03/27/2014	N	<100	**21 J**	<100	<100	<100	<100	<100	<100	<100	<1000	<1000	<100	<100	<100	<100	<100	<100	<100	**3,300**	<100	<100	<100	<100
SAIA-MW1A	Shallow Gaspur	08/25/2014	N	**0.58**	**17**	**16 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<11	**0.29 J**	<0.50	**0.11 J**	**0.045 J**	**0.41 J**	<0.50	<0.50	**6,900**	**0.18 J**	<0.50	**0.17 J**	<0.50
SAIA-MW1A	Shallow Gaspur	07/14/2016	N	<25	**22 J**	<25	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	<25	<25	<25	**3,900**	<25	<25	<25	<25
SAIA-MW1B	Intermediate Gaspur	03/27/2014	N	<0.50	**0.25**	<0.50	<0.50	<0.50	**0.48 J**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**59**	**0.24 J**	<0.50	<0.50	<0.50
SAIA-MW1B	Intermediate Gaspur	08/25/2014	N	<0.50	**0.19 J**	<0.50	<0.50	<0.50	**0.52**	**0.097 J**	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**51**	**0.22 J**	<0.50	<0.50	<0.50
SAIA-MW1B	Intermediate Gaspur	07/14/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.58**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**14**	<0.50	<0.50	<0.50	<0.50
SAIA-MW1B	Intermediate Gaspur	07/14/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	**0.64**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**15**	<0.50	<0.50	<0.50	<0.50
SAIA-MW1C	Lower Gaspur	03/27/2014	N	<4.0	**3.9 J**	<4.0	<4.0	<4.0	**35**	<4.0	<4.0	<4.0	<40	<40	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**370**	**1.6 J**	<4.0	<4.0	<4.0

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)										Semivolatiles (ug/L)			Metals (ug/L)								
Location ID	Aquifer	Sample Date	Sample Type	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	1,4-Dioxane (p-Dioxane)	bis(2-Ethylhexyl) Phthalate	Carbazole	Calcium	Iron	Magnesium	Potassium	Sodium	Aluminum	Arsenic	Barium	Beryllium
MW32	Exposition Aquifer	07/13/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW32	Exposition Aquifer	07/13/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW34	Shallow Gaspur	03/26/2014	N	<2.5	<2.5	<2.5	<2.5	1.8 J	<2.5	<2.5	25	45	<2.5	1.3	<5.0	<5.0	126,000	1,340	40,300	<5000	374,000	<20	100	52.6	<1.0
MW34	Shallow Gaspur	03/26/2014	FD	<2.0	<2.0	<2.0	<2.0	1.5 J	<2.0	<2.0	20	38	<2.0	1.5	<5.0	<5.0	126,000	1,250	40,500	<5000	373,000	<20	102	54.6	<1.0
MW34	Shallow Gaspur	07/12/2016	N	<0.50	<0.50	<0.50	<0.50	1.7	<0.50	<0.50	9.9	4.5	0.81	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW35	Lower Gaspur	03/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.5	6.9	<0.50	2.3	<5.0	<5.0	580,000	4,340	214,000	7,670	842,000	79.8	22.5	28.9	<1.0
MW35	Lower Gaspur	07/12/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	15	3.5	<0.50	19	--	--	--	--	--	--	--	--	--	--	--
MW42	Shallow Gaspur	03/05/2013	N	<40	<40	<40	<40	<40	<40	<40	51	220	<40	15	--	--	--	--	--	--	--	--	--	--	--
MW42	Shallow Gaspur	03/26/2014	N	<10	<10	<10	<10	<10	<10	<10	75	390 J	<10	24	<5.0	<5.0	210,000	58,100	75,500	11,700	221,000	31,300	78.3	457	0.75 J
MW42	Shallow Gaspur	07/12/2016	N	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	40 J	32	<2.5	47	--	--	--	--	--	--	--	--	--	--	--
MW43	Intermediate Gaspur	03/05/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	36	<0.50	5.7	--	--	--	--	--	--	--	--	--	--	--
MW43	Intermediate Gaspur	03/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	8.6	<0.50	2.8	3.4 J	<5.0	457,000	4,780	167,000	5,710	673,000	1,150	31.2	46.2	<2.0
MW43	Intermediate Gaspur	07/12/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3	5.4	1	4	--	--	--	--	--	--	--	--	--	--	--
MW44	Lower Gaspur	03/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	2.9	<0.50	2.8	<5.0	<5.0	493,000	4,860	204,000	7,170	909,000	136	31.6	23.8	<2.0
MW44	Lower Gaspur	07/12/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	8.2	--	--	--	--	--	--	--	--	--	--	--
MW45	Intermediate Gaspur	03/05/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16 J	4	6.9	<0.50	1.4	--	--	--	--	--	--	--	--	--	--	--
MW45	Intermediate Gaspur	03/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.7	2.2	<0.50	2.1	<5.0	<5.0	339,000	2,430	111,000	3,700 J	201,000	268	21.6	41.2	<1.0
MW45	Intermediate Gaspur	07/14/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.8	1.6	<0.50	3.5	--	--	--	--	--	--	--	--	--	--	--
MW46	Shallow Gaspur	03/05/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19 J	2.9	4.5	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW46	Shallow Gaspur	03/05/2013	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16 J	2.7	4.4	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW46	Shallow Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.7 J	8.6 J	<0.50	<0.50	<5.0	<5.0	126,000	1,050	42,600	6,800	439,000	57.3	50	42.3	<1.0
MW46	Shallow Gaspur	07/19/2016	N	<1.0	1.1 J	<1.0	<1.0	<1.0	<1.0	<1.0	37	57	<1.0	3.5	--	--	--	--	--	--	--	--	--	--	--
MW47	Intermediate Gaspur	03/05/2013	N	<10	<10	<10	<10	<10	<10	<10	49	36	<10	1	--	--	--	--	--	--	--	--	--	--	--
MW47	Intermediate Gaspur	03/24/2014	N	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	47	14	<4.0	1.8	<5.0	<5.0	143,000	1,210	43,000	2,860 J	199,000	303	34	50.1	<1.0
MW47	Intermediate Gaspur	07/19/2016	N	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	30	5.4	<5.0	6.2	--	--	--	--	--	--	--	--	--	--	--
MW48	Lower Gaspur	03/06/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.21 J	3.1	17	<0.50	5.5	--	--	--	--	--	--	--	--	--	--	--
MW48	Lower Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.5	29	<0.50	8.7	<5.0	<5.0	395,000	2,350	131,000	4,440 J	241,000	<20	24.2	44	<1.0
MW48	Lower Gaspur	07/19/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.3	1.3	1.1	13	--	--	--	--	--	--	--	--	--	--	--
MW49	Shallow Gaspur	03/06/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19 J	3.9	3.4	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW49	Shallow Gaspur	03/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.4	2.9	<0.50	<0.50	<5.0	<5.0	433,000	5,640	177,000	9,470	754,000	618	66.5	37.6	<2.0
MW49	Shallow Gaspur	07/15/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.9	1.6	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW49	Shallow Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.3	1.6	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW52	Shallow Gaspur	03/06/2013	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.13 J	2	2.5	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW52	Shallow Gaspur	03/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5	6.1	<0.50	<0.50	2.3	<5.0	395,000	3,710	142,000	5,750	340,000	52.9	26.8	46.8	<1.0
MW52	Shallow Gaspur	03/25/2014	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.2	5.6	<0.50	<0.50	<5.0	<5.0	395,000	3,740	142,000	5,740	340,000	83.5	23.3	45.8	<1.0
MW52	Shallow Gaspur	07/19/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.2	5.6	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
MW56	Shallow Gaspur	03/26/2014	N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	15	290	<2.0	<0.50	<5.0	<5.0	178,000	1,870	43,000	<5000	190,000	407	24.2	80.5	<2.0
MW56	Shallow Gaspur	07/18/2016	N	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	15	74	<1.0	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1A	Shallow Gaspur	03/27/2014	N	<100	<100	<100	<100	<100	<100	<100	71 J	7,400 J	<100	1.7 J	<5.0	<5.0	105,000	2,700	38,600	7,630 J	163,000	1,330	16.1	95.1	<2.0
SAIA-MW1A	Shallow Gaspur	08/25/2014	N	0.16 J	<0.50	0.1 J	<0.50	<0.50	0.42 J	0.51	96 J	4,800	<360	1.4	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1A	Shallow Gaspur	07/14/2016	N	<25	<25	<25	<25	<25	<25	<25	160	1,500	<25	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1B	Intermediate Gaspur	03/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.6	17	<0.50	1.9	<5.0	<5.0	421,000	3,350	147,000	<5000	358,000	366	23.8	67.4	<2.0
SAIA-MW1B	Intermediate Gaspur	08/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.6	4.3 J	<0.50	2.6	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1B	Intermediate Gaspur	07/14/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2	0.84	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1B	Intermediate Gaspur	07/14/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	0.82	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1C	Lower Gaspur	03/27/2014	N	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	34	420 J	<4	18	<5.0	7.1	467,000	4,970	142,000	7,160	839,000	176	7.4	37	<2.0

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Metals (ug/L)												General Chemistry (ug/L)						
Location ID	Aquifer	Sample Date	Sample Type	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	Chloride	Sulfate (as SO4)	Total Dissolved Solids	Total Organic Carbon
MW32	Exposition Aquifer	07/13/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW32	Exposition Aquifer	07/13/2016	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW34	Shallow Gaspur	03/26/2014	N	<1.0	7.5 J	11.3	1.4 J	0.64 J	816	4.3 J	2.3 J	0.06 J	<1.0	<5.0	5.4 J	930,000	<10000	930,000	40,000	400,000	1,600,000	4,500
MW34	Shallow Gaspur	03/26/2014	FD	<1.0	5 J	11.5	2.7	0.62 J	844	3.9 J	1.6 J	0.073 J	<1.0	<5.0	6.2 J	900,000	<10000	900,000	40,000	400,000	1,600,000	5,100
MW34	Shallow Gaspur	07/12/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW35	Lower Gaspur	03/26/2014	N	1.3	5.2 J	48.7	2.9	1.3	4,340	5 J	1.7 J	0.12 J	<1.0	<5.0	17.2 J	670,000	<10000	670,000	170,000	3,600,000	6,000,000	5,500
MW35	Lower Gaspur	07/12/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW42	Shallow Gaspur	03/05/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW42	Shallow Gaspur	03/26/2014	N	1.3	79.1	43.9	57.5	20.3	2,120	73.4	<10	0.14 J	<1.0	53.5 J	157	860,000	<10000	860,000	46,000	190,000	1,300,000	9,100
MW42	Shallow Gaspur	07/12/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW43	Intermediate Gaspur	03/05/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW43	Intermediate Gaspur	03/26/2014	N	0.38 J	24.7 J	40.1	5.6	1.3	3,830	20	<10	0.096 J	0.08 J	<10	10.9 J	690,000	<10000	690,000	140,000	2,800,000	4,800,000	5,400
MW43	Intermediate Gaspur	07/12/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW44	Lower Gaspur	03/26/2014	N	<1.0	9.5 J	44.3	2.4 J	0.37 J	4,330	7.2 J	<10	0.1 J	<1.0	<10	11.1 J	640,000	<10000	640,000	150,000	3,400,000	5,700,000	5,600
MW44	Lower Gaspur	07/12/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW45	Intermediate Gaspur	03/05/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW45	Intermediate Gaspur	03/25/2014	N	0.28 J	12.7	0.65 J	2.7	1.6	1,940	10.9	<5.0	0.048 J	<1.0	<5.0	12.8	580,000	<10000	580,000	120,000	1,100,000	2,400,000	3,300
MW45	Intermediate Gaspur	07/14/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW46	Shallow Gaspur	03/05/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW46	Shallow Gaspur	03/05/2013	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW46	Shallow Gaspur	03/24/2014	N	0.17 J	3.8	0.25 J	7.3	0.43 J	764	3.1	<5.0	0.088 J	<1.0	<5.0	18.8	830,000	16,000	850,000	86,000	500,000	1,700,000	4,200
MW46	Shallow Gaspur	07/19/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW47	Intermediate Gaspur	03/05/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW47	Intermediate Gaspur	03/24/2014	N	<1	5	0.52 J	2.4	1.2	1,040	4.3	<5.0	0.057 J	<1.0	<5.0	11.5	670,000	<10000	670,000	49,000	340,000	1,300,000	5,800
MW47	Intermediate Gaspur	07/19/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW48	Lower Gaspur	03/06/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW48	Lower Gaspur	03/24/2014	N	0.5 J	3.6	0.3 J	2.2	0.33 J	2,550	4.4	<5.0	0.076 J	<1.0	<5.0	12.8	670,000	<10000	670,000	250,000	1,200,000	2,800,000	4,600
MW48	Lower Gaspur	07/19/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW49	Shallow Gaspur	03/06/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW49	Shallow Gaspur	03/26/2014	N	0.12 J	67.9	43.4	8.2	0.69 J	3,930	145	<10	0.14 J	<1.0	<10	10.8 J	890,000	<10000	890,000	170,000	3,000,000	5,300,000	3,700
MW49	Shallow Gaspur	07/15/2016	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW49	Shallow Gaspur	07/15/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW52	Shallow Gaspur	03/06/2013	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW52	Shallow Gaspur	03/25/2014	N	<1.0	5.1	0.68 J	2.4	0.8 J	3,520	5	<5.0	0.061 J	<1.0	<5.0	11	760,000	<10000	760,000	170,000	1,500,000	3,200,000	4,900
MW52	Shallow Gaspur	03/25/2014	FD	<1.0	7.6	0.72 J	2.6	0.41 J	3,370	4.7	<5.0	0.076 J	<1.0	<5.0	9.1	780,000	<10000	780,000	180,000	1,500,000	3,200,000	4,900
MW52	Shallow Gaspur	07/19/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW56	Shallow Gaspur	03/26/2014	N	<1.0	4.9 J	15.3	2.4 J	0.73 J	1,350	4.5 J	<10	<1	<1.0	<10	6.7 J	610,000	<10000	610,000	84,000	400,000	1,300,000	2,800
MW56	Shallow Gaspur	07/18/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1A	Shallow Gaspur	03/27/2014	N	<1.0	20.5 J	10.7	5.4	1.6	480	12.7 J	<10	0.15 J	<1.0	<10	14.6 J	600,000	<10000	600,000	53,000	180,000	1,000,000	23,000
SAIA-MW1A	Shallow Gaspur	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1A	Shallow Gaspur	07/14/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1B	Intermediate Gaspur	03/27/2014	N	<1.0	7.1 J	37.7	2 J	0.57 J	2,510	7.8 J	<10	<1.0	<1.0	<10	6.1 J	610,000	<10000	610,000	580,000	1,200,000	3,300,000	8,000
SAIA-MW1B	Intermediate Gaspur	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1B	Intermediate Gaspur	07/14/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1B	Intermediate Gaspur	07/14/2016	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1C	Lower Gaspur	03/27/2014	N	<1.0	12.5 J	41.9	2.3 J	1	3,240	8.7 J	0.99 J	0.081 J	0.082 J	<10	6.4 J	740,000	<10000	740,000	120,000	3,000,000	5,100,000	11,000

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)																						
Location ID	Aquifer	Sample Date	Sample Type	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromomethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	Cyclohexane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene
SAIA-MW1C	Lower Gaspur	08/25/2014	N	<0.50	4.2	6.5 J	<0.50	<0.50	52	0.1 J	<0.50	<0.50	<5.0	<5.0	3.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	560	2.6	<0.50	<0.50	<0.50
SAIA-MW1C	Lower Gaspur	07/14/2016	N	<0.50	2.6	5.3	<0.50	<0.50	33	<0.50	<0.50	<0.50	<5.0	<5.0	3.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	350	2	<0.50	<0.50	<0.50
SAIA-MW2A	Shallow Gaspur	03/27/2014	N	<10	4.8 J	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	<10	<10	<10	2,000	<10	<10	<10	<10
SAIA-MW2A	Shallow Gaspur	08/25/2014	N	0.45 J	7.2	7.7 J	<0.50	<0.50	0.25 J	<0.50	<0.50	<0.50	<5.0	<5.3	0.35 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2,500	0.14 J	<0.50	<0.50	<0.50
SAIA-MW2A	Shallow Gaspur	08/25/2014	FD	0.47 J	7	7.7 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	0.35 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2,400	0.15 J	<0.50	<0.50	<0.50
SAIA-MW2A	Shallow Gaspur	07/11/2016	N	<2.5	5.5	6.4	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	1,300	<2.5	<2.5	<2.5	<2.5
SAIA-MW2B	Intermediate Gaspur	03/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	6.6	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	69	0.24 J	<0.50	<0.50	<0.50
SAIA-MW2B	Intermediate Gaspur	08/25/2014	N	<0.50	0.11 J	0.5	<0.50	<0.50	5.1	0.23 J	<0.50	<0.50	<5.0	<5.0	0.2 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	51	0.19 J	<0.50	<0.50	<0.50
SAIA-MW2B	Intermediate Gaspur	07/11/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	0.81	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	10	<0.50	<0.50	<0.50	<0.50
SAIA-MW2C	Lower Gaspur	03/27/2014	N	<2.0	3	4.7	<2.0	<2.0	32	0.19	<2.0	<2.0	<20	<20	6.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	360	1.7 J	<2.0	<2.0	<2.0
SAIA-MW2C	Lower Gaspur	08/25/2014	N	<0.50	2.8	5.2 J	<0.50	<0.50	34	<0.50	<0.50	<0.50	<5.0	<5.0	4.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	370	1.9	<0.50	<0.50	<0.50
SAIA-MW2C	Lower Gaspur	07/11/2016	N	<0.50	1.8	3.5 J	<0.50	<0.50	33	<0.50	<0.50	<0.50	<5.0	7.8	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	270 J	1.1	<0.50	<0.50	<0.50
SAIA-MW3A	Shallow Gaspur	03/24/2014	N	<0.50	0.13	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	8.9	<0.50	<0.50	<0.50	<0.50
SAIA-MW3A	Shallow Gaspur	08/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.8	<0.50	<0.50	<0.50	<0.50
SAIA-MW3A	Shallow Gaspur	07/13/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50
SAIA-MW3B	Intermediate Gaspur	03/24/2014	N	<25	49	18 J	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	<25	<25	<25	7,000	<25	<25	<25	<25
SAIA-MW3B	Intermediate Gaspur	08/26/2014	N	3.6	72	20 J	<0.50	<0.50	2.1	<0.50	<0.50	<0.50	<5.0	<5.0	1.5	<0.50	1.4	<0.50	<0.50	<0.50	<0.50	9,100	0.42 J	0.13 J	0.19 J	<0.50
SAIA-MW3B	Intermediate Gaspur	07/13/2016	N	<25	23 J	<25	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	<25	<25	<25	4,600	<25	<25	<25	<25
SAIA-MW3C	Lower Gaspur	03/24/2014	N	<0.50	0.2	<0.50	<0.50	<0.50	1.8	0.23	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	38	0.16	<0.50	<0.50	<0.50
SAIA-MW3C	Lower Gaspur	03/24/2014	FD	<0.50	0.2	<0.50	0.32 J	0.13 J	1.6	0.25	0.095	<0.50	<5.0	<5.0	<0.50	0.12 J	<0.50	<0.50	<0.50	<0.50	<0.50	37	0.16	<0.50	<0.50	0.05
SAIA-MW3C	Lower Gaspur	08/26/2014	N	<0.50	0.25 J	<0.50	<0.50	<0.50	2.1	0.27 J	<0.50	<0.50	<5.0	<5.0	0.085 J	<0.50	0.13 J	<0.50	<0.50	<0.50	<0.50	27	0.14 J	<0.50	<0.50	<0.50
SAIA-MW3C	Lower Gaspur	07/13/2016	N	<0.50	0.51	<0.50	<0.50	<0.50	2.8	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	49	<0.50	<0.50	<0.50	<0.50
SAIA-MW4A	Shallow Gaspur	03/25/2014	N	<0.50	0.32	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.7	<0.50	<0.50	<0.50	<0.50
SAIA-MW4A	Shallow Gaspur	08/26/2014	N	<0.50	0.34 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.72	<0.50	<0.50	<0.50	<0.50
SAIA-MW4A	Shallow Gaspur	07/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16 J	<0.50	<0.50	<0.50	<0.50
SAIA-MW4B	Intermediate Gaspur	03/25/2014	N	<25	15 J	<25	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	<25	<25	<25	4,200	<25	<25	<25	<25
SAIA-MW4B	Intermediate Gaspur	08/26/2014	N	1.1	18	6.6 J	<0.50	<0.50	0.72	<0.50	<0.50	<0.50	<5.0	<5.0	0.55	<0.50	1.3	<0.50	<0.50	<0.50	<0.50	4,800	0.17 J	0.034 J	<0.50	<0.50
SAIA-MW4B	Intermediate Gaspur	08/26/2014	FD	1.1	18	6.6 J	<0.50	<0.50	0.69	<0.50	<0.50	<0.50	<5.0	<5.0	0.55	<0.50	1.2	<0.50	<0.50	<0.50	<0.50	4,800	0.17 J	<0.50	<0.50	<0.50
SAIA-MW4B	Intermediate Gaspur	07/22/2016	N	<10	16	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	<10	<10	<10	4,200	<10	<10	<10	<10
SAIA-MW4C	Lower Gaspur	03/25/2014	N	<10	3.6 J	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	<10	<10	<10	910	<10	<10	<10	<10
SAIA-MW4C	Lower Gaspur	08/26/2014	N	<0.50	4.1	1.3	<0.50	<0.50	2.1	0.3 J	<0.50	<0.50	<5.0	<5.0	0.19 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	910	0.16 J	<0.50	<0.50	<0.50
SAIA-MW4C	Lower Gaspur	07/22/2016	N	<2.5	5.9	<2.5	<2.5	<2.5	2 J	<2.5	<2.5	<2.5	<25	<25	<2.5	1.3 J	<2.5	<2.5	<2.5	<2.5	<2.5	870	<2.5	<2.5	<2.5	<2.5
SAIA-MW5A	Shallow Gaspur	03/25/2014	N	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.7 J	<50	<50	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<5.0	530	<5.0	<5.0	<5.0	<5.0
SAIA-MW5A	Shallow Gaspur	08/27/2014	N	<0.50	0.42 J	0.89	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	R	<0.50	<0.50	<0.50	<0.50	<0.50	520	<0.50	<0.50	<0.50	<0.50
SAIA-MW5A	Shallow Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	210	<0.50	<0.50	<0.50	<0.50
SAIA-MW5A	Shallow Gaspur	07/20/2016	FD	<0.50	<0.50	0.66	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	220	<0.50	<0.50	<0.50	<0.50
SAIA-MW5B	Intermediate Gaspur	03/25/2014	N	<25	<25	<25	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	<25	<25	<25	3,100	<25	<25	<25	<25
SAIA-MW5B	Intermediate Gaspur	08/27/2014	N	0.84	9.5	5.5	<0.50	<0.50	0.52	<0.50	<0.50	<0.50	<5.0	<5.0	0.36 J	R	0.96	<0.50	<0.50	<0.50	<0.50	3,600	0.16 J	<0.50	<0.50	<0.50
SAIA-MW5B	Intermediate Gaspur	07/21/2016	N	<2.5	6.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2,100	<2.5	<2.5	<2.5	<2.5
SAIA-MW5C	Lower Gaspur	03/25/2014	N	<4.0	<4.0	<4.0	<4.0	<4.0	2 J	<4.0	<4.0	<4.0	<40	<40	<4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	300	<4.0	<4.0	<4.0	<4.0
SAIA-MW5C	Lower Gaspur	08/27/2014	N	<0.50	0.64 J	0.8 J	<0.50	<0.50	1.9	0.26 J	<0.50	<0.50	<5.0	<5.0	0.18 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	320	0.15 J	<0.50	<0.50	<0.50
SAIA-MW5C	Lower Gaspur	07/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	95	<0.50	<0.50	<0.50	<0.50
SAIA-MW6A	Shallow Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-MW6A	Shallow Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-MW6A	Shallow Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-MW6B	Intermediate Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	0.12	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.50	13	<0.50	<0.50	<0.50	<0.50

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)										Semivolatiles (ug/L)			Metals (ug/L)								
Location ID	Aquifer	Sample Date	Sample Type	Methylcyclohexane	Methylene Chloride	o-Xylene	Styrene	tert-Butyl Methyl Ether (MTBE)	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	1,4-Dioxane (p-Dioxane)	bis(2-Ethylhexyl) Phthalate	Carbazole	Calcium	Iron	Magnesium	Potassium	Sodium	Aluminum	Arsenic	Barium	Beryllium
SAIA-MW1C	Lower Gaspur	08/25/2014	N	0.15 J	<0.50	0.057 J	<0.50	<0.50	<0.50	<0.50	47	210	1.4	22	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1C	Lower Gaspur	07/14/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	27	4.4	18	7.3	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2A	Shallow Gaspur	03/27/2014	N	<10	<10	<10	<10	<10	<10	<10	74	1,100 J	<10	12	<5.0	<5.0	122,000	883	35,800	<5000	177,000	349	29.6	129	<2.0
SAIA-MW2A	Shallow Gaspur	08/25/2014	N	0.17 J	<0.50	0.083 J	<0.50	<0.50	<0.50	<0.50	110 J	1,300	5.5	16	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2A	Shallow Gaspur	08/25/2014	FD	0.16 J	<0.50	0.087 J	<0.50	<0.50	<0.50	<0.50	120 J	1,300	5.3	15	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2A	Shallow Gaspur	07/11/2016	N	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	85	120	<2.5	5.3	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2B	Intermediate Gaspur	03/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7.2	6.8 J	<0.50	1.7	<5.0	<5.0	398,000	2,880	136,000	<5000	285,000	88.2	24.9	44.5	<2.0
SAIA-MW2B	Intermediate Gaspur	08/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.9	2.8	0.75	1.3	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2B	Intermediate Gaspur	07/11/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	0.57	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2C	Lower Gaspur	03/27/2014	N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	28	260 J	<2	14	<5.0	<5.0	457,000	3,220	153,000	5,770	666,000	182	21.8	30.4	<2.0
SAIA-MW2C	Lower Gaspur	08/25/2014	N	0.14 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	33	200	3.3	20	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2C	Lower Gaspur	07/11/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	19 J	4.7	0.87	15	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3A	Shallow Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.073	0.2	9.2 J	<0.50	<0.50	<5.0	<5.0	238,000	12,900	68,900	7,740	156,000	8,320	41.7	147	0.36 J
SAIA-MW3A	Shallow Gaspur	08/26/2014	N	<0.50	<0.50	<0.50	0.045 J	<0.50	<0.50	1.3	0.15 J	3.6	<0.50	<0.46	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3A	Shallow Gaspur	07/13/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.29 J	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3B	Intermediate Gaspur	03/24/2014	N	<25	<25	<25	<25	<25	<25	<25	120	6,700	<25	110 J	<5.0	<5.0	141,000	540	42,400	4,230 J	160,000	108	18.6	43	<1.0
SAIA-MW3B	Intermediate Gaspur	08/26/2014	N	0.28 J	<0.50	0.032 J	<0.50	<0.50	<0.50	1.1	230 J	6,600	47	86	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3B	Intermediate Gaspur	07/13/2016	N	<25	<25	<25	<25	<25	<25	<25	340	3,500	<25	3.9	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3C	Lower Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	2.1	<0.50	1.5	<5.0	<5.0	497,000	3,710	154,000	6,850	308,000	235	6.4	59.8	<1.0
SAIA-MW3C	Lower Gaspur	03/24/2014	FD	<0.50	<0.50	<0.50	0.036	<0.50	<0.50	<0.50	2.5	2	<0.50	1.6	<5.0	<5.0	499,000	3,490	155,000	6,750	307,000	161	6.4	58.1	<1.0
SAIA-MW3C	Lower Gaspur	08/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	6	6.1	<0.46	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3C	Lower Gaspur	07/13/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.4	5.7	<0.50	6.1	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4A	Shallow Gaspur	03/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19	0.53	<0.50	1.6	<5.0	<5.0	170,000	2,170	55,400	6,150	263,000	980	47.3	96.6	<1.0
SAIA-MW4A	Shallow Gaspur	08/26/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19 J	<0.50	1.8	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4A	Shallow Gaspur	07/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4B	Intermediate Gaspur	03/25/2014	N	<25	<25	<25	<25	<25	<25	<25	130	790	<25	58	<5.0	<5.0	177,000	803	48,700	4,640 J	162,000	157	16.9	36.1	<1.0
SAIA-MW4B	Intermediate Gaspur	08/26/2014	N	0.19 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	180 J	150 J	6.5	60	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4B	Intermediate Gaspur	08/26/2014	FD	0.18 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	180 J	150 J	6.5	59 J	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4B	Intermediate Gaspur	07/22/2016	N	<10	<10	<10	<10	<10	<10	<10	210	6.6 J	<10	62 J	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4C	Lower Gaspur	03/25/2014	N	<10	<10	<10	<10	<10	<10	<10	53	3.9 J	<10	14	<5.0	<5.0	348,000	2,160	100,000	5,210	280,000	382	8.3	45.1	<1.0
SAIA-MW4C	Lower Gaspur	08/26/2014	N	0.074 J	<0.50	<0.50	0.074 J	<0.50	<0.50	1.1	73	3.4	11	11 J	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4C	Lower Gaspur	07/22/2016	N	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	1.3 J	120	2.7	45	7.7	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5A	Shallow Gaspur	03/25/2014	N	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1.4 J	21	1.8 J	<5	2.4	<5.0	<5.0	330,000	3,440	110,000	9,010	366,000	1,340	15.7	62	<1.0
SAIA-MW5A	Shallow Gaspur	08/27/2014	N	0.09 J	<0.50	<0.50	0.041 J	<0.50	<0.50	0.77	24 J	1.9	0.72	2.3	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5A	Shallow Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	19	1.3	<0.50	1	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5A	Shallow Gaspur	07/20/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	17	1.2	<0.50	1.3	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5B	Intermediate Gaspur	03/25/2014	N	<25	<25	<25	<25	<25	<25	8.9 J	98	380	<25	16	<5.0	<5.0	276,000	2,520	87,800	4,900 J	337,000	611	18.1	47.2	<1.0
SAIA-MW5B	Intermediate Gaspur	08/27/2014	N	0.22 J	<0.50	<0.50	0.055 J	<0.50	<0.50	1.2	120 J	99 J	4.5	23	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5B	Intermediate Gaspur	07/21/2016	N	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	79	3	20	30 J	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5C	Lower Gaspur	03/25/2014	N	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	21	6.5	<4.0	3.4	<5.0	<5.0	507,000	1,820	147,000	7,330	299,000	297	4.9	51.5	<1.0
SAIA-MW5C	Lower Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	25	4.8	<0.50	3.2	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5C	Lower Gaspur	07/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	11	1.6	<0.50	2.4	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6A	Shallow Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	0.24	<0.50	<0.50	<0.50	0.087	<0.50	0.52	<5.0	<5.0	31,800	12,300	13,300	4,000 J	255,000	7,550	16	112	0.36 J
SAIA-MW6A	Shallow Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	0.034 J	0.19 J	<0.50	0.68	<0.50	<0.50	<0.50	0.53	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6A	Shallow Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6B	Intermediate Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.069	3.9	3.7	<0.50	<0.50	<5.0	<5.0	408,000	1,600	110,000	12,400	719,000	415	5.9	49.1	<1.0

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Metals (ug/L)												General Chemistry (ug/L)						
Location ID	Aquifer	Sample Date	Sample Type	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	Chloride	Sulfate (as SO4)	Total Dissolved Solids	Total Organic Carbon
SAIA-MW1C	Lower Gaspur	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW1C	Lower Gaspur	07/14/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2A	Shallow Gaspur	03/27/2014	N	<1.0	5.6 J	11.3	2.4 J	1.3	674	4.7 J	0.6 J	<1.0	<1.0	<10	13.3 J	780,000	<10000	780,000	26,000	100,000	1,000,000	23,000
SAIA-MW2A	Shallow Gaspur	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2A	Shallow Gaspur	08/25/2014	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2A	Shallow Gaspur	07/11/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2B	Intermediate Gaspur	03/27/2014	N	<1.0	4.2 J	34.6	7.7	2.7	2,290	4.5 J	<10	<1.0	<1.0	<10	9.4 J	490,000	<10000	490,000	320,000	1,500,000	3,200,000	6,400
SAIA-MW2B	Intermediate Gaspur	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2B	Intermediate Gaspur	07/11/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2C	Lower Gaspur	03/27/2014	N	<1.0	4.2 J	43.1	2 J	0.38 J	3,370	4.7 J	1.1 J	0.069 J	<1.0	<10	7.4 J	700,000	<10000	700,000	160,000	2,900,000	5,000,000	6,600
SAIA-MW2C	Lower Gaspur	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW2C	Lower Gaspur	07/11/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3A	Shallow Gaspur	03/24/2014	N	0.1 J	20.2	6.7	21.9	6.2	1,430	16.7	5.1	0.21 J	<1.0	21.7	42	680,000	<10000	680,000	200,000	380,000	1,500,000	--
SAIA-MW3A	Shallow Gaspur	08/26/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3A	Shallow Gaspur	07/13/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3B	Intermediate Gaspur	03/24/2014	N	<1.0	8.2	0.74 J	2.1	0.62 J	766	5.6	<5.0	0.078 J	<1.0	<5.0	26	590,000	<10000	590,000	89,000	220,000	1,100,000	--
SAIA-MW3B	Intermediate Gaspur	08/26/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3B	Intermediate Gaspur	07/13/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3C	Lower Gaspur	03/24/2014	N	<1.0	7.8	0.62 J	3	0.75 J	3,050	7.5	<5.0	0.052 J	<1.0	<5.0	14.2	510,000	<10000	510,000	680,000	1,300,000	3,300,000	--
SAIA-MW3C	Lower Gaspur	03/24/2014	FD	<1.0	8.4	0.56 J	2.6	0.46 J	2,970	7	<5.0	0.066 J	<1.0	<5.0	8.7	490,000	<10000	490,000	670,000	1,200,000	3,400,000	--
SAIA-MW3C	Lower Gaspur	08/26/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW3C	Lower Gaspur	07/13/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4A	Shallow Gaspur	03/25/2014	N	<1.0	8.6	1.1	4.5	0.94 J	1,080	6.9	6.6	<1.0	<1.0	1.6 J	13.2	690,000	<10000	690,000	160,000	390,000	1,500,000	4,300
SAIA-MW4A	Shallow Gaspur	08/26/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4A	Shallow Gaspur	07/22/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4B	Intermediate Gaspur	03/25/2014	N	<1.0	6.7	0.5 J	2.1	0.59 J	957	3.7	<5.0	0.11 J	<1.0	<5.0	9.2	610,000	<10000	610,000	86,000	400,000	1,300,000	19,000
SAIA-MW4B	Intermediate Gaspur	08/26/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4B	Intermediate Gaspur	08/26/2014	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4B	Intermediate Gaspur	07/22/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4C	Lower Gaspur	03/25/2014	N	<1.0	9	0.8 J	2.5	0.8 J	2,420	7.9	<5.0	<1.0	<1.0	<5.0	9.2	480,000	<10000	480,000	510,000	900,000	2,600,000	8,200
SAIA-MW4C	Lower Gaspur	08/26/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW4C	Lower Gaspur	07/22/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5A	Shallow Gaspur	03/25/2014	N	<1.0	19	2.5	8.2	1.8	2,250	14	<5.0	0.08 J	<1.0	3.7 J	19.2	830,000	<10000	830,000	180,000	1,300,000	3,000,000	5,200
SAIA-MW5A	Shallow Gaspur	08/27/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5A	Shallow Gaspur	07/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5A	Shallow Gaspur	07/20/2016	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5B	Intermediate Gaspur	03/25/2014	N	<1.0	14.2	1.2	4.9	1	1,930	10.7	<5.0	0.089 J	<1.0	0.87 J	11.6	630,000	<10000	630,000	150,000	1,200,000	2,600,000	12,000
SAIA-MW5B	Intermediate Gaspur	08/27/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5B	Intermediate Gaspur	07/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5C	Lower Gaspur	03/25/2014	N	<1.0	6.3	1.1	3.1	0.68 J	3,050	7.5	<5.0	0.055 J	<1.0	<5.0	7.9	450,000	<10000	450,000	700,000	1,200,000	3,300,000	7,300
SAIA-MW5C	Lower Gaspur	08/27/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW5C	Lower Gaspur	07/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6A	Shallow Gaspur	03/24/2014	N	0.15 J	27.1	6.7	29.4	7.4	454	22.4	<5.0	0.21 J	<1.0	20.4	65.1	390,000	<10000	390,000	100,000	230,000	940,000	5,900
SAIA-MW6A	Shallow Gaspur	08/27/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6A	Shallow Gaspur	07/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6B	Intermediate Gaspur	03/24/2014	N	<1.0	10.7	0.73 J	4.6	0.45 J	1,800	7	12	0.049 J	<1.0	<5.0	10	710,000	<10000	710,000	350,000	2,000,000	4,300,000	--

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)																						
Location ID	**Aquifer**	**Sample Date**	**Sample Type**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,3-Trichlorobenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,3-Dichlorobenzene**	**1,4-Dichlorobenzene**	**4-Methyl-2-pentanone (MIBK)**	**Acetone**	**Benzene**	**Bromomethane**	**Carbon Disulfide**	**Chlorobenzene**	**Chloroethane**	**Chloroform**	**Chloromethane**	**cis-1,2-Dichloroethylene**	**Cyclohexane**	**Ethylbenzene**	**Isopropylbenzene (Cumene)**	**m,p-Xylene**
SAIA-MW6B	Intermediate Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**14**	<0.50	<0.50	<0.50	<0.50
SAIA-MW6B	Intermediate Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**14**	<0.50	<0.50	<0.50	<0.50
SAIA-MW6C	Lower Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.2**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**17**	<0.50	<0.50	<0.50	**0.031**
SAIA-MW6C	Lower Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	R	**0.24 J**	<0.50	<0.50	<0.50	<0.50	**21**	<0.50	<0.50	<0.50	<0.50
SAIA-MW6C	Lower Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.31 J**	<0.50	<0.50	<0.50	<5.0	**6.3**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**17**	<0.50	<0.50	<0.50	<0.50
SAIA-MW7	Exposition Aquifer	03/27/2014	N	<0.50	**0.3**	<0.50	<0.50	<0.50	**0.96**	<0.50	**0.11**	**0.14**	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**16**	<0.50	<0.50	<0.50	<0.50
SAIA-MW7	Exposition Aquifer	03/27/2014	FD	<0.50	**0.37**	<0.50	<0.50	<0.50	**1.1**	<0.50	**0.12**	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**17**	<0.50	<0.50	<0.50	<0.50
SAIA-MW7	Exposition Aquifer	08/25/2014	N	<0.50	**0.67**	**0.65**	<0.50	<0.50	**1.6**	<0.50	**0.12 J**	<0.50	<5.0	<5.0	**0.14 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**57**	<0.50	<0.50	<0.50	<0.50
SAIA-MW7	Exposition Aquifer	07/11/2016	N	<0.50	**0.84**	<0.50	<0.50	<0.50	**2.9**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**73**	<0.50	<0.50	<0.50	<0.50
SAIA-MW8	Exposition Aquifer	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.18**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.83**	<0.50	<0.50	<0.50	<0.50
SAIA-MW8	Exposition Aquifer	08/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.62**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.9**	<0.50	<0.50	<0.50	<0.50
SAIA-MW8	Exposition Aquifer	07/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	**0.78**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**2.2**	<0.50	<0.50	<0.50	<0.50
SAIA-MW9A	Shallow Gaspur	07/18/2016	N	<0.50	<0.50	<0.50	**0.37 J**	**0.2 J**	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.2**	<0.50	<0.50	<0.50	<0.50
SAIA-MW9A	Shallow Gaspur	09/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.3 J**	<0.50	<0.50	<0.50	<0.50
SAIA-MW9B	Intermediate Gaspur	07/18/2016	N	<0.50	<0.50	<0.50	<0.50	R	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**52**	<0.50	<0.50	<0.50	<0.50
SAIA-MW9B	Intermediate Gaspur	09/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**18**	<0.50	<0.50	<0.50	<0.50
SAIA-MW9C	Lower Gaspur	07/18/2016	FD	<1.0	<1.0	<1.0	<1.0	R	**0.48 J**	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**310**	<1.0	<1.0	<1.0	<1.0
SAIA-MW9C	Lower Gaspur	07/18/2016	N	<1.0	<1.0	<1.0	<1.0	R	**0.4 J**	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**250**	<1.0	<1.0	<1.0	<1.0
SAIA-MW9C	Lower Gaspur	09/20/2016	N	<0.50	**0.88**	**0.82**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**500**	<0.50	<0.50	<0.50	<0.50
SAIA-MW10	Exposition Aquifer	07/18/2016	N	<1.0	<1.0	<1.0	<1.0	R	**0.59 J**	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**220**	<1.0	<1.0	<1.0	<1.0
SAIA-MW10	Exposition Aquifer	09/20/2016	N	<0.50	**0.32 J**	**1.2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.66 J**	**480**	**0.21 J**	<0.50	<0.50	<0.50
SAIA-MW11A	Shallow Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-MW11A	Shallow Gaspur	09/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-MW11B	Intermediate Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**3.5 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**47**	<0.50	<0.50	<0.50	<0.50
SAIA-MW11B	Intermediate Gaspur	09/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**7.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**40**	<0.50	<0.50	<0.50	<0.50
SAIA-MW11C	Lower Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**36**	<0.50	<0.50	<0.50	<0.50
SAIA-MW11C	Lower Gaspur	09/22/2016	FD	<0.50	<0.50	**0.3 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**61**	<0.50	<0.50	<0.50	<0.50
SAIA-MW11C	Lower Gaspur	09/22/2016	N	<0.50	<0.50	**0.27 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**55**	<0.50	<0.50	<0.50	<0.50
SAIA-MW12A	Shallow Gaspur	07/25/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1**	<0.50	<0.50	<0.50	<0.50
SAIA-MW12A	Shallow Gaspur	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**5.3 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.5**	<0.50	<0.50	<0.50	<0.50
SAIA-MW12B	Intermediate Gaspur	07/25/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.77 J**	<0.50	<0.50	<0.50	<0.50
SAIA-MW12B	Intermediate Gaspur	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.7**	<0.50	<0.50	<0.50	<0.50
SAIA-MW12C	Lower Gaspur	07/25/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.66 J**	<0.50	<0.50	<0.50	<0.50
SAIA-MW12C	Lower Gaspur	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**9 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**8**	<0.50	<0.50	<0.50	<0.50
SAIA-MW13	Exposition Aquifer	07/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**190**	<0.50	<0.50	<0.50	<0.50
SAIA-MW13	Exposition Aquifer	09/21/2016	N	<0.50	<0.50	**0.47 J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**250**	<0.50	<0.50	<0.50	<0.50

Screening Criteria

MCL or NL				5	5	6	NA	70	0.5	5	NA	75	NA	NA	1	NA	NA	100	NA	80	NA	6	NA	700	NA	1750
RSL for Tap Water, or DTSC-modified RSL				0.28	2.8	280	7	NA	NA	NA	NA	NA	6300	14000	0.15 [1]	7.5	810	78	2100	0.22	190	NA	13000	1.5	450	NA

Notes:

Exceeds primary (not secondary) MCL for California or US, or exceeds NL (California Notification Level).

In the absence of a primary MCL or NL, value is highlighted if it exceeds the DTSC-modified screening level or RSL Tap Water screening criterion.

[1] = Based on California-modified RSLs (DTSC, 2018 - Table 2 Screening Levels for Tapwater, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs] [released June 2018]).

[2] = Based on Notification Level (California SWRCB Division of Drinking Water, updated 2 February 2018).

[3] = Secondary MCL (not used for determining a screening-level exceedance)

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)										Semivolatiles (ug/L)			Metals (ug/L)								
Location ID	**Aquifer**	**Sample Date**	**Sample Type**	**Methylcyclohexane**	**Methylene Chloride**	**o-Xylene**	**Styrene**	**tert-Butyl Methyl Ether (MTBE)**	**Tetrachloroethene (PCE)**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene (TCE)**	**Vinyl Chloride**	**1,4-Dioxane (p-Dioxane)**	**bis(2-Ethylhexyl) Phthalate**	**Carbazole**	**Calcium**	**Iron**	**Magnesium**	**Potassium**	**Sodium**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**
SAIA-MW6B	Intermediate Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	**0.048 J**	<0.50	<0.50	**0.99**	**5.1**	**3.6**	<0.50	**0.26 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6B	Intermediate Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**3.7**	**2.7**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6C	Lower Gaspur	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.075**	**2.3**	**2**	<0.50	**0.52**	<5.0	<5.0	**499,000**	**2,270**	**130,000**	**8,710**	**492,000**	**237**	**4.2**	**52.5**	<1.0
SAIA-MW6C	Lower Gaspur	08/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**2.8**	**2.4**	<0.50	**0.52**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6C	Lower Gaspur	07/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**2.9**	**2**	**1.2**	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW7	Exposition Aquifer	03/27/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.1**	**24 J**	<0.50	**1.9**	<5.0	<5.0	**714,000**	**1,370**	**166,000**	**5,930 J**	**359,000**	**927**	**4.7**	**92.1**	<2.0
SAIA-MW7	Exposition Aquifer	03/27/2014	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.1**	**22 J**	<0.50	**2**	<5.0	<5.0	**737,000**	**419**	**171,000**	**5,850 J**	**368,000**	**302**	**3.3**	**62.4**	<1.0
SAIA-MW7	Exposition Aquifer	08/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**2.5**	**22**	**1.3**	**3.6**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW7	Exposition Aquifer	07/11/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**4.8**	**19**	<0.50	**7.9**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW8	Exposition Aquifer	03/24/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.18**	**0.08**	**0.53**	<0.50	<0.50	<5	<5	**374,000**	**874**	**80,500**	**5,180**	**142,000**	**178**	**8.9**	**82.6**	<1
SAIA-MW8	Exposition Aquifer	08/25/2014	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.2 J**	**3.9**	<0.50	**0.16 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW8	Exposition Aquifer	07/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.31 J**	**1.3**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9A	Shallow Gaspur	07/18/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.13 J**	<0.50	<0.50	**7.5**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9A	Shallow Gaspur	09/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.5 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9B	Intermediate Gaspur	07/18/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.5**	**0.91**	<0.50	**1.2**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9B	Intermediate Gaspur	09/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.4**	**1.4**	<0.50	**1 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9C	Lower Gaspur	07/18/2016	FD	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**22**	**0.74 J**	<1.0	**1.7**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9C	Lower Gaspur	07/18/2016	N	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**22**	**0.7 J**	<1.0	**3.6**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9C	Lower Gaspur	09/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**35**	**0.79**	**0.71**	**2.1 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW10	Exposition Aquifer	07/18/2016	N	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**14**	**0.93 J**	<1.0	**0.72**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW10	Exposition Aquifer	09/20/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**19 J**	**1.4**	**0.67**	**1.1 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11A	Shallow Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11A	Shallow Gaspur	09/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11B	Intermediate Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**6.1**	**16**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11B	Intermediate Gaspur	09/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**3.7**	**15**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11C	Lower Gaspur	07/15/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**6.7**	**11**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11C	Lower Gaspur	09/22/2016	FD	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**6.4**	**9.4**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11C	Lower Gaspur	09/22/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**7.2**	**11**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12A	Shallow Gaspur	07/25/2016	N	<0.50	<0.50	<0.50	<0.50	**0.67**	<0.50	<0.50	**0.2 J**	**0.63**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12A	Shallow Gaspur	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	**0.56**	<0.50	<0.50	**0.35 J**	**0.97**	<0.50	**0.72 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12B	Intermediate Gaspur	07/25/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.73**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12B	Intermediate Gaspur	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	**1.3**	<0.50	<0.50	**0.42 J**	**1.6**	<0.50	**1 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12C	Lower Gaspur	07/25/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12C	Lower Gaspur	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	**0.51**	<0.50	<0.50	**0.67**	**1.5**	<0.50	**0.48 J**	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW13	Exposition Aquifer	07/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**29**	**1.5**	<0.50	<0.50	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW13	Exposition Aquifer	09/21/2016	N	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**32**	**2**	**0.36 J**	**0.22 J**	--	--	--	--	--	--	--	--	--	--	--

Screening Criteria

MCL or NL				NA	5	1750	100	13	5	150	10	5	0.5	1 [2]	6	NA	NA	300 [3]	NA	NA	NA	1,000	10	2,000	4 [1]
RSL for Tap Water, or DTSC-modified RSL				NA	0.93 [1]	190	1200	NA	0.082 [1]	1100	360	0.49	0.019	0.46	5.6	NA	NA	14,000	NA	NA	NA	20,000	0.0082	3,800	25

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Metals (ug/L)												General Chemistry (ug/L)						
Location ID	**Aquifer**	**Sample Date**	**Sample Type**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Manganese**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**	**Alkalinity, Bicarbonate (as CaCO3)**	**Alkalinity, Carbonate (as CaCO3)**	**Alkalinity, Total (as CaCO3)**	**Chloride**	**Sulfate (as SO4)**	**Total Dissolved Solids**	**Total Organic Carbon**
SAIA-MW6B	Intermediate Gaspur	08/27/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6B	Intermediate Gaspur	07/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6C	Lower Gaspur	03/24/2014	N	<1.0	**18.6**	**0.86 J**	**3.5**	**2**	**2,300**	**13.8**	**12.3**	**0.071 J**	<1.0	<5.0	**10.2**	**640,000**	<10000	**640,000**	**410,000**	**1,900,000**	**4,100,000**	--
SAIA-MW6C	Lower Gaspur	08/27/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW6C	Lower Gaspur	07/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW7	Exposition Aquifer	03/27/2014	N	**0.17 J**	**12.2 J**	**63.8**	**4.9**	**1.6**	**3,550**	**18.9 J**	<10	<1.0	<1.0	<10	**19.5 J**	**420,000**	<10000	**420,000**	**730,000**	**2,100,000**	**4,800,000**	**4,000**
SAIA-MW7	Exposition Aquifer	03/27/2014	FD	<1.0	**3.2 J**	**59.4**	**2.3**	**0.74 J**	**3,530**	**6.7 J**	<5.0	**0.06 J**	<1.0	<5.0	**10.5 J**	**420,000**	<10000	**420,000**	**740,000**	**2,200,000**	**4,700,000**	**3,900**
SAIA-MW7	Exposition Aquifer	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW7	Exposition Aquifer	07/11/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW8	Exposition Aquifer	03/24/2014	N	<1	**8.4**	**0.54 J**	**2.3**	**0.83 J**	**703**	**5.5**	<5	**0.27 J**	<1	<5	**25.6**	**320,000**	<10000	**320,000**	**390,000**	**780,000**	**2,100,000**	--
SAIA-MW8	Exposition Aquifer	08/25/2014	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW8	Exposition Aquifer	07/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9A	Shallow Gaspur	07/18/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9A	Shallow Gaspur	09/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9B	Intermediate Gaspur	07/18/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9B	Intermediate Gaspur	09/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9C	Lower Gaspur	07/18/2016	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9C	Lower Gaspur	07/18/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW9C	Lower Gaspur	09/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW10	Exposition Aquifer	07/18/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW10	Exposition Aquifer	09/20/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11A	Shallow Gaspur	07/15/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11A	Shallow Gaspur	09/22/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11B	Intermediate Gaspur	07/15/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11B	Intermediate Gaspur	09/22/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11C	Lower Gaspur	07/15/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11C	Lower Gaspur	09/22/2016	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW11C	Lower Gaspur	09/22/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12A	Shallow Gaspur	07/25/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12A	Shallow Gaspur	09/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12B	Intermediate Gaspur	07/25/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12B	Intermediate Gaspur	09/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12C	Lower Gaspur	07/25/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW12C	Lower Gaspur	09/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW13	Exposition Aquifer	07/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAIA-MW13	Exposition Aquifer	09/21/2016	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Screening Criteria																						
MCL or NL				5	100	NA	1,300	15	50 [3]	100	50	100 [3]	2	NA	500 [3]	NA	NA	NA	250,000 [3]	250,000 [3]	500,000 [3]	NA
RSL for Tap Water, or DTSC-modified RSL				9.2	NA	6	80	15	430	NA	100	94	0.2	86	6000	NA	NA	NA	NA	NA	NA	NA

Table 4-5
VOCs, SVOCs, and Metals Detected in Groundwater Samples from Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

				Volatiles (ug/L)																						
Location ID	**Aquifer**	**Sample Date**	**Sample Type**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,3-Trichlorobenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,3-Dichlorobenzene**	**1,4-Dichlorobenzene**	**4-Methyl-2-pentanone (MIBK)**	**Acetone**	**Benzene**	**Bromomethane**	**Carbon Disulfide**	**Chlorobenzene**	**Chloroethane**	**Chloroform**	**Chloromethane**	**cis-1,2-Dichloroethylene**	**Cyclohexane**	**Ethylbenzene**	**Isopropylbenzene (Cumene)**	**m,p-Xylene**

Notes (continued):

Detected results shown in bold font

FD = Field duplicate sample results

ID = Identification number

J = Estimated value

MCL = Maximum contaminant level

N = Normal sample results

NA = Not available

NL - Notification Level (California SWRCB Division of Drinking Water, updated 2 February 2018)

PCB = Polychlorinated biphenyl

R = The sample result was rejected due to serious deficiencies in meeting QC criteria.

RSL = Regional Screening Level, EPA Region 9

ug/L = Micrograms per liter

-- = Not analyzed

Table 4-6
VOCs and SVOCs Detected in Groundwater Discrete-Depth Samples from CPT Borings
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

					VOCs (ug/L)																									SVOC (ug/L)
Location ID	Aquifer	Sample Date	Sample Type	Sample Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2-Butanone (MEK)	Acetone	Benzene	Bromoform	Bromomethane	Carbon Disulfide	cis-1,2-Dichloroethylene	Cyclohexane	Dibromochloromethane	m,p-Xylene	Methyl Acetate	Methylene Chloride	o-Xylene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	1,4-Dioxane (p-Dioxane)
SAIA-HP10	Perched Aquifer	02/28/2013	N	42	0.23 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	11	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.18 J	0.15 J	0.33 J	20	<0.50	<0.50
SAIA-HP10	Shallow Gaspur	02/27/2013	N	64	22 J	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	2,000	<25	<25	<25	<25	<25	<25	<25	<25	43	1,400	<25	19
SAIA-HP10	Intermediate Gaspur	02/27/2013	N	85	2.2 J	<4.0	<4.0	58	<4.0	<4.0	<4.0	<40	<40	15	<4.0	<4.0	<4.0	400	2.0 J	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	19	8.7	<4.0	6.0
SAIA-HP10	Lower Gaspur	02/27/2013	N	102	13 J	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	560	<25	<25	<25	<25	<25	<25	<25	<25	33	1,800 J	<25	0.60
SAIA-HP10	Exposition Aquifer	02/27/2013	N	122	<0.50	<0.50	<0.50	0.46 J	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	5.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.36 J	12	<0.50	32
SAIA-HP17	Shallow Gaspur	03/11/2013	N	65	0.32 J	<2.0	<2.0	32	<2.0	<2.0	<2.0	<2.00	12 J	<2.0	<2.0	<2.0	<2.0	62	1.4 J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.5	88	<2.0	1.7
SAIA-HP17	Shallow Gaspur	03/11/2013	FD	65	0.27 J	<2.0	<2.0	25	<2.0	<2.0	<2.0	<2.00	10 J	<2.0	<2.0	<2.0	<2.0	50	1.1 J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.9	110	<2.0	1.1
SAIA-HP17	Intermediate Gaspur	03/11/2013	N	82	<0.50	<0.50	<0.50	3.6	<0.50	<0.50	<0.50	<5.0	16	<0.50	<0.50	<0.50	<0.50	1.3	0.38 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.29 J	10	<0.50	1.2
SAIA-HP17	Lower Gaspur	03/11/2013	N	100	0.12 J	<0.50	<0.50	0.49 J	<0.50	<0.50	<0.50	<5.0	11	<0.50	<0.50	<0.50	<0.50	21	0.069 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	24	<0.50	1.8
SAIA-HP17	Exposition Aquifer	03/11/2013	N	123	<0.50	<0.50	<0.50	0.42 J	<0.50	<0.50	<0.50	<5.0	87	<0.50	<0.50	<0.50	<0.50	0.60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.60	<0.50	7.1
SAIA-HP18	Shallow Gaspur	03/12/2013	N	67	0.12 J	<0.50	<0.50	0.17 J	<0.50	<0.50	<0.50	<5.0	4.0 J	<0.50	<0.50	<0.50	<0.50	5.8	0.097 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.79	40	<0.50	2.6
SAIA-HP18	Intermediate Gaspur	03/12/2013	N	85	1.7 J	4.5	<2.0	53	<2.0	<2.0	<2.0	<2.00	12 J	<2.0	<2.0	<2.0	<2.0	170	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	13	38	<2.0	6.8
SAIA-HP18	Lower Gaspur	03/12/2013	N	100	5.8	7.3	<5.0	29	<5.0	<5.0	<5.0	<5.00	21 J	<5.0	<5.0	<5.0	<5.0	460	2.2 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	66	180	<5.0	13
SAIA-HP18	Lower Gaspur	03/12/2013	FD	100	8.5	11	<4.0	52	<4.0	<4.0	<4.0	<400	<400	<4.0	<4.0	<4.0	<4.0	960	3.8 J	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	100	410	<4.0	11
SAIA-HP18	Exposition Aquifer	03/12/2013	N	124	<0.50	<0.50	<0.50	0.66	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-HP21	Perched Aquifer	02/26/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	8.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.62	<0.50	<0.50
SAIA-HP21	Shallow Gaspur	02/26/2013	N	64	13 J	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	2,100	<25	<25	<25	<25	<25	<25	<25	<25	50	3,500	<25	33
SAIA-HP21	Intermediate Gaspur	02/26/2013	N	85	<0.50	<0.50	<0.50	3.8	0.38 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	4.5	<0.50	0.56
SAIA-HP21	Lower Gaspur	02/26/2013	N	102	1.3 J	<2.0	<2.0	7.6	<2.0	<2.0	<2.0	<200	<200	<2.0	<2.0	<2.0	<2.0	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.2	170	<2.0	6.0
SAIA-HP21	Exposition Aquifer	02/26/2013	N	122	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.22 J	<0.50	<0.50
SAIA-HP21	Exposition Aquifer	02/26/2013	N	142	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.3 J	14	<0.50	<0.50	<0.50	<0.50	2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.9	<0.50	<0.50
SAIA-HP36	Shallow Gaspur	02/28/2013	N	64	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	4.9 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.34 J	<0.50	<0.50
SAIA-HP36	Intermediate Gaspur	02/28/2013	N	89	7.9	2.3	<0.50	2.3	0.47 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	61	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.5	12	6.6	23
SAIA-HP36	Lower Gaspur	02/28/2013	N	108	0.7	<0.50	<0.50	0.40 J	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	0.61	<0.50	1.9
SAIA-HP36	Exposition Aquifer	02/28/2013	N	128	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT02	Perched Aquifer	03/22/2013	N	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	0.45 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.091 J	<0.50	<0.50
SAIA-CPT02	Shallow Gaspur	03/22/2013	N	64	0.10 J	<0.50	<0.50	0.065 J	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	7.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	1.3	<0.50	<0.50
SAIA-CPT02	Intermediate Gaspur	03/22/2013	N	80	<0.50	<0.50	<0.50	8.0	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.18 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.085 J	<0.50	1.0
SAIA-CPT02	Lower Gaspur	03/22/2013	N	98	<0.50	<0.50	<0.50	6.1	0.21 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.13 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.063 J	<0.50	0.95
SAIA-CPT02	Exposition Aquifer	03/22/2013	N	124	<0.50	<0.50	<0.50	0.30 J	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--
SAIA-CPT03	Perched Aquifer	03/13/2013	N	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--
SAIA-CPT03	Shallow Gaspur	03/13/2013	N	64	<2.0	<2.0	<2.0	<2.0	<2.0	0.087 J	0.12 J	<2.00	<2.00	<2.0	<2.0	<2.0	<2.0	120	<2.0	<2.0	<2.0	<2.0	6.0	<2.0	<2.0	<2.0	44	92	<2.0	8.0
SAIA-CPT03	Intermediate Gaspur	03/13/2013	N	84	<0.50	<0.50	<0.50	0.39 J	<0.50	<0.50	<0.50	<5.0	6.3	<0.50	<0.50	<0.50	<0.50	0.31 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.21 J	<0.50	0.42 J
SAIA-CPT03	Intermediate Gaspur	03/13/2013	FD	84	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	3.1 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.42 J
SAIA-CPT03	Lower Gaspur	03/13/2013	N	102	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.71
SAIA-CPT03	Exposition Aquifer	03/13/2013	N	138	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	16	<0.50	<0.50	<0.50	<0.50	4.3	<0.50	<0.50	0.11 J	<0.50	<0.50	<0.50	<0.50	<0.50	0.26 J	2.4	<0.50	<0.50
SAIA-CPT04	Perched Aquifer	03/14/2013	N	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	2.8 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--
SAIA-CPT04	Shallow Gaspur	03/14/2013	N	64	12 J	<25	<25	<25	<25	<25	<25	<250	<250	<25	<25	<25	<25	1,300	<25	<25	<25	<25	<25	<25	<25	<25	29	890	<2.05	12
SAIA-CPT04	Intermediate Gaspur	03/14/2013	N	84	0.12 J	<0.50	<0.50	1.4	<0.50	<0.50	<0.50	<5.0	21	<0.50	<0.50	<0.50	<0.50	52	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	6.5	<0.50	0.57
SAIA-CPT04	Lower Gaspur	03/14/2013	N	102	2.3 J	<4.0	<4.0	4.5	<4.0	<4.0	<4.0	<4.00	<4.00	<4.0	<4.0	<4.0	<4.0	55	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.5	280	<4.0	9.2
SAIA-CPT04	Exposition Aquifer	03/14/2013	N	128	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT05	Perched Aquifer	03/04/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	9.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.36 J	0.87	<0.50	0.77
SAIA-CPT05	Shallow Gaspur	03/05/2013	N	64	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	490	<10	<10	<10	<10	23	<10	<10	<10	31	400	<10	2.6
SAIA-CPT05	Intermediate Gaspur	03/05/2013	N	84	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	97	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	1.3 J	<1.0	0.9
SAIA-CPT05	Lower Gaspur	03/05/2013	N	104	<0.50	<0.50	<0.50	1.3	0.19 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	7.3	0.10 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.38 J	2.7	<0.50	1.6
SAIA-CPT05	Exposition Aquifer	03/05/2013	N	130	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.14 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT06	Perched Aquifer	03/08/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	21	<0.50	<0.50	<0.50	<0.50	0.077 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.092 J	<0.50	<0.50	<0.50	--
SAIA-CPT06	Shallow Gaspur	03/08/2013	N	63	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	3.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.49 J	2.1	<0.50	<0.50
SAIA-CPT06	Intermediate Gaspur	03/08/2013	N	82	21 J	<40	<40	<40	<40	<40	<40	<400	<400	<40	<40	<40	<40	3,900	<40	<40	<40	<40	<40	<40	<40	5.4 J	770	270	<40	40
SAIA-CPT06	Lower Gaspur	03/08/2013	N	102	0.13 J	<0.50	0.094 J	1.8	0.22 J	<0.50	<0.50	<5.0	11	<0.50	<0.50	<0.50	<0.50	42	0.12 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.9	1.3	<0.50	1.0
SAIA-CPT06	Exposition Aquifer	03/08/2013	N	132	<0.50	<0.50	<0.50	0.12 J	<0.50	<0.50	<0.50	<5.0	15	<0.50	<0.50	<0.50	<0.50	0.3 J	<0.50	<0.50	<0.50	0.4 J	0.1 J	<0.50	<0.50	<0.50	<0.50	0.087 J	<0.50	<0.50
SAIA-CPT07	Perched Aquifer	03/04/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19 J	<0.50	<0.50	<0.50	<0.50
SAIA-CPT07	Shallow Gaspur	03/01/2013	N	70	2.0 J	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	780	<10	<10	<10	<10	<10	<10	<10	<10	36	16	<10	15
SAIA-CPT07	Shallow Gaspur	03/01/2013	FD	70	2.3 J	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	810	<10	<10	<10	<10	<10	<10	<10	<10	40	17	<10	20
SAIA-CPT07	Lower Gaspur	03/01/2013	N	96	<0.50	<0.50	<0.50	0.53	<0.50	<0.50	<0.50	<5.0	4.8 J	<0.50	<0.50	<0.50	<0.50	13	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	2.9	<0.50	0.66
SAIA-CPT07	Lower Gaspur/Exposition	03/01/2013	N	114	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	14	<0.50	<0.50	<0.50	<0.50	3.1	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	0.16 J	<0.50	<0.50	<0.50
SAIA-CPT07	Exposition Aquifer	03/01/2013	N	134	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	8.6	<0.50	<0.50	<0.50	<0.50	0.28 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT08	Perched Aquifer	03/07/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.13 J	<0.50	<0.50

Table 4-6
VOCs and SVOCs Detected in Groundwater Discrete-Depth Samples from CPT Borings
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

					VOCs (ug/L)																									SVOC (ug/L)
Location ID	Aquifer	Sample Date	Sample Type	Sample Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2-Butanone (MEK)	Acetone	Benzene	Bromoform	Bromomethane	Carbon Disulfide	cis-1,2-Dichloroethylene	Cyclohexane	Dibromochloromethane	m,p-Xylene	Methyl Acetate	Methylene Chloride	o-Xylene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	1,4-Dioxane (p-Dioxane)
SAIA-CPT08	Intermediate Gaspur	03/07/2013	N	76	<10	<10	<10	<10	<10	<10	<10	<100	<100	<10	<10	<10	<10	530	<10	<10	<10	<10	<10	<10	<10	<10	27	12	<10	1.8
SAIA-CPT08	Lower Gaspur	03/07/2013	N	96	0.18 J	<0.50	<0.50	1.0	0.17 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	78	0.11 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5	1.7	<0.50	0.55
SAIA-CPT08	Exposition Aquifer	03/07/2013	N	121	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.69	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.066 J	<0.50	0.13 J	<0.50	<0.50
SAIA-CPT09	Perched Aquifer	03/06/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.51
SAIA-CPT09	Intermediate Gaspur	03/06/2013	N	78	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.00	<2.00	<2.0	<2.0	<2.0	<2.0	110	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	12	0.56 J	<2.0	<0.50
SAIA-CPT09	Intermediate Gaspur	03/06/2013	FD	78	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	140	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	16	<2.5	<2.5	<0.50
SAIA-CPT09	Lower Gaspur	03/06/2013	N	98	0.36 J	<0.50	<0.50	1.2	0.19 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	43	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.3	2.4	<0.50	0.65
SAIA-CPT09	Exposition Aquifer	03/06/2013	N	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.22 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT10	Perched Aquifer	03/21/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.48 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT10	Shallow Gaspur	03/21/2013	N	60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	15	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.61	<0.50	0.09 J	<0.50	<0.50	<0.50	0.31 J	<0.50	<0.50
SAIA-CPT10	Intermediate Gaspur	03/21/2013	N	80	2.2 J	3.2 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.00	<5.00	<5.0	<5.0	<5.0	<5.0	1,800	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	82	170 J	<5.0	9.1
SAIA-CPT10	Lower Gaspur	03/21/2013	N	100	<0.50	<0.50	<0.50	0.88	0.14 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	68	0.19 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7.6	13 J	<0.50	<0.50
SAIA-CPT10	Exposition Aquifer	03/21/2013	N	122	<0.50	<0.50	<0.50	0.86	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	0.10 J	<0.50	2.3	<0.50	<0.50	<0.50	0.49 J	<0.50	<0.50	9.9	<0.50	<0.50	15	<0.50	<0.50
SAIA-CPT11	Perched Aquifer	03/20/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--
SAIA-CPT11	Shallow Gaspur	03/20/2013	N	64	<4.0	<4.0	<4.0	0.72 J	<4.0	<4.0	<4.0	9.4 J	<4.00	<4.0	<4.0	<4.0	<4.0	390	<4.0	<4.0	0.49 J	<4.0	<4.0	<4.0	9.4	<4.0	2.3 J	120	62	1.5
SAIA-CPT11	Intermediate Gaspur	03/20/2013	N	84	4.1 J	<20	<20	<20	<20	<20	<20	<200	<200	<20	<20	<20	<20	1,800	<20	<20	<20	<20	<20	<20	<20	<20	86	140	<20	3.7
SAIA-CPT11	Lower Gaspur	03/20/2013	N	104	0.38 J	<0.50	<0.50	1.4	0.22 J	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	160	0.12 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	13	2.8	<0.50	1.6
SAIA-CPT11	Lower Gaspur	03/20/2013	FD	104	0.40 J	<1.0	<1.0	1.5	0.27 J	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	14	2.9	<1.0	1.1
SAIA-CPT11	Exposition Aquifer	03/20/2013	N	129	<0.50	<0.50	<0.50	0.11 J	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.47 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.66	<0.50	<0.50
SAIA-CPT12	Perched Aquifer	03/19/2013	N	41	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.083 J	<0.50	<0.50
SAIA-CPT12	Shallow Gaspur	03/19/2013	N	65	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.29 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.48 J
SAIA-CPT12	Intermediate Gaspur	03/19/2013	N	80	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<200	<2.0	<2.0	<2.0	<2.0	93	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	7.5	44	<2.0	<0.50
SAIA-CPT12	Lower Gaspur	03/19/2013	N	98	<0.50	<0.50	<0.50	0.57	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	50	0.07 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.9	1.4	<0.50	<0.50
SAIA-CPT12	Exposition Aquifer	03/19/2013	N	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT13	Perched Aquifer	03/15/2013	N	42	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	10	<0.50	<0.50	<0.50	<0.50	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.18 J	0.15 J	<0.50	<0.50
SAIA-CPT13	Shallow Gaspur	03/15/2013	N	68	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	3.2 J	<0.50	<0.50	<0.50	<0.50	2.7	<0.50	<0.50	<0.50	0.24 J	<0.50	<0.50	<0.50	<0.50	0.48 J	0.94	<0.50	<0.50
SAIA-CPT13	Intermediate Gaspur	03/15/2013	N	82	<0.50	<0.50	<0.50	0.084 J	<0.50	<0.50	<0.50	<5.0	3.6 J	<0.50	<0.50	<0.50	<0.50	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.69	3.3	<0.50	<0.50
SAIA-CPT13	Lower Gaspur	03/15/2013	N	98	<0.50	<0.50	<0.50	0.36 J	<0.50	<0.50	<0.50	<5.0	4.6 J	<0.50	<0.50	<0.50	<0.50	9.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	6.0	<0.50	<0.50
SAIA-CPT13	Exposition Aquifer	03/15/2013	N	121	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	21	<0.50	<0.50	<0.50	<0.50	0.091 J	<0.50	<0.50	<0.50	0.42 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT14	Shallow Gaspur	07/23/2015	N	60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT14	Intermediate Gaspur	07/23/2015	N	75	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	130	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7.1	2.7	<0.50	<0.50
SAIA-CPT14	Intermediate Gaspur	07/23/2015	FD	75	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	140	<0.50	<0.50	<0.50	<0.50	0.26 J	<0.50	<0.50	<0.50	8.4	3.1	<0.50	0.37 J
SAIA-CPT14	Lower Gaspur	07/23/2015	N	100	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	440	<25	<25	<25	<25	<25	<25	<25	<25	36	<25	<25	<0.50
SAIA-CPT14	Exposition Aquifer	07/23/2015	N	130	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.00	<5.00	<5.0	<5.0	<5.0	<5.0	770	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	33	<5.0	<5.0	0.27 J
SAIA-CPT15	Perched Aquifer	07/29/2015	N	45	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<6.2	<0.50	<0.50	<0.50	<0.50	0.65	<0.50	<0.50	<0.50	<0.50	0.53	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT15	Shallow Gaspur	07/28/2015	N	60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT15	Intermediate Gaspur	07/28/2015	N	75	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	180	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	19	5.0	<0.50	<0.50
SAIA-CPT15	Lower Gaspur	07/28/2015	N	90	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.00	<2.00	<2.0	<2.0	<2.0	<2.0	250	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	25	2.4	<2.0	<0.50
SAIA-CPT15	Lower Gaspur	07/28/2015	FD	90	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	270	<25	<25	<25	<25	<25	<25	<25	<25	24	2.2 J	<25	<0.50
SAIA-CPT15	Lower Gapsur	07/28/2015	N	105	<0.50	<0.50	<0.50	0.40 J	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	11	0.87	<0.50	<0.50
SAIA-CPT15	Exposition Aquifer	07/28/2015	N	130	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<7.8	<0.50	<0.50	<0.50	<0.50	150	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.4	4.1	<0.50	<0.50
SAIA-CPT16	Perched Aquifer	07/30/2015	N	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--
SAIA-CPT16	Shallow Gaspur	07/29/2015	N	55	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.31 J
SAIA-CPT16	Intermediate Gaspur	07/29/2015	N	70	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	9.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	1.4	<0.50	<0.50
SAIA-CPT16	Intermediate Gaspur	07/29/2015	N	85	<0.50	<0.50	<0.50	0.23 J	<0.50	<0.50	<0.50	<5.0	<11	<0.50	<0.50	<0.50	<0.50	72	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	16	7.8	<0.50	<0.50
SAIA-CPT16	Lower Gaspur	07/29/2015	N	105	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	14	0.94	<0.50	<0.50
SAIA-CPT16	Exposition Aquifer	07/29/2015	N	125	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0.5	<0.50	<0.50	<0.50	<0.50	6.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.4 J	1.2	<0.50	<0.50
SAIA-CPT17	Perched Aquifer	07/31/2015	N	48	3.0	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.39 J	0.46 J	<0.50	0.68
SAIA-CPT17	Shallow Gaspur	07/30/2015	N	61	7.7	4.9	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	6.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.57	0.59	<0.50	14
SAIA-CPT17	Intermediate Gaspur	07/30/2015	N	74	1.3	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	37	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.1	13	<0.50	2.1
SAIA-CPT17	Intermediate Gaspur	07/30/2015	FD	75	1.4	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.6	14	<0.50	1.4
SAIA-CPT17	Lower gaspur	07/30/2015	N	92	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	11	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	2.5	<0.50	<0.50
SAIA-CPT17	Lower Gaspur	07/30/2015	N	105	<0.50	<0.50	<0.50	0.30 J	<0.50	<0.50	<0.50	<5.0	7.6	<0.50	<0.50	<0.50	<0.50	29	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.7	2.0	<0.50	<0.50
SAIA-CPT17	Exposition Aquifer	07/30/2015	N	128	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	0.36 J	<0.50	<0.50	<0.50	<0.50	0.36 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
SAIA-CPT18	Shallow Gaspur	07/31/2015	N	49	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.27 J	<0.50	0.51
SAIA-CPT18	Shallow Gaspur	07/31/2015	N	68	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.97	<0.50	<0.50
SAIA-CPT18	Intermediate Gaspur	07/31/2015	N	84	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	8.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.61	0.61	<0.50	0.60

Table 4-6
VOCs and SVOCs Detected in Groundwater Discrete-Depth Samples from CPT Borings
Southern Avenue Industrial Area Superfund Site
South Gate, Los Angeles County, California

					VOCs (ug/L)																									SVOC (ug/L)
Location ID	**Aquifer**	**Sample Date**	**Sample Type**	**Sample Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,3-Trichloropropane**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,3-Dichlorobenzene**	**1,4-Dichlorobenzene**	**2-Butanone (MEK)**	**Acetone**	**Benzene**	**Bromoform**	**Bromomethane**	**Carbon Disulfide**	**cis-1,2-Dichloroethylene**	**Cyclohexane**	**Dibromochloromethane**	**m,p-Xylene**	**Methyl Acetate**	**Methylene Chloride**	**o-Xylene**	**Tetrachloroethene (PCE)**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene (TCE)**	**Vinyl Chloride**	**1,4-Dioxane (p-Dioxane)**
SAIA-CPT18	Lower Gaspur	07/31/2015	N	102	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.4**	**0.64**	<0.50	<0.50
SAIA-CPT18	Exposition Aquifer	07/31/2015	N	125	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.53**	<0.50	**1.1**
SAIA-CPT19	Shallow Gaspur	07/27/2015	N	48	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.6**
SAIA-CPT19	Intermediate Gaspur	07/24/2015	N	70	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**20**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**6.7**	**1.2**	<0.50	<0.50
SAIA-CPT19	Lower Gaspur	07/24/2015	N	90	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**46**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**11**	**0.52**	<0.50	<0.50
SAIA-CPT19	Lower Gapsur	07/24/2015	N	104	<0.50	<0.50	<0.50	**0.26 J**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**44**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**13**	**1.1**	<0.50	<0.50
SAIA-CPT19	Lower Gaspur/ Exposition	07/24/2015	N	118	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**46**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**3.6**	**33**	<0.50	<0.50
SAIA-CPT19	Exposition Aquifer	07/24/2015	N	132	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**530**	<25	<25	<25	<25	<3.2	<25	<25	<25	**26**	**8.0**	<25	**0.87**
SAIA-CPT20	Shallow Gaspur	07/28/2015	N	50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.35 J**
SAIA-CPT20	Shallow Gaspur	07/27/2015	N	69	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**9.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**2.0**	**1.5**	<0.50	**0.62**
SAIA-CPT20	Intermediate Gaspur	07/27/2015	N	88	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**20**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**3.5**	**2.0**	<0.50	**0.35 J**
SAIA-CPT20	Intermediate Gaspur	07/27/2015	FD	89	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	**18**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**3.6**	**2.0**	<0.50	**0.42 J**
SAIA-CPT20	Lower Gaspur	07/27/2015	N	105	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<15	<0.50	<0.50	<0.50	<0.50	**7.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**1.2**	**0.55**	<0.50	<0.50
SAIA-CPT20	Exposition Aquifer	07/27/2015	N	132	<0.50	<0.50	<0.50	**0.35 J**	<0.50	<0.50	<0.50	<5.0	<7.5	<0.50	<0.50	<0.50	<0.50	**45**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**7.6**	**0.42 J**	<0.50	--
Screening Criteria																														
MCL or NL					5	6	0.0002 [1]	0.5	5	NA	75	NA	NA	1	80	NA	NA	6	NA	80	1750	NA	5	1750	5	150	10	5	0.5	1 [2]
RSL for Tap Water, or DTSC-modified RSL					2.8	280	0.0008	NA	NA	NA	NA	5600	14000	0.15 [1]	3.3	7.5	810	NA	13000	0.87	NA	20000	0.93 [1]	190	0.082 [1]	1100	360	0.49	0.019	0.46

Notes:

[1] = Based on California-modified RSLs (DTSC, 2018 - Table 2 Screening Levels for Tapwater, HERO HHRA Note Number 3, DTSC-modified Screening Levels [DTSC-SLs] [released June 2018]).
[2] = Based on Notification Level (California SWRCB Division of Drinking Water, updated 2 February 2018).
[3] = Secondary MCL (not used for determining a screening-level exceedance)
Detected results shown in bold
ID = Identification number
FD = Field duplicate sample results
J = Concentration is estimated because it falls between the method detection limit and the laboratory reporting limit.
MCL = Maximum contaminant level
N = Normal sample results
NA = Not applicable
NL = Notification Level (California)
R = The sample results are rejected due to serious deficiencies in meeting QC criteria.

Table 5-1
Summary of Physical and Chemical Properties of COCs at 25°C
Southern Avenue Industrial Area Superfund Site
South Gate, California

COC	Molecular Weight (g/mol)	Vapor Pressure (mm Hg)	Water Solubility (mg/L)	Henry's Law Constant (atm-m^3/mol)	Boiling Point (°C)	Density (g/cm^3)	Viscosity (cP)	Octanol/Water Partition Coefficient (log K_{ow})	Organic Carbon Partitioning Coefficient (K_{oc}; mL/g)
Benzene	78.12	94.8 @ 25°C	1,780	$5.56*10^{-3}$	80.1 @ 760 mmHg	0.879	0.601	2.13	58.9
cis -DCE	96.95	200 @ 25°C	3,500	$4.08*10^{-3}$	60.2 @ 760 mmHg	1.28	0.48	1.86	35.5
1,4-Dioxane	88.1	38.1 @ 25°C	miscible	$4.80*10^{-6}$	101.1 @ 760 mmHg	1.033	1.37	-0.27	29
PCE	165.83	18.5 @ 25°C	150	$1.77*10^{-2}$	121.1 @ 760 mmHg	1.623	0.89	3.4	155
TCE	131.4	74.2 @ 25°C	1,100	$1.17*10^{-2}$	87.2 @ 760 mmHg	1.46	0.57	2.53	86

Notes:

COC = contaminant of concern

g/mol = grams per mole

mm Hg = millimeter of mercury

mg/L = milligrams per liter

atm-m^3/mol = atmosphere-cubic meter per mole

°C = degree Celsius

g/cm^3 = grams per cubic centimeter

cP =centipoise

mL/g = milliliters per gram

cis -DCE = cis-1,2-dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

Table 5-2
Dissolved Oxygen and Oxygen Reduction Potential at Site Monitoring Wells
Southern Avenue Industrial Area Superfund Site
South Gate, California

Location	Mar-14		Aug-14		Jul-16		Sep-16	
	D.O. (mg/L)	ORP (mv)	D.O. (mg/L)	ORP (mv)	D.O. (mg/L)	ORP (mv)	D.O. (mg/L)	ORP (mv)
SAIA-MW01A	0.69	-295.6	0.31	141.9	1.66	-81.2	NA	NA
SAIA-MW01B	0.48	-382.6	0.54	68.6	1.89	-120.3	NA	NA
SAIA-MW01C	0.58	-359.1	0.33	30.1	1.72	-106.4	NA	NA
SAIA-MW02A	1.81	-23.5	0.19	-82.5	1.55	-130.2	NA	NA
SAIA-MW02B	0.61	-13.5	0.18	-106.7	1.74	-131.9	NA	NA
SAIA-MW02C	0.91	-19.7	0.32	-98.5	1.87	-116.0	NA	NA
SAIA-MW03A	0.67	-71.5	0.32	-78.2	1.41	-115.1	NA	NA
SAIA-MW03B	0.66	-88.5	0.48	-74.1	1.43	-114.5	NA	NA
SAIA-MW03C	0.78	-87.3	0.77	-104.8	1.87	-145.2	NA	NA
SAIA-MW04A	0.80	-28.6	0.35	-103.4	1.66	-122.8	NA	NA
SAIA-MW04B	0.62	-16.9	0.28	-100.3	1.38	-105.3	NA	NA
SAIA-MW04C	0.72	-17.9	0.38	-123.8	1.51	-107.0	NA	NA
SAIA-MW05A	0.57	-291.4	0.10	-116.5	1.61	-96.3	NA	NA
SAIA-MW05B	0.60	-299.4	0.18	-128.4	1.49	-121.3	NA	NA
SAIA-MW05C	0.84	-267.1	0.15	-119.7	1.66	-102.5	NA	NA
SAIA-MW06A	0.66	-111.0	0.07	-136.6	1.47	-131.5	NA	NA
SAIA-MW06B	0.93	-223.6	0.09	-146.7	1.18	-112.6	NA	NA
SAIA-MW06C	1.70	-159.3	0.12	-122.6	0.99	115.7	NA	NA
SAIA-MW07	0.35	-136.9	0.15	-119.7	2.08	-139.7	NA	NA
SAIA-MW08	1.62	-102.9	0.42	96.5	1.64	-70.9	NA	NA
SAIA-MW09A	NA	NA	NA	NA	0.16	-110.5	0.36	-84.1
SAIA-MW09B	NA	NA	NA	NA	0.31	-111.2	0.35	-128.4
SAIA-MW09C	NA	NA	NA	NA	0.09	-93.5	0.34	-100.4
SAIA-MW10	NA	NA	NA	NA	0.19	-35.3	0.43	-57.8
SAIA-MW11A	NA	NA	NA	NA	0.68	-116.9	0.40	-108.9
SAIA-MW11B	NA	NA	NA	NA	0.30	-136.9	0.37	-108.6
SAIA-MW11C	NA	NA	NA	NA	0.45	-192.7	0.45	-87.7
SAIA-MW12A	NA	NA	NA	NA	1.28	-196.3	0.28	-111.4
SAIA-MW12B	NA	NA	NA	NA	1.14	-126.0	0.33	-171.7
SAIA-MW12C	NA	NA	NA	NA	1.63	-116.8	0.25	-99.4
SAIA-MW13	NA	NA	NA	NA	1.51	-5.3	0.33	-14.6
MW-32	NA	NA	NA	NA	1.93	-94.9	NA	NA
MW-34	0.85	71.5	NA	NA	2.06	47.6	NA	NA
MW-35	0.63	-50.1	NA	NA	1.84	-113.6	NA	NA
MW-42	0.79	-278.3	NA	NA	1.70	-84.3	NA	NA
MW-43	0.84	-293.1	NA	NA	2.02	-200.9	NA	NA
MW-44	0.89	-314.6	NA	NA	0.98	-115.9	NA	NA
MW-45	1.01	-260.6	NA	NA	1.67	-117.7	NA	NA
MW-46	0.90	-64.7	NA	NA	1.85	5.6	NA	NA
MW-47	0.71	-101.7	NA	NA	1.72	-108.4	NA	NA
MW-48	0.80	-82.4	NA	NA	1.67	-82.6	NA	NA
MW-49	1.17	-220.1	NA	NA	0.14	-119.9	NA	NA
MW-52	0.84	-32.5	NA	NA	1.53	-85.5	NA	NA
MW-56	0.73	97.5	NA	NA	0.82	-123.9	NA	NA

Notes:
mg/L = milligram per liter
mv = millivolts
NA = not applicable

Table 6-1
Summary of Detected Chemicals
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media in which detected				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
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-Dichloroethene	❍	-	-	-	❍
1,1-Difluoroethane	❍	-	-	-	-
1,2,3-Trichlorobenzene	-	-	-	❍	❍
1,2,4-Trichlorobenzene	❍	-	-	❍	❍
1,2,4-Trimethylbenzene	-	❍	❍	-	-
1,2-Dibromo-3-chloropropane	-	-	-	❍	-
1,2-Dibromoethane (EDB)	-	-	-	❍	-
1,2-Dichloroethane	❍	❍	❍	❍	❍
1,2-Dichloropropane	-	-	-	-	❍
1,3,5-Trimethylbenzene	❍	❍	❍	-	-
1,3-Dichlorobenzene	-	-	-	-	❍
1,4-Dichlorobenzene	❍	-	-	-	❍
1,4-Dioxane (p-Dioxane)	❍	-	-	-	❍
1-Pentene	-	-	-	-	❍
2-Methylnaphthalene	-	-	-	❍	-
4-Methyl-2-pentanone (MIBK)	-	-	-	-	❍
Acenaphthene	-	-	-	❍	-
Acetaldehyde	❍	-	-	-	-
Acetone	-	-	-	❍	❍
Alkalinity, Bicarbonate (as CaCO3)	-	-	-	-	❍
Alkalinity, Carbonate (as CaCO3)	-	-	-	-	❍
Alkalinity, Total (as CaCO3)	-	-	-	-	❍
Aluminum	-	-	-	❍	❍
Anthracene	-	-	-	❍	-
Antimony	-	-	-	❍	-
Arsenic	-	-	-	❍	❍
Barium	-	-	-	❍	❍
Benzene	❍	❍	❍	❍	❍
Benzo(a)anthracene	-	-	-	❍	-
Benzo(a)pyrene	-	-	-	❍	-

Table 6-1
Summary of Detected Chemicals
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media in which detected				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
Benzo(b)fluoranthene	-	-	-	❍	-
Benzo(g,h,i)perylene	-	-	-	❍	-
Benzo(k)fluoranthene	-	-	-	❍	-
Beryllium	-	-	-	❍	❍
Biphenyl (Diphenyl)	-	-	-	❍	-
bis(2-Ethylhexyl) Phthalate	-	-	-	❍	❍
Bromodichloromethane	-	-	-	❍	-
Bromoform	-	-	-	❍	-
Bromomethane	-	-	-	-	❍
Butane	❍	-	-	-	-
Butylcyclooctane	❍	-	-	-	-
Cadmium	-	-	-	❍	❍
Calcium	-	-	-	❍	❍
Carbazole	-	-	-	❍	❍
Carbon Disulfide	-	-	-	❍	❍
Carbon Tetrachloride	-	-	-	❍	-
Chloride	-	-	-	-	❍
Chlorobenzene	❍	-	-	-	❍
Chlorodifluoromethane	❍	-	-	-	-
Chloroethane	❍	-	-	-	❍
Chloroform	❍	-	-	❍	❍
Chloromethane	❍	-	-	-	❍
Chromium	-	-	-	❍	❍
Chrysene	-	-	-	❍	-
cis-1,2-Dichloroethylene	❍	-	-	❍	❍
cis-1,3-Dichloropropene	-	-	-	❍	-
Cobalt	-	-	-	❍	❍
Copper	-	-	-	❍	❍
Cyclohexane	-	-	-	❍	❍
Decahydro Naphthalene	❍	-	-	-	-
Decahydromethyl Naphthalene	❍	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	❍	-
Dibenzofuran	-	-	-	❍	-
Dichlorodifluoromethane	❍	-	-	-	-
Diethyl Phthalate	-	-	-	❍	-

Table 6-1
Summary of Detected Chemicals
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media in which detected				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
Diethylmethylcyclohexane	❍	-	-	-	-
Dimethyl Octane	❍	-	-	-	-
Dimethyl Phthalate	-	-	-	❍	-
Dimethylpentane	❍	-	-	-	-
Di-n-Butyl Phthalate	-	-	-	❍	-
Ethylbenzene	❍	❍	❍	❍	❍
Fluoranthene	-	-	-	❍	-
Fluorene	-	-	-	❍	-
Indeno(1,2,3-c,d)pyrene	-	-	-	❍	-
Iron	-	-	-	❍	❍
Isopropylbenzene (Cumene)	❍	-	-	❍	❍
Isopropylcyclobutane	❍	-	-	-	-
Lead	-	-	-	❍	❍
m,p-Xylene	❍	❍	❍	❍	❍
Magnesium	-	-	-	❍	❍
Manganese	-	-	-	❍	❍
Mercury	-	-	-	❍	-
Methyl Acetate	-	-	-	❍	-
Methyl Butane	❍	-	-	-	❍
Methylcyclobutane	-	-	-	-	❍
Methylcyclohexane	-	-	-	❍	❍
Methylene Chloride	❍	-	-	-	❍
Naphthalene	❍	❍	-	❍	-
n-Butylbenzene	❍	-	-	-	-
Nickel	-	-	-	❍	❍
o-Xylene	❍	❍	❍	❍	❍
PCB-1248 (Arochlor 1248)	-	-	-	❍	-
PCB-1254 (Arochlor 1254)	-	-	-	❍	-
PCB-1260 (Arochlor 1260)	-	-	-	❍	-
p-Cymene (p-Isopropyltoluene)	❍	-	-	-	-
Phenanthrene	-	-	-	❍	-
Phenol	-	-	-	❍	-
Potassium	-	-	-	❍	❍
Pyrene	-	-	-	❍	-
sec-Butylbenzene	❍	-	-	-	-

Table 6-1
Summary of Detected Chemicals
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media in which detected				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
Selenium	-	-	-	❍	❍
Silver	-	-	-	❍	❍
Sodium	-	-	-	❍	❍
Styrene	❍	-	-	-	❍
Sulfate (as SO4)	-	-	-	-	❍
tert-Butyl Ethyl Ether	-	-	-	-	❍
tert-Butyl Methyl Ether (MTBE)	-	-	-	❍	❍
tert-Butylbenzene	❍	-	-	-	-
Tetrachloroethene (PCE)	❍	❍	❍	❍	❍
Thallium	-	-	-	❍	❍
Toluene	❍	❍	❍	❍	❍
Total Dissolved Solids	-	-	-	-	❍
Total Organic Carbon	-	-	-	-	❍
trans-1,2-Dichloroethene	❍	-	-	-	❍
trans-1,3-Dichloropropene	-	-	-	❍	-
Trichloroethene (TCE)	❍	❍	-	❍	❍
Trichlorofluoromethane	-	-	-	❍	-
Trimethyl Cyclohexane	❍	-	-	-	-
Trimethyl Cyclopentane Isomers	❍	-	-	-	-
Vanadium	-	-	-	❍	❍
Vinyl Chloride	❍	-	-	❍	❍
Zinc	-	-	-	❍	❍

Notes:
ft bgs = feet below ground surface
❍ = analyte detected in media shown

Table 6-2
Chemicals of Potential Concern
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media for which chemical is a COPC				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
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-Dichloroethene	❍	-	-	-	❍
1,1-Difluoroethane	❍	-	-	-	-
1,2,3-Trichlorobenzene	-	-	-	❍	❍
1,2,4-Trichlorobenzene	❍	-	-	❍	❍
1,2,4-Trimethylbenzene	-	❍	❍	-	-
1,2-Dibromo-3-chloropropane	-	-	-	❍	-
1,2-Dibromoethane (EDB)	-	-	-	❍	-
1,2-Dichloroethane	❍	❍	❍	❍	❍
1,2-Dichloropropane	-	-	-	-	❍
1,3,5-Trimethylbenzene	❍	❍	❍	-	-
1,3-Dichlorobenzene	-	-	-	-	❍
1,4-Dichlorobenzene	❍	-	-	-	❍
1,4-Dioxane (p-Dioxane)	❍	-	-	-	❍
1-Pentene	-	-	-	-	❍
2-Methylnaphthalene	-	-	-	❍	-
4-Methyl-2-pentanone (MIBK)	-	-	-	-	❍
Acenaphthene	-	-	-	❍	-
Acetaldehyde	❍	-	-	-	-
Acetone	-	-	-	❍	❍
Anthracene	-	-	-	❍	-
Antimony	-	-	-	❍	-
Arsenic	-	-	-	❍	-
Benzene	❍	❍	❍	❍	❍
Benzo(a)anthracene	-	-	-	❍	-
Benzo(a)pyrene	-	-	-	❍	-
Benzo(b)fluoranthene	-	-	-	❍	-
Benzo(g,h,i)perylene	-	-	-	❍	-
Benzo(k)fluoranthene	-	-	-	❍	-
Biphenyl (Diphenyl)	-	-	-	❍	-

Table 6-2
Chemicals of Potential Concern
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media for which chemical is a COPC				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
bis(2-Ethylhexyl) Phthalate	-	-	-	❍	❍
Bromodichloromethane	-	-	-	❍	-
Bromoform	-	-	-	❍	-
Bromomethane	-	-	-	-	❍
Butane	❍	-	-	-	-
Butylcyclooctane	❍	-	-	-	-
Cadmium	-	-	-	❍	-
Carbazole	-	-	-	❍	❍
Carbon Disulfide	-	-	-	❍	❍
Carbon Tetrachloride	-	-	-	❍	-
Chlorobenzene	❍	-	-	-	❍
Chlorodifluoromethane	❍	-	-	-	-
Chloroethane	❍	-	-	-	❍
Chloroform	❍	-	-	❍	❍
Chloromethane	❍	-	-	-	❍
Chrysene	-	-	-	❍	-
cis-1,2-Dichloroethylene	❍	-	-	❍	❍
cis-1,3-Dichloropropene	-	-	-	❍	-
Cobalt	-	-	-	❍	-
Copper	-	-	-	❍	-
Cyclohexane	-	-	-	❍	❍
Decahydro Naphthalene	❍	-	-	-	-
Decahydromethyl Naphthalene	❍	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	❍	-
Dibenzofuran	-	-	-	❍	-
Dichlorodifluoromethane	❍	-	-	-	-
Diethyl Phthalate	-	-	-	❍	-
Diethylmethylcyclohexane	❍	-	-	-	-
Dimethyl Octane	❍	-	-	-	-
Dimethyl Phthalate	-	-	-	❍	-
Dimethylpentane	❍	-	-	-	-
Di-n-Butyl Phthalate	-	-	-	❍	-
Ethylbenzene	❍	❍	❍	❍	❍
Fluoranthene	-	-	-	❍	-

Table 6-2
Chemicals of Potential Concern
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media for which chemical is a COPC				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
Fluorene	-	-	-	❍	-
Indeno(1,2,3-c,d)pyrene	-	-	-	❍	-
Isopropylbenzene (Cumene)	❍	-	-	❍	❍
Isopropylcyclobutane	❍	-	-	-	-
Lead	-	-	-	❍	-
m,p-Xylene	❍	❍	❍	❍	❍
Manganese	-	-	-	❍	-
Methyl Acetate	-	-	-	❍	-
Methyl Butane	❍	-	-	-	❍
Methylcyclobutane	-	-	-	-	❍
Methylcyclohexane	-	-	-	❍	❍
Methylene Chloride	❍	-	-	-	❍
Naphthalene	❍	❍	-	❍	-
n-Butylbenzene	❍	-	-	-	-
Nickel	-	-	-	❍	-
o-Xylene	❍	❍	❍	❍	❍
PCB-1248 (Arochlor 1248)	-	-	-	❍	-
PCB-1254 (Arochlor 1254)	-	-	-	❍	-
PCB-1260 (Arochlor 1260)	-	-	-	❍	-
p-Cymene (p-Isopropyltoluene)	❍	-	-	-	-
Phenanthrene	-	-	-	❍	-
Phenol	-	-	-	❍	-
Pyrene	-	-	-	❍	-
sec-Butylbenzene	❍	-	-	-	-
Styrene	❍	-	-	-	❍
tert-Butyl Ethyl Ether	-	-	-	-	❍
tert-Butyl Methyl Ether (MTBE)	-	-	-	❍	❍
tert-Butylbenzene	❍	-	-	-	-
Tetrachloroethene (PCE)	❍	❍	❍	❍	❍
Thallium	-	-	-	❍	-
Toluene	❍	❍	❍	❍	❍
trans-1,2-Dichloroethene	❍	-	-	-	❍
trans-1,3-Dichloropropene	-	-	-	❍	-

Table 6-2
Chemicals of Potential Concern
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical	Media for which chemical is a COPC				
	Soil Gas (5 to 35 ft bgs)	Indoor/Crawlspace Air	Ambient Air	Soil (0 to 10 ft bgs)	Groundwater
Trichloroethene (TCE)	❍	❍	-	❍	❍
Trichlorofluoromethane	-	-	-	❍	-
Trimethyl Cyclohexane	❍	-	-	-	-
Trimethyl Cyclopentane Isomers	❍	-	-	-	-
Vinyl Chloride	❍	-	-	❍	❍

Notes:
ft bgs = feet below ground surface
❍ = COPC

Table 6-3a
Air Risk-Based Concentrations, Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Commercial/Industrial Risk-Based Concentrations (in mg/m^3)					
		USEPA RSL		DTSC HERO Note 3 SL		Air RBC*	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
1,1,1-Trichloroethane	71-55-6	No value	2.2E+04	No value	4.4E+03	No value	4.4E+03
1,1,2,2-Tetrachloroethane	79-34-5	2.1E-01	No value	2.1E-01	3.5E+02	2.1E-01	3.5E+02
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	No value	2.2E+04	No value	No value	No value	2.2E+04
1,1,2-Trichloroethane	79-00-5	7.7E-01	8.8E-01	No value	No value	7.7E-01	8.8E-01
1,1-Dichloroethane	75-34-3	7.7E+00	No value	7.7E+00	3.5E+03	7.7E+00	3.5E+03
1,1-Dichloroethene	75-35-4	No value	8.8E+02	No value	3.1E+02	No value	3.1E+02
1,1-Difluoroethane	75-37-6	No value	1.8E+05	No value	No value	No value	1.8E+05
1,2,3-Trichlorobenzene	87-61-6	No value	No value	No value	1.4E+01	No value	1.4E+01
1,2,4-Trichlorobenzene	120-82-1	No value	8.8E+00	1.7E+00	8.8E+00	1.7E+00	8.8E+00
1,2,4-Trimethylbenzene	95-63-6	No value	2.6E+02	No value	No value	No value	2.6E+02
1,2-Dichloroethane	107-06-2	4.7E-01	3.1E+01	No value	No value	4.7E-01	3.1E+01
1,2-Dichloropropane	78-87-5	3.3E+00	1.8E+01	1.2E+00	1.8E+01	1.2E+00	1.8E+01
1,3,5-Trimethylbenzene	108-67-8	No value	2.6E+02	No value	No value	No value	2.6E+02
1,3-Dichlorobenzene	-	No value	No value	No value	No value	No value	No value
1,4-Dichlorobenzene	106-46-7	1.1E+00	3.5E+03	No value	No value	1.1E+00	3.5E+03
1,4-Dioxane (p-Dioxane)	123-91-1	2.5E+00	1.3E+02	1.6E+00	1.3E+02	1.6E+00	1.3E+02
1-Pentene	-	No value	No value	No value	No value	No value	No value
4-Methyl-2-pentanone (MIBK)	108-10-1	No value	1.3E+04	No value	No value	No value	1.3E+04
Acetaldehyde	75-07-0	5.6E+00	3.9E+01	4.5E+00	3.9E+01	4.5E+00	3.9E+01
Acetone	67-64-1	No value	1.4E+05	No value	No value	No value	1.4E+05
Benzene	71-43-2	1.6E+00	1.3E+02	4.2E-01	1.3E+01	4.2E-01	1.3E+01
bis(2-Ethylhexyl) Phthalate	117-81-7	5.1E+00	No value	No value	No value	5.1E+00	No value
Bromomethane	74-83-9	No value	2.2E+01	No value	No value	No value	2.2E+01
Butane	-	No value	No value	No value	No value	No value	No value
Butylcyclooctane	-	No value	No value	No value	No value	No value	No value
Carbazole	-	No value	No value	No value	No value	No value	No value
Carbon Disulfide	75-15-0	No value	3.1E+03	No value	No value	No value	3.1E+03
Chlorobenzene	108-90-7	No value	2.2E+02	No value	No value	No value	2.2E+02
Chlorodifluoromethane	75-45-6	No value	2.2E+05	No value	No value	No value	2.2E+05
Chloroethane	-	No value	No value	No value	No value	No value	No value
Chloroform	67-66-3	5.3E-01	4.3E+02	No value	No value	5.3E-01	4.3E+02
Chloromethane	74-87-3	No value	3.9E+02	No value	No value	No value	3.9E+02
cis-1,2-Dichloroethylene	156-59-2	No value	No value	No value	3.5E+01	No value	3.5E+01
Cyclohexane	110-82-7	No value	2.6E+04	No value	No value	No value	2.6E+04
Decahydro Naphthalene	-	No value	No value	No value	No value	No value	No value
Decahydromethyl Naphthalene	-	No value	No value	No value	No value	No value	No value
Dichlorodifluoromethane	75-71-8	No value	4.4E+02	No value	No value	No value	4.4E+02
Diethylmethylcyclohexane	-	No value	No value	No value	No value	No value	No value
Dimethyl Octane	-	No value	No value	No value	No value	No value	No value
Dimethylpentane	-	No value	No value	No value	No value	No value	No value
Ethylbenzene	100-41-4	4.9E+00	4.4E+03	No value	No value	4.9E+00	4.4E+03
Isopropylbenzene (Cumene)	98-82-8	No value	1.8E+03	No value	No value	No value	1.8E+03
Isopropylcyclobutane	-	No value	No value	No value	No value	No value	No value
m,p-Xylene**	1330-20-7	No value	4.4E+02	No value	No value	No value	4.4E+02
Methyl Butane	-	No value	No value	No value	No value	No value	No value
Methylcyclobutane	-	No value	No value	No value	No value	No value	No value
Methylcyclohexane	-	No value	No value	No value	No value	No value	No value
Methylene Chloride	75-09-2	1.2E+03	2.6E+03	1.2E+01	1.8E+03	1.2E+01	1.8E+03
Naphthalene	91-20-3	3.6E-01	1.3E+01	No value	No value	3.6E-01	1.3E+01
n-Butylbenzene	104-51-8	No value	No value	No value	8.8E+02	No value	8.8E+02
o-Xylene	95-47-6	No value	4.4E+02	No value	No value	No value	4.4E+02
p-Cymene (p-Isopropyltoluene)***	-	No value	No value	No value	No value	No value	No value

Table 6-3a
Air Risk-Based Concentrations, Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Commercial/Industrial Risk-Based Concentrations (in mg/m^3)					
		USEPA RSL		DTSC HERO Note 3 SL		Air RBC*	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
sec-Butylbenzene	135-98-8	No value	No value	No value	1.8E+03	No value	1.8E+03
Styrene	100-42-5	No value	4.4E+03	No value	3.9E+03	No value	3.9E+03
tert-Butyl Ethyl Ether	-	No value	No value	No value	No value	No value	No value
tert-Butyl Methyl Ether (MTBE)	1634-04-4	4.7E+01	1.3E+04	No value	No value	4.7E+01	1.3E+04
tert-Butylbenzene	98-06-6	No value	No value	No value	1.8E+03	No value	1.8E+03
Tetrachloroethene (PCE)	127-18-4	4.7E+01	1.8E+02	2.0E+00	1.8E+02	2.0E+00	1.8E+02
Toluene	108-88-3	No value	2.2E+04	No value	1.3E+03	No value	1.3E+03
trans-1,2-Dichloroethene	156-60-5	No value	No value	No value	3.5E+02	No value	3.5E+02
Trichloroethene (TCE)	79-01-6	3.0E+00	8.8E+00	No value	No value	3.0E+00	8.8E+00
Trimethyl Cyclohexane	-	No value	No value	No value	No value	No value	No value
Trimethyl Cyclopentane Isomers	-	No value	No value	No value	No value	No value	No value
Vinyl Chloride	75-01-4	2.8E+00	4.4E+02	1.6E-01	4.4E+02	1.6E-01	4.4E+02

Notes:

* USEPA RSL used except in those cases where CalEPA DTSC-SL is lower (more stringent).

** Xylenes used as surrogate.

*** Cumene (isopropylbenzene) used as surrogate.

USEPA does not recognize oral to inhalation route extrapolation.
CalEPA value, which is based on route extrapolation, is conservatively used.

Grey highlighting = RBC based upon the CalEPA value

Air RBC = Risk based concentration
CalEPA = California Environmental Protection Agency
DTSC HERO Note 3 SL = Screening level
ug/m^3 = microgram per cubic meter
RBC = Risk based concentration
USEPA RSL = Regional screening level

Table 6-3b
Air Risk-Based Concentrations, Construction Receptor (based on Commercial/Industrial Receptor)
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Construction Risk-Based Concentrations (in mg/m^3) (see text)					
		based on USEPA RSL		based on DTSC HERO Note 3 SL		Air RBC*	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
1,1,1-Trichloroethane	71-55-6	No value	2.2E+04	No value	4.4E+03	No value	4.4E+03
1,1,2,2-Tetrachloroethane	79-34-5	2.6E+00	No value	2.6E+00	3.5E+02	2.6E+00	3.5E+02
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	No value	2.2E+04	No value	No value	No value	2.2E+04
1,1,2-Trichloroethane	79-00-5	9.6E+00	8.8E-01	No value	No value	9.6E+00	8.8E-01
1,1-Dichloroethane	75-34-3	9.6E+01	No value	9.6E+01	3.5E+03	9.6E+01	3.5E+03
1,1-Dichloroethene	75-35-4	No value	8.8E+02	No value	3.1E+02	No value	3.1E+02
1,1-Difluoroethane	75-37-6	No value	1.8E+05	No value	No value	No value	1.8E+05
1,2,3-Trichlorobenzene	87-61-6	No value	No value	No value	1.4E+01	No value	1.4E+01
1,2,4-Trichlorobenzene	120-82-1	No value	8.8E+00	2.1E+01	8.8E+00	2.1E+01	8.8E+00
1,2,4-Trimethylbenzene	95-63-6	No value	2.6E+02	No value	No value	No value	2.6E+02
1,2-Dichloroethane	107-06-2	5.9E+00	3.1E+01	No value	No value	5.9E+00	3.1E+01
1,2-Dichloropropane	78-87-5	4.1E+01	1.8E+01	1.5E+01	1.8E+01	1.5E+01	1.8E+01
1,3,5-Trimethylbenzene	108-67-8	No value	2.6E+02	No value	No value	No value	2.6E+02
1,3-Dichlorobenzene	-	No value	No value	No value	No value	No value	No value
1,4-Dichlorobenzene	106-46-7	1.4E+01	3.5E+03	No value	No value	1.4E+01	3.5E+03
1,4-Dioxane (p-Dioxane)	123-91-1	3.1E+01	1.3E+02	2.0E+01	1.3E+02	2.0E+01	1.3E+02
1-Pentene	-	No value	No value	No value	No value	No value	No value
4-Methyl-2-pentanone (MIBK)	108-10-1	No value	1.3E+04	No value	No value	No value	1.3E+04
Acetaldehyde	75-07-0	7.0E+01	3.9E+01	5.7E+01	3.9E+01	5.7E+01	3.9E+01
Acetone	67-64-1	No value	1.4E+05	No value	No value	No value	1.4E+05
Benzene	71-43-2	2.0E+01	1.3E+02	5.3E+00	1.3E+01	5.3E+00	1.3E+01
bis(2-Ethylhexyl) Phthalate	117-81-7	6.4E+01	No value	No value	No value	6.4E+01	No value
Bromomethane	74-83-9	No value	2.2E+01	No value	No value	No value	2.2E+01
Butane	-	No value	No value	No value	No value	No value	No value
Butylcyclooctane	-	No value	No value	No value	No value	No value	No value
Carbazole	-	No value	No value	No value	No value	No value	No value
Carbon Disulfide	75-15-0	No value	3.1E+03	No value	No value	No value	3.1E+03
Chlorobenzene	108-90-7	No value	2.2E+02	No value	No value	No value	2.2E+02
Chlorodifluoromethane	75-45-6	No value	2.2E+05	No value	No value	No value	2.2E+05
Chloroethane	-	No value	No value	No value	No value	No value	No value
Chloroform	67-66-3	6.6E+00	4.3E+02	No value	No value	6.6E+00	4.3E+02
Chloromethane	74-87-3	No value	3.9E+02	No value	No value	No value	3.9E+02
cis-1,2-Dichloroethylene	156-59-2	No value	No value	No value	3.5E+01	No value	3.5E+01
Cyclohexane	110-82-7	No value	2.6E+04	No value	No value	No value	2.6E+04
Decahydro Naphthalene	-	No value	No value	No value	No value	No value	No value
Decahydromethyl Naphthalene	-	No value	No value	No value	No value	No value	No value
Dichlorodifluoromethane	75-71-8	No value	4.4E+02	No value	No value	No value	4.4E+02
Diethylmethylcyclohexane	-	No value	No value	No value	No value	No value	No value
Dimethyl Octane	-	No value	No value	No value	No value	No value	No value
Dimethylpentane	-	No value	No value	No value	No value	No value	No value
Ethylbenzene	100-41-4	6.1E+01	4.4E+03	No value	No value	6.1E+01	4.4E+03
Isopropylbenzene (Cumene)	98-82-8	No value	1.8E+03	No value	No value	No value	1.8E+03
Isopropylcyclobutane	-	No value	No value	No value	No value	No value	No value
m,p-Xylene**	1330-20-7	No value	4.4E+02	No value	No value	No value	4.4E+02
Methyl Butane	-	No value	No value	No value	No value	No value	No value
Methylcyclobutane	-	No value	No value	No value	No value	No value	No value
Methylcyclohexane	-	No value	No value	No value	No value	No value	No value
Methylene Chloride	75-09-2	1.5E+04	2.6E+03	1.5E+02	1.8E+03	1.5E+02	1.8E+03
Naphthalene	91-20-3	4.5E+00	1.3E+01	No value	No value	4.5E+00	1.3E+01
n-Butylbenzene	104-51-8	No value	No value	No value	8.8E+02	No value	8.8E+02
o-Xylene	95-47-6	No value	4.4E+02	No value	No value	No value	4.4E+02

Table 6-3b
Air Risk-Based Concentrations, Construction Receptor (based on Commercial/Industrial Receptor)
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Construction Risk-Based Concentrations (in mg/m^3) (see text)					
		based on USEPA RSL		based on DTSC HERO Note 3 SL		Air RBC*	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
p-Cymene (p-Isopropyltoluene)***	-	No value	No value	No value	No value	No value	No value
sec-Butylbenzene	135-98-8	No value	No value	No value	1.8E+03	No value	1.8E+03
Styrene	100-42-5	No value	4.4E+03	No value	3.9E+03	No value	3.9E+03
tert-Butyl Ethyl Ether	-	No value	No value	No value	No value	No value	No value
tert-Butyl Methyl Ether (MTBE)	1634-04-4	5.9E+02	1.3E+04	No value	No value	5.9E+02	1.3E+04
tert-Butylbenzene	98-06-6	No value	No value	No value	1.8E+03	No value	1.8E+03
Tetrachloroethene (PCE)	127-18-4	5.9E+02	1.8E+02	2.5E+01	1.8E+02	2.5E+01	1.8E+02
Toluene	108-88-3	No value	2.2E+04	No value	1.3E+03	No value	1.3E+03
trans-1,2-Dichloroethene	156-60-5	No value	No value	No value	3.5E+02	No value	3.5E+02
Trichloroethene (TCE)	79-01-6	3.8E+01	8.8E+00	No value	No value	3.8E+01	8.8E+00
Trimethyl Cyclohexane	-	No value	No value	No value	No value	No value	No value
Trimethyl Cyclopentane Isomers	-	No value	No value	No value	No value	No value	No value
Vinyl Chloride	75-01-4	3.5E+01	4.4E+02	2.0E+00	4.4E+02	2.0E+00	4.4E+02

Notes:

* USEPA RSL used except in those cases where CalEPA DTSC-SL is lower (more stringent).

** Xylenes used as surrogate.

*** Cumene (isopropylbenzene) used as surrogate.

USEPA does not recognize oral to inhalation route extrapolation.

CalEPA value, which is based on route extrapolation, is conservatively used.

Grey highlighting = RBC based upon the CalEPA value

Air RBC = Risk based concentration

CalEPA = California Environmental Protection Agency

DTSC HERO Note 3 SL = Screening level

ug/m^3 = microgram per cubic meter

RBC = Risk based concentration

USEPA RSL = Regional screening level

Table 6-3c
Air Risk-Based Concentrations, Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Residential Risk-Based Concentrations (in mg/m^3)					
		USEPA RSL		DTSC HERO Note 3 SL		Air RBC*	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
1,1,1-Trichloroethane	71-55-6	No value	5.2E+03	No value	1.0E+03	No value	1.0E+03
1,1,2,2-Tetrachloroethane	79-34-5	4.8E-02	No value	4.8E-02	8.3E+01	4.8E-02	8.3E+01
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	No value	5.2E+03	No value	No value	No value	5.2E+03
1,1,2-Trichloroethane	79-00-5	1.8E-01	2.1E-01	No value	No value	1.8E-01	2.1E-01
1,1-Dichloroethane	75-34-3	1.8E+00	No value	1.8E+00	8.3E+02	1.8E+00	8.3E+02
1,1-Dichloroethene	75-35-4	No value	2.1E+02	No value	7.3E+01	No value	7.3E+01
1,1-Difluoroethane	75-37-6	No value	4.2E+04	No value	No value	No value	4.2E+04
1,2,3-Trichlorobenzene	87-61-6	No value	No value	No value	3.3E+00	No value	3.3E+00
1,2,4-Trichlorobenzene	120-82-1	No value	2.1E+00	3.9E-01	2.1E+00	3.9E-01	2.1E+00
1,2,4-Trimethylbenzene	95-63-6	No value	No value	No value	No value	No value	No value
1,2-Dichloroethane	107-06-2	1.1E-01	7.3E+00	No value	No value	1.1E-01	7.3E+00
1,2-Dichloropropane	78-87-5	No value	No value	2.8E-01	4.2E+00	2.8E-01	4.2E+00
1,3,5-Trimethylbenzene	108-67-8	No value	6.3E+01	No value	No value	No value	6.3E+01
1,3-Dichlorobenzene	-	No value	No value	No value	No value	No value	No value
1,4-Dichlorobenzene	106-46-7	2.6E-01	8.3E+02	No value	No value	2.6E-01	8.3E+02
1,4-Dioxane (p-Dioxane)	123-91-1	5.6E-01	3.1E+01	3.6E-01	3.1E+01	3.6E-01	3.1E+01
1-Pentene	-	No value	No value	No value	No value	No value	No value
4-Methyl-2-pentanone (MIBK)	108-10-1	No value	3.1E+03	No value	No value	No value	3.1E+03
Acetaldehyde	75-07-0	1.3E+00	9.4E+00	1.0E+00	9.4E+00	1.0E+00	9.4E+00
Acetone	67-64-1	No value	3.2E+04	No value	No value	No value	3.2E+04
Benzene	71-43-2	3.6E-01	3.1E+01	9.7E-02	3.1E+00	9.7E-02	3.1E+00
bis(2-Ethylhexyl) Phthalate	117-81-7	1.2E+00	No value	No value	No value	1.2E+00	No value
Bromomethane	74-83-9	No value	5.2E+00	No value	No value	No value	5.2E+00
Butane	-	No value	No value	No value	No value	No value	No value
Butylcyclooctane	-	No value	No value	No value	No value	No value	No value
Carbazole	-	No value	No value	No value	No value	No value	No value
Carbon Disulfide	75-15-0	No value	7.3E+02	No value	No value	No value	7.3E+02
Chlorobenzene	108-90-7	No value	5.2E+01	No value	No value	No value	5.2E+01
Chlorodifluoromethane	75-45-6	No value	5.2E+04	No value	No value	No value	5.2E+04
Chloroethane	-	No value	No value	No value	No value	No value	No value
Chloroform	67-66-3	1.2E-01	1.0E+02	No value	No value	1.2E-01	1.0E+02
Chloromethane	74-87-3	No value	9.4E+01	No value	No value	No value	9.4E+01
cis-1,2-Dichloroethylene	156-59-2	No value	No value	No value	8.3E+00	No value	8.3E+00
Cyclohexane	110-82-7	No value	6.3E+03	No value	No value	No value	6.3E+03
Decahydro Naphthalene	-	No value	No value	No value	No value	No value	No value
Decahydromethyl Naphthalene	-	No value	No value	No value	No value	No value	No value
Dichlorodifluoromethane	75-71-8	No value	1.0E+02	No value	No value	No value	1.0E+02
Diethylmethylcyclohexane	-	No value	No value	No value	No value	No value	No value
Dimethyl Octane	-	No value	No value	No value	No value	No value	No value
Dimethylpentane	-	No value	No value	No value	No value	No value	No value
Ethylbenzene	100-41-4	1.1E+00	1.0E+03	No value	No value	1.1E+00	1.0E+03
Isopropylbenzene (Cumene)	98-82-8	No value	4.2E+02	No value	No value	No value	4.2E+02
Isopropylcyclobutane	-	No value	No value	No value	No value	No value	No value
m,p-Xylene**	1330-20-7	No value	1.0E+02	No value	No value	No value	1.0E+02
Methyl Butane	-	No value	No value	No value	No value	No value	No value
Methylcyclobutane	-	No value	No value	No value	No value	No value	No value
Methylcyclohexane	-	No value	No value	No value	No value	No value	No value
Methylene Chloride	75-09-2	1.0E+02	6.3E+02	1.0E+00	4.2E+02	1.0E+00	4.2E+02
Naphthalene	91-20-3	8.3E-02	3.1E+00	No value	No value	8.3E-02	3.1E+00
n-Butylbenzene	104-51-8	No value	No value	No value	2.1E+02	No value	2.1E+02

Table 6-3c
Air Risk-Based Concentrations, Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Residential Risk-Based Concentrations (in mg/m^3)					
		USEPA RSL		DTSC HERO Note 3 SL		Air RBC*	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
o-Xylene	95-47-6	No value	1.0E+02	No value	No value	No value	1.0E+02
p-Cymene (p-Isopropyltoluene)***	-	No value	No value	No value	No value	No value	No value
sec-Butylbenzene	135-98-8	No value	No value	No value	4.2E+02	No value	4.2E+02
Styrene	100-42-5	No value	1.0E+03	No value	9.4E+02	No value	9.4E+02
tert-Butyl Ethyl Ether	-	No value	No value	No value	No value	No value	No value
tert-Butyl Methyl Ether (MTBE)	1634-04-4	1.1E+01	3.1E+03	No value	No value	1.1E+01	3.1E+03
tert-Butylbenzene	98-06-6	No value	No value	No value	4.2E+02	No value	4.2E+02
Tetrachloroethene (PCE)	127-18-4	1.1E+01	4.2E+01	4.6E-01	4.2E+01	4.6E-01	4.2E+01
Toluene	108-88-3	No value	5.2E+03	No value	3.1E+02	No value	3.1E+02
trans-1,2-Dichloroethene	156-60-5	No value	No value	No value	8.3E+01	No value	8.3E+01
Trichloroethene (TCE)	79-01-6	4.8E-01	2.1E+00	No value	No value	4.8E-01	2.1E+00
Trimethyl Cyclohexane	-	No value	No value	No value	No value	No value	No value
Trimethyl Cyclopentane Isomers	-	No value	No value	No value	No value	No value	No value
Vinyl Chloride	75-01-4	1.7E-01	1.0E+02	9.5E-03	1.0E+02	9.5E-03	1.0E+02

Notes:

* USEPA RSL used except in those cases where CalEPA DTSC-SL is lower (more stringent).

** Xylenes used as surrogate.

*** Cumene (isopropylbenzene) used as surrogate.

USEPA does not recognize oral to inhalation route extrapolation.

CalEPA value, which is based on route extrapolation, is conservatively used.

Grey highlighting = RBC based upon the CalEPA value

Air RBC = Risk based concentration

CalEPA = California Environmental Protection Agency

DTSC HERO Note 3 SL = Screening level

ug/m^3 = microgram per cubic meter

RBC = Risk based concentration

USEPA RSL = Regional screening level

Table 6-4
Soil Gas Risk-Based Concentrations, all Receptors
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	CAS No.	Soil Gas Risk-Based Concentrations (in mg/m^3)					
		Commercial/Industrial		Construction Worker		Residential	
		Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
1,1,1-Trichloroethane	71-55-6	No value	1.5E+05	No value	1.5E+05	No value	3.5E+04
1,1,2,2-Tetrachloroethane	79-34-5	7.0E+00	1.2E+04	8.8E+01	1.2E+04	1.6E+00	2.8E+03
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	No value	7.3E+05	No value	7.3E+05	No value	1.7E+05
1,1,2-Trichloroethane	79-00-5	2.6E+01	2.9E+01	3.2E+02	2.9E+01	6.0E+00	7.0E+00
1,1-Dichloroethane	75-34-3	2.6E+02	1.2E+05	3.2E+03	1.2E+05	5.8E+01	2.8E+04
1,1-Dichloroethene	75-35-4	No value	1.0E+04	No value	1.0E+04	No value	2.4E+03
1,1-Difluoroethane	75-37-6	No value	6.0E+06	No value	6.0E+06	No value	1.4E+06
1,2,4-Trichlorobenzene	120-82-1	5.6E+01	4.7E+02	No value	4.7E+02	No value	1.1E+02
1,2-Dichloroethane	107-06-2	1.6E+01	1.0E+03	2.0E+02	1.0E+03	3.7E+00	2.4E+02
1,3,5-Trimethylbenzene	108-67-8	No value	8.7E+03	No value	8.7E+03	No value	2.1E+03
1,4-Dichlorobenzene	106-46-7	3.7E+01	1.2E+05	4.6E+02	1.2E+05	8.7E+00	2.8E+04
1,4-Dioxane (p-Dioxane)	123-91-1	5.3E+01	4.3E+03	6.6E+02	4.3E+03	1.2E+01	1.0E+03
Acetaldehyde	75-07-0	1.5E+02	1.3E+03	1.9E+03	1.3E+03	3.5E+01	3.1E+02
Benzene	71-43-2	1.4E+01	4.4E+02	1.8E+02	4.4E+02	3.2E+00	1.0E+02
Butane	-	No value	No value	No value	No value	No value	No value
Butylcyclooctane	-	No value	No value	No value	No value	No value	No value
Chlorobenzene	108-90-7	No value	7.3E+03	No value	7.3E+03	No value	1.7E+03
Chlorodifluoromethane	75-45-6	No value	7.3E+06	No value	7.3E+06	No value	1.7E+06
Chloroethane	75-00-3	No value	No value	No value	No value	No value	No value
Chloroform	67-66-3	1.8E+01	1.4E+04	2.2E+02	1.4E+04	4.0E+00	3.3E+03
Chloromethane	74-87-3	No value	1.3E+04	No value	1.3E+04	No value	3.1E+03
cis-1,2-Dichloroethylene	156-59-2	No value	1.2E+03	No value	1.2E+03	No value	2.8E+02
Decahydro Naphthalene	-	No value	No value	No value	No value	No value	No value
Decahydromethyl Naphthalene	-	No value	No value	No value	No value	No value	No value
Dichlorodifluoromethane	75-71-8	No value	1.5E+04	No value	1.5E+04	No value	3.3E+03
Diethylmethylcyclohexane	-	No value	No value	No value	No value	No value	No value
Dimethyl Octane	-	No value	No value	No value	No value	No value	No value
Dimethylpentane	-	No value	No value	No value	No value	No value	No value
Ethylbenzene	100-41-4	1.6E+02	1.5E+05	2.0E+03	1.5E+05	3.7E+01	3.3E+04
Isopropylbenzene (Cumene)	98-82-8	No value	6.0E+04	No value	6.0E+04	No value	1.4E+04
Isopropylcyclobutane	-	No value	No value	No value	No value	No value	No value
m,p-Xylene	1330-20-7	No value	1.5E+04	No value	1.5E+04	No value	3.3E+03
Methyl Butane	-	No value	No value	No value	No value	No value	No value
Methylene Chloride	75-09-2	4.1E+02	5.8E+04	5.1E+03	5.8E+04	3.4E+01	1.4E+04
Naphthalene	91-20-3	1.2E+01	4.3E+02	1.5E+02	4.3E+02	2.8E+00	1.0E+02
n-Butylbenzene	104-51-8	No value	2.9E+04	No value	2.9E+04	No value	7.0E+03
o-Xylene	95-47-6	No value	1.5E+04	No value	1.5E+04	No value	3.3E+03
p-Cymene (p-Isopropyltoluene)	-	No value	No value	No value	No value	No value	No value
sec-Butylbenzene	135-98-8	No value	5.8E+04	No value	5.8E+04	No value	1.4E+04
Styrene	100-42-5	No value	1.3E+05	No value	1.3E+05	No value	3.1E+04
tert-Butylbenzene	98-06-6	No value	5.8E+04	No value	No value	No value	No value
Tetrachloroethene (PCE)	127-18-4	6.7E+01	5.8E+03	8.4E+02	5.8E+03	1.5E+01	1.4E+03
Toluene	108-88-3	No value	4.4E+04	No value	4.4E+04	No value	1.0E+04
trans-1,2-Dichloroethene	156-60-5	No value	1.2E+04	No value	1.2E+04	No value	2.8E+03
Trichloroethene (TCE)	79-01-6	1.0E+02	2.9E+02	1.3E+03	2.9E+02	1.6E+01	7.0E+01
Trimethyl Cyclohexane	-	No value	No value	No value	No value	No value	No value
Trimethyl Cyclopentane Isomers	-	No value	No value	No value	No value	No value	No value
Vinyl Chloride	75-01-4	5.2E+00	1.5E+04	6.6E+01	1.5E+04	3.2E-01	3.3E+03

Table 6-5
Groundwater Risk-Based Concentrations, Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	Air RBC (from Table 6-3c) (mg/m^3)		Henry's constant at 25°C (mg/m^3 per mg/L)	Solubility (mg/L)	Groundwater RBC (mg/L)*	
	Cancer	Noncancer			Cancer	Noncancer
1,1,2-Trichloroethane	1.8E-01	2.1E-01	3.37E+01	4.59E+06	5.3E+00	6.2E+00
1,1-Dichloroethane	1.8E+00	8.3E+02	2.30E+02	5.04E+06	7.6E+00	3.6E+03
1,1-Dichloroethene	No value	7.3E+01	1.07E+03	2.42E+06	-	6.8E+01
1,2,3-Trichlorobenzene	No value	3.3E+00	5.11E+01	1.80E+04	-	6.5E+01
1,2,4-Trichlorobenzene	3.9E-01	2.1E+00	5.81E+01	4.90E+04	6.7E+00	3.6E+01
1,2-Dichloroethane	1.1E-01	7.3E+00	4.82E+01	8.60E+06	2.3E+00	1.5E+02
1,2-Dichloropropane	2.8E-01	4.2E+00	1.15E+02	2.80E+06	2.4E+00	3.6E+01
1,3-Dichlorobenzene	No value	No value	No value	No value	-	-
1,4-Dichlorobenzene	2.6E-01	8.3E+02	9.85E+01	8.13E+04	2.6E+00	8.4E+03
1,4-Dioxane (p-Dioxane)	3.6E-01	3.1E+01	1.96E-01	1.00E+09	1.9E+03	1.6E+05
1-Pentene	No value	No value	No value	No value	-	-
4-Methyl-2-pentanone (MIBK)	No value	3.1E+03	5.64E+00	1.90E+07	-	5.5E+05
Acetone	No value	3.2E+04	1.43E+00	1.00E+09	-	2.2E+07
Benzene	9.7E-02	3.1E+00	2.27E+02	1.79E+06	4.3E-01	1.4E+01
bis(2-Ethylhexyl) Phthalate	1.2E+00	No value	1.10E-02	2.70E+02	1.1E+05	-
Bromomethane	No value	5.2E+00	3.00E+02	1.52E+07	-	1.7E+01
Carbazole	No value	No value	No value	No value	-	-
Carbon Disulfide	No value	7.3E+02	5.89E+02	2.16E+06	-	1.2E+03
Chlorobenzene	No value	5.2E+01	1.27E+02	4.98E+05	-	4.1E+02
Chloroethane	No value	No value	4.54E+02	6.71E+06	-	-
Chloroform	1.2E-01	1.0E+02	1.50E+02	7.95E+06	8.0E-01	6.7E+02
Chloromethane	No value	9.4E+01	3.61E+02	5.32E+06	-	2.6E+02
cis-1,2-Dichloroethylene	No value	8.3E+00	1.67E+02	6.41E+06	-	5.0E+01
Cyclohexane	No value	6.3E+03	6.13E+03	5.50E+04	-	1.0E+03
Ethylbenzene	1.1E+00	1.0E+03	3.22E+02	1.69E+05	3.4E+00	3.1E+03
Isopropylbenzene (Cumene)	No value	4.2E+02	4.70E+02	6.13E+04	-	8.9E+02
m,p-Xylene	No value	1.0E+02	2.71E+02	1.06E+05	-	3.7E+02
Methyl Butane	No value	No value	No value	No value	-	-
Methylcyclobutane	No value	No value	No value	No value	-	-

Table 6-5
Groundwater Risk-Based Concentrations, Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	Air RBC (from Table 6-3c) (mg/m^3)		Henry's constant at 25°C (mg/m^3 per mg/L)	Solubility (mg/L)	Groundwater RBC (mg/L)*	
	Cancer	Noncancer			Cancer	Noncancer
Methylcyclohexane	No value	No value	No value	No value	-	-
Methylene Chloride	1.0E+00	4.2E+02	1.33E+02	1.30E+07	7.6E+00	3.1E+03
o-Xylene	No value	1.0E+02	2.12E+02	1.78E+05	-	4.7E+02
Styrene	No value	9.4E+02	1.12E+02	3.10E+05	-	8.3E+03
tert-Butyl Ethyl Ether	No value	No value	No value	No value	-	-
tert-Butyl Methyl Ether (MTBE)	1.1E+01	3.1E+03	2.40E+01	5.10E+07	4.6E+02	1.3E+05
Tetrachloroethene (PCE)	4.6E-01	4.2E+01	7.24E+02	2.06E+05	6.4E-01	5.8E+01
Toluene	No value	3.1E+02	2.71E+02	5.26E+05	-	1.2E+03
trans-1,2-Dichloroethene	No value	8.3E+01	3.83E+02	4.52E+06	-	2.2E+02
Trichloroethene (TCE)	4.8E-01	2.1E+00	4.03E+02	1.28E+06	1.2E+00	5.2E+00
Vinyl Chloride	9.5E-03	1.0E+02	1.14E+03	8.80E+06	8.3E-03	8.8E+01

Notes:

* Groundwater Screening RBC = Air RBC / 0.001 / Henry's constant, where 0.001 is the default screening level groundwater-to-indoor air attenuation factor.

ug/m^3 = microgram per cubic meter

ug/L = microgram per liter

Table 6-6a
Soil Risk-Based Concentrations, Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	Commercial/Industrial Risk-Based Concentrations (in mg/kg)*					
	USEPA RSL		DTSC HERO Note 3 SL		Soil RBC** (mg/kg)	
	Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
1,1,1-Trichloroethane	No value	3.6E+04	No value	1.7E+03	No value	1.7E+03
1,1,2,2-Tetrachloroethane	2.7E+00	2.3E+04	6.0E-01	7.0E+02	6.0E-01	7.0E+02
1,1,2-Trichloro-1,2,2-trifluoroethane	No value	2.8E+04	No value	No value	No value	2.8E+04
1,1,2-Trichloroethane	5.0E+00	6.3E+00	No value	No value	5.0E+00	6.3E+00
1,1-Dichloroethane	1.6E+01	2.3E+05	3.6E+00	1.6E+03	3.6E+00	1.6E+03
1,2,3-Trichlorobenzene	No value	9.3E+02	No value	4.0E+01	No value	4.0E+01
1,2,4-Trichlorobenzene	1.1E+02	2.6E+02	No value	No value	1.1E+02	2.6E+02
1,2-Dibromo-3-chloropropane	6.4E-02	2.5E+01	No value	No value	6.4E-02	2.5E+01
1,2-Dibromoethane (EDB)	1.6E-01	3.3E+02	No value	No value	1.6E-01	3.3E+02
1,2-Dichloroethane	2.0E+00	1.4E+02	No value	No value	2.0E+00	1.4E+02
2-Methylnaphthalene	No value	3.0E+03	No value	No value	No value	3.0E+03
Acenaphthene	No value	4.5E+04	No value	No value	No value	4.5E+04
Acetone	No value	6.7E+05	No value	No value	No value	6.7E+05
Anthracene	No value	2.3E+05	No value	No value	No value	2.3E+05
Antimony	No value	4.7E+02	No value	No value	No value	4.7E+02
Arsenic	3.0E+00	4.8E+02	1.1E-01	4.0E-01	1.1E-01	4.0E-01
Benzene	5.1E+00	4.2E+02	3.3E-01	1.1E+01	3.3E-01	1.1E+01
Benzo(a)anthracene	2.1E+01	No value	No value	No value	2.1E+01	No value
Benzo(a)pyrene	2.1E+00	2.2E+02	No value	No value	2.1E+00	2.2E+02
Benzo(b)fluoranthene	2.1E+01	No value	No value	No value	2.1E+01	No value
Benzo(g,h,i)perylene	No value	No value	No value	No value	No value	No value
Benzo(k)fluoranthene	2.1E+02	No value	No value	No value	2.1E+02	No value
Biphenyl (Diphenyl)	4.1E+02	2.0E+02	No value	No value	4.1E+02	2.0E+02
bis(2-Ethylhexyl) Phthalate	1.6E+02	1.6E+04	No value	No value	1.6E+02	1.6E+04
Bromodichloromethane	1.3E+00	2.3E+04	2.8E-01	2.7E+02	2.8E-01	2.7E+02
Bromoform	8.6E+01	2.3E+04	1.8E+01	5.3E+02	1.8E+01	5.3E+02
Cadmium	9.3E+03	9.8E+02	9.1E+02	5.2E+00	9.1E+02	5.2E+00
Carbazole	No value	No value	No value	No value	No value	No value
Carbon Disulfide	No value	3.5E+03	No value	No value	No value	3.5E+03
Carbon Tetrachloride	2.9E+00	5.7E+02	9.8E-02	5.2E+01	9.8E-02	5.2E+01
Chloroform	1.4E+00	1.0E+03	No value	No value	1.4E+00	1.0E+03
Chrysene	2.1E+03	No value	No value	No value	2.1E+03	No value
cis-1,2-Dichloroethylene	No value	2.3E+03	No value	1.8E+01	No value	1.8E+01
cis-1,3-Dichloropropene	8.2E+00	3.1E+02	5.8E-01	7.2E+01	5.8E-01	7.2E+01
Cobalt	1.9E+03	3.5E+02	No value	No value	1.9E+03	3.5E+02
Copper	No value	4.7E+04	No value	No value	No value	4.7E+04
Cyclohexane	No value	2.7E+04	No value	No value	No value	2.7E+04
Dibenz(a,h)anthracene	2.1E+00	No value	No value	No value	2.1E+00	No value
Dibenzofuran	No value	1.0E+03	No value	No value	No value	1.0E+03
Diethyl Phthalate	No value	6.6E+05	No value	No value	No value	6.6E+05
Dimethyl Phthalate	No value	No value	No value	No value	No value	No value
Di-n-Butyl Phthalate	No value	8.2E+04	No value	No value	No value	8.2E+04
Ethylbenzene	2.5E+01	2.0E+04	No value	No value	2.5E+01	2.0E+04
Fluoranthene	No value	3.0E+04	No value	No value	No value	3.0E+04
Fluorene	No value	3.0E+04	No value	No value	No value	3.0E+04
Indeno(1,2,3-c,d)pyrene	2.1E+01	No value	No value	No value	2.1E+01	No value
Isopropylbenzene (Cumene)	No value	9.9E+03	No value	No value	No value	9.9E+03
Lead	No value	8.0E+02	No value	3.2E+02	No value	3.2E+02
m,p-Xylene	No value	2.5E+03	No value	No value	No value	2.5E+03
Manganese	No value	2.6E+04	No value	1.1E+03	No value	1.1E+03
Methyl Acetate	No value	1.2E+06	No value	2.4E+04	No value	2.4E+04
Methylcyclohexane	No value	No value	No value	5.5E+03	No value	5.5E+03
Naphthalene	1.7E+01	5.9E+02	No value	No value	1.7E+01	5.9E+02
Nickel	6.4E+04	2.2E+04	1.5E+04	4.9E+02	1.5E+04	4.9E+02
o-Xylene	No value	2.8E+03	No value	No value	No value	2.8E+03
PCB-1248 (Aroclor 1248)	9.5E-01	No value	No value	No value	9.5E-01	No value
PCB-1254 (Aroclor 1254)	9.7E-01	1.5E+01	No value	No value	9.7E-01	1.5E+01
PCB-1260 (Aroclor 1260)	9.9E-01	No value	No value	No value	9.9E-01	No value
Phenanthrene	No value	No value	No value	No value	No value	No value

Table 6-6a
Soil Risk-Based Concentrations, Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	Commercial/Industrial Risk-Based Concentrations (in mg/kg)*					
	USEPA RSL		DTSC HERO Note 3 SL		Soil RBC** (mg/kg)	
	Cancer	Noncancer	Cancer	Noncancer	Cancer	Noncancer
Phenol	No value	2.5E+05	No value	No value	No value	2.5E+05
Pyrene	No value	2.3E+04	No value	No value	No value	2.3E+04
tert-Butyl Methyl Ether (MTBE)	2.1E+02	6.4E+04	No value	No value	2.1E+02	6.4E+04
Tetrachloroethene (PCE)	1.0E+02	3.9E+02	5.9E-01	8.1E+01	5.9E-01	8.1E+01
Thallium	No value	1.2E+01	No value	No value	No value	1.2E+01
Toluene	No value	4.7E+04	No value	1.1E+03	No value	1.1E+03
trans-1,3-Dichloropropene	8.2E+00	3.1E+02	5.8E-01	7.2E+01	5.8E-01	7.2E+01
Trichloroethene (TCE)	6.0E+00	1.9E+01	No value	No value	6.0E+00	1.9E+01
Trichlorofluoromethane	No value	3.5E+05	No value	1.2E+03	No value	1.2E+03
Vinyl Chloride	1.7E+00	3.7E+02	8.7E-03	7.0E+01	8.7E-03	7.0E+01

Notes:

* All soil concentrations and RBCs are in units of milligrams per kilogram (mg/kg) on a dry weight basis.

** USEPA RSL used except in those cases where CalEPA DTSC-SL is lower (more stringent).

Table 6-6b
Soil Risk-Based Concentrations, Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	Construction Risk-Based Concentrations (in mg/kg)*	
	CalEPA ESL	
	Cancer	Noncancer
1,1,1-Trichloroethane	No value	8.8E+03
1,1,2,2-Tetrachloroethane	4.4E+01	7.1E+03
1,1,2-Trichloro-1,2,2-trifluoroethane	No value	No value
1,1,2-Trichloroethane	9.0E+01	5.2E+00
1,1-Dichloroethane	3.9E+02	7.1E+04
1,2,3-Trichlorobenzene	No value	No value
1,2,4-Trichlorobenzene	8.5E+02	3.1E+02
1,2-Dibromo-3-chloropropane	1.3E+00	2.4E+01
1,2-Dibromoethane (EDB)	3.2E+00	2.9E+01
1,2-Dichloroethane	3.7E+01	1.0E+02
2-Methylnaphthalene	No value	6.7E+02
Acenaphthene	No value	1.0E+04
Acetone	No value	2.6E+05
Anthracene	No value	5.0E+04
Antimony	No value	1.4E+02
Arsenic	2.0E+00	9.8E-01
Benzene	2.4E+01	3.2E+01
Benzo(a)anthracene	1.6E+01	No value
Benzo(a)pyrene	1.6E+00	No value
Benzo(b)fluoranthene	1.6E+01	No value
Benzo(g,h,i)perylene	No value	No value
Benzo(k)fluoranthene	1.5E+02	No value
Biphenyl (Diphenyl)	1.7E+03	2.4E+02
bis(2-Ethylhexyl) Phthalate	9.5E+02	3.8E+03
Bromodichloromethane	4.7E+01	7.1E+03
Bromoform	2.2E+03	7.1E+03
Cadmium	1.1E+02	4.3E+01
Carbazole	No value	No value
Carbon Disulfide	No value	No value
Carbon Tetrachloride	1.3E+01	2.7E+02
Chloroform	3.2E+01	8.1E+02
Chrysene	1.5E+03	No value
cis-1,2-Dichloroethylene	No value	8.2E+01
cis-1,3-Dichloropropene	2.9E+01	1.5E+02
Cobalt	4.9E+01	2.8E+01
Copper	No value	1.4E+04
Cyclohexane	No value	No value
Dibenz(a,h)anthracene	1.6E+00	No value
Dibenzofuran	No value	No value
Diethyl Phthalate	No value	1.5E+05
Dimethyl Phthalate	No value	No value
Di-n-Butyl Phthalate	No value	No value
Ethylbenzene	4.8E+02	1.3E+04
Fluoranthene	No value	6.7E+03

Table 6-6b
Soil Risk-Based Concentrations, Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Chemical of Potential Concern (COPC)	Construction Risk-Based Concentrations (in mg/kg)*	
	CalEPA ESL	
	Cancer	Noncancer
Fluorene	No value	6.7E+03
Indeno(1,2,3-c,d)pyrene	1.6E+01	No value
Isopropylbenzene (Cumene)	No value	No value
Lead	No value	1.6E+02
m,p-Xylene	No value	2.4E+03
Manganese	No value	No value
Methyl Acetate	No value	No value
Methylcyclohexane	No value	No value
Naphthalene	3.5E+02	4.4E+02
Nickel	1.7E+03	8.6E+01
o-Xylene	No value	No value
PCB-1248 (Arochlor 1248)	5.6E+00	No value
PCB-1254 (Arochlor 1254)	5.6E+00	No value
PCB-1260 (Arochlor 1260)	5.6E+00	No value
Phenanthrene	No value	No value
Phenol	No value	9.8E+04
Pyrene	No value	5.0E+03
tert-Butyl Methyl Ether (MTBE)	3.7E+03	5.6E+04
Tetrachloroethene (PCE)	3.3E+01	3.1E+02
Thallium	No value	3.5E+00
Toluene	No value	4.1E+03
trans-1,3-Dichloropropene	2.9E+01	1.5E+02
Trichloroethene (TCE)	1.6E+02	2.3E+01
Trichlorofluoromethane	No value	No value
Vinyl Chloride	3.4E+00	3.0E+02

Notes:

* All soil concentrations and RBCs are in units of milligrams per kilogram (mg/kg) on a dry weight basis and are RWQCB ESLs (https://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.html)

Table 6-7
Exposure and Risk Characterization Approach
Southern Avenue Industrial Area Superfund Site
South Gate, California

Receptor	Location		Exposure Medium	Source Media				Exposure Model			
	On-Site	Off-Site		Soil Gas	Indoor Air	Groundwater	Soil	Soil Gas	Crawlspace/Indoor Air	Groundwater	Soil
Commercial/Industrial (Future only)	❍	-	Indoor Air	❍	-	-	-	Default attenuation factor of 0.03	-	-	-
			Soil	-	-	-	❍	-	-	-	None (measured concentration used)
Construction (Future only)	❍	-	Outdoor (Trench) Air	❍	-	-	-	Default attenuation factor of 0.03	-	-	-
			Soil	-	-	-	❍	-	-	-	None (measured concentration used)
Residential (Current and Future)	-	❍	Indoor Air	❍*	❍	❍	-	-	-	Default attenuation factor of 0.001	-

Notes:

❍ = Scenario addressed in HHRA

* = SG 15, SG 16, SG 17, SG 40, and SG 41

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-19-15, P913cc	15	1,1,1-Trichloroethane	64	No value	1.5E+05	-	4E-04	3E-03	1E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	1700	2.6E+02	1.2E+05	7E-06	1E-02		
		1,1-Dichloroethene	85	No value	1.0E+04	-	8E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	43	No value	8.7E+03	-	5E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	350	1.4E+01	4.4E+02	2E-05	8E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5300	No value	1.2E+03	-	5E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	100	1.6E+02	1.5E+05	6E-07	7E-04		
		Isopropylbenzene (Cumene)	43	No value	6.0E+04	-	7E-04		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	34	No value	2.9E+04	-	1E-03		
		o-Xylene	150	No value	1.5E+04	-	1E-02		
		p-Cymene (p-Isopropyltoluene)	43	No value	No value	-	-		
		sec-Butylbenzene	56	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1200	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	210	No value	4.4E+04	-	5E-03		
		trans-1,2-Dichloroethene	500	No value	1.2E+04	-	4E-02		
		Trichloroethene (TCE)	35000	1.0E+02	2.9E+02	4E-04	1E+02		
		Vinyl Chloride	13000	5.2E+00	1.5E+04	2E-03	9E-01		
SAIA-SB/SG-19-25, P530cc	25	1,1,1-Trichloroethane	150	No value	1.5E+05	-	1E-03	2E-01	9E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	18000	2.6E+02	1.2E+05	7E-05	2E-01		
		1,1-Dichloroethene	660	No value	1.0E+04	-	6E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	110	1.6E+01	1.0E+03	7E-06	1E-01		
		1,3,5-Trimethylbenzene	200	No value	8.7E+03	-	2E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	600	1.4E+01	4.4E+02	4E-05	1E+00		
		Chloroethane	440	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	22000	No value	1.2E+03	-	2E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	270	1.6E+02	1.5E+05	2E-06	2E-03		
		Isopropylbenzene (Cumene)	200	No value	6.0E+04	-	3E-03		
		m,p-Xylene	290	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	270	No value	2.9E+04	-	9E-03		
		o-Xylene	490	No value	1.5E+04	-	3E-02		
		p-Cymene (p-Isopropyltoluene)	180	No value	No value	-	-		
		sec-Butylbenzene	290	No value	5.8E+04	-	5E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	410	6.7E+01	5.8E+03	6E-06	7E-02		
		Toluene	1900	No value	4.4E+04	-	4E-02		
		trans-1,2-Dichloroethene	6400	No value	1.2E+04	-	5E-01		
		Trichloroethene (TCE)	230000	1.0E+02	2.9E+02	2E-03	8E+02		
		Vinyl Chloride	810000	5.2E+00	1.5E+04	2E-01	6E+01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-19-35, P578cc	35	1,1,1-Trichloroethane	38	No value	1.5E+05	-	3E-04	8E-03	8E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	820	2.6E+02	1.2E+05	3E-06	7E-03		
		1,1-Dichloroethene	700	No value	1.0E+04	-	7E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	98	1.4E+01	4.4E+02	7E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6800	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	70	1.6E+02	1.5E+05	4E-07	5E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	63	No value	1.5E+04	-	4E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	38	No value	1.5E+04	-	3E-03		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	2200	6.7E+01	5.8E+03	3E-05	4E-01		
		Toluene	87	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	460	No value	1.2E+04	-	4E-02		
		Trichloroethene (TCE)	21000	1.0E+02	2.9E+02	2E-04	7E+01		
		Vinyl Chloride	38000	5.2E+00	1.5E+04	7E-03	3E+00		
SAIA-SB/SG-19-5, P816cc	5	1,1,1-Trichloroethane	2400	No value	1.5E+05	-	2E-02	3E-04	1E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	2000	2.6E+02	1.2E+05	8E-06	2E-02		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	85	1.8E+01	1.4E+04	5E-06	6E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	17000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1100	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	370	No value	1.2E+04	-	3E-02		
		Trichloroethene (TCE)	30000	1.0E+02	2.9E+02	3E-04	1E+02		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-20-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	3E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	20000	2.6E+02	1.2E+05	8E-05	2E-01		
		1,1-Dichloroethene	9400	No value	1.0E+04	-	9E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	440	1.6E+01	1.0E+03	3E-05	4E-01		
		1,3,5-Trimethylbenzene	32	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	910	1.4E+01	4.4E+02	6E-05	2E+00		
		Chloroethane	8800	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3000000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	32	No value	6.0E+04	-	5E-04		
		m,p-Xylene	240	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	37	No value	2.9E+04	-	1E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	58	No value	No value	-	-		
		sec-Butylbenzene	31	No value	5.8E+04	-	5E-04		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	440	6.7E+01	5.8E+03	7E-06	8E-02		
		Toluene	740	No value	4.4E+04	-	2E-02		
		trans-1,2-Dichloroethene	19000	No value	1.2E+04	-	2E+00		
		Trichloroethene (TCE)	7700	1.0E+02	2.9E+02	8E-05	3E+01		
		Vinyl Chloride	85000	5.2E+00	1.5E+04	2E-02	6E+00		
SAIA-SB/SG-20-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	2E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	5900	2.6E+02	1.2E+05	2E-05	5E-02		
		1,1-Dichloroethene	55000	No value	1.0E+04	-	5E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	35	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	430	1.4E+01	4.4E+02	3E-05	1E+00		
		Chloroethane	19000	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	23000000	No value	1.2E+03	-	2E+04		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	94	1.6E+02	1.5E+05	6E-07	6E-04		
		Isopropylbenzene (Cumene)	35	No value	6.0E+04	-	6E-04		
		m,p-Xylene	290	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	52	No value	2.9E+04	-	2E-03		
		o-Xylene	140	No value	1.5E+04	-	1E-02		
		p-Cymene (p-Isopropyltoluene)	74	No value	No value	-	-		
		sec-Butylbenzene	44	No value	5.8E+04	-	8E-04		
		tert-Butylbenzene	38	No value	5.8E+04	-	7E-04		
		Tetrachloroethene (PCE)	140	6.7E+01	5.8E+03	2E-06	2E-02		
		Toluene	240	No value	4.4E+04	-	5E-03		
		trans-1,2-Dichloroethene	90000	No value	1.2E+04	-	8E+00		
		Trichloroethene (TCE)	270000	1.0E+02	2.9E+02	3E-03	9E+02		
		Vinyl Chloride	98000	5.2E+00	1.5E+04	2E-02	7E+00		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-20-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-02	2E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	62000	2.6E+02	1.2E+05	2E-04	5E-01		
		1,1-Dichloroethene	20000	No value	1.0E+04	-	2E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	230	1.6E+01	1.0E+03	1E-05	2E-01		
		1,3,5-Trimethylbenzene	91	No value	8.7E+03	-	1E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	310	1.4E+01	4.4E+02	2E-05	7E-01		
		Chloroethane	730	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5200000	No value	1.2E+03	-	4E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	110	1.6E+02	1.5E+05	7E-07	8E-04		
		Isopropylbenzene (Cumene)	90	No value	6.0E+04	-	2E-03		
		m,p-Xylene	91	No value	1.5E+04	-	6E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	99	No value	2.9E+04	-	3E-03		
		o-Xylene	110	No value	1.5E+04	-	8E-03		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	120	No value	5.8E+04	-	2E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	2000	6.7E+01	5.8E+03	3E-05	3E-01		
		Toluene	360	No value	4.4E+04	-	8E-03		
		trans-1,2-Dichloroethene	93000	No value	1.2E+04	-	8E+00		
		Trichloroethene (TCE)	4100000	1.0E+02	2.9E+02	4E-02	1E+04		
		Vinyl Chloride	80000	5.2E+00	1.5E+04	2E-02	5E+00		
SAIA-SB/SG-20-5, P816cc	5	1,1,1-Trichloroethane	76	No value	1.5E+05	-	5E-04	3E-02	6E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	22000	2.6E+02	1.2E+05	9E-05	2E-01		
		1,1-Dichloroethene	710	No value	1.0E+04	-	7E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	72	1.6E+01	1.0E+03	5E-06	7E-02		
		1,3,5-Trimethylbenzene	39	No value	8.7E+03	-	5E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	340	1.4E+01	4.4E+02	2E-05	8E-01		
		Chloroethane	650	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	610000	No value	1.2E+03	-	5E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	150	1.6E+02	1.5E+05	9E-07	1E-03		
		Isopropylbenzene (Cumene)	39	No value	6.0E+04	-	7E-04		
		m,p-Xylene	390	No value	1.5E+04	-	3E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	41	No value	2.9E+04	-	1E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	69	No value	No value	-	-		
		sec-Butylbenzene	34	No value	5.8E+04	-	6E-04		
		tert-Butylbenzene	41	No value	5.8E+04	-	7E-04		
		Tetrachloroethene (PCE)	290	6.7E+01	5.8E+03	4E-06	5E-02		
		Toluene	460	No value	4.4E+04	-	1E-02		
		trans-1,2-Dichloroethene	1700	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	17000	1.0E+02	2.9E+02	2E-04	6E+01		
		Vinyl Chloride	170000	5.2E+00	1.5E+04	3E-02	1E+01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-21-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	6E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	510	2.6E+02	1.2E+05	2E-06	4E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	40	1.4E+01	4.4E+02	3E-06	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	32000	No value	1.2E+03	-	3E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	570	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	67	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	150	No value	1.2E+04	-	1E-02		
		Trichloroethene (TCE)	8500	1.0E+02	2.9E+02	9E-05	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-21-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-04	7E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	2200	2.6E+02	1.2E+05	9E-06	2E-02		
		1,1-Dichloroethene	1100	No value	1.0E+04	-	1E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	120	1.4E+01	4.4E+02	9E-06	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	50000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	96	No value	1.5E+04	-	7E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	360	6.7E+01	5.8E+03	5E-06	6E-02		
		Toluene	90	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	5400	No value	1.2E+04	-	5E-01		
		Trichloroethene (TCE)	7000	1.0E+02	2.9E+02	7E-05	2E+01		
		Vinyl Chloride	1600	5.2E+00	1.5E+04	3E-04	1E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-21-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	1E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	930	2.6E+02	1.2E+05	4E-06	8E-03		
		1,1-Dichloroethene	1700	No value	1.0E+04	-	2E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	59	1.4E+01	4.4E+02	4E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	52000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	38	6.7E+01	5.8E+03	6E-07	7E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	4700	No value	1.2E+04	-	4E-01		
		Trichloroethene (TCE)	21000	1.0E+02	2.9E+02	2E-04	7E+01		
		Vinyl Chloride	4300	5.2E+00	1.5E+04	8E-04	3E-01		
SAIA-SB/SG-21-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	6E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	93	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	160	1.0E+02	2.9E+02	2E-06	5E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-22-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	7E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	25	1.4E+01	4.4E+02	2E-06	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	45	No value	2.9E+04	-	2E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	40	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	39	6.7E+01	5.8E+03	6E-07	7E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	180	1.0E+02	2.9E+02	2E-06	6E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-22-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	120	1.4E+01	4.4E+02	9E-06	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	120	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	110	No value	2.9E+04	-	4E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	97	No value	No value	-	-		
		sec-Butylbenzene	43	No value	5.8E+04	-	7E-04		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	43	6.7E+01	5.8E+03	6E-07	7E-03		
		Toluene	50	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	310	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-22-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	6E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	40	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	210	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	51	No value	1.5E+04	-	3E-03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	73	5.2E+00	1.5E+04	1E-05	5E-03		
SAIA-SB/SG-22-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	6E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	26	No value	1.0E+04	-	3E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	190	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	47	No value	1.5E+04	-	3E-03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	23	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	120	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	90	5.2E+00	1.5E+04	2E-05	6E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-22-5 Rep, P866cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	59	No value	2.9E+04	-	2E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	46	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	100	1.0E+02	2.9E+02	1E-06	3E-01		
		Vinyl Chloride	32	5.2E+00	1.5E+04	6E-06	2E-03		
SAIA-SB/SG-22-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	76	No value	2.9E+04	-	3E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	61	No value	No value	-	-		
		sec-Butylbenzene	44	No value	5.8E+04	-	8E-04		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	35	6.7E+01	5.8E+03	5E-07	6E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	86	1.0E+02	2.9E+02	9E-07	3E-01		
		Vinyl Chloride	64	5.2E+00	1.5E+04	1E-05	4E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-15, 1PV, P481cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	25	1.4E+01	4.4E+02	2E-06	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	100	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	420	1.0E+02	2.9E+02	4E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-23-15, 3PV, P1444cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	91	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	440	1.0E+02	2.9E+02	4E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-15,10PV, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	88	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	440	1.0E+02	2.9E+02	4E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-23-25, 1PV, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	47	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	69	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	900	1.0E+02	2.9E+02	9E-06	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-25, 3PV, P1589cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	43	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	89	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	55	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	320	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-23-25,10PV, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	6E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	47	6.7E+01	5.8E+03	7E-07	8E-03		
		Toluene	28	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	160	1.0E+02	2.9E+02	2E-06	5E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-35, 1PV, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	5E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	58	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	110	6.7E+01	5.8E+03	2E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1500	1.0E+02	2.9E+02	2E-05	5E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-23-35, 3PV, P1734cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	5E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	55	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	82	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1500	1.0E+02	2.9E+02	2E-05	5E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-35,10PV, P5782cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	5E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	58	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	75	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1500	1.0E+02	2.9E+02	2E-05	5E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-23-5, 10PV, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	72	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	280	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-5, 1PV, P433cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	9E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	58	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	260	1.0E+02	2.9E+02	3E-06	9E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-23-5, 3PV, P1299cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	9E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	63	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	260	1.0E+02	2.9E+02	3E-06	9E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-24-15, P913cc	15	1,1,1-Trichloroethane	56	No value	1.5E+05	-	4E-04	2E-04	7E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	360	2.6E+02	1.2E+05	1E-06	3E-03		
		1,1-Dichloroethene	81	No value	1.0E+04	-	8E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	19	1.4E+01	4.4E+02	1E-06	4E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3900	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	93	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	120	No value	1.2E+04	-	1E-02		
		Trichloroethene (TCE)	19000	1.0E+02	2.9E+02	2E-04	6E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-24-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	43	No value	7.3E+05	-	6E-05		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	110	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1200	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	40	1.6E+02	1.5E+05	2E-07	3E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	51	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	760	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	44	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	45	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	5500	1.0E+02	2.9E+02	6E-05	2E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-24-35, P578cc	35	1,1,1-Trichloroethane	610	No value	1.5E+05	-	4E-03	1E-02	4E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	53000	2.6E+02	1.2E+05	2E-04	5E-01		
		1,1-Dichloroethene	35000	No value	1.0E+04	-	3E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	840	1.4E+01	4.4E+02	6E-05	2E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	120	1.8E+01	1.4E+04	7E-06	8E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	420000	No value	1.2E+03	-	4E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	93	1.6E+02	1.5E+05	6E-07	6E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	24	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	50	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	950	6.7E+01	5.8E+03	1E-05	2E-01		
		Toluene	63	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	72000	No value	1.2E+04	-	6E+00		
		Trichloroethene (TCE)	980000	1.0E+02	2.9E+02	1E-02	3E+03		
		Vinyl Chloride	17000	5.2E+00	1.5E+04	3E-03	1E+00		
SAIA-SB/SG-24-5, P816cc	5	1,1,1-Trichloroethane	50	No value	1.5E+05	-	3E-04	1E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	180	2.6E+02	1.2E+05	7E-07	2E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	170	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	93	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	920	1.0E+02	2.9E+02	9E-06	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-25-15 Rep, P963cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-05	6E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	26	1.4E+01	4.4E+02	2E-06	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	3400	6.7E+01	5.8E+03	5E-05	6E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-25-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-05	7E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	20	1.4E+01	4.4E+02	1E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	4100	6.7E+01	5.8E+03	6E-05	7E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-25-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	28	1.4E+01	4.4E+02	2E-06	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	58	No value	1.3E+04	-	4E-03		
		cis-1,2-Dichloroethylene	81	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	580	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	29	No value	4.4E+04	-	7E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	620	1.0E+02	2.9E+02	6E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-25-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-04	9E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	100	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6700	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	6400	6.7E+01	5.8E+03	1E-04	1E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	690	No value	1.2E+04	-	6E-02		
		Trichloroethene (TCE)	25000	1.0E+02	2.9E+02	3E-04	9E+01		
		Vinyl Chloride	26	5.2E+00	1.5E+04	5E-06	2E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-25-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	5E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	3000	6.7E+01	5.8E+03	4E-05	5E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-26-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-04	1E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	900	2.6E+02	1.2E+05	4E-06	8E-03		
		1,1-Dichloroethene	110	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	42	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	17000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	37	6.7E+01	5.8E+03	6E-07	6E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	240	No value	1.2E+04	-	2E-02		
		Trichloroethene (TCE)	33000	1.0E+02	2.9E+02	3E-04	1E+02		
		Vinyl Chloride	230	5.2E+00	1.5E+04	4E-05	2E-02		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-26-25, P530cc	25	1,1,1-Trichloroethane	30	No value	1.5E+05	-	2E-04	3E-03	6E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	4400	2.6E+02	1.2E+05	2E-05	4E-02		
		1,1-Dichloroethene	1100	No value	1.0E+04	-	1E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	71	1.4E+01	4.4E+02	5E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	98000	No value	1.2E+03	-	8E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	75	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	30	No value	4.4E+04	-	7E-04		
		trans-1,2-Dichloroethene	1200	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	150000	1.0E+02	2.9E+02	2E-03	5E+02		
		Vinyl Chloride	6500	5.2E+00	1.5E+04	1E-03	4E-01		
SAIA-SB/SG-26-5 Rep, P866cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	72	5.6E+01	4.7E+02	1E-06	2E-01		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	770	3.7E+01	1.2E+05	2E-05	7E-03		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	46	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	240	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	36	6.7E+01	5.8E+03	5E-07	6E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	740	1.0E+02	2.9E+02	7E-06	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-26-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	65	5.6E+01	4.7E+02	1E-06	1E-01		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	770	3.7E+01	1.2E+05	2E-05	7E-03		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	41	1.4E+01	4.4E+02	3E-06	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	290	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	65	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	950	1.0E+02	2.9E+02	1E-05	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-27-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-04	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	25	1.4E+01	4.4E+02	2E-06	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	340	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	30000	6.7E+01	5.8E+03	4E-04	5E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	100	No value	1.2E+04	-	9E-03		
		Trichloroethene (TCE)	5300	1.0E+02	2.9E+02	5E-05	2E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-27-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-04	8E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	220	2.6E+02	1.2E+05	9E-07	2E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	49	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4000	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	15000	6.7E+01	5.8E+03	2E-04	3E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	460	No value	1.2E+04	-	4E-02		
		Trichloroethene (TCE)	23000	1.0E+02	2.9E+02	2E-04	8E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-27-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	5E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	58	2.6E+02	1.2E+05	2E-07	5E-04		
		1,1-Dichloroethene	99	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	14000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	210	6.7E+01	5.8E+03	3E-06	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	1200	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	10000	1.0E+02	2.9E+02	1E-04	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-27-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-04	1E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	29	1.4E+01	4.4E+02	2E-06	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	57	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	53000	6.7E+01	5.8E+03	8E-04	9E+00		
		Toluene	20	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	970	1.0E+02	2.9E+02	1E-05	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-28-15 Rep, P963cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	9E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	540	6.7E+01	5.8E+03	8E-06	9E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-28-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	690	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-28-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	6E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	50	2.6E+01	2.9E+01	2E-06	2E+00		
		1,1-Dichloroethane	220	2.6E+02	1.2E+05	9E-07	2E-03		
		1,1-Dichloroethene	130	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	24000	No value	1.2E+03	-	2E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	310	6.7E+01	5.8E+03	5E-06	5E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	1600	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	11000	1.0E+02	2.9E+02	1E-04	4E+01		
		Vinyl Chloride	64	5.2E+00	1.5E+04	1E-05	4E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-28-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-06	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	590	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-29-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	1E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	61	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-29-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	170	1.4E+01	4.4E+02	1E-05	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	83	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	35	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	320	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	13	5.2E+00	1.5E+04	2E-06	9E-04		
SAIA-SB/SG-29-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	4E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	120	2.6E+02	1.2E+05	5E-07	1E-03		
		1,1-Dichloroethene	74	No value	1.0E+04	-	7E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	7600	No value	1.2E+03	-	7E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	680	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	530	No value	1.2E+04	-	5E-02		
		Trichloroethene (TCE)	9500	1.0E+02	2.9E+02	1E-04	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-29-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1200	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	5700	1.0E+02	2.9E+02	6E-05	2E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-30-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-06	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	590	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-30-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	5E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	28	1.4E+01	4.4E+02	2E-06	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	240	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	740	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1300	1.0E+02	2.9E+02	1E-05	4E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-30-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	290	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	490	6.7E+01	5.8E+03	7E-06	8E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	59	No value	1.2E+04	-	5E-03		
		Trichloroethene (TCE)	250	1.0E+02	2.9E+02	3E-06	9E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-30-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	7E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	400	6.7E+01	5.8E+03	6E-06	7E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-31-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	34	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	750	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	57	1.0E+02	2.9E+02	6E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-31-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	8E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	24	1.4E+01	4.4E+02	2E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	170	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	110	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	580	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	2300	1.0E+02	2.9E+02	2E-05	8E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-31-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	7E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1600	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	560	6.7E+01	5.8E+03	8E-06	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	110	No value	1.2E+04	-	9E-03		
		Trichloroethene (TCE)	1500	1.0E+02	2.9E+02	2E-05	5E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-31-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	8E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	490	6.7E+01	5.8E+03	7E-06	8E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-32-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	21	1.4E+01	4.4E+02	1E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	150	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	230	6.7E+01	5.8E+03	3E-06	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	980	1.0E+02	2.9E+02	1E-05	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-32-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-32-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	4E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	47	No value	1.2E+03	-	4E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	120	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-32-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	1E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	76	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-33-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	7E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	420	No value	8.7E+03	-	5E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	270	1.6E+02	1.5E+05	2E-06	2E-03		
		Isopropylbenzene (Cumene)	420	No value	6.0E+04	-	7E-03		
		m,p-Xylene	120	No value	1.5E+04	-	8E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	260	1.2E+01	4.3E+02	2E-05	6E-01		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	300	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	940	No value	No value	-	-		
		sec-Butylbenzene	1300	No value	5.8E+04	-	2E-02		
		tert-Butylbenzene	400	No value	5.8E+04	-	7E-03		
		Tetrachloroethene (PCE)	190	6.7E+01	5.8E+03	3E-06	3E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-33-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	230	No value	8.7E+03	-	3E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	35	1.4E+01	4.4E+02	2E-06	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	170	1.6E+02	1.5E+05	1E-06	1E-03		
		Isopropylbenzene (Cumene)	230	No value	6.0E+04	-	4E-03		
		m,p-Xylene	140	No value	1.5E+04	-	1E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	33	1.2E+01	4.3E+02	3E-06	8E-02		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	46	No value	1.5E+04	-	3E-03		
		p-Cymene (p-Isopropyltoluene)	3400	No value	No value	-	-		
		sec-Butylbenzene	650	No value	5.8E+04	-	1E-02		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	39	No value	4.4E+04	-	9E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-33-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	7E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	29	1.4E+01	4.4E+02	2E-06	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	630	No value	1.2E+03	-	5E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	51	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	1900	1.0E+02	2.9E+02	2E-05	6E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-33-5 Rep, P866cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	7E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	410	6.7E+01	5.8E+03	6E-06	7E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-33-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	8E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	470	6.7E+01	5.8E+03	7E-06	8E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-34-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-34-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-34-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-34-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-35-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-35-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	79	1.4E+01	4.4E+02	6E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	51	No value	1.2E+03	-	4E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	34	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	530	1.0E+02	2.9E+02	5E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-35-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-35-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-36-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	5E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	21	1.4E+01	4.4E+02	1E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-36-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-36-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	40	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-36-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-37-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	7E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	58	1.4E+01	4.4E+02	4E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	83	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	35	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	160	1.0E+02	2.9E+02	2E-06	5E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-37-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	380	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	45	6.7E+01	5.8E+03	7E-07	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	400	1.0E+02	2.9E+02	4E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-38-15 Rep, P963cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	49	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	330	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	57	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	37	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	270	1.0E+02	2.9E+02	3E-06	9E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-38-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	52	1.4E+01	4.4E+02	4E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	350	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	53	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	330	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-38-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	55	1.4E+01	4.4E+02	4E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	510	No value	1.2E+03	-	4E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	47	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	74	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	38	No value	4.4E+04	-	9E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	200	1.0E+02	2.9E+02	2E-06	7E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-38-35, P578cc	35	1,1,1-Trichloroethane	120	No value	1.5E+05	-	8E-04	2E-02	4E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	45000	2.6E+02	1.2E+05	2E-04	4E-01		
		1,1-Dichloroethene	4400	No value	1.0E+04	-	4E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	65	1.6E+01	1.0E+03	4E-06	6E-02		
		1,3,5-Trimethylbenzene	190	No value	8.7E+03	-	2E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	230	1.4E+01	4.4E+02	2E-05	5E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	44	1.8E+01	1.4E+04	2E-06	3E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1100000	No value	1.2E+03	-	9E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	25	1.6E+02	1.5E+05	2E-07	2E-04		
		Isopropylbenzene (Cumene)	190	No value	6.0E+04	-	3E-03		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	300	No value	5.8E+04	-	5E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	3100	6.7E+01	5.8E+03	5E-05	5E-01		
		Toluene	180	No value	4.4E+04	-	4E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	940000	1.0E+02	2.9E+02	9E-03	3E+03		
		Vinyl Chloride	52000	5.2E+00	1.5E+04	1E-02	4E+00		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-38-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-07	8E-03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	46	6.7E+01	5.8E+03	7E-07	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-39-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-39-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	6E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	90	1.4E+01	4.4E+02	6E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	140	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	47	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	78	1.0E+02	2.9E+02	8E-07	3E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-39-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	7E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	380	2.6E+02	1.2E+05	1E-06	3E-03		
		1,1-Dichloroethene	160	No value	1.0E+04	-	2E-02		
		1,1-Difluoroethane	92	No value	6.0E+06	-	2E-05		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	34000	No value	1.2E+03	-	3E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	160	6.7E+01	5.8E+03	2E-06	3E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	1700	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	13000	1.0E+02	2.9E+02	1E-04	4E+01		
		Vinyl Chloride	76	5.2E+00	1.5E+04	1E-05	5E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-39-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-40-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	9E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	23	1.4E+01	4.4E+02	2E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	340	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	330	6.7E+01	5.8E+03	5E-06	6E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	140	1.0E+02	2.9E+02	1E-06	5E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1200	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	380	1.0E+02	2.9E+02	4E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-40-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	730	No value	1.2E+03	-	6E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	88	No value	1.2E+04	-	8E-03		
		Trichloroethene (TCE)	320	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	900	No value	1.2E+03	-	8E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	96	No value	1.2E+04	-	8E-03		
		Trichloroethene (TCE)	430	1.0E+02	2.9E+02	4E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-40-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	410	No value	1.2E+03	-	4E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	240	6.7E+01	5.8E+03	4E-06	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	200	1.0E+02	2.9E+02	2E-06	7E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-41-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	5E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	160	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	45	6.7E+01	5.8E+03	7E-07	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	94	1.0E+02	2.9E+02	9E-07	3E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-41-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	60	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	34	1.0E+02	2.9E+02	3E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-41-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	6E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	69	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-41-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	51	1.0E+02	2.9E+02	5E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-42-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-42-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-42-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	4E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	17	1.4E+01	4.4E+02	1E-06	4E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	33	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-42-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	4E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	21	1.4E+01	4.4E+02	1E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	190	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	53	1.0E+02	2.9E+02	5E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-43-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-43-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	5E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	60	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-43-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SB/SG-43-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-43-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	62	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	55	1.0E+02	2.9E+02	6E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG02-D05-E0413	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	5E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	40	2.6E+02	1.2E+05	2E-07	3E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	1500	1.0E+02	2.9E+02	2E-05	5E+00		
		Vinyl Chloride	50	5.2E+00	1.5E+04	1E-05	3E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG06-D35-E0413	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	8E+01
		1,1,2,2-Tetrachloroethane	200	7.0E+00	1.2E+04	3E-05	2E-02		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	400	2.6E+02	1.2E+05	2E-06	3E-03		
		1,1-Dichloroethane	300	2.6E+02	1.2E+05	1E-06	3E-03		
		1,1-Dichloroethene	2100	No value	1.0E+04	-	2E-01		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	60	No value	8.7E+03	-	7E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	50	1.4E+01	4.4E+02	4E-06	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	38000	No value	1.2E+03	-	3E+01		
		Decahydromethyl Naphthalene*	400	No value	No value	-	-		
		Diethylmethylcyclohexane*	500	No value	No value	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	100	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	15000	1.0E+02	2.9E+02	2E-04	5E+01		
		Vinyl Chloride	5000	5.2E+00	1.5E+04	1E-03	3E-01		
SAIA-SG08-D05-E0413	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-01	3E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	65000	2.6E+02	1.2E+05	3E-04	6E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	260000	No value	1.2E+03	-	2E+02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	530000	5.2E+00	1.5E+04	1E-01	4E+01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG09-D35-E0413	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-02	2E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	150000	2.6E+02	1.2E+05	6E-04	1E+00		
		1,1-Dichloroethene	28000	No value	1.0E+04	-	3E+00		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6100000	No value	1.2E+03	-	5E+03		
		Decahydromethyl Naphthalene*	48000	No value	No value	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	2900000	1.0E+02	2.9E+02	3E-02	1E+04		
		Vinyl Chloride	180000	5.2E+00	1.5E+04	3E-02	1E+01		
SAIA-SG10-D15-E0413	15	1,1,1-Trichloroethane	37000	No value	1.5E+05	-	3E-01	3E-01	2E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	270000	2.6E+02	1.2E+05	1E-03	2E+00		
		1,1-Dichloroethene	21000	No value	1.0E+04	-	2E+00		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2200000	No value	1.2E+03	-	2E+03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	11000	1.0E+02	2.9E+02	1E-04	4E+01		
		Vinyl Chloride	1700000	5.2E+00	1.5E+04	3E-01	1E+02		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG11-D25-E0413	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Butane*	1600	No value	No value	-	-		
		Butylcyclooctane*	1900	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	900	No value	1.2E+03	-	8E-01		
		Dimethylpentane*	1100	No value	No value	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylcyclobutane*	700	No value	No value	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methyl Butane*	800	No value	No value	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	100	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	700	1.0E+02	2.9E+02	7E-06	2E+00		
		Vinyl Chloride	30	5.2E+00	1.5E+04	6E-06	2E-03		
SAIA-SG14-D25-E0413	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	8E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	10	No value	8.7E+03	-	1E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	20	1.4E+01	4.4E+02	1E-06	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	100	No value	1.2E+03	-	9E-02		
		Decahydro Naphthalene*	70	No value	No value	-	-		
		Decahydromethyl Naphthalene*	80	No value	No value	-	-		
		Ethylbenzene	20	1.6E+02	1.5E+05	1E-07	1E-04		
		m,p-Xylene	40	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	10	No value	1.3E+05	-	8E-05		
		Tetrachloroethene (PCE)	80	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	200	1.0E+02	2.9E+02	2E-06	7E-01		
		Vinyl Chloride	10	5.2E+00	1.5E+04	2E-06	7E-04		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG20-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-02	1E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	32000	2.6E+02	1.2E+05	1E-04	3E-01		
		1,1-Dichloroethene	11000	No value	1.0E+04	-	1E+00		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4700000	No value	1.2E+03	-	4E+03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	3200000	1.0E+02	2.9E+02	3E-02	1E+04		
		Vinyl Chloride	43000	5.2E+00	1.5E+04	8E-03	3E+00		
SAIA-SG22-E25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	7	No value	1.0E+04	-	7E-04		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	8	No value	8.7E+03	-	9E-04		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	200	1.4E+01	4.4E+02	1E-05	5E-01		
		Butane*	1600	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dimethyl Octane*	600	No value	No value	-	-		
		Ethylbenzene	10	1.6E+02	1.5E+05	6E-08	7E-05		
		m,p-Xylene	30	No value	1.5E+04	-	2E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	60	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	800	1.0E+02	2.9E+02	8E-06	3E+00		
		Vinyl Chloride	10	5.2E+00	1.5E+04	2E-06	7E-04		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG24-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-02	2E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	57000	2.6E+02	1.2E+05	2E-04	5E-01		
		1,1-Dichloroethene	38000	No value	1.0E+04	-	4E+00		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2600000	No value	1.2E+03	-	2E+03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	6600000	1.0E+02	2.9E+02	7E-02	2E+04		
		Vinyl Chloride	20000	5.2E+00	1.5E+04	4E-03	1E+00		
SAIA-SG27-E5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-04	1E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	60	1.4E+01	4.4E+02	4E-06	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	40000	6.7E+01	5.8E+03	6E-04	7E+00		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	1600	1.0E+02	2.9E+02	2E-05	5E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG29-E5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chlorodifluoromethane*	400	No value	7.3E+06	-	5E-05		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1400	No value	1.2E+03	-	1E+00		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	4800	1.0E+02	2.9E+02	5E-05	2E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG30-E25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	1E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Acetaldehyde*	40	1.5E+02	1.3E+03	3E-07	3E-02		
		Benzene	40	1.4E+01	4.4E+02	3E-06	9E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	500	No value	1.2E+03	-	4E-01		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	700	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	2600	1.0E+02	2.9E+02	3E-05	9E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG32-E15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	7E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	5	2.6E+02	1.2E+05	2E-08	4E-05		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	10	5.6E+01	4.7E+02	2E-07	2E-02		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	40	1.4E+01	4.4E+02	3E-06	9E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	400	No value	1.2E+03	-	3E-01		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	200	6.7E+01	5.8E+03	3E-06	3E-02		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	2000	1.0E+02	2.9E+02	2E-05	7E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG33-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	1E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	10	2.6E+02	1.2E+05	4E-08	9E-05		
		1,1-Dichloroethene	10	No value	1.0E+04	-	1E-03		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	50	1.4E+01	4.4E+02	4E-06	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	800	No value	1.2E+03	-	7E-01		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	20	6.7E+01	5.8E+03	3E-07	3E-03		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	2700	1.0E+02	2.9E+02	3E-05	9E+00		
		Trimethyl Cyclohexane*	300	No value	No value	-	-		
		Trimethyl Cyclopentane Isomers*	80	No value	No value	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG35-E25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	10	5.6E+01	4.7E+02	2E-07	2E-02		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	100	1.4E+01	4.4E+02	7E-06	2E-01		
		Butane*	400	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	100	No value	1.2E+03	-	9E-02		
		Decahydromethyl Naphthalene*	40	No value	No value	-	-		
		Ethylbenzene	7	1.6E+02	1.5E+05	4E-08	5E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		Trichloroethene (TCE)	1200	1.0E+02	2.9E+02	1E-05	4E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG36-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	9	1.4E+01	4.4E+02	6E-07	2E-02		
		Butane*	60	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methyl Butane*	30	No value	No value	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	80	1.0E+02	2.9E+02	8E-07	3E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG39-E15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	10	1.4E+01	4.4E+02	7E-07	2E-02		
		Butane*	60	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chlorodifluoromethane*	70	No value	7.3E+06	-	1E-05		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		Trichloroethene (TCE)	20	1.0E+02	2.9E+02	2E-07	7E-02		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG41-E5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	20	2.6E+02	1.2E+05	8E-08	2E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		Benzene	60	1.4E+01	4.4E+02	4E-06	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5100	No value	1.2E+03	-	4E+00		
		Decahydromethyl Naphthalene*	100	No value	No value	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	50	6.7E+01	5.8E+03	7E-07	9E-03		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	6000	1.0E+02	2.9E+02	6E-05	2E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG44-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	10	No value	1.0E+04	-	1E-03		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	40	1.4E+01	4.4E+02	3E-06	9E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	10	No value	1.2E+03	-	9E-03		
		Ethylbenzene	9	1.6E+02	1.5E+05	6E-08	6E-05		
		m,p-Xylene	30	No value	1.5E+04	-	2E-03		
		Methylene Chloride	6	4.1E+02	5.8E+04	1E-08	1E-04		
		o-Xylene	9	No value	1.5E+04	-	6E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	30	6.7E+01	5.8E+03	4E-07	5E-03		
		Toluene	80	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	40	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	40	5.2E+00	1.5E+04	8E-06	3E-03		
SAIA-SG44-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	10	No value	1.0E+04	-	1E-03		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	10	1.4E+01	4.4E+02	7E-07	2E-02		
		Chlorobenzene	5	No value	7.3E+03	-	7E-04		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	2	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	30	No value	1.2E+03	-	3E-02		
		Ethylbenzene	6	1.6E+02	1.5E+05	4E-08	4E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	4	4.1E+02	5.8E+04	1E-08	7E-05		
		o-Xylene	8	No value	1.5E+04	-	5E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	50	1.0E+02	2.9E+02	5E-07	2E-01		
		Vinyl Chloride	30	5.2E+00	1.5E+04	6E-06	2E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG44-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	7	No value	1.0E+04	-	7E-04		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	10	1.4E+01	4.4E+02	7E-07	2E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	20	6.7E+01	5.8E+03	3E-07	3E-03		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	40	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	20	5.2E+00	1.5E+04	4E-06	1E-03		
SAIA-SG44-5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	3E-03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	5	1.8E+01	1.4E+04	3E-07	3E-04		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	5	1.6E+02	1.5E+05	3E-08	3E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	4	4.1E+02	5.8E+04	1E-08	7E-05		
		o-Xylene	6	No value	1.5E+04	-	4E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG45-5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	6	1.4E+01	4.4E+02	4E-07	1E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	10	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG45-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	30	1.4E+01	4.4E+02	2E-06	7E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	30	1.8E+01	1.4E+04	2E-06	2E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	6	1.6E+02	1.5E+05	4E-08	4E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	6	4.1E+02	5.8E+04	1E-08	1E-04		
		o-Xylene	7	No value	1.5E+04	-	5E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	100	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	20	1.0E+02	2.9E+02	2E-07	7E-02		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG45-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-05	1E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	30	2.6E+02	1.2E+05	1E-07	3E-04		
		1,1-Dichloroethene	100	No value	1.0E+04	-	1E-02		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	9	1.4E+01	4.4E+02	6E-07	2E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	900	No value	1.2E+03	-	8E-01		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	4	4.1E+02	5.8E+04	1E-08	7E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	20	6.7E+01	5.8E+03	3E-07	3E-03		
		Toluene	200	No value	4.4E+04	-	5E-03		
		Trichloroethene (TCE)	3500	1.0E+02	2.9E+02	4E-05	1E+01		
		Vinyl Chloride	60	5.2E+00	1.5E+04	1E-05	4E-03		
SAIA-SG45-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-05	1E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	30	2.6E+02	1.2E+05	1E-07	3E-04		
		1,1-Dichloroethene	100	No value	1.0E+04	-	1E-02		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	5	1.4E+01	4.4E+02	4E-07	1E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1100	No value	1.2E+03	-	9E-01		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	30	6.7E+01	5.8E+03	4E-07	5E-03		
		Toluene	100	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	3900	1.0E+02	2.9E+02	4E-05	1E+01		
		Vinyl Chloride	50	5.2E+00	1.5E+04	1E-05	3E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG45-5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	6	1.4E+01	4.4E+02	4E-07	1E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	10	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG46-05	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	2E-04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	7	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG46-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	4E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	20	1.4E+01	4.4E+02	1E-06	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	10	1.8E+01	1.4E+04	6E-07	7E-04		
		Chloromethane	3	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	6	4.1E+02	5.8E+04	1E-08	1E-04		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	100	1.0E+02	2.9E+02	1E-06	3E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG46-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	20	1.4E+01	4.4E+02	1E-06	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	10	1.8E+01	1.4E+04	6E-07	7E-04		
		Chloromethane	2	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	10	No value	1.2E+03	-	9E-03		
		Ethylbenzene	5	1.6E+02	1.5E+05	3E-08	3E-05		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	5	4.1E+02	5.8E+04	1E-08	9E-05		
		o-Xylene	5	No value	1.5E+04	-	3E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	500	1.0E+02	2.9E+02	5E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG46-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	6E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	70	2.6E+02	1.2E+05	3E-07	6E-04		
		1,1-Dichloroethene	90	No value	1.0E+04	-	9E-03		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	30	1.4E+01	4.4E+02	2E-06	7E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	7	No value	1.3E+04	-	5E-04		
		cis-1,2-Dichloroethylene	1900	No value	1.2E+03	-	2E+00		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	5	4.1E+02	5.8E+04	1E-08	9E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	8	6.7E+01	5.8E+03	1E-07	1E-03		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	16000	1.0E+02	2.9E+02	2E-04	5E+01		
		Vinyl Chloride	20	5.2E+00	1.5E+04	4E-06	1E-03		
SAIA-SG47-05	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	2E-03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	7	1.8E+01	1.4E+04	4E-07	5E-04		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	4	4.1E+02	5.8E+04	1E-08	7E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	9	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG47-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-07	2E-02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	8	1.4E+01	4.4E+02	6E-07	2E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	5	4.1E+02	5.8E+04	1E-08	9E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	80	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SAIA-SG47-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	20	1.4E+01	4.4E+02	1E-06	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	10	1.8E+01	1.4E+04	6E-07	7E-04		
		Chloromethane	3	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	6	4.1E+02	5.8E+04	1E-08	1E-04		
		o-Xylene	5	No value	1.5E+04	-	3E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	8	6.7E+01	5.8E+03	1E-07	1E-03		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	40	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG47-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	60	1.4E+01	4.4E+02	4E-06	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	7	No value	1.2E+03	-	6E-03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	9	4.1E+02	5.8E+04	2E-08	2E-04		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	6.7E+01	5.8E+03	1E-07	2E-03		
		Toluene	600	No value	4.4E+04	-	1E-02		
		Trichloroethene (TCE)	50	1.0E+02	2.9E+02	5E-07	2E-01		
		Vinyl Chloride	30	5.2E+00	1.5E+04	6E-06	2E-03		
SG10-15, P4814cc	15	1,1,1-Trichloroethane	70000	No value	1.5E+05	-	5E-01	4E-01	4E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	380000	2.6E+02	1.2E+05	1E-03	3E+00		
		1,1-Dichloroethene	40000	No value	1.0E+04	-	4E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4000000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	1900000	5.2E+00	1.5E+04	4E-01	1E+02		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG10-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E+00	3E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	650000	2.6E+02	1.2E+05	3E-03	6E+00		
		1,1-Dichloroethene	86000	No value	1.0E+04	-	8E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2600000	No value	1.2E+03	-	2E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	6100000	5.2E+00	1.5E+04	1E+00	4E+02		
SG10-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	9E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	42000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	16000	1.0E+02	2.9E+02	2E-04	5E+01		
		Vinyl Chloride	9100	5.2E+00	1.5E+04	2E-03	6E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG10-5, P4330cc	5	1,1,1-Trichloroethane	190000	No value	1.5E+05	-	1E+00	1E-01	4E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	250000	2.6E+02	1.2E+05	1E-03	2E+00		
		1,1-Dichloroethene	16000	No value	1.0E+04	-	2E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	1800	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4400000	No value	1.2E+03	-	4E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	640	No value	1.5E+04	-	4E-02		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1100	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	1500	No value	4.4E+04	-	3E-02		
		trans-1,2-Dichloroethene	52000	No value	1.2E+04	-	4E+00		
		Trichloroethene (TCE)	63000	1.0E+02	2.9E+02	6E-04	2E+02		
		Vinyl Chloride	520000	5.2E+00	1.5E+04	1E-01	4E+01		
SG11-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	21	1.4E+01	4.4E+02	1E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	74	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	53	1.0E+02	2.9E+02	5E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG11-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	590	No value	1.2E+03	-	5E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	70	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	130	6.7E+01	5.8E+03	2E-06	2E-02		
		Toluene	26	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	830	1.0E+02	2.9E+02	8E-06	3E+00		
		Vinyl Chloride	21	5.2E+00	1.5E+04	4E-06	1E-03		
SG11-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG11-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	8E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	170	1.0E+02	2.9E+02	2E-06	6E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG1-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	5E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	44	No value	1.2E+03	-	4E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	720	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	100	1.0E+02	2.9E+02	1E-06	3E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG12-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-05	3E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	130	2.6E+02	1.2E+05	5E-07	1E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	32	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	57	1.4E+01	4.4E+02	4E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5200	No value	1.2E+03	-	4E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	32	No value	2.9E+04	-	1E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	36	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	81	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	46	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	8900	1.0E+02	2.9E+02	9E-05	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG12-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	6E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	160	2.6E+02	1.2E+05	6E-07	1E-03		
		1,1-Dichloroethene	190	No value	1.0E+04	-	2E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	29	No value	8.7E+03	-	3E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	96	1.4E+01	4.4E+02	7E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6600	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	45	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	32	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	120	6.7E+01	5.8E+03	2E-06	2E-02		
		Toluene	34	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	91	No value	1.2E+04	-	8E-03		
		Trichloroethene (TCE)	15000	1.0E+02	2.9E+02	2E-04	5E+01		
		Vinyl Chloride	66	5.2E+00	1.5E+04	1E-05	5E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG12-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	4E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	110	2.6E+02	1.2E+05	4E-07	9E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	31	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	46	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5200	No value	1.2E+03	-	4E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	44	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	80	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	23	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	9900	1.0E+02	2.9E+02	1E-04	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG12-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	9E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	15000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	22000	1.0E+02	2.9E+02	2E-04	8E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG1-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-04	7E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	250	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	42000	6.7E+01	5.8E+03	6E-04	7E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	18000	1.0E+02	2.9E+02	2E-04	6E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG13-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	44	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	160	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	170	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	3600	6.7E+01	5.8E+03	5E-05	6E-01		
		Toluene	94	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	35	5.2E+00	1.5E+04	7E-06	2E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG13-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	190	No value	6.0E+06	-	3E-05		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	61	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	43	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG13-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	72	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	65	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	550	6.7E+01	5.8E+03	8E-06	9E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	290	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG13-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-05	9E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	180	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	2900	6.7E+01	5.8E+03	4E-05	5E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	61	1.0E+02	2.9E+02	6E-07	2E-01		
		Vinyl Chloride	53	5.2E+00	1.5E+04	1E-05	4E-03		
SG1-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	3E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1900	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	6100	6.7E+01	5.8E+03	9E-05	1E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	8100	1.0E+02	2.9E+02	8E-05	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG14-15 Rep, P4864cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	30	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	34	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	35	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG14-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG14-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	25	No value	8.7E+03	-	3E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	31	1.4E+01	4.4E+02	2E-06	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	230	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	200	No value	1.5E+04	-	1E-02		
		Ethylbenzene	24	1.6E+02	1.5E+05	1E-07	2E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	54	No value	1.5E+04	-	4E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	23	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	70	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	140	6.7E+01	5.8E+03	2E-06	2E-02		
		Toluene	91	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	480	1.0E+02	2.9E+02	5E-06	2E+00		
		Vinyl Chloride	18	5.2E+00	1.5E+04	3E-06	1E-03		
SG14-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	44	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	150	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	150	No value	1.5E+04	-	1E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	570	1.0E+02	2.9E+02	6E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG14-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	4E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	30	No value	1.5E+04	-	2E-03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	46	6.7E+01	5.8E+03	7E-07	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG1-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	13000	6.7E+01	5.8E+03	2E-04	2E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	130	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG15-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	5E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	110	1.4E+01	4.4E+02	8E-06	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	810	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	40	No value	4.4E+04	-	9E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	32	1.0E+02	2.9E+02	3E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG15-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	23	1.4E+01	4.4E+02	2E-06	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1600	6.7E+01	5.8E+03	2E-05	3E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	460	1.0E+02	2.9E+02	5E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG15-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1200	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	580	1.0E+02	2.9E+02	6E-06	2E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG15-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	1E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	750	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	5E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	29	1.4E+01	4.4E+02	2E-06	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	55	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	38	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	820	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	35	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	72	1.0E+02	2.9E+02	7E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG16-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	72	1.4E+01	4.4E+02	5E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	870	No value	1.2E+03	-	7E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1100	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	880	1.0E+02	2.9E+02	9E-06	3E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	7E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	610	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	170	1.0E+02	2.9E+02	2E-06	6E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG16-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	66	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	390	6.7E+01	5.8E+03	6E-06	7E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	49	1.0E+02	2.9E+02	5E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	5E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	120	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	280	6.7E+01	5.8E+03	4E-06	5E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.0E+02	2.9E+02	1E-06	4E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG17-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	38	1.4E+01	4.4E+02	3E-06	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	35	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	210	6.7E+01	5.8E+03	3E-06	4E-02		
		Toluene	44	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	39	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG17-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	6E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	100	1.4E+01	4.4E+02	7E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	270	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	1400	6.7E+01	5.8E+03	2E-05	2E-01		
		Toluene	53	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1700	1.0E+02	2.9E+02	2E-05	6E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG17-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-05	3E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	130	2.6E+02	1.2E+05	5E-07	1E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	36	1.4E+01	4.4E+02	3E-06	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3000	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	480	6.7E+01	5.8E+03	7E-06	8E-02		
		Toluene	19	No value	4.4E+04	-	4E-04		
		trans-1,2-Dichloroethene	69	No value	1.2E+04	-	6E-03		
		Trichloroethene (TCE)	6800	1.0E+02	2.9E+02	7E-05	2E+01		
		Vinyl Chloride	27	5.2E+00	1.5E+04	5E-06	2E-03		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG17-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	190	6.7E+01	5.8E+03	3E-06	3E-02		
		Toluene	27	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	82	1.0E+02	2.9E+02	8E-07	3E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG18-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	8E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	82	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	200	1.0E+02	2.9E+02	2E-06	7E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG18-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	280	1.0E+02	2.9E+02	3E-06	1E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG18-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	6E-04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	25	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG18-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	65	1.0E+02	2.9E+02	7E-07	2E-01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG2-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	3E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	110	2.6E+02	1.2E+05	4E-07	9E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	41	1.4E+01	4.4E+02	3E-06	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2700	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	47	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	4400	6.7E+01	5.8E+03	7E-05	8E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	41	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	8400	1.0E+02	2.9E+02	8E-05	3E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG2-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	7E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	280	2.6E+02	1.2E+05	1E-06	2E-03		
		1,1-Dichloroethene	320	No value	1.0E+04	-	3E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6700	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	220	6.7E+01	5.8E+03	3E-06	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	610	No value	1.2E+04	-	5E-02		
		Trichloroethene (TCE)	18000	1.0E+02	2.9E+02	2E-04	6E+01		
		Vinyl Chloride	73	5.2E+00	1.5E+04	1E-05	5E-03		
SG2-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-03	1E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	8100	2.6E+02	1.2E+05	3E-05	7E-02		
		1,1-Dichloroethene	1300	No value	1.0E+04	-	1E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	75	1.6E+01	1.0E+03	5E-06	7E-02		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	75	1.4E+01	4.4E+02	5E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	360000	No value	1.2E+03	-	3E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	610	6.7E+01	5.8E+03	9E-06	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	7700	No value	1.2E+04	-	7E-01		
		Trichloroethene (TCE)	280000	1.0E+02	2.9E+02	3E-03	1E+03		
		Vinyl Chloride	2500	5.2E+00	1.5E+04	5E-04	2E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG2-5 Rep, P5580cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-05	9E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	790	No value	1.2E+03	-	7E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	3200	6.7E+01	5.8E+03	5E-05	5E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	2400	1.0E+02	2.9E+02	2E-05	8E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG2-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-05	8E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1600	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	3400	6.7E+01	5.8E+03	5E-05	6E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1700	1.0E+02	2.9E+02	2E-05	6E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG3-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	8400	No value	1.2E+03	-	7E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	3900	1.0E+02	2.9E+02	4E-05	1E+01		
		Vinyl Chloride	610	5.2E+00	1.5E+04	1E-04	4E-02		
SG3-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	4E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	16000	2.6E+02	1.2E+05	6E-05	1E-01		
		1,1-Dichloroethene	3400	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	130000	No value	1.2E+03	-	1E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	3200	No value	4.4E+04	-	7E-02		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	89000	1.0E+02	2.9E+02	9E-04	3E+02		
		Vinyl Chloride	75000	5.2E+00	1.5E+04	1E-02	5E+00		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG3-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-01	3E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	190000	2.6E+02	1.2E+05	7E-04	2E+00		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4900000	No value	1.2E+03	-	4E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	7800000	1.0E+02	2.9E+02	8E-02	3E+04		
		Vinyl Chloride	130000	5.2E+00	1.5E+04	2E-02	9E+00		
SG3-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	1E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	21000	2.6E+02	1.2E+05	8E-05	2E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	6100	No value	8.7E+03	-	7E-01		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	330000	No value	1.2E+03	-	3E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	4800	No value	1.5E+04	-	3E-01		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	3400	No value	1.5E+04	-	2E-01		
		p-Cymene (p-Isopropyltoluene)	7800	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	2900	No value	4.4E+04	-	7E-02		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	270000	1.0E+02	2.9E+02	3E-03	9E+02		
		Vinyl Chloride	91000	5.2E+00	1.5E+04	2E-02	6E+00		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG3-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	7E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	17000	2.6E+02	1.2E+05	7E-05	1E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	4300	No value	8.7E+03	-	5E-01		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	210000	No value	1.2E+03	-	2E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	3200	No value	1.5E+04	-	2E-01		
		p-Cymene (p-Isopropyltoluene)	4400	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	2500	No value	4.4E+04	-	6E-02		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	140000	1.0E+02	2.9E+02	1E-03	5E+02		
		Vinyl Chloride	88000	5.2E+00	1.5E+04	2E-02	6E+00		
SG4-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	5E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	2800	2.6E+02	1.2E+05	1E-05	2E-02		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	13000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	8200	6.7E+01	5.8E+03	1E-04	1E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	130000	1.0E+02	2.9E+02	1E-03	4E+02		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG4-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-03	1E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	11000	2.6E+02	1.2E+05	4E-05	9E-02		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	77000	No value	1.2E+03	-	7E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	5300	6.7E+01	5.8E+03	8E-05	9E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	2100	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	310000	1.0E+02	2.9E+02	3E-03	1E+03		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG4-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-03	3E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	23000	2.6E+02	1.2E+05	9E-05	2E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	650000	No value	1.2E+03	-	6E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	11000	No value	1.2E+04	-	9E-01		
		Trichloroethene (TCE)	650000	1.0E+02	2.9E+02	7E-03	2E+03		
		Vinyl Chloride	6300	5.2E+00	1.5E+04	1E-03	4E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG4-5, P4330cc	5	1,1,1-Trichloroethane	160	No value	1.5E+05	-	1E-03	1E-03	5E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	1900	2.6E+02	1.2E+05	7E-06	2E-02		
		1,1-Dichloroethene	120	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	79	No value	8.7E+03	-	9E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	70	1.4E+01	4.4E+02	5E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	120	1.8E+01	1.4E+04	7E-06	8E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	40000	No value	1.2E+03	-	3E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	26	1.6E+02	1.5E+05	2E-07	2E-04		
		Isopropylbenzene (Cumene)	54	No value	6.0E+04	-	9E-04		
		m,p-Xylene	53	No value	1.5E+04	-	4E-03		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	32	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	100	No value	No value	-	-		
		sec-Butylbenzene	96	No value	5.8E+04	-	2E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	6700	6.7E+01	5.8E+03	1E-04	1E+00		
		Toluene	44	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	260	No value	1.2E+04	-	2E-02		
		Trichloroethene (TCE)	130000	1.0E+02	2.9E+02	1E-03	4E+02		
		Vinyl Chloride	390	5.2E+00	1.5E+04	7E-05	3E-02		
SG5-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	9E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	70	1.4E+01	4.4E+02	5E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	80	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	770	6.7E+01	5.8E+03	1E-05	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	2500	1.0E+02	2.9E+02	3E-05	9E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG5-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	4E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	30	No value	1.0E+04	-	3E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	170	1.4E+01	4.4E+02	1E-05	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	130	6.7E+01	5.8E+03	2E-06	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	83	No value	1.2E+04	-	7E-03		
		Trichloroethene (TCE)	11000	1.0E+02	2.9E+02	1E-04	4E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG5-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	7E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	810	No value	1.2E+03	-	7E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	20000	1.0E+02	2.9E+02	2E-04	7E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG5-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	240	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	970	6.7E+01	5.8E+03	1E-05	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1200	1.0E+02	2.9E+02	1E-05	4E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG5-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	210	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	990	6.7E+01	5.8E+03	1E-05	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1200	1.0E+02	2.9E+02	1E-05	4E+00		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-15, 1PV, P481cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	44	No value	8.7E+03	-	5E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	32	1.2E+01	4.3E+02	3E-06	7E-02		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	51	No value	No value	-	-		
		sec-Butylbenzene	29	No value	5.8E+04	-	5E-04		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	110	5.2E+00	1.5E+04	2E-05	8E-03		
SG6-15, 3PV, P1443cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	39	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	34	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3800	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	44	No value	2.9E+04	-	2E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	29	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	43	1.0E+02	2.9E+02	4E-07	1E-01		
		Vinyl Chloride	500	5.2E+00	1.5E+04	1E-04	3E-02		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-25, 10PV, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	4E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	1900	2.6E+02	1.2E+05	7E-06	2E-02		
		1,1-Dichloroethene	6800	No value	1.0E+04	-	7E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	320	No value	8.7E+03	-	4E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	530	1.4E+01	4.4E+02	4E-05	1E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	470000	No value	1.2E+03	-	4E+02		
		Dichlorodifluoromethane	270	No value	1.5E+04	-	2E-02		
		Ethylbenzene	89	1.6E+02	1.5E+05	5E-07	6E-04		
		Isopropylbenzene (Cumene)	100	No value	6.0E+04	-	2E-03		
		m,p-Xylene	220	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	120	No value	1.5E+04	-	8E-03		
		p-Cymene (p-Isopropyltoluene)	250	No value	No value	-	-		
		sec-Butylbenzene	180	No value	5.8E+04	-	3E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	61	6.7E+01	5.8E+03	9E-07	1E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	4300	No value	1.2E+04	-	4E-01		
		Trichloroethene (TCE)	2600	1.0E+02	2.9E+02	3E-05	9E+00		
		Vinyl Chloride	130000	5.2E+00	1.5E+04	2E-02	9E+00		
SG6-25, 1PV, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-25, 3PV, P1590cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-02	4E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	890	2.6E+02	1.2E+05	3E-06	8E-03		
		1,1-Dichloroethene	2900	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	160	No value	8.7E+03	-	2E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	170	1.4E+01	4.4E+02	1E-05	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	430000	No value	1.2E+03	-	4E+02		
		Dichlorodifluoromethane	85	No value	1.5E+04	-	6E-03		
		Ethylbenzene	50	1.6E+02	1.5E+05	3E-07	3E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	160	No value	1.5E+04	-	1E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	71	No value	1.5E+04	-	5E-03		
		p-Cymene (p-Isopropyltoluene)	120	No value	No value	-	-		
		sec-Butylbenzene	83	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	64	No value	5.8E+04	-	1E-03		
		Tetrachloroethene (PCE)	78	6.7E+01	5.8E+03	1E-06	1E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	1900	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	3200	1.0E+02	2.9E+02	3E-05	1E+01		
		Vinyl Chloride	120000	5.2E+00	1.5E+04	2E-02	8E+00		
SG6-35, 10PV, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	2E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	620	2.6E+02	1.2E+05	2E-06	5E-03		
		1,1-Dichloroethene	3300	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	65	No value	8.7E+03	-	8E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	140	5.3E+01	4.3E+03	3E-06	3E-02		
		Benzene	80	1.4E+01	4.4E+02	6E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	66000	No value	1.2E+03	-	6E+01		
		Dichlorodifluoromethane	240	No value	1.5E+04	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	25	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	80	No value	No value	-	-		
		sec-Butylbenzene	83	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	2400	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	33000	1.0E+02	2.9E+02	3E-04	1E+02		
		Vinyl Chloride	7300	5.2E+00	1.5E+04	1E-03	5E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-35, 1PV, P581cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	1E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	710	2.6E+02	1.2E+05	3E-06	6E-03		
		1,1-Dichloroethene	3600	No value	1.0E+04	-	4E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	100	No value	8.7E+03	-	1E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	150	5.3E+01	4.3E+03	3E-06	3E-02		
		Benzene	100	1.4E+01	4.4E+02	7E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	57000	No value	1.2E+03	-	5E+01		
		Dichlorodifluoromethane	270	No value	1.5E+04	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	78	1.2E+01	4.3E+02	7E-06	2E-01		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	29	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	130	No value	No value	-	-		
		sec-Butylbenzene	110	No value	5.8E+04	-	2E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	31	No value	4.4E+04	-	7E-04		
		trans-1,2-Dichloroethene	2700	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	28000	1.0E+02	2.9E+02	3E-04	1E+02		
		Vinyl Chloride	8900	5.2E+00	1.5E+04	2E-03	6E-01		
SG6-35, 3PV, P1742cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	1E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	530	2.6E+02	1.2E+05	2E-06	5E-03		
		1,1-Dichloroethene	2700	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	58	No value	8.7E+03	-	7E-03		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	100	5.3E+01	4.3E+03	2E-06	2E-02		
		Benzene	81	1.4E+01	4.4E+02	6E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	41000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	230	No value	1.5E+04	-	2E-02		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	46	1.2E+01	4.3E+02	4E-06	1E-01		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	51	No value	No value	-	-		
		sec-Butylbenzene	74	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	24	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	2000	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	21000	1.0E+02	2.9E+02	2E-04	7E+01		
		Vinyl Chloride	4900	5.2E+00	1.5E+04	9E-04	3E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-5, 10PV, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	270	2.6E+02	1.2E+05	1E-06	2E-03		
		1,1-Dichloroethene	61	No value	1.0E+04	-	6E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	710	No value	8.7E+03	-	8E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	36	1.4E+01	4.4E+02	3E-06	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	45	No value	1.5E+04	-	3E-03		
		Ethylbenzene	180	1.6E+02	1.5E+05	1E-06	1E-03		
		Isopropylbenzene (Cumene)	150	No value	6.0E+04	-	3E-03		
		m,p-Xylene	680	No value	1.5E+04	-	5E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	570	No value	2.9E+04	-	2E-02		
		o-Xylene	360	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	380	No value	No value	-	-		
		sec-Butylbenzene	280	No value	5.8E+04	-	5E-03		
		tert-Butylbenzene	290	No value	5.8E+04	-	5E-03		
		Tetrachloroethene (PCE)	240	6.7E+01	5.8E+03	4E-06	4E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	65	No value	1.2E+04	-	6E-03		
		Trichloroethene (TCE)	480	1.0E+02	2.9E+02	5E-06	2E+00		
		Vinyl Chloride	7000	5.2E+00	1.5E+04	1E-03	5E-01		
SG6-5, 1PV, P433cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-04	4E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	250	2.6E+02	1.2E+05	1E-06	2E-03		
		1,1-Dichloroethene	68	No value	1.0E+04	-	7E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	590	No value	8.7E+03	-	7E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	36	1.4E+01	4.4E+02	3E-06	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	47	No value	1.5E+04	-	3E-03		
		Ethylbenzene	190	1.6E+02	1.5E+05	1E-06	1E-03		
		Isopropylbenzene (Cumene)	130	No value	6.0E+04	-	2E-03		
		m,p-Xylene	660	No value	1.5E+04	-	5E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	350	No value	2.9E+04	-	1E-02		
		o-Xylene	330	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	310	No value	No value	-	-		
		sec-Butylbenzene	230	No value	5.8E+04	-	4E-03		
		tert-Butylbenzene	220	No value	5.8E+04	-	4E-03		
		Tetrachloroethene (PCE)	220	6.7E+01	5.8E+03	3E-06	4E-02		
		Toluene	120	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	67	No value	1.2E+04	-	6E-03		
		Trichloroethene (TCE)	560	1.0E+02	2.9E+02	6E-06	2E+00		
		Vinyl Chloride	4900	5.2E+00	1.5E+04	9E-04	3E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-5, 3PV, P1299cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	3E+00
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	220	2.6E+02	1.2E+05	9E-07	2E-03		
		1,1-Dichloroethene	44	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	540	No value	8.7E+03	-	6E-02		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	43	1.4E+01	4.4E+02	3E-06	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1500	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	33	No value	1.5E+04	-	2E-03		
		Ethylbenzene	160	1.6E+02	1.5E+05	1E-06	1E-03		
		Isopropylbenzene (Cumene)	130	No value	6.0E+04	-	2E-03		
		m,p-Xylene	570	No value	1.5E+04	-	4E-02		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	350	No value	2.9E+04	-	1E-02		
		o-Xylene	300	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	280	No value	No value	-	-		
		sec-Butylbenzene	220	No value	5.8E+04	-	4E-03		
		tert-Butylbenzene	210	No value	5.8E+04	-	4E-03		
		Tetrachloroethene (PCE)	190	6.7E+01	5.8E+03	3E-06	3E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	62	No value	1.2E+04	-	5E-03		
		Trichloroethene (TCE)	440	1.0E+02	2.9E+02	4E-06	2E+00		
		Vinyl Chloride	5000	5.2E+00	1.5E+04	1E-03	3E-01		
SG7-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	89	1.4E+01	4.4E+02	6E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	600	No value	1.2E+03	-	5E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	23	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	6100	1.0E+02	2.9E+02	6E-05	2E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG7-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	4E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	1300	2.6E+02	1.2E+05	5E-06	1E-02		
		1,1-Dichloroethene	280	No value	1.0E+04	-	3E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	120	1.4E+01	4.4E+02	9E-06	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	24000	No value	1.2E+03	-	2E+01		
		Dichlorodifluoromethane	34	No value	1.5E+04	-	2E-03		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	90	6.7E+01	5.8E+03	1E-06	2E-02		
		Toluene	27	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	630	No value	1.2E+04	-	5E-02		
		Trichloroethene (TCE)	120000	1.0E+02	2.9E+02	1E-03	4E+02		
		Vinyl Chloride	130	5.2E+00	1.5E+04	2E-05	9E-03		
SG7-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-03	1E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	5400	2.6E+02	1.2E+05	2E-05	5E-02		
		1,1-Dichloroethene	4100	No value	1.0E+04	-	4E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200000	No value	1.2E+03	-	2E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	7300	No value	1.2E+04	-	6E-01		
		Trichloroethene (TCE)	340000	1.0E+02	2.9E+02	3E-03	1E+03		
		Vinyl Chloride	6800	5.2E+00	1.5E+04	1E-03	5E-01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG7-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	6E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2200	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	18000	1.0E+02	2.9E+02	2E-04	6E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		
SG7-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	5E+01
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	0	2.6E+02	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6300	No value	1.2E+03	-	5E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	12000	1.0E+02	2.9E+02	1E-04	4E+01		
		Vinyl Chloride	0	5.2E+00	1.5E+04	-	-		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG8-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-01	5E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	180000	2.6E+02	1.2E+05	7E-04	2E+00		
		1,1-Dichloroethene	14000	No value	1.0E+04	-	1E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2400000	No value	1.2E+03	-	2E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	880000	1.0E+02	2.9E+02	9E-03	3E+03		
		Vinyl Chloride	480000	5.2E+00	1.5E+04	9E-02	3E+01		
SG8-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-02	4E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	130000	2.6E+02	1.2E+05	5E-04	1E+00		
		1,1-Dichloroethene	23000	No value	1.0E+04	-	2E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4000000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	85000	1.0E+02	2.9E+02	9E-04	3E+02		
		Vinyl Chloride	400000	5.2E+00	1.5E+04	8E-02	3E+01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG8-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-02	5E+03
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	110000	2.6E+02	1.2E+05	4E-04	9E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3100000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	65000	No value	1.2E+04	-	6E+00		
		Trichloroethene (TCE)	770000	1.0E+02	2.9E+02	8E-03	3E+03		
		Vinyl Chloride	200000	5.2E+00	1.5E+04	4E-02	1E+01		
SG8-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-02	2E+02
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	83000	2.6E+02	1.2E+05	3E-04	7E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	230000	No value	1.2E+03	-	2E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.0E+02	2.9E+02	-	-		
		Vinyl Chloride	450000	5.2E+00	1.5E+04	9E-02	3E+01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG9-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-02	1E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	240000	2.6E+02	1.2E+05	9E-04	2E+00		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800000	No value	1.2E+03	-	2E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	3200000	1.0E+02	2.9E+02	3E-02	1E+04		
		Vinyl Chloride	51000	5.2E+00	1.5E+04	1E-02	3E+00		
SG9-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-02	2E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	420000	2.6E+02	1.2E+05	2E-03	4E+00		
		1,1-Dichloroethene	140000	No value	1.0E+04	-	1E+01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	9100000	No value	1.2E+03	-	8E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	45000	No value	2.9E+04	-	2E+00		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	63000	No value	1.2E+04	-	5E+00		
		Trichloroethene (TCE)	3000000	1.0E+02	2.9E+02	3E-02	1E+04		
		Vinyl Chloride	200000	5.2E+00	1.5E+04	4E-02	1E+01		

Table 6-8a
Risk Characterization (Soil Gas), Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG9-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-01	3E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	1700	2.6E+01	2.9E+01	7E-05	6E+01		
		1,1-Dichloroethane	170000	2.6E+02	1.2E+05	7E-04	1E+00		
		1,1-Dichloroethene	30000	No value	1.0E+04	-	3E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	900	1.6E+01	1.0E+03	6E-05	9E-01		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	850	1.4E+01	4.4E+02	6E-05	2E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	8400000	No value	1.2E+03	-	7E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	580	1.6E+02	1.5E+05	4E-06	4E-03		
		Isopropylbenzene (Cumene)	890	No value	6.0E+04	-	1E-02		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	1900	No value	2.9E+04	-	7E-02		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	780	No value	No value	-	-		
		sec-Butylbenzene	1000	No value	5.8E+04	-	2E-02		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	5200	6.7E+01	5.8E+03	8E-05	9E-01		
		Toluene	990	No value	4.4E+04	-	2E-02		
		trans-1,2-Dichloroethene	29000	No value	1.2E+04	-	2E+00		
		Trichloroethene (TCE)	6600000	1.0E+02	2.9E+02	7E-02	2E+04		
		Vinyl Chloride	300000	5.2E+00	1.5E+04	6E-02	2E+01		
SG9-5, P4330cc	5	1,1,1-Trichloroethane	100000	No value	1.5E+05	-	7E-01	8E-02	2E+04
		1,1,2,2-Tetrachloroethane	0	7.0E+00	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	2.6E+01	2.9E+01	-	-		
		1,1-Dichloroethane	430000	2.6E+02	1.2E+05	2E-03	4E+00		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	5.6E+01	4.7E+02	-	-		
		1,2-Dichloroethane	0	1.6E+01	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	3.7E+01	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	5.3E+01	4.3E+03	-	-		
		Benzene	0	1.4E+01	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	1.8E+01	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3700000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	1.6E+02	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	4.1E+02	5.8E+04	-	-		
		Naphthalene	0	1.2E+01	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	5.8E+04	-	-		
		Tetrachloroethene (PCE)	0	6.7E+01	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	5800000	1.0E+02	2.9E+02	6E-02	2E+04		
		Vinyl Chloride	93000	5.2E+00	1.5E+04	2E-02	6E+00		

Notes:

* Tentatively identified compound (TIC): concentration listed only for those samples where tentatively identified.

Table 6-8b
Soil Exposure Point Concentrations and Risk Values, Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Soil COPC	Commercial/Industrial Receptor Concentrations (mg/kg) in 0 to 2 ft bgs samples*			Soil RBCs (mg/kg) (from Table 6-6a)		Risk Values based on 95% UCL		Risk Values based on Maximum	
	Mean	95% UCL	Maximum	Cancer	Noncancer	ILCR	HQ	ILCR	HQ
1,1,1-Trichloroethane	6.2E-03	2.7E-02	2.4E-01	No value	1.7E+03	-	2E-05	-	1E-04
1,1,2,2-Tetrachloroethane	1.5E-05	8.0E-05	7.5E-04	6.0E-01	7.0E+02	1E-10	1E-07	1E-09	1E-06
1,1,2-Trichloro-1,2,2-trifluoroethane	1.4E-05	7.6E-05	7.1E-04	No value	2.8E+04	-	3E-09	-	3E-08
1,1,2-Trichloroethane	2.6E-03	1.2E-02	1.1E-01	5.0E+00	6.3E+00	2E-09	2E-03	2E-08	2E-02
1,1-Dichloroethane	5.8E-04	1.8E-03	9.7E-03	3.6E+00	1.6E+03	5E-10	1E-06	3E-09	6E-06
1,2,3-Trichlorobenzene	1.3E-04	7.1E-04	6.6E-03	No value	4.0E+01	-	2E-05	-	2E-04
1,2,4-Trichlorobenzene	9.6E-04	5.1E-03	4.8E-02	1.1E+02	2.6E+02	5E-11	2E-05	4E-10	2E-04
1,2-Dibromo-3-chloropropane	1.5E-05	8.2E-05	7.6E-04	6.4E-02	2.5E+01	1E-09	3E-06	1E-08	3E-05
1,2-Dibromoethane (EDB)	1.4E-05	7.6E-05	7.1E-04	1.6E-01	3.3E+02	5E-10	2E-07	4E-09	2E-06
1,2-Dichloroethane	1.4E-05	7.4E-05	6.9E-04	2.0E+00	1.4E+02	4E-11	5E-07	3E-10	5E-06
2-Methylnaphthalene	3.1E-01	8.0E-01	4.5E+00	No value	3.0E+03	-	3E-04	-	2E-03
Acenaphthene	6.8E-03	2.8E-02	2.2E-01	No value	4.5E+04	-	6E-07	-	5E-06
Acetone	8.0E-03	3.2E-02	2.6E-01	No value	6.7E+05	-	5E-08	-	4E-07
Anthracene	Not detected in 0 to 2 ft bgs depth interval in on-site samples			No value	2.3E+05	-	-	-	-
Antimony	3.6E+00	9.1E+00	6.4E+01	No value	4.7E+02	-	2E-02	-	1E-01
Benzene	1.2E-05	6.7E-05	6.2E-04	3.3E-01	1.1E+01	2E-10	6E-06	2E-09	6E-05
Benzo(a)anthracene	3.0E-03	1.2E-02	8.5E-02	2.1E+01	No value	6E-10	-	4E-09	-
Benzo(a)pyrene	9.2E-03	2.7E-02	1.3E-01	2.1E+00	2.2E+02	1E-08	1E-04	6E-08	6E-04
Benzo(b)fluoranthene	8.8E-04	4.7E-03	4.4E-02	2.1E+01	No value	2E-10	-	2E-09	-
Benzo(g,h,i)perylene	1.0E-02	2.9E-02	1.2E-01	No value	No value	-	-	-	-
Benzo(k)fluoranthene	6.8E-03	2.2E-02	1.2E-01	2.1E+02	No value	1E-10	-	6E-10	-
Biphenyl (Diphenyl)	1.2E-02	4.5E-02	2.8E-01	4.1E+02	2.0E+02	1E-10	2E-04	7E-10	1E-03
bis(2-Ethylhexyl) Phthalate	5.7E-03	2.1E-02	1.5E-01	1.6E+02	1.6E+04	1E-10	1E-06	9E-10	9E-06
Bromodichloromethane	2.0E-05	1.1E-04	1.0E-03	2.8E-01	2.7E+02	4E-10	4E-07	4E-09	4E-06
Bromoform	1.4E-05	7.3E-05	6.8E-04	1.8E+01	5.3E+02	4E-12	1E-07	4E-11	1E-06
Cadmium	1.9E+00	5.8E+00	4.1E+01	9.1E+02	5.2E+00	6E-09	1E+00	4E-08	8E+00
Carbazole	Not detected in 0 to 2 ft bgs depth interval in on-site samples			No value	No value	-	-	-	-
Carbon Disulfide	1.4E-05	7.4E-05	6.9E-04	No value	3.5E+03	-	2E-08	-	2E-07
Carbon Tetrachloride	3.3E-05	1.3E-04	9.5E-04	9.8E-02	5.2E+01	1E-09	3E-06	1E-08	2E-05
Chloroform	1.7E-04	9.3E-04	8.7E-03	1.4E+00	1.0E+03	7E-10	9E-07	6E-09	9E-06
Chrysene	1.0E-02	2.9E-02	1.2E-01	2.1E+03	No value	1E-11	-	6E-11	-
cis-1,2-Dichloroethylene	3.4E-02	1.4E-01	1.2E+00	No value	1.8E+01	-	8E-03	-	7E-02
cis-1,3-Dichloropropene	Not detected in 0 to 2 ft bgs depth interval in on-site samples			5.8E-01	7.2E+01	0E+00	-	-	-
Cobalt	1.3E+01	1.8E+01	2.0E+02	1.9E+03	3.5E+02	1E-08	5E-02	1E-07	6E-01
Copper	2.4E+02	6.3E+02	4.4E+03	No value	4.7E+04	-	1E-02	-	9E-02
Cyclohexane	2.4E-05	1.3E-04	1.2E-03	No value	2.7E+04	-	5E-09	-	4E-08
Dibenz(a,h)anthracene	Not detected in 0 to 2 ft bgs depth interval in on-site samples			2.1E+00	No value	0E+00	-	-	-

Table 6-8b
Soil Exposure Point Concentrations and Risk Values, Commercial/Industrial Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Soil COPC	Commercial/Industrial Receptor Concentrations (mg/kg) in 0 to 2 ft bgs samples*			Soil RBCs (mg/kg) (from Table 6-6a)		Risk Values based on 95% UCL		Risk Values based on Maximum	
	Mean	95% UCL	Maximum	Cancer	Noncancer	ILCR	HQ	ILCR	HQ
Dibenzofuran	Not detected in 0 to 2 ft bgs depth interval in on-site samples			No value	1.0E+03	-	-	-	-
Diethyl Phthalate	Not detected in 0 to 2 ft bgs depth interval in on-site samples			No value	6.6E+05	-	-	-	-
Dimethyl Phthalate	Not detected in 0 to 2 ft bgs depth interval in on-site samples			No value	No value	-	-	-	-
Di-n-Butyl Phthalate	6.6E-03	2.0E-02	1.0E-01	No value	8.2E+04	-	2E-07	-	1E-06
Ethylbenzene	2.4E-03	1.1E-02	9.6E-02	2.5E+01	2.0E+04	4E-10	5E-07	4E-09	5E-06
Fluoranthene	1.3E-02	3.5E-02	1.4E-01	No value	3.0E+04	-	1E-06	-	5E-06
Fluorene	4.4E-02	1.4E-01	8.6E-01	No value	3.0E+04	-	5E-06	-	3E-05
Indeno(1,2,3-c,d)pyrene	2.9E-03	1.2E-02	8.6E-02	2.1E+01	No value	6E-10	-	4E-09	-
Isopropylbenzene (Cumene)	2.2E-03	1.0E-02	8.9E-02	No value	9.9E+03	-	1E-06	-	9E-06
Lead	1.8E+02	4.2E+02	2.6E+03	No value	3.2E+02	95% UCL and Maximum > Soil Lead Level			
m,p-Xylene	5.4E-03	2.2E-02	1.9E-01	No value	2.5E+03	-	9E-06	-	8E-05
Manganese	3.8E+02	4.3E+02	1.9E+03	No value	1.1E+03	-	4E-01	-	2E+00
Methyl Acetate	7.0E-04	1.9E-03	9.7E-03	No value	2.4E+04	-	8E-08	-	4E-07
Methylcyclohexane	1.2E-04	3.9E-04	2.7E-03	No value	5.5E+03	-	7E-08	-	5E-07
Naphthalene	7.9E-02	2.3E-01	1.5E+00	1.7E+01	5.9E+02	1E-08	4E-04	9E-08	3E-03
Nickel	3.9E+01	8.4E+01	5.9E+02	1.5E+04	4.9E+02	6E-09	2E-01	4E-08	1E+00
o-Xylene	4.7E-03	2.0E-02	1.7E-01	No value	2.8E+03	-	7E-06	-	6E-05
PCB-1248 (Aroclor 1248)	5.4E-01	2.6E+00	2.4E+01	9.5E-01	No value	3E-06	-	3E-05	-
PCB-1254 (Aroclor 1254)	1.8E-02	5.5E-02	3.2E-01	9.7E-01	1.5E+01	6E-08	4E-03	3E-07	2E-02
PCB-1260 (Aroclor 1260)	3.2E-01	1.2E+00	7.3E+00	9.9E-01	No value	1E-06	-	7E-06	-
Phenanthrene	1.6E-01	4.7E-01	2.9E+00	No value	No value	-	-	-	-
Phenol	Not detected in 0 to 2 ft bgs depth interval in on-site samples			No value	2.5E+05	-	-	-	-
Pyrene	1.5E-02	4.2E-02	1.8E-01	No value	2.3E+04	-	2E-06	-	8E-06
tert-Butyl Methyl Ether (MTBE)	1.5E-05	8.2E-05	7.6E-04	2.1E+02	6.4E+04	4E-13	1E-09	4E-12	1E-08
Tetrachloroethene (PCE)	8.3E-03	3.7E-02	3.3E-01	5.9E-01	8.1E+01	6E-08	5E-04	6E-07	4E-03
Thallium	2.1E-01	1.1E+00	1.3E+01	No value	1.2E+01	-	9E-02	-	1E+00
Toluene	1.2E-03	6.2E-03	5.7E-02	No value	1.1E+03	-	6E-06	-	5E-05
trans-1,3-Dichloropropene	4.0E-05	2.1E-04	2.0E-03	5.8E-01	7.2E+01	4E-10	3E-06	3E-09	3E-05
Trichloroethene (TCE)	7.4E-01	3.5E+00	3.2E+01	6.0E+00	1.9E+01	6E-07	2E-01	5E-06	2E+00
Trichlorofluoromethane	1.5E-05	7.8E-05	7.3E-04	No value	1.2E+03	-	6E-08	-	6E-07
Vinyl Chloride	1.7E-05	9.0E-05	8.4E-04	8.7E-03	7.0E+01	1E-08	1E-06	1E-07	1E-05
Cumulative Risk Values =>						**5E-06**	**2E+00**	**4E-05**	**1E+01**

Notes:

* All concentrations are in units of milligrams per kilogram (mg/kg) on a dry weight basis

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-19-15, P913cc	15	1,1,1-Trichloroethane	64	No value	1.5E+05	-	4E-04	2E-04	1E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	1700	3.2E+03	1.2E+05	5E-07	1E-02		
		1,1-Dichloroethene	85	No value	1.0E+04	-	8E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	43	No value	8.7E+03	-	5E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	350	1.8E+02	4.4E+02	2E-06	8E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5300	No value	1.2E+03	-	5E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	100	2.0E+03	1.5E+05	5E-08	7E-04		
		Isopropylbenzene (Cumene)	43	No value	6.0E+04	-	7E-04		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	34	No value	2.9E+04	-	1E-03		
		o-Xylene	150	No value	1.5E+04	-	1E-02		
		p-Cymene (p-Isopropyltoluene)	43	No value	No value	-	-		
		sec-Butylbenzene	56	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1200	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	210	No value	4.4E+04	-	5E-03		
		trans-1,2-Dichloroethene	500	No value	1.2E+04	-	4E-02		
		Trichloroethene (TCE)	35000	1.3E+03	2.9E+02	3E-05	1E+02		
		Vinyl Chloride	13000	6.6E+01	1.5E+04	2E-04	9E-01		
SAIA-SB/SG-19-25, P530cc	25	1,1,1-Trichloroethane	150	No value	1.5E+05	-	1E-03	1E-02	9E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	18000	3.2E+03	1.2E+05	6E-06	2E-01		
		1,1-Dichloroethene	660	No value	1.0E+04	-	6E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	110	2.0E+02	1.0E+03	6E-07	1E-01		
		1,3,5-Trimethylbenzene	200	No value	8.7E+03	-	2E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	600	1.8E+02	4.4E+02	3E-06	1E+00		
		Chloroethane	440	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	22000	No value	1.2E+03	-	2E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	270	2.0E+03	1.5E+05	1E-07	2E-03		
		Isopropylbenzene (Cumene)	200	No value	6.0E+04	-	3E-03		
		m,p-Xylene	290	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	270	No value	2.9E+04	-	9E-03		
		o-Xylene	490	No value	1.5E+04	-	3E-02		
		p-Cymene (p-Isopropyltoluene)	180	No value	No value	-	-		
		sec-Butylbenzene	290	No value	5.8E+04	-	5E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	410	8.4E+02	5.8E+03	5E-07	7E-02		
		Toluene	1900	No value	4.4E+04	-	4E-02		
		trans-1,2-Dichloroethene	6400	No value	1.2E+04	-	5E-01		
		Trichloroethene (TCE)	230000	1.3E+03	2.9E+02	2E-04	8E+02		
		Vinyl Chloride	810000	6.6E+01	1.5E+04	1E-02	6E+01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-19-35, P578cc	35	1,1,1-Trichloroethane	38	No value	1.5E+05	-	3E-04	6E-04	8E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	820	3.2E+03	1.2E+05	3E-07	7E-03		
		1,1-Dichloroethene	700	No value	1.0E+04	-	7E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	98	1.8E+02	4.4E+02	6E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6800	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	70	2.0E+03	1.5E+05	3E-08	5E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	63	No value	1.5E+04	-	4E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	38	No value	1.5E+04	-	3E-03		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	2200	8.4E+02	5.8E+03	3E-06	4E-01		
		Toluene	87	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	460	No value	1.2E+04	-	4E-02		
		Trichloroethene (TCE)	21000	1.3E+03	2.9E+02	2E-05	7E+01		
		Vinyl Chloride	38000	6.6E+01	1.5E+04	6E-04	3E+00		
SAIA-SB/SG-19-5, P816cc	5	1,1,1-Trichloroethane	2400	No value	1.5E+05	-	2E-02	3E-05	1E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	2000	3.2E+03	1.2E+05	6E-07	2E-02		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	85	2.2E+02	1.4E+04	4E-07	6E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	17000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1100	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	370	No value	1.2E+04	-	3E-02		
		Trichloroethene (TCE)	30000	1.3E+03	2.9E+02	2E-05	1E+02		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-20-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	3E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	20000	3.2E+03	1.2E+05	6E-06	2E-01		
		1,1-Dichloroethene	9400	No value	1.0E+04	-	9E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	440	2.0E+02	1.0E+03	2E-06	4E-01		
		1,3,5-Trimethylbenzene	32	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	910	1.8E+02	4.4E+02	5E-06	2E+00		
		Chloroethane	8800	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3000000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	32	No value	6.0E+04	-	5E-04		
		m,p-Xylene	240	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	37	No value	2.9E+04	-	1E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	58	No value	No value	-	-		
		sec-Butylbenzene	31	No value	5.8E+04	-	5E-04		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	440	8.4E+02	5.8E+03	5E-07	8E-02		
		Toluene	740	No value	4.4E+04	-	2E-02		
		trans-1,2-Dichloroethene	19000	No value	1.2E+04	-	2E+00		
		Trichloroethene (TCE)	7700	1.3E+03	2.9E+02	6E-06	3E+01		
		Vinyl Chloride	85000	6.6E+01	1.5E+04	1E-03	6E+00		
SAIA-SB/SG-20-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	2E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	5900	3.2E+03	1.2E+05	2E-06	5E-02		
		1,1-Dichloroethene	55000	No value	1.0E+04	-	5E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	35	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	430	1.8E+02	4.4E+02	2E-06	1E+00		
		Chloroethane	19000	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	23000000	No value	1.2E+03	-	2E+04		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	94	2.0E+03	1.5E+05	5E-08	6E-04		
		Isopropylbenzene (Cumene)	35	No value	6.0E+04	-	6E-04		
		m,p-Xylene	290	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	52	No value	2.9E+04	-	2E-03		
		o-Xylene	140	No value	1.5E+04	-	1E-02		
		p-Cymene (p-Isopropyltoluene)	74	No value	No value	-	-		
		sec-Butylbenzene	44	No value	5.8E+04	-	8E-04		
		tert-Butylbenzene	38	No value	No value	-	-		
		Tetrachloroethene (PCE)	140	8.4E+02	5.8E+03	2E-07	2E-02		
		Toluene	240	No value	4.4E+04	-	5E-03		
		trans-1,2-Dichloroethene	90000	No value	1.2E+04	-	8E+00		
		Trichloroethene (TCE)	270000	1.3E+03	2.9E+02	2E-04	9E+02		
		Vinyl Chloride	98000	6.6E+01	1.5E+04	1E-03	7E+00		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-20-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-03	2E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	62000	3.2E+03	1.2E+05	2E-05	5E-01		
		1,1-Dichloroethene	20000	No value	1.0E+04	-	2E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	230	2.0E+02	1.0E+03	1E-06	2E-01		
		1,3,5-Trimethylbenzene	91	No value	8.7E+03	-	1E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	310	1.8E+02	4.4E+02	2E-06	7E-01		
		Chloroethane	730	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5200000	No value	1.2E+03	-	4E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	110	2.0E+03	1.5E+05	5E-08	8E-04		
		Isopropylbenzene (Cumene)	90	No value	6.0E+04	-	2E-03		
		m,p-Xylene	91	No value	1.5E+04	-	6E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	99	No value	2.9E+04	-	3E-03		
		o-Xylene	110	No value	1.5E+04	-	8E-03		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	120	No value	5.8E+04	-	2E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	2000	8.4E+02	5.8E+03	2E-06	3E-01		
		Toluene	360	No value	4.4E+04	-	8E-03		
		trans-1,2-Dichloroethene	93000	No value	1.2E+04	-	8E+00		
		Trichloroethene (TCE)	4100000	1.3E+03	2.9E+02	3E-03	1E+04		
		Vinyl Chloride	80000	6.6E+01	1.5E+04	1E-03	5E+00		
SAIA-SB/SG-20-5, P816cc	5	1,1,1-Trichloroethane	76	No value	1.5E+05	-	5E-04	3E-03	6E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	22000	3.2E+03	1.2E+05	7E-06	2E-01		
		1,1-Dichloroethene	710	No value	1.0E+04	-	7E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	72	2.0E+02	1.0E+03	4E-07	7E-02		
		1,3,5-Trimethylbenzene	39	No value	8.7E+03	-	5E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	340	1.8E+02	4.4E+02	2E-06	8E-01		
		Chloroethane	650	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	610000	No value	1.2E+03	-	5E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	150	2.0E+03	1.5E+05	7E-08	1E-03		
		Isopropylbenzene (Cumene)	39	No value	6.0E+04	-	7E-04		
		m,p-Xylene	390	No value	1.5E+04	-	3E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	41	No value	2.9E+04	-	1E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	69	No value	No value	-	-		
		sec-Butylbenzene	34	No value	5.8E+04	-	6E-04		
		tert-Butylbenzene	41	No value	No value	-	-		
		Tetrachloroethene (PCE)	290	8.4E+02	5.8E+03	3E-07	5E-02		
		Toluene	460	No value	4.4E+04	-	1E-02		
		trans-1,2-Dichloroethene	1700	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	17000	1.3E+03	2.9E+02	1E-05	6E+01		
		Vinyl Chloride	170000	6.6E+01	1.5E+04	3E-03	1E+01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-21-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	6E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	510	3.2E+03	1.2E+05	2E-07	4E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	40	1.8E+02	4.4E+02	2E-07	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	32000	No value	1.2E+03	-	3E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	570	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	67	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	150	No value	1.2E+04	-	1E-02		
		Trichloroethene (TCE)	8500	1.3E+03	2.9E+02	7E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-21-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	7E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	2200	3.2E+03	1.2E+05	7E-07	2E-02		
		1,1-Dichloroethene	1100	No value	1.0E+04	-	1E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	120	1.8E+02	4.4E+02	7E-07	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	50000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	96	No value	1.5E+04	-	7E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	360	8.4E+02	5.8E+03	4E-07	6E-02		
		Toluene	90	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	5400	No value	1.2E+04	-	5E-01		
		Trichloroethene (TCE)	7000	1.3E+03	2.9E+02	6E-06	2E+01		
		Vinyl Chloride	1600	6.6E+01	1.5E+04	2E-05	1E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-21-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-05	1E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	930	3.2E+03	1.2E+05	3E-07	8E-03		
		1,1-Dichloroethene	1700	No value	1.0E+04	-	2E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	59	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	52000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	38	8.4E+02	5.8E+03	5E-08	7E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	4700	No value	1.2E+04	-	4E-01		
		Trichloroethene (TCE)	21000	1.3E+03	2.9E+02	2E-05	7E+01		
		Vinyl Chloride	4300	6.6E+01	1.5E+04	7E-05	3E-01		
SAIA-SB/SG-21-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	6E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	93	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	160	1.3E+03	2.9E+02	1E-07	5E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-22-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	7E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	25	1.8E+02	4.4E+02	1E-07	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	45	No value	2.9E+04	-	2E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	40	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	39	8.4E+02	5.8E+03	5E-08	7E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	180	1.3E+03	2.9E+02	1E-07	6E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-22-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	120	1.8E+02	4.4E+02	7E-07	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	120	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	110	No value	2.9E+04	-	4E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	97	No value	No value	-	-		
		sec-Butylbenzene	43	No value	5.8E+04	-	7E-04		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	43	8.4E+02	5.8E+03	5E-08	7E-03		
		Toluene	50	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	310	1.3E+03	2.9E+02	2E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-22-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	6E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	40	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	210	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	51	No value	1.5E+04	-	3E-03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.3E+03	2.9E+02	9E-08	4E-01		
		Vinyl Chloride	73	6.6E+01	1.5E+04	1E-06	5E-03		
SAIA-SB/SG-22-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	6E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	26	No value	1.0E+04	-	3E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	190	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	47	No value	1.5E+04	-	3E-03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	23	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	120	1.3E+03	2.9E+02	1E-07	4E-01		
		Vinyl Chloride	90	6.6E+01	1.5E+04	1E-06	6E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-22-5 Rep, P866cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	59	No value	2.9E+04	-	2E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	46	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	100	1.3E+03	2.9E+02	8E-08	3E-01		
		Vinyl Chloride	32	6.6E+01	1.5E+04	5E-07	2E-03		
SAIA-SB/SG-22-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	76	No value	2.9E+04	-	3E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	61	No value	No value	-	-		
		sec-Butylbenzene	44	No value	5.8E+04	-	8E-04		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	35	8.4E+02	5.8E+03	4E-08	6E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	86	1.3E+03	2.9E+02	7E-08	3E-01		
		Vinyl Chloride	64	6.6E+01	1.5E+04	1E-06	4E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-15, 1PV, P481cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	25	1.8E+02	4.4E+02	1E-07	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	100	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	420	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-23-15, 3PV, P1444cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	91	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	440	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-15,10PV, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	88	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	440	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-23-25, 1PV, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	47	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	69	8.4E+02	5.8E+03	8E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	900	1.3E+03	2.9E+02	7E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-25, 3PV, P1589cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	43	1.8E+02	4.4E+02	2E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	89	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	55	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	320	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-23-25,10PV, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	6E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	47	8.4E+02	5.8E+03	6E-08	8E-03		
		Toluene	28	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	160	1.3E+03	2.9E+02	1E-07	5E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-35, 1PV, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	5E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	58	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	110	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1500	1.3E+03	2.9E+02	1E-06	5E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-23-35, 3PV, P1734cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	5E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	55	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	82	8.4E+02	5.8E+03	1E-07	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1500	1.3E+03	2.9E+02	1E-06	5E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-35,10PV, P5782cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	5E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	58	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	75	8.4E+02	5.8E+03	9E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1500	1.3E+03	2.9E+02	1E-06	5E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-23-5, 10PV, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	72	8.4E+02	5.8E+03	9E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	280	1.3E+03	2.9E+02	2E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-23-5, 1PV, P433cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	9E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	58	8.4E+02	5.8E+03	7E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	260	1.3E+03	2.9E+02	2E-07	9E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-23-5, 3PV, P1299cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	9E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	63	8.4E+02	5.8E+03	8E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	260	1.3E+03	2.9E+02	2E-07	9E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-24-15, P913cc	15	1,1,1-Trichloroethane	56	No value	1.5E+05	-	4E-04	2E-05	7E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	360	3.2E+03	1.2E+05	1E-07	3E-03		
		1,1-Dichloroethene	81	No value	1.0E+04	-	8E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	19	1.8E+02	4.4E+02	1E-07	4E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3900	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	93	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	120	No value	1.2E+04	-	1E-02		
		Trichloroethene (TCE)	19000	1.3E+03	2.9E+02	2E-05	6E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-24-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	43	No value	7.3E+05	-	6E-05		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	110	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1200	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	40	2.0E+03	1.5E+05	2E-08	3E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	51	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	760	8.4E+02	5.8E+03	9E-07	1E-01		
		Toluene	44	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	45	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	5500	1.3E+03	2.9E+02	4E-06	2E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-24-35, P578cc	35	1,1,1-Trichloroethane	610	No value	1.5E+05	-	4E-03	1E-03	4E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	53000	3.2E+03	1.2E+05	2E-05	5E-01		
		1,1-Dichloroethene	35000	No value	1.0E+04	-	3E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	840	1.8E+02	4.4E+02	5E-06	2E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	120	2.2E+02	1.4E+04	5E-07	8E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	420000	No value	1.2E+03	-	4E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	93	2.0E+03	1.5E+05	5E-08	6E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	24	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	50	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	950	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	63	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	72000	No value	1.2E+04	-	6E+00		
		Trichloroethene (TCE)	980000	1.3E+03	2.9E+02	8E-04	3E+03		
		Vinyl Chloride	17000	6.6E+01	1.5E+04	3E-04	1E+00		
SAIA-SB/SG-24-5, P816cc	5	1,1,1-Trichloroethane	50	No value	1.5E+05	-	3E-04	9E-07	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	180	3.2E+03	1.2E+05	6E-08	2E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	170	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	93	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	920	1.3E+03	2.9E+02	7E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-25-15 Rep, P963cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	6E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	26	1.8E+02	4.4E+02	1E-07	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	3400	8.4E+02	5.8E+03	4E-06	6E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-25-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	7E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	20	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	4100	8.4E+02	5.8E+03	5E-06	7E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-25-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	28	1.8E+02	4.4E+02	2E-07	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	58	No value	1.3E+04	-	4E-03		
		cis-1,2-Dichloroethylene	81	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	580	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	29	No value	4.4E+04	-	7E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	620	1.3E+03	2.9E+02	5E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-25-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	9E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	100	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6700	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	6400	8.4E+02	5.8E+03	8E-06	1E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	690	No value	1.2E+04	-	6E-02		
		Trichloroethene (TCE)	25000	1.3E+03	2.9E+02	2E-05	9E+01		
		Vinyl Chloride	26	6.6E+01	1.5E+04	4E-07	2E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-25-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	5E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	3000	8.4E+02	5.8E+03	4E-06	5E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-26-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-05	1E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	900	3.2E+03	1.2E+05	3E-07	8E-03		
		1,1-Dichloroethene	110	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	42	1.8E+02	4.4E+02	2E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	17000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	37	8.4E+02	5.8E+03	4E-08	6E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	240	No value	1.2E+04	-	2E-02		
		Trichloroethene (TCE)	33000	1.3E+03	2.9E+02	3E-05	1E+02		
		Vinyl Chloride	230	6.6E+01	1.5E+04	4E-06	2E-02		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-26-25, P530cc	25	1,1,1-Trichloroethane	30	No value	1.5E+05	-	2E-04	2E-04	6E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	4400	3.2E+03	1.2E+05	1E-06	4E-02		
		1,1-Dichloroethene	1100	No value	1.0E+04	-	1E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	71	1.8E+02	4.4E+02	4E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	98000	No value	1.2E+03	-	8E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	75	8.4E+02	5.8E+03	9E-08	1E-02		
		Toluene	30	No value	4.4E+04	-	7E-04		
		trans-1,2-Dichloroethene	1200	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	150000	1.3E+03	2.9E+02	1E-04	5E+02		
		Vinyl Chloride	6500	6.6E+01	1.5E+04	1E-04	4E-01		
SAIA-SB/SG-26-5 Rep, P866cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	72	No value	4.7E+02	-	2E-01		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	770	4.6E+02	1.2E+05	2E-06	7E-03		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	46	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	240	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	36	8.4E+02	5.8E+03	4E-08	6E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	740	1.3E+03	2.9E+02	6E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-26-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	65	No value	4.7E+02	-	1E-01		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	770	4.6E+02	1.2E+05	2E-06	7E-03		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	41	1.8E+02	4.4E+02	2E-07	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	290	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	65	8.4E+02	5.8E+03	8E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	950	1.3E+03	2.9E+02	8E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-27-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	25	1.8E+02	4.4E+02	1E-07	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	340	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	30000	8.4E+02	5.8E+03	4E-05	5E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	100	No value	1.2E+04	-	9E-03		
		Trichloroethene (TCE)	5300	1.3E+03	2.9E+02	4E-06	2E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-27-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-05	8E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	220	3.2E+03	1.2E+05	7E-08	2E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	49	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4000	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	15000	8.4E+02	5.8E+03	2E-05	3E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	460	No value	1.2E+04	-	4E-02		
		Trichloroethene (TCE)	23000	1.3E+03	2.9E+02	2E-05	8E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-27-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	5E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	58	3.2E+03	1.2E+05	2E-08	5E-04		
		1,1-Dichloroethene	99	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	14000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	210	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	1200	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	10000	1.3E+03	2.9E+02	8E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-27-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-05	1E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	29	1.8E+02	4.4E+02	2E-07	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	57	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	53000	8.4E+02	5.8E+03	6E-05	9E+00		
		Toluene	20	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	970	1.3E+03	2.9E+02	8E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-28-15 Rep, P963cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	9E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	540	8.4E+02	5.8E+03	6E-07	9E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-28-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	690	8.4E+02	5.8E+03	8E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-28-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	6E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	50	3.2E+02	2.9E+01	2E-07	2E+00		
		1,1-Dichloroethane	220	3.2E+03	1.2E+05	7E-08	2E-03		
		1,1-Dichloroethene	130	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	24000	No value	1.2E+03	-	2E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	310	8.4E+02	5.8E+03	4E-07	5E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	1600	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	11000	1.3E+03	2.9E+02	9E-06	4E+01		
		Vinyl Chloride	64	6.6E+01	1.5E+04	1E-06	4E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-28-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	590	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-29-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-08	1E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	61	8.4E+02	5.8E+03	7E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-29-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	170	1.8E+02	4.4E+02	1E-06	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	83	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	35	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	320	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	13	6.6E+01	1.5E+04	2E-07	9E-04		
SAIA-SB/SG-29-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	4E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	120	3.2E+03	1.2E+05	4E-08	1E-03		
		1,1-Dichloroethene	74	No value	1.0E+04	-	7E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	7600	No value	1.2E+03	-	7E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	680	8.4E+02	5.8E+03	8E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	530	No value	1.2E+04	-	5E-02		
		Trichloroethene (TCE)	9500	1.3E+03	2.9E+02	8E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-29-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1200	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	5700	1.3E+03	2.9E+02	5E-06	2E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-30-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	590	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-30-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	5E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	28	1.8E+02	4.4E+02	2E-07	6E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	240	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	740	8.4E+02	5.8E+03	9E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1300	1.3E+03	2.9E+02	1E-06	4E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-30-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	290	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	490	8.4E+02	5.8E+03	6E-07	8E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	59	No value	1.2E+04	-	5E-03		
		Trichloroethene (TCE)	250	1.3E+03	2.9E+02	2E-07	9E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-30-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	7E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	400	8.4E+02	5.8E+03	5E-07	7E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-31-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	34	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	750	8.4E+02	5.8E+03	9E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	57	1.3E+03	2.9E+02	5E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-31-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	8E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	24	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	170	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	110	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	580	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	2300	1.3E+03	2.9E+02	2E-06	8E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-31-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	7E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1600	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	560	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	110	No value	1.2E+04	-	9E-03		
		Trichloroethene (TCE)	1500	1.3E+03	2.9E+02	1E-06	5E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-31-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	8E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	490	8.4E+02	5.8E+03	6E-07	8E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-32-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	21	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	150	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	230	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	980	1.3E+03	2.9E+02	8E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-32-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-32-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	4E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	47	No value	1.2E+03	-	4E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	120	1.3E+03	2.9E+02	1E-07	4E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-32-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-08	1E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	76	8.4E+02	5.8E+03	9E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-33-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	7E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	420	No value	8.7E+03	-	5E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	270	2.0E+03	1.5E+05	1E-07	2E-03		
		Isopropylbenzene (Cumene)	420	No value	6.0E+04	-	7E-03		
		m,p-Xylene	120	No value	1.5E+04	-	8E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	260	1.5E+02	4.3E+02	2E-06	6E-01		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	300	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	940	No value	No value	-	-		
		sec-Butylbenzene	1300	No value	5.8E+04	-	2E-02		
		tert-Butylbenzene	400	No value	No value	-	-		
		Tetrachloroethene (PCE)	190	8.4E+02	5.8E+03	2E-07	3E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-33-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	230	No value	8.7E+03	-	3E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	35	1.8E+02	4.4E+02	2E-07	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	170	2.0E+03	1.5E+05	8E-08	1E-03		
		Isopropylbenzene (Cumene)	230	No value	6.0E+04	-	4E-03		
		m,p-Xylene	140	No value	1.5E+04	-	1E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	33	1.5E+02	4.3E+02	2E-07	8E-02		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	46	No value	1.5E+04	-	3E-03		
		p-Cymene (p-Isopropyltoluene)	3400	No value	No value	-	-		
		sec-Butylbenzene	650	No value	5.8E+04	-	1E-02		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	39	No value	4.4E+04	-	9E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-33-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	7E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	29	1.8E+02	4.4E+02	2E-07	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	630	No value	1.2E+03	-	5E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	51	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	1900	1.3E+03	2.9E+02	2E-06	6E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-33-5 Rep, P866cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	7E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	410	8.4E+02	5.8E+03	5E-07	7E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-33-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	8E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	470	8.4E+02	5.8E+03	6E-07	8E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-34-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-34-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-34-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-34-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-35-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-35-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	79	1.8E+02	4.4E+02	4E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	51	No value	1.2E+03	-	4E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	34	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	530	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-35-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-35-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-36-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	5E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	21	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-36-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-36-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-08	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	40	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-36-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-37-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	7E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	58	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	83	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	35	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	160	1.3E+03	2.9E+02	1E-07	5E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-37-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	380	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	45	8.4E+02	5.8E+03	5E-08	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	400	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-38-15 Rep, P963cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	49	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	330	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	57	8.4E+02	5.8E+03	7E-08	1E-02		
		Toluene	37	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	270	1.3E+03	2.9E+02	2E-07	9E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-38-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	52	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	350	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	53	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	330	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-38-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	55	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	510	No value	1.2E+03	-	4E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	47	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	74	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	38	No value	4.4E+04	-	9E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	200	1.3E+03	2.9E+02	2E-07	7E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-38-35, P578cc	35	1,1,1-Trichloroethane	120	No value	1.5E+05	-	8E-04	2E-03	4E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	45000	3.2E+03	1.2E+05	1E-05	4E-01		
		1,1-Dichloroethene	4400	No value	1.0E+04	-	4E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	65	2.0E+02	1.0E+03	3E-07	6E-02		
		1,3,5-Trimethylbenzene	190	No value	8.7E+03	-	2E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	230	1.8E+02	4.4E+02	1E-06	5E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	44	2.2E+02	1.4E+04	2E-07	3E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1100000	No value	1.2E+03	-	9E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	25	2.0E+03	1.5E+05	1E-08	2E-04		
		Isopropylbenzene (Cumene)	190	No value	6.0E+04	-	3E-03		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	300	No value	5.8E+04	-	5E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	3100	8.4E+02	5.8E+03	4E-06	5E-01		
		Toluene	180	No value	4.4E+04	-	4E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	940000	1.3E+03	2.9E+02	8E-04	3E+03		
		Vinyl Chloride	52000	6.6E+01	1.5E+04	8E-04	4E+00		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-38-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-08	8E-03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	46	8.4E+02	5.8E+03	5E-08	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-39-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-39-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	6E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	90	1.8E+02	4.4E+02	5E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	140	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	47	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	78	1.3E+03	2.9E+02	6E-08	3E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-39-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	7E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	380	3.2E+03	1.2E+05	1E-07	3E-03		
		1,1-Dichloroethene	160	No value	1.0E+04	-	2E-02		
		1,1-Difluoroethane	92	No value	6.0E+06	-	2E-05		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	34000	No value	1.2E+03	-	3E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	160	8.4E+02	5.8E+03	2E-07	3E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	1700	No value	1.2E+04	-	1E-01		
		Trichloroethene (TCE)	13000	1.3E+03	2.9E+02	1E-05	4E+01		
		Vinyl Chloride	76	6.6E+01	1.5E+04	1E-06	5E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-39-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-40-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	9E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	23	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	340	No value	1.2E+03	-	3E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	330	8.4E+02	5.8E+03	4E-07	6E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	140	1.3E+03	2.9E+02	1E-07	5E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1200	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	380	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-40-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	730	No value	1.2E+03	-	6E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	88	No value	1.2E+04	-	8E-03		
		Trichloroethene (TCE)	320	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	900	No value	1.2E+03	-	8E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	96	No value	1.2E+04	-	8E-03		
		Trichloroethene (TCE)	430	1.3E+03	2.9E+02	3E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-40-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	410	No value	1.2E+03	-	4E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	240	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	200	1.3E+03	2.9E+02	2E-07	7E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-41-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	5E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	160	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	45	8.4E+02	5.8E+03	5E-08	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	94	1.3E+03	2.9E+02	8E-08	3E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-41-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-08	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	60	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	34	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-41-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	6E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	69	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-41-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-08	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	51	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-42-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-42-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-42-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	4E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	17	1.8E+02	4.4E+02	1E-07	4E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	33	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-42-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	4E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	21	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	190	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	53	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-43-15, P913cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-43-25, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	5E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	60	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-43-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SB/SG-43-35, P578cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-43-5, P816cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-08	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	62	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	55	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG02-D05-E0413	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	5E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	40	3.2E+03	1.2E+05	1E-08	3E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	1500	1.3E+03	2.9E+02	1E-06	5E+00		
		Vinyl Chloride	50	6.6E+01	1.5E+04	8E-07	3E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG06-D35-E0413	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-05	8E+01
		1,1,2,2-Tetrachloroethane	200	8.8E+01	1.2E+04	2E-06	2E-02		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	400	3.2E+03	1.2E+05	1E-07	3E-03		
		1,1-Dichloroethane	300	3.2E+03	1.2E+05	9E-08	3E-03		
		1,1-Dichloroethene	2100	No value	1.0E+04	-	2E-01		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	60	No value	8.7E+03	-	7E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	50	1.8E+02	4.4E+02	3E-07	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	38000	No value	1.2E+03	-	3E+01		
		Decahydromethyl Naphthalene*	400	No value	No value	-	-		
		Diethylmethylcyclohexane*	500	No value	No value	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	100	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	15000	1.3E+03	2.9E+02	1E-05	5E+01		
		Vinyl Chloride	5000	6.6E+01	1.5E+04	8E-05	3E-01		
SAIA-SG08-D05-E0413	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-03	3E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	65000	3.2E+03	1.2E+05	2E-05	6E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	260000	No value	1.2E+03	-	2E+02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	530000	6.6E+01	1.5E+04	8E-03	4E+01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG09-D35-E0413	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-03	2E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	150000	3.2E+03	1.2E+05	5E-05	1E+00		
		1,1-Dichloroethene	28000	No value	1.0E+04	-	3E+00		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6100000	No value	1.2E+03	-	5E+03		
		Decahydromethyl Naphthalene*	48000	No value	No value	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	2900000	1.3E+03	2.9E+02	2E-03	1E+04		
		Vinyl Chloride	180000	6.6E+01	1.5E+04	3E-03	1E+01		
SAIA-SG10-D15-E0413	15	1,1,1-Trichloroethane	37000	No value	1.5E+05	-	3E-01	3E-02	2E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	270000	3.2E+03	1.2E+05	8E-05	2E+00		
		1,1-Dichloroethene	21000	No value	1.0E+04	-	2E+00		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2200000	No value	1.2E+03	-	2E+03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	11000	1.3E+03	2.9E+02	9E-06	4E+01		
		Vinyl Chloride	1700000	6.6E+01	1.5E+04	3E-02	1E+02		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG11-D25-E0413	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Butane*	1600	No value	No value	-	-		
		Butylcyclooctane*	1900	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	900	No value	1.2E+03	-	8E-01		
		Dimethylpentane*	1100	No value	No value	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylcyclobutane*	700	No value	No value	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methyl Butane*	800	No value	No value	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	100	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	700	1.3E+03	2.9E+02	6E-07	2E+00		
		Vinyl Chloride	30	6.6E+01	1.5E+04	5E-07	2E-03		
SAIA-SG14-D25-E0413	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	8E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	10	No value	8.7E+03	-	1E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	20	1.8E+02	4.4E+02	1E-07	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	100	No value	1.2E+03	-	9E-02		
		Decahydro Naphthalene*	70	No value	No value	-	-		
		Decahydromethyl Naphthalene*	80	No value	No value	-	-		
		Ethylbenzene	20	2.0E+03	1.5E+05	1E-08	1E-04		
		m,p-Xylene	40	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	10	No value	1.3E+05	-	8E-05		
		Tetrachloroethene (PCE)	80	8.4E+02	5.8E+03	1E-07	1E-02		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	200	1.3E+03	2.9E+02	2E-07	7E-01		
		Vinyl Chloride	10	6.6E+01	1.5E+04	2E-07	7E-04		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG20-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-03	1E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	32000	3.2E+03	1.2E+05	1E-05	3E-01		
		1,1-Dichloroethene	11000	No value	1.0E+04	-	1E+00		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4700000	No value	1.2E+03	-	4E+03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	3200000	1.3E+03	2.9E+02	3E-03	1E+04		
		Vinyl Chloride	43000	6.6E+01	1.5E+04	7E-04	3E+00		
SAIA-SG22-E25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	7	No value	1.0E+04	-	7E-04		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	8	No value	8.7E+03	-	9E-04		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	200	1.8E+02	4.4E+02	1E-06	5E-01		
		Butane*	1600	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dimethyl Octane*	600	No value	No value	-	-		
		Ethylbenzene	10	2.0E+03	1.5E+05	5E-09	7E-05		
		m,p-Xylene	30	No value	1.5E+04	-	2E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	60	8.4E+02	5.8E+03	7E-08	1E-02		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	800	1.3E+03	2.9E+02	6E-07	3E+00		
		Vinyl Chloride	10	6.6E+01	1.5E+04	2E-07	7E-04		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG24-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-03	2E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	57000	3.2E+03	1.2E+05	2E-05	5E-01		
		1,1-Dichloroethene	38000	No value	1.0E+04	-	4E+00		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2600000	No value	1.2E+03	-	2E+03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	6600000	1.3E+03	2.9E+02	5E-03	2E+04		
		Vinyl Chloride	20000	6.6E+01	1.5E+04	3E-04	1E+00		
SAIA-SG27-E5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-05	1E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	60	1.8E+02	4.4E+02	3E-07	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	40000	8.4E+02	5.8E+03	5E-05	7E+00		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	1600	1.3E+03	2.9E+02	1E-06	5E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG29-E5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chlorodifluoromethane*	400	No value	7.3E+06	-	5E-05		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1400	No value	1.2E+03	-	1E+00		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	4800	1.3E+03	2.9E+02	4E-06	2E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG30-E25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	1E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Acetaldehyde*	40	1.9E+03	1.3E+03	2E-08	3E-02		
		Benzene	40	1.8E+02	4.4E+02	2E-07	9E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	500	No value	1.2E+03	-	4E-01		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	700	8.4E+02	5.8E+03	8E-07	1E-01		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	2600	1.3E+03	2.9E+02	2E-06	9E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG32-E15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	7E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	5	3.2E+03	1.2E+05	2E-09	4E-05		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	10	No value	4.7E+02	-	2E-02		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	40	1.8E+02	4.4E+02	2E-07	9E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	400	No value	1.2E+03	-	3E-01		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	200	8.4E+02	5.8E+03	2E-07	3E-02		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	2000	1.3E+03	2.9E+02	2E-06	7E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG33-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	1E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	10	3.2E+03	1.2E+05	3E-09	9E-05		
		1,1-Dichloroethene	10	No value	1.0E+04	-	1E-03		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	50	1.8E+02	4.4E+02	3E-07	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	800	No value	1.2E+03	-	7E-01		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	20	8.4E+02	5.8E+03	2E-08	3E-03		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	2700	1.3E+03	2.9E+02	2E-06	9E+00		
		Trimethyl Cyclohexane*	300	No value	No value	-	-		
		Trimethyl Cyclopentane Isomers*	80	No value	No value	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG35-E25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	10	No value	4.7E+02	-	2E-02		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	100	1.8E+02	4.4E+02	6E-07	2E-01		
		Butane*	400	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	100	No value	1.2E+03	-	9E-02		
		Decahydromethyl Naphthalene*	40	No value	No value	-	-		
		Ethylbenzene	7	2.0E+03	1.5E+05	3E-09	5E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		Trichloroethene (TCE)	1200	1.3E+03	2.9E+02	1E-06	4E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG36-E35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	9	1.8E+02	4.4E+02	5E-08	2E-02		
		Butane*	60	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methyl Butane*	30	No value	No value	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	80	1.3E+03	2.9E+02	6E-08	3E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG39-E15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-08	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	10	1.8E+02	4.4E+02	6E-08	2E-02		
		Butane*	60	No value	No value	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chlorodifluoromethane*	70	No value	7.3E+06	-	1E-05		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	10	No value	1.5E+04	-	7E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		Trichloroethene (TCE)	20	1.3E+03	2.9E+02	2E-08	7E-02		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG41-E5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	20	3.2E+03	1.2E+05	6E-09	2E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		Benzene	60	1.8E+02	4.4E+02	3E-07	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5100	No value	1.2E+03	-	4E+00		
		Decahydromethyl Naphthalene*	100	No value	No value	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	50	8.4E+02	5.8E+03	6E-08	9E-03		
		Toluene	0	No value	4.4E+04	-	-		
		Trichloroethene (TCE)	6000	1.3E+03	2.9E+02	5E-06	2E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG44-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	10	No value	1.0E+04	-	1E-03		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	40	1.8E+02	4.4E+02	2E-07	9E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	10	No value	1.2E+03	-	9E-03		
		Ethylbenzene	9	2.0E+03	1.5E+05	4E-09	6E-05		
		m,p-Xylene	30	No value	1.5E+04	-	2E-03		
		Methylene Chloride	6	5.1E+03	5.8E+04	1E-09	1E-04		
		o-Xylene	9	No value	1.5E+04	-	6E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	30	8.4E+02	5.8E+03	4E-08	5E-03		
		Toluene	80	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	40	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	40	6.6E+01	1.5E+04	6E-07	3E-03		
SAIA-SG44-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	10	No value	1.0E+04	-	1E-03		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	10	1.8E+02	4.4E+02	6E-08	2E-02		
		Chlorobenzene	5	No value	7.3E+03	-	7E-04		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	2	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	30	No value	1.2E+03	-	3E-02		
		Ethylbenzene	6	2.0E+03	1.5E+05	3E-09	4E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	4	5.1E+03	5.8E+04	8E-10	7E-05		
		o-Xylene	8	No value	1.5E+04	-	5E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	50	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	30	6.6E+01	1.5E+04	5E-07	2E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG44-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	7	No value	1.0E+04	-	7E-04		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	10	1.8E+02	4.4E+02	6E-08	2E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	20	8.4E+02	5.8E+03	2E-08	3E-03		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	40	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	20	6.6E+01	1.5E+04	3E-07	1E-03		
SAIA-SG44-5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-08	3E-03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	5	2.2E+02	1.4E+04	2E-08	3E-04		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	5	2.0E+03	1.5E+05	2E-09	3E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	4	5.1E+03	5.8E+04	8E-10	7E-05		
		o-Xylene	6	No value	1.5E+04	-	4E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG45-5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-08	2E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	6	1.8E+02	4.4E+02	3E-08	1E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	10	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG45-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	30	1.8E+02	4.4E+02	2E-07	7E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	30	2.2E+02	1.4E+04	1E-07	2E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	6	2.0E+03	1.5E+05	3E-09	4E-05		
		m,p-Xylene	20	No value	1.5E+04	-	1E-03		
		Methylene Chloride	6	5.1E+03	5.8E+04	1E-09	1E-04		
		o-Xylene	7	No value	1.5E+04	-	5E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	100	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	20	1.3E+03	2.9E+02	2E-08	7E-02		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG45-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	1E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	30	3.2E+03	1.2E+05	9E-09	3E-04		
		1,1-Dichloroethene	100	No value	1.0E+04	-	1E-02		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	9	1.8E+02	4.4E+02	5E-08	2E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	900	No value	1.2E+03	-	8E-01		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	4	5.1E+03	5.8E+04	8E-10	7E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	20	8.4E+02	5.8E+03	2E-08	3E-03		
		Toluene	200	No value	4.4E+04	-	5E-03		
		Trichloroethene (TCE)	3500	1.3E+03	2.9E+02	3E-06	1E+01		
		Vinyl Chloride	60	6.6E+01	1.5E+04	9E-07	4E-03		
SAIA-SG45-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	1E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	30	3.2E+03	1.2E+05	9E-09	3E-04		
		1,1-Dichloroethene	100	No value	1.0E+04	-	1E-02		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	5	1.8E+02	4.4E+02	3E-08	1E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1100	No value	1.2E+03	-	9E-01		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	30	8.4E+02	5.8E+03	4E-08	5E-03		
		Toluene	100	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	3900	1.3E+03	2.9E+02	3E-06	1E+01		
		Vinyl Chloride	50	6.6E+01	1.5E+04	8E-07	3E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG45-5	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-08	2E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	6	1.8E+02	4.4E+02	3E-08	1E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	10	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG46-05	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	2E-04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	7	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG46-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	4E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	20	1.8E+02	4.4E+02	1E-07	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	10	2.2E+02	1.4E+04	5E-08	7E-04		
		Chloromethane	3	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	20	No value	1.2E+03	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	6	5.1E+03	5.8E+04	1E-09	1E-04		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	40	No value	4.4E+04	-	9E-04		
		Trichloroethene (TCE)	100	1.3E+03	2.9E+02	8E-08	3E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG46-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	20	1.8E+02	4.4E+02	1E-07	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	10	2.2E+02	1.4E+04	5E-08	7E-04		
		Chloromethane	2	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	10	No value	1.2E+03	-	9E-03		
		Ethylbenzene	5	2.0E+03	1.5E+05	2E-09	3E-05		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	5	5.1E+03	5.8E+04	1E-09	9E-05		
		o-Xylene	5	No value	1.5E+04	-	3E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	500	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG46-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	6E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	70	3.2E+03	1.2E+05	2E-08	6E-04		
		1,1-Dichloroethene	90	No value	1.0E+04	-	9E-03		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	30	1.8E+02	4.4E+02	2E-07	7E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	7	No value	1.3E+04	-	5E-04		
		cis-1,2-Dichloroethylene	1900	No value	1.2E+03	-	2E+00		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	5	5.1E+03	5.8E+04	1E-09	9E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	8	8.4E+02	5.8E+03	1E-08	1E-03		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	16000	1.3E+03	2.9E+02	1E-05	5E+01		
		Vinyl Chloride	20	6.6E+01	1.5E+04	3E-07	1E-03		
SAIA-SG47-05	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-08	2E-03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	7	2.2E+02	1.4E+04	3E-08	5E-04		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	4	5.1E+03	5.8E+04	8E-10	7E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	9	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	8	No value	4.4E+04	-	2E-04		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG47-15	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-08	2E-02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	8	1.8E+02	4.4E+02	5E-08	2E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	5	5.1E+03	5.8E+04	1E-09	9E-05		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	80	No value	4.4E+04	-	2E-03		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SAIA-SG47-25	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	20	1.8E+02	4.4E+02	1E-07	5E-02		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	10	2.2E+02	1.4E+04	5E-08	7E-04		
		Chloromethane	3	No value	1.3E+04	-	2E-04		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	6	5.1E+03	5.8E+04	1E-09	1E-04		
		o-Xylene	5	No value	1.5E+04	-	3E-04		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	8	8.4E+02	5.8E+03	1E-08	1E-03		
		Toluene	60	No value	4.4E+04	-	1E-03		
		Trichloroethene (TCE)	40	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG47-35	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	60	1.8E+02	4.4E+02	3E-07	1E-01		
		Chlorobenzene	0	No value	7.3E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	7	No value	1.2E+03	-	6E-03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		m,p-Xylene	10	No value	1.5E+04	-	7E-04		
		Methylene Chloride	9	5.1E+03	5.8E+04	2E-09	2E-04		
		o-Xylene	0	No value	1.5E+04	-	-		
		Styrene	0	No value	1.3E+05	-	-		
		Tetrachloroethene (PCE)	10	8.4E+02	5.8E+03	1E-08	2E-03		
		Toluene	600	No value	4.4E+04	-	1E-02		
		Trichloroethene (TCE)	50	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	30	6.6E+01	1.5E+04	5E-07	2E-03		
SG10-15, P4814cc	15	1,1,1-Trichloroethane	70000	No value	1.5E+05	-	5E-01	3E-02	4E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	380000	3.2E+03	1.2E+05	1E-04	3E+00		
		1,1-Dichloroethene	40000	No value	1.0E+04	-	4E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4000000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	1900000	6.6E+01	1.5E+04	3E-02	1E+02		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG10-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-02	3E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	650000	3.2E+03	1.2E+05	2E-04	6E+00		
		1,1-Dichloroethene	86000	No value	1.0E+04	-	8E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2600000	No value	1.2E+03	-	2E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	6100000	6.6E+01	1.5E+04	9E-02	4E+02		
SG10-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	9E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	42000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	16000	1.3E+03	2.9E+02	1E-05	5E+01		
		Vinyl Chloride	9100	6.6E+01	1.5E+04	1E-04	6E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG10-5, P4330cc	5	1,1,1-Trichloroethane	190000	No value	1.5E+05	-	1E+00	8E-03	4E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	250000	3.2E+03	1.2E+05	8E-05	2E+00		
		1,1-Dichloroethene	16000	No value	1.0E+04	-	2E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	1800	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4400000	No value	1.2E+03	-	4E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	640	No value	1.5E+04	-	4E-02		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1100	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	1500	No value	4.4E+04	-	3E-02		
		trans-1,2-Dichloroethene	52000	No value	1.2E+04	-	4E+00		
		Trichloroethene (TCE)	63000	1.3E+03	2.9E+02	5E-05	2E+02		
		Vinyl Chloride	520000	6.6E+01	1.5E+04	8E-03	4E+01		
SG11-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	21	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	74	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	53	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG11-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	590	No value	1.2E+03	-	5E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	70	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	130	8.4E+02	5.8E+03	2E-07	2E-02		
		Toluene	26	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	830	1.3E+03	2.9E+02	7E-07	3E+00		
		Vinyl Chloride	21	6.6E+01	1.5E+04	3E-07	1E-03		
SG11-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG11-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	8E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	170	1.3E+03	2.9E+02	1E-07	6E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG1-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	5E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	44	No value	1.2E+03	-	4E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	720	8.4E+02	5.8E+03	9E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	100	1.3E+03	2.9E+02	8E-08	3E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG12-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	3E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	130	3.2E+03	1.2E+05	4E-08	1E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	32	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	57	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5200	No value	1.2E+03	-	4E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	32	No value	2.9E+04	-	1E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	36	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	81	8.4E+02	5.8E+03	1E-07	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	46	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	8900	1.3E+03	2.9E+02	7E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG12-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	6E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	160	3.2E+03	1.2E+05	5E-08	1E-03		
		1,1-Dichloroethene	190	No value	1.0E+04	-	2E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	29	No value	8.7E+03	-	3E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	96	1.8E+02	4.4E+02	5E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6600	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	45	No value	1.5E+04	-	3E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	32	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	120	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	34	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	91	No value	1.2E+04	-	8E-03		
		Trichloroethene (TCE)	15000	1.3E+03	2.9E+02	1E-05	5E+01		
		Vinyl Chloride	66	6.6E+01	1.5E+04	1E-06	5E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG12-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	4E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	110	3.2E+03	1.2E+05	3E-08	9E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	31	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	46	1.8E+02	4.4E+02	3E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	5200	No value	1.2E+03	-	4E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	44	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	80	8.4E+02	5.8E+03	1E-07	1E-02		
		Toluene	23	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	9900	1.3E+03	2.9E+02	8E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG12-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	9E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	15000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	22000	1.3E+03	2.9E+02	2E-05	8E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG1-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-05	7E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	250	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	42000	8.4E+02	5.8E+03	5E-05	7E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	18000	1.3E+03	2.9E+02	1E-05	6E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG13-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	44	1.8E+02	4.4E+02	2E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	160	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	170	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	3600	8.4E+02	5.8E+03	4E-06	6E-01		
		Toluene	94	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.3E+03	2.9E+02	9E-08	4E-01		
		Vinyl Chloride	35	6.6E+01	1.5E+04	5E-07	2E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG13-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	190	No value	6.0E+06	-	3E-05		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	61	8.4E+02	5.8E+03	7E-08	1E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	43	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG13-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	72	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	65	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	550	8.4E+02	5.8E+03	7E-07	9E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	290	1.3E+03	2.9E+02	2E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG13-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	9E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	180	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	2900	8.4E+02	5.8E+03	3E-06	5E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	61	1.3E+03	2.9E+02	5E-08	2E-01		
		Vinyl Chloride	53	6.6E+01	1.5E+04	8E-07	4E-03		
SG1-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1900	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	6100	8.4E+02	5.8E+03	7E-06	1E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	8100	1.3E+03	2.9E+02	6E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG14-15 Rep, P4864cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-08	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	30	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	34	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	35	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG14-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG14-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	25	No value	8.7E+03	-	3E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	31	1.8E+02	4.4E+02	2E-07	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	230	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	200	No value	1.5E+04	-	1E-02		
		Ethylbenzene	24	2.0E+03	1.5E+05	1E-08	2E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	54	No value	1.5E+04	-	4E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	23	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	70	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	140	8.4E+02	5.8E+03	2E-07	2E-02		
		Toluene	91	No value	4.4E+04	-	2E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	480	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	18	6.6E+01	1.5E+04	3E-07	1E-03		
SG14-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	44	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	150	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	150	No value	1.5E+04	-	1E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	570	1.3E+03	2.9E+02	5E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG14-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-07	4E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	30	No value	1.5E+04	-	2E-03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	46	8.4E+02	5.8E+03	5E-08	8E-03		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.3E+03	2.9E+02	9E-08	4E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG1-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	13000	8.4E+02	5.8E+03	2E-05	2E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	130	1.3E+03	2.9E+02	1E-07	4E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG15-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	5E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	110	1.8E+02	4.4E+02	6E-07	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	810	8.4E+02	5.8E+03	1E-06	1E-01		
		Toluene	40	No value	4.4E+04	-	9E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	32	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG15-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	23	1.8E+02	4.4E+02	1E-07	5E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1600	8.4E+02	5.8E+03	2E-06	3E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	460	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG15-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1200	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	580	1.3E+03	2.9E+02	5E-07	2E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG15-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	1E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	750	8.4E+02	5.8E+03	9E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-06	5E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	29	1.8E+02	4.4E+02	2E-07	7E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	55	No value	1.2E+03	-	5E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	38	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	820	8.4E+02	5.8E+03	1E-06	1E-01		
		Toluene	35	No value	4.4E+04	-	8E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	72	1.3E+03	2.9E+02	6E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG16-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	72	1.8E+02	4.4E+02	4E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	870	No value	1.2E+03	-	7E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1100	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	880	1.3E+03	2.9E+02	7E-07	3E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-07	7E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	610	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	170	1.3E+03	2.9E+02	1E-07	6E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG16-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	66	No value	1.2E+03	-	6E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	390	8.4E+02	5.8E+03	5E-07	7E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	49	1.3E+03	2.9E+02	4E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-07	5E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	120	No value	1.2E+03	-	1E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	280	8.4E+02	5.8E+03	3E-07	5E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	110	1.3E+03	2.9E+02	9E-08	4E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG17-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	38	1.8E+02	4.4E+02	2E-07	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	35	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	210	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	44	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	39	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG17-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-06	6E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	100	1.8E+02	4.4E+02	6E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	270	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1400	8.4E+02	5.8E+03	2E-06	2E-01		
		Toluene	53	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1700	1.3E+03	2.9E+02	1E-06	6E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG17-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-06	3E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	130	3.2E+03	1.2E+05	4E-08	1E-03		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	36	1.8E+02	4.4E+02	2E-07	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3000	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	480	8.4E+02	5.8E+03	6E-07	8E-02		
		Toluene	19	No value	4.4E+04	-	4E-04		
		trans-1,2-Dichloroethene	69	No value	1.2E+04	-	6E-03		
		Trichloroethene (TCE)	6800	1.3E+03	2.9E+02	5E-06	2E+01		
		Vinyl Chloride	27	6.6E+01	1.5E+04	4E-07	2E-03		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG17-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-07	3E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	190	8.4E+02	5.8E+03	2E-07	3E-02		
		Toluene	27	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	82	1.3E+03	2.9E+02	7E-08	3E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG18-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	8E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	82	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	200	1.3E+03	2.9E+02	2E-07	7E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG18-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-07	1E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	280	1.3E+03	2.9E+02	2E-07	1E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG18-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	6E-04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	25	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG18-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-08	2E-01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	65	1.3E+03	2.9E+02	5E-08	2E-01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG2-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	3E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	110	3.2E+03	1.2E+05	3E-08	9E-04		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	41	1.8E+02	4.4E+02	2E-07	9E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2700	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	47	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	4400	8.4E+02	5.8E+03	5E-06	8E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	41	No value	1.2E+04	-	4E-03		
		Trichloroethene (TCE)	8400	1.3E+03	2.9E+02	7E-06	3E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG2-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	7E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	280	3.2E+03	1.2E+05	9E-08	2E-03		
		1,1-Dichloroethene	320	No value	1.0E+04	-	3E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6700	No value	1.2E+03	-	6E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	220	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	610	No value	1.2E+04	-	5E-02		
		Trichloroethene (TCE)	18000	1.3E+03	2.9E+02	1E-05	6E+01		
		Vinyl Chloride	73	6.6E+01	1.5E+04	1E-06	5E-03		
SG2-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-04	1E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	8100	3.2E+03	1.2E+05	3E-06	7E-02		
		1,1-Dichloroethene	1300	No value	1.0E+04	-	1E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	75	2.0E+02	1.0E+03	4E-07	7E-02		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	75	1.8E+02	4.4E+02	4E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	360000	No value	1.2E+03	-	3E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	610	8.4E+02	5.8E+03	7E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	7700	No value	1.2E+04	-	7E-01		
		Trichloroethene (TCE)	280000	1.3E+03	2.9E+02	2E-04	1E+03		
		Vinyl Chloride	2500	6.6E+01	1.5E+04	4E-05	2E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG2-5 Rep, P5580cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-06	9E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	790	No value	1.2E+03	-	7E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	3200	8.4E+02	5.8E+03	4E-06	5E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	2400	1.3E+03	2.9E+02	2E-06	8E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG2-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	8E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1600	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	3400	8.4E+02	5.8E+03	4E-06	6E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1700	1.3E+03	2.9E+02	1E-06	6E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG3-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	8400	No value	1.2E+03	-	7E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	3900	1.3E+03	2.9E+02	3E-06	1E+01		
		Vinyl Chloride	610	6.6E+01	1.5E+04	9E-06	4E-02		
SG3-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	4E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	16000	3.2E+03	1.2E+05	5E-06	1E-01		
		1,1-Dichloroethene	3400	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	130000	No value	1.2E+03	-	1E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	3200	No value	4.4E+04	-	7E-02		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	89000	1.3E+03	2.9E+02	7E-05	3E+02		
		Vinyl Chloride	75000	6.6E+01	1.5E+04	1E-03	5E+00		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG3-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-03	3E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	190000	3.2E+03	1.2E+05	6E-05	2E+00		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4900000	No value	1.2E+03	-	4E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	7800000	1.3E+03	2.9E+02	6E-03	3E+04		
		Vinyl Chloride	130000	6.6E+01	1.5E+04	2E-03	9E+00		
SG3-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	1E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	21000	3.2E+03	1.2E+05	7E-06	2E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	6100	No value	8.7E+03	-	7E-01		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	330000	No value	1.2E+03	-	3E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	4800	No value	1.5E+04	-	3E-01		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	3400	No value	1.5E+04	-	2E-01		
		p-Cymene (p-Isopropyltoluene)	7800	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	2900	No value	4.4E+04	-	7E-02		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	270000	1.3E+03	2.9E+02	2E-04	9E+02		
		Vinyl Chloride	91000	6.6E+01	1.5E+04	1E-03	6E+00		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG3-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-03	7E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	17000	3.2E+03	1.2E+05	5E-06	1E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	4300	No value	8.7E+03	-	5E-01		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	210000	No value	1.2E+03	-	2E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	3200	No value	1.5E+04	-	2E-01		
		p-Cymene (p-Isopropyltoluene)	4400	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	2500	No value	4.4E+04	-	6E-02		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	140000	1.3E+03	2.9E+02	1E-04	5E+02		
		Vinyl Chloride	88000	6.6E+01	1.5E+04	1E-03	6E+00		
SG4-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	5E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	2800	3.2E+03	1.2E+05	9E-07	2E-02		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	13000	No value	1.2E+03	-	1E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	8200	8.4E+02	5.8E+03	1E-05	1E+00		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	130000	1.3E+03	2.9E+02	1E-04	4E+02		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG4-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-04	1E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	11000	3.2E+03	1.2E+05	3E-06	9E-02		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	77000	No value	1.2E+03	-	7E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	5300	8.4E+02	5.8E+03	6E-06	9E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	2100	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	310000	1.3E+03	2.9E+02	2E-04	1E+03		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG4-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-04	3E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	23000	3.2E+03	1.2E+05	7E-06	2E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	650000	No value	1.2E+03	-	6E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	11000	No value	1.2E+04	-	9E-01		
		Trichloroethene (TCE)	650000	1.3E+03	2.9E+02	5E-04	2E+03		
		Vinyl Chloride	6300	6.6E+01	1.5E+04	1E-04	4E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG4-5, P4330cc	5	1,1,1-Trichloroethane	160	No value	1.5E+05	-	1E-03	1E-04	5E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	1900	3.2E+03	1.2E+05	6E-07	2E-02		
		1,1-Dichloroethene	120	No value	1.0E+04	-	1E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	79	No value	8.7E+03	-	9E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	70	1.8E+02	4.4E+02	4E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	120	2.2E+02	1.4E+04	5E-07	8E-03		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	40000	No value	1.2E+03	-	3E+01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	26	2.0E+03	1.5E+05	1E-08	2E-04		
		Isopropylbenzene (Cumene)	54	No value	6.0E+04	-	9E-04		
		m,p-Xylene	53	No value	1.5E+04	-	4E-03		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	32	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	100	No value	No value	-	-		
		sec-Butylbenzene	96	No value	5.8E+04	-	2E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	6700	8.4E+02	5.8E+03	8E-06	1E+00		
		Toluene	44	No value	4.4E+04	-	1E-03		
		trans-1,2-Dichloroethene	260	No value	1.2E+04	-	2E-02		
		Trichloroethene (TCE)	130000	1.3E+03	2.9E+02	1E-04	4E+02		
		Vinyl Chloride	390	6.6E+01	1.5E+04	6E-06	3E-02		
SG5-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-06	9E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	70	1.8E+02	4.4E+02	4E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	80	No value	1.2E+03	-	7E-02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	770	8.4E+02	5.8E+03	9E-07	1E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	2500	1.3E+03	2.9E+02	2E-06	9E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG5-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	4E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	30	No value	1.0E+04	-	3E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	170	1.8E+02	4.4E+02	1E-06	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	130	8.4E+02	5.8E+03	2E-07	2E-02		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	83	No value	1.2E+04	-	7E-03		
		Trichloroethene (TCE)	11000	1.3E+03	2.9E+02	9E-06	4E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG5-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-05	7E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	810	No value	1.2E+03	-	7E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	20000	1.3E+03	2.9E+02	2E-05	7E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG5-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	240	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	970	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1200	1.3E+03	2.9E+02	1E-06	4E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG5-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	210	No value	1.2E+03	-	2E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	990	8.4E+02	5.8E+03	1E-06	2E-01		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	1200	1.3E+03	2.9E+02	1E-06	4E+00		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-15, 1PV, P481cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	44	No value	8.7E+03	-	5E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	32	1.5E+02	4.3E+02	2E-07	7E-02		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	51	No value	No value	-	-		
		sec-Butylbenzene	29	No value	5.8E+04	-	5E-04		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	110	6.6E+01	1.5E+04	2E-06	8E-03		
SG6-15, 3PV, P1443cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-06	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	39	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	34	No value	8.7E+03	-	4E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3800	No value	1.2E+03	-	3E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	44	No value	2.9E+04	-	2E-03		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	29	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	43	1.3E+03	2.9E+02	3E-08	1E-01		
		Vinyl Chloride	500	6.6E+01	1.5E+04	8E-06	3E-02		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-25, 10PV, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	4E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	1900	3.2E+03	1.2E+05	6E-07	2E-02		
		1,1-Dichloroethene	6800	No value	1.0E+04	-	7E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	320	No value	8.7E+03	-	4E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	530	1.8E+02	4.4E+02	3E-06	1E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	470000	No value	1.2E+03	-	4E+02		
		Dichlorodifluoromethane	270	No value	1.5E+04	-	2E-02		
		Ethylbenzene	89	2.0E+03	1.5E+05	4E-08	6E-04		
		Isopropylbenzene (Cumene)	100	No value	6.0E+04	-	2E-03		
		m,p-Xylene	220	No value	1.5E+04	-	2E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	120	No value	1.5E+04	-	8E-03		
		p-Cymene (p-Isopropyltoluene)	250	No value	No value	-	-		
		sec-Butylbenzene	180	No value	5.8E+04	-	3E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	61	8.4E+02	5.8E+03	7E-08	1E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	4300	No value	1.2E+04	-	4E-01		
		Trichloroethene (TCE)	2600	1.3E+03	2.9E+02	2E-06	9E+00		
		Vinyl Chloride	130000	6.6E+01	1.5E+04	2E-03	9E+00		
SG6-25, 1PV, P530cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	0E+00	0E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	0	No value	1.2E+03	-	-		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-25, 3PV, P1590cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-03	4E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	890	3.2E+03	1.2E+05	3E-07	8E-03		
		1,1-Dichloroethene	2900	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	160	No value	8.7E+03	-	2E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	170	1.8E+02	4.4E+02	1E-06	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	430000	No value	1.2E+03	-	4E+02		
		Dichlorodifluoromethane	85	No value	1.5E+04	-	6E-03		
		Ethylbenzene	50	2.0E+03	1.5E+05	2E-08	3E-04		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	160	No value	1.5E+04	-	1E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	71	No value	1.5E+04	-	5E-03		
		p-Cymene (p-Isopropyltoluene)	120	No value	No value	-	-		
		sec-Butylbenzene	83	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	64	No value	No value	-	-		
		Tetrachloroethene (PCE)	78	8.4E+02	5.8E+03	9E-08	1E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	1900	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	3200	1.3E+03	2.9E+02	3E-06	1E+01		
		Vinyl Chloride	120000	6.6E+01	1.5E+04	2E-03	8E+00		
SG6-35, 10PV, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	2E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	620	3.2E+03	1.2E+05	2E-07	5E-03		
		1,1-Dichloroethene	3300	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	65	No value	8.7E+03	-	8E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	140	6.6E+02	4.3E+03	2E-07	3E-02		
		Benzene	80	1.8E+02	4.4E+02	5E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	66000	No value	1.2E+03	-	6E+01		
		Dichlorodifluoromethane	240	No value	1.5E+04	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	25	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	80	No value	No value	-	-		
		sec-Butylbenzene	83	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	20	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	2400	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	33000	1.3E+03	2.9E+02	3E-05	1E+02		
		Vinyl Chloride	7300	6.6E+01	1.5E+04	1E-04	5E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-35, 1PV, P581cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	2E-04	1E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	710	3.2E+03	1.2E+05	2E-07	6E-03		
		1,1-Dichloroethene	3600	No value	1.0E+04	-	4E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	100	No value	8.7E+03	-	1E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	150	6.6E+02	4.3E+03	2E-07	3E-02		
		Benzene	100	1.8E+02	4.4E+02	6E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	57000	No value	1.2E+03	-	5E+01		
		Dichlorodifluoromethane	270	No value	1.5E+04	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	78	1.5E+02	4.3E+02	5E-07	2E-01		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	29	No value	1.5E+04	-	2E-03		
		p-Cymene (p-Isopropyltoluene)	130	No value	No value	-	-		
		sec-Butylbenzene	110	No value	5.8E+04	-	2E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	31	No value	4.4E+04	-	7E-04		
		trans-1,2-Dichloroethene	2700	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	28000	1.3E+03	2.9E+02	2E-05	1E+02		
		Vinyl Chloride	8900	6.6E+01	1.5E+04	1E-04	6E-01		
SG6-35, 3PV, P1742cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	9E-05	1E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	530	3.2E+03	1.2E+05	2E-07	5E-03		
		1,1-Dichloroethene	2700	No value	1.0E+04	-	3E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	58	No value	8.7E+03	-	7E-03		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	100	6.6E+02	4.3E+03	2E-07	2E-02		
		Benzene	81	1.8E+02	4.4E+02	5E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	41000	No value	1.2E+03	-	4E+01		
		Dichlorodifluoromethane	230	No value	1.5E+04	-	2E-02		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	46	1.5E+02	4.3E+02	3E-07	1E-01		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	51	No value	No value	-	-		
		sec-Butylbenzene	74	No value	5.8E+04	-	1E-03		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	24	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	2000	No value	1.2E+04	-	2E-01		
		Trichloroethene (TCE)	21000	1.3E+03	2.9E+02	2E-05	7E+01		
		Vinyl Chloride	4900	6.6E+01	1.5E+04	7E-05	3E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-5, 10PV, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	270	3.2E+03	1.2E+05	8E-08	2E-03		
		1,1-Dichloroethene	61	No value	1.0E+04	-	6E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	710	No value	8.7E+03	-	8E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	36	1.8E+02	4.4E+02	2E-07	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	45	No value	1.5E+04	-	3E-03		
		Ethylbenzene	180	2.0E+03	1.5E+05	9E-08	1E-03		
		Isopropylbenzene (Cumene)	150	No value	6.0E+04	-	3E-03		
		m,p-Xylene	680	No value	1.5E+04	-	5E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	570	No value	2.9E+04	-	2E-02		
		o-Xylene	360	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	380	No value	No value	-	-		
		sec-Butylbenzene	280	No value	5.8E+04	-	5E-03		
		tert-Butylbenzene	290	No value	No value	-	-		
		Tetrachloroethene (PCE)	240	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	65	No value	1.2E+04	-	6E-03		
		Trichloroethene (TCE)	480	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	7000	6.6E+01	1.5E+04	1E-04	5E-01		
SG6-5, 1PV, P433cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	250	3.2E+03	1.2E+05	8E-08	2E-03		
		1,1-Dichloroethene	68	No value	1.0E+04	-	7E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	590	No value	8.7E+03	-	7E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	36	1.8E+02	4.4E+02	2E-07	8E-02		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	47	No value	1.5E+04	-	3E-03		
		Ethylbenzene	190	2.0E+03	1.5E+05	9E-08	1E-03		
		Isopropylbenzene (Cumene)	130	No value	6.0E+04	-	2E-03		
		m,p-Xylene	660	No value	1.5E+04	-	5E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	350	No value	2.9E+04	-	1E-02		
		o-Xylene	330	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	310	No value	No value	-	-		
		sec-Butylbenzene	230	No value	5.8E+04	-	4E-03		
		tert-Butylbenzene	220	No value	No value	-	-		
		Tetrachloroethene (PCE)	220	8.4E+02	5.8E+03	3E-07	4E-02		
		Toluene	120	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	67	No value	1.2E+04	-	6E-03		
		Trichloroethene (TCE)	560	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	4900	6.6E+01	1.5E+04	7E-05	3E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG6-5, 3PV, P1299cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	220	3.2E+03	1.2E+05	7E-08	2E-03		
		1,1-Dichloroethene	44	No value	1.0E+04	-	4E-03		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	540	No value	8.7E+03	-	6E-02		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	43	1.8E+02	4.4E+02	2E-07	1E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1500	No value	1.2E+03	-	1E+00		
		Dichlorodifluoromethane	33	No value	1.5E+04	-	2E-03		
		Ethylbenzene	160	2.0E+03	1.5E+05	8E-08	1E-03		
		Isopropylbenzene (Cumene)	130	No value	6.0E+04	-	2E-03		
		m,p-Xylene	570	No value	1.5E+04	-	4E-02		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	350	No value	2.9E+04	-	1E-02		
		o-Xylene	300	No value	1.5E+04	-	2E-02		
		p-Cymene (p-Isopropyltoluene)	280	No value	No value	-	-		
		sec-Butylbenzene	220	No value	5.8E+04	-	4E-03		
		tert-Butylbenzene	210	No value	No value	-	-		
		Tetrachloroethene (PCE)	190	8.4E+02	5.8E+03	2E-07	3E-02		
		Toluene	110	No value	4.4E+04	-	3E-03		
		trans-1,2-Dichloroethene	62	No value	1.2E+04	-	5E-03		
		Trichloroethene (TCE)	440	1.3E+03	2.9E+02	4E-07	2E+00		
		Vinyl Chloride	5000	6.6E+01	1.5E+04	8E-05	3E-01		
SG7-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	5E-06	2E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	89	1.8E+02	4.4E+02	5E-07	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	600	No value	1.2E+03	-	5E-01		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	23	No value	4.4E+04	-	5E-04		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	6100	1.3E+03	2.9E+02	5E-06	2E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG7-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-04	4E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	1300	3.2E+03	1.2E+05	4E-07	1E-02		
		1,1-Dichloroethene	280	No value	1.0E+04	-	3E-02		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	120	1.8E+02	4.4E+02	7E-07	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	24000	No value	1.2E+03	-	2E+01		
		Dichlorodifluoromethane	34	No value	1.5E+04	-	2E-03		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	90	8.4E+02	5.8E+03	1E-07	2E-02		
		Toluene	27	No value	4.4E+04	-	6E-04		
		trans-1,2-Dichloroethene	630	No value	1.2E+04	-	5E-02		
		Trichloroethene (TCE)	120000	1.3E+03	2.9E+02	1E-04	4E+02		
		Vinyl Chloride	130	6.6E+01	1.5E+04	2E-06	9E-03		
SG7-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-04	1E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	5400	3.2E+03	1.2E+05	2E-06	5E-02		
		1,1-Dichloroethene	4100	No value	1.0E+04	-	4E-01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	200000	No value	1.2E+03	-	2E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	7300	No value	1.2E+04	-	6E-01		
		Trichloroethene (TCE)	340000	1.3E+03	2.9E+02	3E-04	1E+03		
		Vinyl Chloride	6800	6.6E+01	1.5E+04	1E-04	5E-01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG7-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	6E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2200	No value	1.2E+03	-	2E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	18000	1.3E+03	2.9E+02	1E-05	6E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		
SG7-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-05	5E+01
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	0	3.2E+03	1.2E+05	-	-		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	6300	No value	1.2E+03	-	5E+00		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	12000	1.3E+03	2.9E+02	1E-05	4E+01		
		Vinyl Chloride	0	6.6E+01	1.5E+04	-	-		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG8-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	8E-03	5E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	180000	3.2E+03	1.2E+05	6E-05	2E+00		
		1,1-Dichloroethene	14000	No value	1.0E+04	-	1E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	2400000	No value	1.2E+03	-	2E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	880000	1.3E+03	2.9E+02	7E-04	3E+03		
		Vinyl Chloride	480000	6.6E+01	1.5E+04	7E-03	3E+01		
SG8-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-03	4E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	130000	3.2E+03	1.2E+05	4E-05	1E+00		
		1,1-Dichloroethene	23000	No value	1.0E+04	-	2E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	4000000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	85000	1.3E+03	2.9E+02	7E-05	3E+02		
		Vinyl Chloride	400000	6.6E+01	1.5E+04	6E-03	3E+01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG8-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	4E-03	5E+03
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	110000	3.2E+03	1.2E+05	3E-05	9E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3100000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	65000	No value	1.2E+04	-	6E+00		
		Trichloroethene (TCE)	770000	1.3E+03	2.9E+02	6E-04	3E+03		
		Vinyl Chloride	200000	6.6E+01	1.5E+04	3E-03	1E+01		
SG8-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	7E-03	2E+02
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	83000	3.2E+03	1.2E+05	3E-05	7E-01		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	230000	No value	1.2E+03	-	2E+02		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	0	1.3E+03	2.9E+02	-	-		
		Vinyl Chloride	450000	6.6E+01	1.5E+04	7E-03	3E+01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG9-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	3E-03	1E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	240000	3.2E+03	1.2E+05	8E-05	2E+00		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	1800000	No value	1.2E+03	-	2E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	3200000	1.3E+03	2.9E+02	3E-03	1E+04		
		Vinyl Chloride	51000	6.6E+01	1.5E+04	8E-04	3E+00		
SG9-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	6E-03	2E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	420000	3.2E+03	1.2E+05	1E-04	4E+00		
		1,1-Dichloroethene	140000	No value	1.0E+04	-	1E+01		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	9100000	No value	1.2E+03	-	8E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	45000	No value	2.9E+04	-	2E+00		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	63000	No value	1.2E+04	-	5E+00		
		Trichloroethene (TCE)	3000000	1.3E+03	2.9E+02	2E-03	1E+04		
		Vinyl Chloride	200000	6.6E+01	1.5E+04	3E-03	1E+01		

Table 6-9a
Risk Characterization (Soil Gas), Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG9-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	1.5E+05	-	-	1E-02	3E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	1700	3.2E+02	2.9E+01	5E-06	6E+01		
		1,1-Dichloroethane	170000	3.2E+03	1.2E+05	5E-05	1E+00		
		1,1-Dichloroethene	30000	No value	1.0E+04	-	3E+00		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	900	2.0E+02	1.0E+03	5E-06	9E-01		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	850	1.8E+02	4.4E+02	5E-06	2E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	8400000	No value	1.2E+03	-	7E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	580	2.0E+03	1.5E+05	3E-07	4E-03		
		Isopropylbenzene (Cumene)	890	No value	6.0E+04	-	1E-02		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	1900	No value	2.9E+04	-	7E-02		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	780	No value	No value	-	-		
		sec-Butylbenzene	1000	No value	5.8E+04	-	2E-02		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	5200	8.4E+02	5.8E+03	6E-06	9E-01		
		Toluene	990	No value	4.4E+04	-	2E-02		
		trans-1,2-Dichloroethene	29000	No value	1.2E+04	-	2E+00		
		Trichloroethene (TCE)	6600000	1.3E+03	2.9E+02	5E-03	2E+04		
		Vinyl Chloride	300000	6.6E+01	1.5E+04	5E-03	2E+01		
SG9-5, P4330cc	5	1,1,1-Trichloroethane	100000	No value	1.5E+05	-	7E-01	6E-03	2E+04
		1,1,2,2-Tetrachloroethane	0	8.8E+01	1.2E+04	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	7.3E+05	-	-		
		1,1,2-Trichloroethane	0	3.2E+02	2.9E+01	-	-		
		1,1-Dichloroethane	430000	3.2E+03	1.2E+05	1E-04	4E+00		
		1,1-Dichloroethene	0	No value	1.0E+04	-	-		
		1,1-Difluoroethane	0	No value	6.0E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	4.7E+02	-	-		
		1,2-Dichloroethane	0	2.0E+02	1.0E+03	-	-		
		1,3,5-Trimethylbenzene	0	No value	8.7E+03	-	-		
		1,4-Dichlorobenzene	0	4.6E+02	1.2E+05	-	-		
		1,4-Dioxane (p-Dioxane)	0	6.6E+02	4.3E+03	-	-		
		Benzene	0	1.8E+02	4.4E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	2.2E+02	1.4E+04	-	-		
		Chloromethane	0	No value	1.3E+04	-	-		
		cis-1,2-Dichloroethylene	3700000	No value	1.2E+03	-	3E+03		
		Dichlorodifluoromethane	0	No value	1.5E+04	-	-		
		Ethylbenzene	0	2.0E+03	1.5E+05	-	-		
		Isopropylbenzene (Cumene)	0	No value	6.0E+04	-	-		
		m,p-Xylene	0	No value	1.5E+04	-	-		
		Methylene Chloride	0	5.1E+03	5.8E+04	-	-		
		Naphthalene	0	1.5E+02	4.3E+02	-	-		
		n-Butylbenzene	0	No value	2.9E+04	-	-		
		o-Xylene	0	No value	1.5E+04	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	5.8E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	8.4E+02	5.8E+03	-	-		
		Toluene	0	No value	4.4E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	1.2E+04	-	-		
		Trichloroethene (TCE)	5800000	1.3E+03	2.9E+02	5E-03	2E+04		
		Vinyl Chloride	93000	6.6E+01	1.5E+04	1E-03	6E+00		

Notes:

* Tentatively identified compound (TIC): concentration listed only for those samples where tentatively identified.

Table 6-9b
Soil Exposure Point Concentrations and Risk Values, Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Soil COPC	Commercial/Industrial Receptor Concentrations (mg/kg) in 0 to 2 ft bgs samples*			Soil RBCs (mg/kg) (from Table 6-6a)		Risk Values based on 95% UCL		Risk Values based on Maximum	
	Mean	95% UCL	Maximum	Cancer	Noncancer	ILCR	HQ	ILCR	HQ
1,1,1-Trichloroethane	4.2E-03	1.7E-02	2.4E-01	No value	8.8E+03	-	2E-06	-	3E-05
1,1,2,2-Tetrachloroethane	9.3E-06	5.0E-05	7.5E-04	4.4E+01	7.1E+03	1E-12	7E-09	2E-11	1E-07
1,1,2-Trichloro-1,2,2-trifluoroethane	8.8E-06	4.7E-05	7.1E-04	No value	No value	-	-	-	-
1,1,2-Trichloroethane	1.8E-03	7.8E-03	1.1E-01	9.0E+01	5.2E+00	9E-11	2E-03	1E-09	2E-02
1,1-Dichloroethane	7.2E-04	2.0E-03	1.8E-02	3.9E+02	7.1E+04	5E-12	3E-08	5E-11	3E-07
1,2,3-Trichlorobenzene	8.2E-05	4.4E-04	6.6E-03	No value	No value	-	-	-	-
1,2,4-Trichlorobenzene	5.9E-04	3.2E-03	4.8E-02	8.5E+02	3.1E+02	4E-12	1E-05	6E-11	2E-04
1,2-Dibromo-3-chloropropane	9.4E-06	5.0E-05	7.6E-04	1.3E+00	2.4E+01	4E-11	2E-06	6E-10	3E-05
1,2-Dibromoethane (EDB)	8.8E-06	4.7E-05	7.1E-04	3.2E+00	2.9E+01	1E-11	2E-06	2E-10	2E-05
1,2-Dichloroethane	8.5E-06	4.6E-05	6.9E-04	3.7E+01	1.0E+02	1E-12	4E-07	2E-11	7E-06
2-Methylnaphthalene	6.1E-01	1.8E+00	2.1E+01	No value	6.7E+02	-	3E-03	-	3E-02
Acenaphthene	1.3E-02	4.8E-02	5.6E-01	No value	1.0E+04	-	5E-06	-	6E-05
Acetone	7.9E-03	2.5E-02	2.6E-01	No value	2.6E+05	-	1E-07	-	1E-06
Anthracene	Not detected in 0 to 10 ft bgs depth interval in on-site samples			No value	5.0E+04	-	-	-	-
Antimony	2.6E+00	6.3E+00	6.4E+01	No value	1.4E+02	-	4E-02	-	5E-01
Benzene	7.7E-06	4.1E-05	6.2E-04	2.4E+01	3.2E+01	2E-12	1E-06	3E-11	2E-05
Benzo(a)anthracene	1.9E-03	7.3E-03	8.5E-02	1.6E+01	No value	5E-10	-	5E-09	-
Benzo(a)pyrene	6.0E-03	1.7E-02	1.3E-01	1.6E+00	No value	1E-08	-	8E-08	-
Benzo(b)fluoranthene	7.8E-04	3.3E-03	4.4E-02	1.6E+01	No value	2E-10	-	3E-09	-
Benzo(g,h,i)perylene	6.7E-03	1.9E-02	1.2E-01	No value	No value	-	-	-	-
Benzo(k)fluoranthene	4.5E-03	1.4E-02	1.2E-01	1.5E+02	No value	9E-11	-	8E-10	-
Biphenyl (Diphenyl)	3.3E-02	9.5E-02	1.0E+00	1.7E+03	2.4E+02	6E-11	4E-04	6E-10	4E-03
bis(2-Ethylhexyl) Phthalate	8.4E-03	3.0E-02	3.7E-01	9.5E+02	3.8E+03	3E-11	8E-06	4E-10	1E-04
Bromodichloromethane	1.2E-05	6.6E-05	1.0E-03	4.7E+01	7.1E+03	1E-12	9E-09	2E-11	1E-07
Bromoform	8.4E-06	4.5E-05	6.8E-04	2.2E+03	7.1E+03	2E-14	6E-09	3E-13	1E-07
Cadmium	1.3E+00	3.9E+00	4.1E+01	1.1E+02	4.3E+01	4E-08	9E-02	4E-07	9E-01
Carbazole	Not detected in 0 to 10 ft bgs depth interval in on-site samples			No value	No value	-	-	-	-
Carbon Disulfide	8.5E-06	4.6E-05	6.9E-04	No value	No value	-	-	-	-
Carbon Tetrachloride	2.0E-05	8.3E-05	9.5E-04	1.3E+01	2.7E+02	6E-12	3E-07	7E-11	4E-06
Chloroform	2.0E-04	8.2E-04	8.7E-03	3.2E+01	8.1E+02	3E-11	1E-06	3E-10	1E-05
Chrysene	6.2E-03	1.8E-02	1.2E-01	1.5E+03	No value	1E-11	-	8E-11	-
cis-1,2-Dichloroethylene	2.9E-02	1.0E-01	1.2E+00	No value	8.2E+01	-	1E-03	-	1E-02
cis-1,3-Dichloropropene	2.4E-05	1.3E-04	1.9E-03	2.9E+01	1.5E+02	4E-12	9E-07	7E-11	1E-05
Cobalt	1.3E+01	1.6E+01	2.0E+02	4.9E+01	2.8E+01	3E-07	6E-01	4E-06	7E+00
Copper	1.7E+02	4.3E+02	4.4E+03	No value	1.4E+04	-	3E-02	-	3E-01
Cyclohexane	1.2E-04	4.5E-04	5.4E-03	No value	No value	-	-	-	-
Dibenz(a,h)anthracene	4.7E-04	2.5E-03	3.8E-02	1.6E+00	No value	2E-09	-	2E-08	-

Table 6-9b
Soil Exposure Point Concentrations and Risk Values, Construction Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Soil COPC	Commercial/Industrial Receptor Concentrations (mg/kg) in 0 to 2 ft bgs samples*			Soil RBCs (mg/kg) (from Table 6-6a)		Risk Values based on 95% UCL		Risk Values based on Maximum	
	Mean	95% UCL	Maximum	Cancer	Noncancer	ILCR	HQ	ILCR	HQ
Dibenzofuran	Not detected in 0 to 10 ft bgs depth interval in on-site samples			No value	No value	-	-	-	-
Diethyl Phthalate	2.1E-04	1.1E-03	1.7E-02	No value	1.5E+05	-	7E-09	-	1E-07
Dimethyl Phthalate	Not detected in 0 to 10 ft bgs depth interval in on-site samples			No value	No value	-	-	-	-
Di-n-Butyl Phthalate	7.8E-03	2.0E-02	1.0E-01	No value	No value	-	-	-	-
Ethylbenzene	1.8E-03	7.0E-03	9.6E-02	4.8E+02	1.3E+04	1E-11	5E-07	2E-10	7E-06
Fluoranthene	8.1E-03	2.2E-02	1.4E-01	No value	6.7E+03	-	3E-06	-	2E-05
Fluorene	5.4E-02	1.6E-01	1.5E+00	No value	6.7E+03	-	2E-05	-	2E-04
Indeno(1,2,3-c,d)pyrene	2.2E-03	8.1E-03	8.6E-02	1.6E+01	No value	5E-10	-	5E-09	-
Isopropylbenzene (Cumene)	1.7E-03	6.5E-03	8.9E-02	No value	No value	-	-	-	-
Lead	1.2E+02	2.8E+02	2.6E+03	No value	1.6E+02	95% UCL and Maximum > Soil Lead Level			
m,p-Xylene	4.3E-03	1.5E-02	1.9E-01	No value	2.4E+03	-	6E-06	-	8E-05
Manganese	4.0E+02	4.4E+02	1.9E+03	No value	No value	-	-	-	-
Methyl Acetate	6.4E-04	1.6E-03	9.7E-03	No value	No value	-	-	-	-
Methylcyclohexane	1.5E-04	4.4E-04	4.3E-03	No value	No value	-	-	-	-
Naphthalene	1.9E-01	6.0E-01	7.3E+00	3.5E+02	4.4E+02	2E-09	1E-03	2E-08	2E-02
Nickel	3.2E+01	6.2E+01	5.9E+02	1.7E+03	8.6E+01	4E-08	7E-01	3E-07	7E+00
o-Xylene	4.0E-03	1.3E-02	1.7E-01	No value	No value	-	-	-	-
PCB-1248 (Aroclor 1248)	3.5E-01	1.6E+00	2.4E+01	5.6E+00	No value	3E-07	-	4E-06	-
PCB-1254 (Aroclor 1254)	1.5E-02	4.1E-02	3.2E-01	5.6E+00	No value	7E-09	-	6E-08	-
PCB-1260 (Aroclor 1260)	2.0E-01	7.2E-01	7.3E+00	5.6E+00	No value	1E-07	-	1E-06	-
Phenanthrene	1.9E-01	4.8E-01	3.7E+00	No value	No value	-	-	-	-
Phenol	Not detected in 0 to 10 ft bgs depth interval in on-site samples			No value	9.8E+04	-	-	-	-
Pyrene	9.6E-03	2.6E-02	1.8E-01	No value	5.0E+03	-	5E-06	-	4E-05
tert-Butyl Methyl Ether (MTBE)	9.4E-06	5.0E-05	7.6E-04	3.7E+03	5.6E+04	1E-14	9E-10	2E-13	1E-08
Tetrachloroethene (PCE)	5.6E-03	2.4E-02	3.3E-01	3.3E+01	3.1E+02	7E-10	8E-05	1E-08	1E-03
Thallium	1.4E-01	7.1E-01	1.3E+01	No value	3.5E+00	-	2E-01	-	4E+00
Toluene	8.7E-04	3.9E-03	5.7E-02	No value	4.1E+03	-	1E-06	-	1E-05
trans-1,3-Dichloropropene	4.3E-05	1.8E-04	2.0E-03	2.9E+01	1.5E+02	6E-12	1E-06	7E-11	1E-05
Trichloroethene (TCE)	4.9E-01	2.2E+00	3.2E+01	1.6E+02	2.3E+01	1E-08	1E-01	2E-07	1E+00
Trichlorofluoromethane	9.0E-06	4.8E-05	7.3E-04	No value	No value	-	-	-	-
Vinyl Chloride	1.0E-05	5.6E-05	8.4E-04	3.4E+00	3.0E+02	2E-11	2E-07	2E-10	3E-06
Cumulative Risk Values =>						**9E-07**	**2E+00**	**1E-05**	**2E+01**

Notes:
* All concentrations are in units of milligrams per kilogram (mg/kg) on a dry weight basis

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-15, P913cc	15	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	4E-05	4E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	23	3.2E+00	1.0E+02	7E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	340	No value	2.8E+02	-	1E+00		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	330	1.5E+01	1.4E+03	2E-05	2E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	140	1.6E+01	7.0E+01	9E-06	2E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SAIA-SB/SG-40-25, P530cc	25	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	1E-04	7E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	200	No value	2.8E+02	-	7E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1200	1.5E+01	1.4E+03	8E-05	9E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	380	1.6E+01	7.0E+01	2E-05	5E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-35 Rep, P628cc	35	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	2E-05	7E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	730	No value	2.8E+02	-	3E+00		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	1.5E+01	1.4E+03	-	-		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	88	No value	2.8E+03	-	3E-02		
		Trichloroethene (TCE)	320	1.6E+01	7.0E+01	2E-05	5E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SAIA-SB/SG-40-35, P578cc	35	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	3E-05	9E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	900	No value	2.8E+02	-	3E+00		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	1.5E+01	1.4E+03	-	-		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	96	No value	2.8E+03	-	3E-02		
		Trichloroethene (TCE)	430	1.6E+01	7.0E+01	3E-05	6E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-40-5, P816cc	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	3E-05	5E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	410	No value	2.8E+02	-	1E+00		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	240	1.5E+01	1.4E+03	2E-05	2E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	200	1.6E+01	7.0E+01	1E-05	3E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SAIA-SB/SG-41-15, P913cc	15	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	9E-06	2E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	160	No value	2.8E+02	-	6E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	45	1.5E+01	1.4E+03	3E-06	3E-02		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	94	1.6E+01	7.0E+01	6E-06	1E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-41-25, P530cc	25	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	2E-06	7E-01
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	60	No value	2.8E+02	-	2E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	1.5E+01	1.4E+03	-	-		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	34	1.6E+01	7.0E+01	2E-06	5E-01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SAIA-SB/SG-41-35, P578cc	35	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	0E+00	2E-01
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	69	No value	2.8E+02	-	2E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	1.5E+01	1.4E+03	-	-		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	0	1.6E+01	7.0E+01	-	-		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SB/SG-41-5, P816cc	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	3E-06	7E-01
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	0	1.5E+01	1.4E+03	-	-		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	51	1.6E+01	7.0E+01	3E-06	7E-01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SG15-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	9E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	110	3.2E+00	1.0E+02	3E-05	1E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	810	1.5E+01	1.4E+03	5E-05	6E-01		
		Toluene	40	No value	1.0E+04	-	4E-03		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	32	1.6E+01	7.0E+01	2E-06	5E-01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG15-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	1E-04	8E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	23	3.2E+00	1.0E+02	7E-06	2E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1600	1.5E+01	1.4E+03	1E-04	1E+00		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	460	1.6E+01	7.0E+01	3E-05	7E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SG15-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	1E-04	9E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1200	1.5E+01	1.4E+03	8E-05	9E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	580	1.6E+01	7.0E+01	4E-05	8E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG15-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	5E-05	5E-01
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	750	1.5E+01	1.4E+03	5E-05	5E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	0	1.6E+01	7.0E+01	-	-		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SG16-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	7E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	29	3.2E+00	1.0E+02	9E-06	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	55	No value	2.8E+02	-	2E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	38	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	820	1.5E+01	1.4E+03	5E-05	6E-01		
		Toluene	35	No value	1.0E+04	-	3E-03		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	72	1.6E+01	7.0E+01	5E-06	1E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	1E-04	2E+01
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	72	3.2E+00	1.0E+02	2E-05	7E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	870	No value	2.8E+02	-	3E+00		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1100	1.5E+01	1.4E+03	7E-05	8E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	880	1.6E+01	7.0E+01	6E-05	1E+01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SG16-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	5E-05	3E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	610	1.5E+01	1.4E+03	4E-05	4E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	170	1.6E+01	7.0E+01	1E-05	2E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG16-5 Rep, P4380cc	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	3E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	66	No value	2.8E+02	-	2E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	390	1.5E+01	1.4E+03	3E-05	3E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	49	1.6E+01	7.0E+01	3E-06	7E-01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SG16-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	3E-05	2E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	120	No value	2.8E+02	-	4E-01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	280	1.5E+01	1.4E+03	2E-05	2E-01		
		Toluene	0	No value	1.0E+04	-	-		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	110	1.6E+01	7.0E+01	7E-06	2E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG17-15, P4814cc	15	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	3E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	38	3.2E+00	1.0E+02	1E-05	4E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	35	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	210	1.5E+01	1.4E+03	1E-05	2E-01		
		Toluene	44	No value	1.0E+04	-	4E-03		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	39	1.6E+01	7.0E+01	2E-06	6E-01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		
SG17-25, P5298cc	25	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	2E-04	3E+01
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	100	3.2E+00	1.0E+02	3E-05	1E+00		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	270	No value	2.8E+02	-	1E+00		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	1400	1.5E+01	1.4E+03	9E-05	1E+00		
		Toluene	53	No value	1.0E+04	-	5E-03		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	1700	1.6E+01	7.0E+01	1E-04	2E+01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SG17-35, P5806cc	35	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	6E-04	1E+02
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	130	5.8E+01	2.8E+04	2E-06	5E-03		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	36	3.2E+00	1.0E+02	1E-05	3E-01		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	3000	No value	2.8E+02	-	1E+01		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	480	1.5E+01	1.4E+03	3E-05	3E-01		
		Toluene	19	No value	1.0E+04	-	2E-03		
		trans-1,2-Dichloroethene	69	No value	2.8E+03	-	2E-02		
		Trichloroethene (TCE)	6800	1.6E+01	7.0E+01	4E-04	1E+02		
		Vinyl Chloride	27	3.2E-01	3.3E+03	9E-05	8E-03		
SG17-5, P4330cc	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	2E-05	1E+00
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	0	5.8E+01	2.8E+04	-	-		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,1-Difluoroethane	0	No value	1.4E+06	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		1,4-Dioxane (p-Dioxane)	0	1.2E+01	1.0E+03	-	-		
		Benzene	0	3.2E+00	1.0E+02	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	0	No value	2.8E+02	-	-		
		Dichlorodifluoromethane	0	No value	3.3E+03	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		Isopropylbenzene (Cumene)	0	No value	1.4E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		Naphthalene	0	2.8E+00	1.0E+02	-	-		
		n-Butylbenzene	0	No value	7.0E+03	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		p-Cymene (p-Isopropyltoluene)	0	No value	No value	-	-		
		sec-Butylbenzene	0	No value	1.4E+04	-	-		
		tert-Butylbenzene	0	No value	No value	-	-		
		Tetrachloroethene (PCE)	190	1.5E+01	1.4E+03	1E-05	1E-01		
		Toluene	27	No value	1.0E+04	-	3E-03		
		trans-1,2-Dichloroethene	0	No value	2.8E+03	-	-		
		Trichloroethene (TCE)	82	1.6E+01	7.0E+01	5E-06	1E+00		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Table 6-10a
Risk Characterization (Soil Gas), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample ID	Depth	Chemical of Potential Concern (COPC)*	Concentration (mg/m^3)	Soil Gas RBC (mg/m^3) from Table 6-4		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-SG41-E5	5	1,1,1-Trichloroethane	0	No value	3.5E+04	-	-	4E-04	1E+02
		1,1,2,2-Tetrachloroethane	0	1.6E+00	2.8E+03	-	-		
		1,1,2-Trichloro-1,2,2-trifluoroethane	0	No value	1.7E+05	-	-		
		1,1,2-Trichloroethane	0	6.0E+00	7.0E+00	-	-		
		1,1-Dichloroethane	20	5.8E+01	2.8E+04	3E-07	7E-04		
		1,1-Dichloroethene	0	No value	2.4E+03	-	-		
		1,2,4-Trichlorobenzene	0	No value	1.1E+02	-	-		
		1,2-Dichloroethane	0	3.7E+00	2.4E+02	-	-		
		1,3,5-Trimethylbenzene	0	No value	2.1E+03	-	-		
		1,4-Dichlorobenzene	0	8.7E+00	2.8E+04	-	-		
		Benzene	60	3.2E+00	1.0E+02	2E-05	6E-01		
		Chlorobenzene	0	No value	1.7E+03	-	-		
		Chloroethane	0	No value	No value	-	-		
		Chloroform	0	4.0E+00	3.3E+03	-	-		
		Chloromethane	0	No value	3.1E+03	-	-		
		cis-1,2-Dichloroethylene	5100	No value	2.8E+02	-	2E+01		
		Decahydromethyl Naphthalene*	100	No value	No value	-	-		
		Ethylbenzene	0	3.7E+01	3.3E+04	-	-		
		m,p-Xylene	0	No value	3.3E+03	-	-		
		Methylene Chloride	0	3.4E+01	1.4E+04	-	-		
		o-Xylene	0	No value	3.3E+03	-	-		
		Styrene	0	No value	3.1E+04	-	-		
		Tetrachloroethene (PCE)	50	1.5E+01	1.4E+03	3E-06	4E-02		
		Toluene	0	No value	1.0E+04	-	-		
		Trichloroethene (TCE)	6000	1.6E+01	7.0E+01	4E-04	9E+01		
		Vinyl Chloride	0	3.2E-01	3.3E+03	-	-		

Notes:

* Tentatively identified compound (TIC): concentration listed only for those samples where tentatively identified.

Table 6-10b
Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample	Sample Date	Indoor Air COPC	Indoor Air Concentration (mg/m^3)	Air RBC (from Table 6-3c) (mg/m^3)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
5227-IA02-0415	4/16/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	8E-06	2E-01
		1,2,4-Trimethylbenzene	0.4	No value	No value	-	-		
		1,2-Dichloroethane	0.11	1.1E-01	7.3E+00	1E-06	2E-02		
		1,3,5-Trimethylbenzene	0.11	No value	6.3E+01	-	2E-03		
		Benzene	0.61	9.7E-02	3.1E+00	6E-06	2E-01		
		Ethylbenzene	0.44	1.1E+00	1.0E+03	4E-07	4E-04		
		m,p-Xylene	1	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.36	No value	1.0E+02	-	4E-03		
		Tetrachloroethene (PCE)	0.12	4.6E-01	4.2E+01	3E-07	3E-03		
		Toluene	1.8	No value	3.1E+02	-	6E-03		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5230-IA01-0415	4/16/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	3E-01
		1,2,4-Trimethylbenzene	0.51	No value	No value	-	-		
		1,2-Dichloroethane	0.09	1.1E-01	7.3E+00	8E-07	1E-02		
		1,3,5-Trimethylbenzene	0.14	No value	6.3E+01	-	2E-03		
		Benzene	0.76	9.7E-02	3.1E+00	8E-06	2E-01		
		Ethylbenzene	0.67	1.1E+00	1.0E+03	6E-07	7E-04		
		m,p-Xylene	2.2	No value	1.0E+02	-	2E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.6	No value	1.0E+02	-	6E-03		
		Tetrachloroethene (PCE)	0.14	4.6E-01	4.2E+01	3E-07	3E-03		
		Toluene	2.6	No value	3.1E+02	-	8E-03		
		Trichloroethene (TCE)	0.052	4.8E-01	2.1E+00	1E-07	2E-02		
5211-IA01-0415	4/17/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	3E-01
		1,2,4-Trimethylbenzene	0.4	No value	No value	-	-		
		1,2-Dichloroethane	0.19	1.1E-01	7.3E+00	2E-06	3E-02		
		1,3,5-Trimethylbenzene	0.11	No value	6.3E+01	-	2E-03		
		Benzene	0.63	9.7E-02	3.1E+00	7E-06	2E-01		
		Ethylbenzene	0.34	1.1E+00	1.0E+03	3E-07	3E-04		
		m,p-Xylene	1	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.35	No value	1.0E+02	-	4E-03		
		Tetrachloroethene (PCE)	1.4	4.6E-01	4.2E+01	3E-06	3E-02		
		Toluene	3.3	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0.054	4.8E-01	2.1E+00	1E-07	3E-02		
5211-CS01-0415	4/17/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	3E-01
		1,2,4-Trimethylbenzene	0.47	No value	No value	-	-		
		1,2-Dichloroethane	0.054	1.1E-01	7.3E+00	5E-07	7E-03		
		1,3,5-Trimethylbenzene	0.13	No value	6.3E+01	-	2E-03		
		Benzene	0.86	9.7E-02	3.1E+00	9E-06	3E-01		
		Ethylbenzene	0.34	1.1E+00	1.0E+03	3E-07	3E-04		
		m,p-Xylene	1.1	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.37	No value	1.0E+02	-	4E-03		
		Tetrachloroethene (PCE)	0.11	4.6E-01	4.2E+01	2E-07	3E-03		
		Toluene	2	No value	3.1E+02	-	6E-03		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		

Table 6-10b
Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample	Sample Date	Indoor Air COPC	Indoor Air Concentration (mg/m^3)	Air RBC (from Table 6-3c) (mg/m^3)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
5234-IA01-0415	4/17/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	9E-06	3E-01
		1,2,4-Trimethylbenzene	0.41	No value	No value	-	-		
		1,2-Dichloroethane	0.077	1.1E-01	7.3E+00	7E-07	1E-02		
		1,3,5-Trimethylbenzene	0.1	No value	6.3E+01	-	2E-03		
		Benzene	0.75	9.7E-02	3.1E+00	8E-06	2E-01		
		Ethylbenzene	0.3	1.1E+00	1.0E+03	3E-07	3E-04		
		m,p-Xylene	1	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.36	No value	1.0E+02	-	4E-03		
		Tetrachloroethene (PCE)	0.094	4.6E-01	4.2E+01	2E-07	2E-03		
		Toluene	2	No value	3.1E+02	-	6E-03		
		Trichloroethene (TCE)	0.05	4.8E-01	2.1E+00	1E-07	2E-02		
5234-CS01-0415	4/17/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	8E-06	3E-01
		1,2,4-Trimethylbenzene	0.38	No value	No value	-	-		
		1,2-Dichloroethane	0.051	1.1E-01	7.3E+00	5E-07	7E-03		
		1,3,5-Trimethylbenzene	0.11	No value	6.3E+01	-	2E-03		
		Benzene	0.69	9.7E-02	3.1E+00	7E-06	2E-01		
		Ethylbenzene	0.29	1.1E+00	1.0E+03	3E-07	3E-04		
		m,p-Xylene	0.96	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.33	No value	1.0E+02	-	3E-03		
		Tetrachloroethene (PCE)	0.11	4.6E-01	4.2E+01	2E-07	3E-03		
		Toluene	1.7	No value	3.1E+02	-	5E-03		
		Trichloroethene (TCE)	0.05	4.8E-01	2.1E+00	1E-07	2E-02		
5215-CS01-0415	4/17/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	8E-06	3E-01
		1,2,4-Trimethylbenzene	0.36	No value	No value	-	-		
		1,2-Dichloroethane	0.051	1.1E-01	7.3E+00	5E-07	7E-03		
		1,3,5-Trimethylbenzene	0.099	No value	6.3E+01	-	2E-03		
		Benzene	0.71	9.7E-02	3.1E+00	7E-06	2E-01		
		Ethylbenzene	0.3	1.1E+00	1.0E+03	3E-07	3E-04		
		m,p-Xylene	0.96	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.32	No value	1.0E+02	-	3E-03		
		Tetrachloroethene (PCE)	0.089	4.6E-01	4.2E+01	2E-07	2E-03		
		Toluene	1.8	No value	3.1E+02	-	6E-03		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5226-IA02-0415	4/23/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	9E-06	3E-01
		1,2,4-Trimethylbenzene	0.68	No value	No value	-	-		
		1,2-Dichloroethane	0.068	1.1E-01	7.3E+00	6E-07	9E-03		
		1,3,5-Trimethylbenzene	0.18	No value	6.3E+01	-	3E-03		
		Benzene	0.78	9.7E-02	3.1E+00	8E-06	2E-01		
		Ethylbenzene	0.37	1.1E+00	1.0E+03	3E-07	4E-04		
		m,p-Xylene	1	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.41	No value	1.0E+02	-	4E-03		
		Tetrachloroethene (PCE)	0.14	4.6E-01	4.2E+01	3E-07	3E-03		
		Toluene	2.1	No value	3.1E+02	-	7E-03		
		Trichloroethene (TCE)	0.07	4.8E-01	2.1E+00	1E-07	3E-02		

Table 6-10b
Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample	Sample Date	Indoor Air COPC	Indoor Air Concentration (mg/m^3)	Air RBC (from Table 6-3c) (mg/m^3)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
5226-IA01-0415	4/23/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	8E-06	3E-01
		1,2,4-Trimethylbenzene	0.54	No value	No value	-	-		
		1,2-Dichloroethane	0.099	1.1E-01	7.3E+00	9E-07	1E-02		
		1,3,5-Trimethylbenzene	0.16	No value	6.3E+01	-	3E-03		
		Benzene	0.66	9.7E-02	3.1E+00	7E-06	2E-01		
		Ethylbenzene	0.31	1.1E+00	1.0E+03	3E-07	3E-04		
		m,p-Xylene	0.92	No value	1.0E+02	-	9E-03		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.34	No value	1.0E+02	-	3E-03		
		Tetrachloroethene (PCE)	0.084	4.6E-01	4.2E+01	2E-07	2E-03		
		Toluene	3.6	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0.059	4.8E-01	2.1E+00	1E-07	3E-02		
5226-IA04-0415	4/24/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	4E-01
		1,2,4-Trimethylbenzene	0.5	No value	No value	-	-		
		1,2-Dichloroethane	0.27	1.1E-01	7.3E+00	2E-06	4E-02		
		1,3,5-Trimethylbenzene	0.13	No value	6.3E+01	-	2E-03		
		Benzene	0.88	9.7E-02	3.1E+00	9E-06	3E-01		
		Ethylbenzene	0.42	1.1E+00	1.0E+03	4E-07	4E-04		
		m,p-Xylene	1.2	No value	1.0E+02	-	1E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.43	No value	1.0E+02	-	4E-03		
		Tetrachloroethene (PCE)	0.093	4.6E-01	4.2E+01	2E-07	2E-03		
		Toluene	2.5	No value	3.1E+02	-	8E-03		
		Trichloroethene (TCE)	0.06	4.8E-01	2.1E+00	1E-07	3E-02		
5215-IA01-0415	4/24/2015	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	6E-06	2E-01
		1,2,4-Trimethylbenzene	0.37	No value	No value	-	-		
		1,2-Dichloroethane	0.043	1.1E-01	7.3E+00	4E-07	6E-03		
		1,3,5-Trimethylbenzene	0.094	No value	6.3E+01	-	1E-03		
		Benzene	0.55	9.7E-02	3.1E+00	6E-06	2E-01		
		Ethylbenzene	0.21	1.1E+00	1.0E+03	2E-07	2E-04		
		m,p-Xylene	0.65	No value	1.0E+02	-	7E-03		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.23	No value	1.0E+02	-	2E-03		
		Tetrachloroethene (PCE)	0.078	4.6E-01	4.2E+01	2E-07	2E-03		
		Toluene	1.3	No value	3.1E+02	-	4E-03		
		Trichloroethene (TCE)	0.018	4.8E-01	2.1E+00	4E-08	9E-03		
5211-IA01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	5E-01
		1,2,4-Trimethylbenzene	1.4	No value	No value	-	-		
		1,2-Dichloroethane	0.08	1.1E-01	7.3E+00	7E-07	1E-02		
		1,3,5-Trimethylbenzene	0.27	No value	6.3E+01	-	4E-03		
		Benzene	1.2	9.7E-02	3.1E+00	1E-05	4E-01		
		Ethylbenzene	0.98	1.1E+00	1.0E+03	9E-07	1E-03		
		m,p-Xylene	3.3	No value	1.0E+02	-	3E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	1.1	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	1.3	4.6E-01	4.2E+01	3E-06	3E-02		
		Toluene	4.3	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0.09	4.8E-01	2.1E+00	2E-07	4E-02		

Table 6-10b
Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample	Sample Date	Indoor Air COPC	Indoor Air Concentration (mg/m^3)	Air RBC (from Table 6-3c) (mg/m^3)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
5211-CS01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	3E-01
		1,2,4-Trimethylbenzene	0.93	No value	No value	-	-		
		1,2-Dichloroethane	0	1.1E-01	7.3E+00	-	-		
		1,3,5-Trimethylbenzene	0.19	No value	6.3E+01	-	3E-03		
		Benzene	0.89	9.7E-02	3.1E+00	9E-06	3E-01		
		Ethylbenzene	0.59	1.1E+00	1.0E+03	5E-07	6E-04		
		m,p-Xylene	2	No value	1.0E+02	-	2E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.71	No value	1.0E+02	-	7E-03		
		Tetrachloroethene (PCE)	0.14	4.6E-01	4.2E+01	3E-07	3E-03		
		Toluene	2.9	No value	3.1E+02	-	9E-03		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5226-IA01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	7E-01
		1,2,4-Trimethylbenzene	1.8	No value	No value	-	-		
		1,2-Dichloroethane	0.09	1.1E-01	7.3E+00	8E-07	1E-02		
		1,3,5-Trimethylbenzene	0.34	No value	6.3E+01	-	5E-03		
		Benzene	1.8	9.7E-02	3.1E+00	2E-05	6E-01		
		Ethylbenzene	0.84	1.1E+00	1.0E+03	8E-07	8E-04		
		m,p-Xylene	2.7	No value	1.0E+02	-	3E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.98	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	0.18	4.6E-01	4.2E+01	4E-07	4E-03		
		Toluene	4.7	No value	3.1E+02	-	2E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5215-IA01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	5E-01
		1,2,4-Trimethylbenzene	1.1	No value	No value	-	-		
		1,2-Dichloroethane	0.07	1.1E-01	7.3E+00	6E-07	1E-02		
		1,3,5-Trimethylbenzene	0.22	No value	6.3E+01	-	3E-03		
		Benzene	1.5	9.7E-02	3.1E+00	2E-05	5E-01		
		Ethylbenzene	0.67	1.1E+00	1.0E+03	6E-07	7E-04		
		m,p-Xylene	2.2	No value	1.0E+02	-	2E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.79	No value	1.0E+02	-	8E-03		
		Tetrachloroethene (PCE)	0.18	4.6E-01	4.2E+01	4E-07	4E-03		
		Toluene	3.8	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5215-CS01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	4E-01
		1,2,4-Trimethylbenzene	1.4	No value	No value	-	-		
		1,2-Dichloroethane	0	1.1E-01	7.3E+00	-	-		
		1,3,5-Trimethylbenzene	0.27	No value	6.3E+01	-	4E-03		
		Benzene	1.2	9.7E-02	3.1E+00	1E-05	4E-01		
		Ethylbenzene	0.82	1.1E+00	1.0E+03	7E-07	8E-04		
		m,p-Xylene	2.7	No value	1.0E+02	-	3E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.97	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	0.2	4.6E-01	4.2E+01	4E-07	5E-03		
		Toluene	4.2	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		

Table 6-10b
Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample	Sample Date	Indoor Air COPC	Indoor Air Concentration (mg/m^3)	Air RBC (from Table 6-3c) (mg/m^3)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
5226-IA04-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	3E-05	1E+00
		1,2,4-Trimethylbenzene	1.3	No value	No value	-	-		
		1,2-Dichloroethane	0.43	1.1E-01	7.3E+00	4E-06	6E-02		
		1,3,5-Trimethylbenzene	0.25	No value	6.3E+01	-	4E-03		
		Benzene	2.7	9.7E-02	3.1E+00	3E-05	9E-01		
		Ethylbenzene	0.66	1.1E+00	1.0E+03	6E-07	7E-04		
		m,p-Xylene	2.1	No value	1.0E+02	-	2E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.74	No value	1.0E+02	-	7E-03		
		Tetrachloroethene (PCE)	0.25	4.6E-01	4.2E+01	5E-07	6E-03		
		Toluene	4.2	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5234-IA01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	5E-01
		1,2,4-Trimethylbenzene	1.2	No value	No value	-	-		
		1,2-Dichloroethane	0	1.1E-01	7.3E+00	-	-		
		1,3,5-Trimethylbenzene	0.26	No value	6.3E+01	-	4E-03		
		Benzene	1.5	9.7E-02	3.1E+00	2E-05	5E-01		
		Ethylbenzene	0.8	1.1E+00	1.0E+03	7E-07	8E-04		
		m,p-Xylene	2.6	No value	1.0E+02	-	3E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.94	No value	1.0E+02	-	9E-03		
		Tetrachloroethene (PCE)	0.21	4.6E-01	4.2E+01	5E-07	5E-03		
		Toluene	4.5	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5234-CS01-0116	1/27/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	1E-05	5E-01
		1,2,4-Trimethylbenzene	1.2	No value	No value	-	-		
		1,2-Dichloroethane	0	1.1E-01	7.3E+00	-	-		
		1,3,5-Trimethylbenzene	0.26	No value	6.3E+01	-	4E-03		
		Benzene	1.3	9.7E-02	3.1E+00	1E-05	4E-01		
		Ethylbenzene	0.79	1.1E+00	1.0E+03	7E-07	8E-04		
		m,p-Xylene	2.6	No value	1.0E+02	-	3E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	0.95	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	0.21	4.6E-01	4.2E+01	5E-07	5E-03		
		Toluene	4.4	No value	3.1E+02	-	1E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5226-IA02-0116	1/28/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	7E-01
		1,2,4-Trimethylbenzene	13	No value	No value	-	-		
		1,2-Dichloroethane	0.08	1.1E-01	7.3E+00	7E-07	1E-02		
		1,3,5-Trimethylbenzene	1.9	No value	6.3E+01	-	3E-02		
		Benzene	1.3	9.7E-02	3.1E+00	1E-05	4E-01		
		Ethylbenzene	2.4	1.1E+00	1.0E+03	2E-06	2E-03		
		m,p-Xylene	4.9	No value	1.0E+02	-	5E-02		
		Naphthalene	0.24	8.3E-02	3.1E+00	3E-06	8E-02		
		o-Xylene	2.1	No value	1.0E+02	-	2E-02		
		Tetrachloroethene (PCE)	0.31	4.6E-01	4.2E+01	7E-07	7E-03		
		Toluene	5.9	No value	3.1E+02	-	2E-02		
		Trichloroethene (TCE)	0.08	4.8E-01	2.1E+00	2E-07	4E-02		

Table 6-10b
Risk Characterization (Indoor/Crawlspace Air), Current Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample	Sample Date	Indoor Air COPC	Indoor Air Concentration (mg/m^3)	Air RBC (from Table 6-3c) (mg/m^3)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
				Cancer	Noncancer			ILCR (unitless)	HI (unitless)
5230-IA02-0116	1/28/2016	1,1,1-Trichloroethane	0.08	No value	1.0E+03	-	8E-05	2E-05	7E-01
		1,2,4-Trimethylbenzene	1.7	No value	No value	-	-		
		1,2-Dichloroethane	0.36	1.1E-01	7.3E+00	3E-06	5E-02		
		1,3,5-Trimethylbenzene	0.33	No value	6.3E+01	-	5E-03		
		Benzene	1.7	9.7E-02	3.1E+00	2E-05	5E-01		
		Ethylbenzene	1.3	1.1E+00	1.0E+03	1E-06	1E-03		
		m,p-Xylene	4.2	No value	1.0E+02	-	4E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	1.3	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	0.25	4.6E-01	4.2E+01	5E-07	6E-03		
		Toluene	5.5	No value	3.1E+02	-	2E-02		
		Trichloroethene (TCE)	0.07	4.8E-01	2.1E+00	1E-07	3E-02		
5406-IA01-0116	1/28/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	6E-01
		1,2,4-Trimethylbenzene	1.9	No value	No value	-	-		
		1,2-Dichloroethane	0.17	1.1E-01	7.3E+00	2E-06	2E-02		
		1,3,5-Trimethylbenzene	0.41	No value	6.3E+01	-	7E-03		
		Benzene	1.6	9.7E-02	3.1E+00	2E-05	5E-01		
		Ethylbenzene	1.1	1.1E+00	1.0E+03	1E-06	1E-03		
		m,p-Xylene	3.6	No value	1.0E+02	-	4E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	1.3	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	0.28	4.6E-01	4.2E+01	6E-07	7E-03		
		Toluene	5.7	No value	3.1E+02	-	2E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		
5227-IA02-0116	1/28/2016	1,1,1-Trichloroethane	0	No value	1.0E+03	-	-	2E-05	6E-01
		1,2,4-Trimethylbenzene	1.9	No value	No value	-	-		
		1,2-Dichloroethane	0.16	1.1E-01	7.3E+00	1E-06	2E-02		
		1,3,5-Trimethylbenzene	0.41	No value	6.3E+01	-	7E-03		
		Benzene	1.6	9.7E-02	3.1E+00	2E-05	5E-01		
		Ethylbenzene	1.1	1.1E+00	1.0E+03	1E-06	1E-03		
		m,p-Xylene	3.6	No value	1.0E+02	-	4E-02		
		Naphthalene	0	8.3E-02	3.1E+00	-	-		
		o-Xylene	1.3	No value	1.0E+02	-	1E-02		
		Tetrachloroethene (PCE)	0.29	4.6E-01	4.2E+01	6E-07	7E-03		
		Toluene	5.9	No value	3.1E+02	-	2E-02		
		Trichloroethene (TCE)	0	4.8E-01	2.1E+00	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW2A-0716 (Shallow Gaspur; 60 to 65)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-04	2E+01
	1,1-Dichloroethane	5.5	7.6E+00	3.6E+03	7E-07	2E-03		
	1,1-Dichloroethene	6.4	-	6.8E+01	No value	9E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	5.3	1.9E+03	1.6E+05	3E-09	3E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1300	-	5.0E+01	No value	3E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	85	-	2.2E+02	No value	4E-01		
	Trichloroethene (TCE)	120	1.2E+00	5.2E+00	1E-04	2E+01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW2B-0716 (Intermediate Gaspur; 70 to 80)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-05	5E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0.81	2.3E+00	1.5E+02	4E-07	5E-03		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	10	-	5.0E+01	No value	2E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	1.5	-	2.2E+02	No value	7E-03		
	Trichloroethene (TCE)	0.57	1.2E+00	5.2E+00	5E-07	1E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW2C-0716 (Lower Gaspur; 96 to 106)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-04	1E+00
	1,1-Dichloroethane	1.8	7.6E+00	3.6E+03	2E-07	5E-04		
	1,1-Dichloroethene	3.5	-	6.8E+01	No value	5E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	33	2.3E+00	1.5E+02	1E-05	2E-01		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	15	1.9E+03	1.6E+05	8E-09	9E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	7.8	-	2.2E+07	No value	3E-07		
	Benzene	2.2	4.3E-01	1.4E+01	5E-06	2E-01		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	270	-	5.0E+01	No value	5E+00		
	Cyclohexane	1.1	-	1.0E+03	No value	1E-03		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	19	-	2.2E+02	No value	9E-02		
	Trichloroethene (TCE)	4.7	1.2E+00	5.2E+00	4E-06	9E-01		
	Vinyl Chloride	0.87	8.3E-03	8.8E+01	1E-04	1E-02		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW7-0716 (Exposition; 122 to 132)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-05	4E+00
	1,1-Dichloroethane	0.84	7.6E+00	3.6E+03	1E-07	2E-04		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	2.9	2.3E+00	1.5E+02	1E-06	2E-02		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	7.9	1.9E+03	1.6E+05	4E-09	5E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	73	-	5.0E+01	No value	1E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	4.8	-	2.2E+02	No value	2E-02		
	Trichloroethene (TCE)	19	1.2E+00	5.2E+00	2E-05	4E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW42-0716 (Shallow Gaspur; 56 to 66)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	5E-05	7E+00
	1,1-Dichloroethane	18	7.6E+00	3.6E+03	2E-06	5E-03		
	1,1-Dichloroethene	3.7	-	6.8E+01	No value	5E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	47	1.9E+03	1.6E+05	3E-08	3E-04		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1100	-	5.0E+01	No value	2E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	40	-	2.2E+02	No value	2E-01		
	Trichloroethene (TCE)	32	1.2E+00	5.2E+00	3E-05	6E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW43-0716 (Intermediate Gaspur; 77 to 87)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-04	1E+00
	1,1-Dichloroethane	1	7.6E+00	3.6E+03	1E-07	3E-04		
	1,1-Dichloroethene	3.4	-	6.8E+01	No value	5E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	44	2.3E+00	1.5E+02	2E-05	3E-01		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	4	1.9E+03	1.6E+05	2E-09	3E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	42	-	5.0E+01	No value	8E-01		
	Cyclohexane	2.5	-	1.0E+03	No value	2E-03		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	3	-	2.2E+02	No value	1E-02		
	Trichloroethene (TCE)	5.4	1.2E+00	5.2E+00	5E-06	1E+00		
	Vinyl Chloride	1	8.3E-03	8.8E+01	1E-04	1E-02		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW44-0716 (Lower Gaspur; 96 to 106)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	0E+00	1E-02
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	8.2	1.9E+03	1.6E+05	4E-09	5E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0.37	-	5.0E+01	No value	7E-03		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW34-0716 (Shallow Gaspur; 58 to 68)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-04	1E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0.94	-	6.8E+01	No value	1E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	50	-	2.2E+07	No value	2E-06		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	170	-	5.0E+01	No value	3E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	1.7	4.6E+02	1.3E+05	4E-09	1E-05		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	9.9	-	2.2E+02	No value	5E-02		
	Trichloroethene (TCE)	4.5	1.2E+00	5.2E+00	4E-06	9E-01		
	Vinyl Chloride	0.81	8.3E-03	8.8E+01	1E-04	9E-03		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW35-0716 (Lower Gaspur; 95 to 105)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	3E-06	7E-01
	1,1-Dichloroethane	3	7.6E+00	3.6E+03	4E-07	8E-04		
	1,1-Dichloroethene	4	-	6.8E+01	No value	6E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	6.8	2.3E+00	1.5E+02	3E-06	4E-02		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	19	1.9E+03	1.6E+05	1E-08	1E-04		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0.7	4.3E-01	1.4E+01	2E-06	5E-02		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	330	-	5.0E+01	No value	7E+00		
	Cyclohexane	0.92	-	1.0E+03	No value	9E-04		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	15	-	2.2E+02	No value	7E-02		
	Trichloroethene (TCE)	3.5	1.2E+00	5.2E+00	3E-06	7E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW32-0716 (Exposition; 122 to 132)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	0E+00	0E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0.67	-	5.0E+01	No value	1E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW3A-0716 (Shallow Gaspur; 58 to 68)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	3E-06	6E-02
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1.1	-	5.0E+01	No value	2E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0.29	1.2E+00	5.2E+00	2E-07	6E-02		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW3B-0716 (Intermediate Gaspur; 76 to 86)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	3E-03	7E+02
	1,1-Dichloroethane	23	7.6E+00	3.6E+03	3E-06	6E-03		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	3.9	1.9E+03	1.6E+05	2E-09	2E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	4600	-	5.0E+01	No value	9E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	340	-	2.2E+02	No value	2E+00		
	Trichloroethene (TCE)	3500	1.2E+00	5.2E+00	3E-03	7E+02		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW3C-0716 (Lower Gaspur; 96 to 106)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	8E-06	1E+00
	1,1-Dichloroethane	0.51	7.6E+00	3.6E+03	7E-08	1E-04		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	2.8	2.3E+00	1.5E+02	1E-06	2E-02		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	6.1	1.9E+03	1.6E+05	3E-09	4E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	49	-	5.0E+01	No value	1E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	5.4	-	2.2E+02	No value	2E-02		
	Trichloroethene (TCE)	5.7	1.2E+00	5.2E+00	5E-06	1E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW1A-0716 (Shallow Gaspur; 60 to 65)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-03	3E+02
	1,1-Dichloroethane	22	7.6E+00	3.6E+03	3E-06	6E-03		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	3900	-	5.0E+01	No value	8E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	160	-	2.2E+02	No value	7E-01		
	Trichloroethene (TCE)	1500	1.2E+00	5.2E+00	1E-03	3E+02		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		
	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW1B-0716 (Intermediate Gaspur; 75 to 85)	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-	2E-05	7E-01
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0.58	2.3E+00	1.5E+02	3E-07	4E-03		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	14	-	5.0E+01	No value	3E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	2	-	2.2E+02	No value	9E-03		
	Trichloroethene (TCE)	0.84	1.2E+00	5.2E+00	7E-07	2E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW1C-0716 (Lower Gaspur; 94 to 104)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-03	1E+00
	1,1-Dichloroethane	2.6	7.6E+00	3.6E+03	3E-07	7E-04		
	1,1-Dichloroethene	5.3	-	6.8E+01	No value	8E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	33	2.3E+00	1.5E+02	1E-05	2E-01		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	7.3	1.9E+03	1.6E+05	4E-09	5E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	3.2	4.3E-01	1.4E+01	7E-06	2E-01		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	350	-	5.0E+01	No value	7E+00		
	Cyclohexane	2	-	1.0E+03	No value	2E-03		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	27	-	2.2E+02	No value	1E-01		
	Trichloroethene (TCE)	4.4	1.2E+00	5.2E+00	4E-06	8E-01		
	Vinyl Chloride	18	8.3E-03	8.8E+01	2E-03	2E-01		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW45-0716 (Intermediate Gaspur; 79 to 89)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-06	3E-01
	1,1-Dichloroethane	0.45	7.6E+00	3.6E+03	6E-08	1E-04		
	1,1-Dichloroethene	0.99	-	6.8E+01	No value	1E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	5.4	2.3E+00	1.5E+02	2E-06	4E-02		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	3.5	1.9E+03	1.6E+05	2E-09	2E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0.43	4.3E-01	1.4E+01	1E-06	3E-02		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0.27	-	1.2E+03	No value	2E-04		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	76	-	5.0E+01	No value	2E+00		
	Cyclohexane	0.3	-	1.0E+03	No value	3E-04		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	5.8	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	1.6	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW11A-0716 (Shallow Gaspur; 74 to 79)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	0E+00	2E-07
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0	-	5.0E+01	No value	-		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW11B-0716 (Intermediate Gaspur; 96 to 106)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-05	3E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	3.5	-	2.2E+07	No value	2E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	47	-	5.0E+01	No value	9E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	6.1	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	16	1.2E+00	5.2E+00	1E-05	3E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW11C-0716 (Lower Gaspur; 114.5 to 119.5)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	9E-06	2E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	36	-	5.0E+01	No value	7E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	6.7	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	11	1.2E+00	5.2E+00	9E-06	2E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW49-0716 (Shallow Gaspur; 60 to 70)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-06	3E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	49	-	5.0E+01	No value	1E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	6.3	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	1.6	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW10-0716 (Exposition; 128 to 138)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	8E-07	3E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0.59	2.3E+00	1.5E+02	3E-07	4E-03		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0.72	1.9E+03	1.6E+05	4E-10	5E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	220	-	5.0E+01	No value	4E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	14	-	2.2E+02	No value	6E-02		
	Trichloroethene (TCE)	0.93	1.2E+00	5.2E+00	8E-07	2E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW9A-0716 (Shallow Gaspur; 55 to 60)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	6E-10	6E-04
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0.37	-	6.5E+01	No value	6E-03		
	1,2,4-Trichlorobenzene	0.2	6.7E+00	3.6E+01	3E-08	6E-03		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	7.5	1.9E+03	1.6E+05	4E-09	5E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1.2	-	5.0E+01	No value	2E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0.13	-	2.2E+02	No value	6E-04		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW9B-0716 (Intermediate Gaspur; 73 to 78)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	9E-07	2E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	1.2	1.9E+03	1.6E+05	6E-10	8E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	52	-	5.0E+01	No value	1E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	5.5	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	0.91	1.2E+00	5.2E+00	8E-07	2E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW9C-0716 (Lower Gaspur; 94 to 104)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	6E-07	2E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0.4	2.3E+00	1.5E+02	2E-07	3E-03		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	3.6	1.9E+03	1.6E+05	2E-09	2E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	250	-	5.0E+01	No value	5E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	22	-	2.2E+02	No value	1E-01		
	Trichloroethene (TCE)	0.7	1.2E+00	5.2E+00	6E-07	1E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW56-0716 (Shallow Gaspur; 62 to 72)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	6E-05	1E+01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	260	-	5.0E+01	No value	5E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	15	-	2.2E+02	No value	7E-02		
	Trichloroethene (TCE)	74	1.2E+00	5.2E+00	6E-05	1E+01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW52-0716 (Shallow Gaspur; 66 to 76)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	6E-06	1E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	15	-	5.0E+01	No value	3E-01		
	Cyclohexane	0.84	-	1.0E+03	No value	8E-04		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	6.2	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	5.6	1.2E+00	5.2E+00	5E-06	1E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW46-0716 (Shallow Gaspur; 57 to 67)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	5E-05	1E+01
	1,1-Dichloroethane	7.5	7.6E+00	3.6E+03	1E-06	2E-03		
	1,1-Dichloroethene	2.2	-	6.8E+01	No value	3E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	3.5	1.9E+03	1.6E+05	2E-09	2E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	460	-	5.0E+01	No value	9E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	1.1	7.6E+00	3.1E+03	1E-07	4E-04		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	37	-	2.2E+02	No value	2E-01		
	Trichloroethene (TCE)	57	1.2E+00	5.2E+00	5E-05	1E+01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW47-0716 (Intermediate Gaspur; 77 to 87)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-05	1E+00
	1,1-Dichloroethane	6.1	7.6E+00	3.6E+03	8E-07	2E-03		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	6.2	1.9E+03	1.6E+05	3E-09	4E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	3.2	-	1.7E+01	No value	2E-01		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	490	-	5.0E+01	No value	1E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	30	-	2.2E+02	No value	1E-01		
	Trichloroethene (TCE)	5.4	1.2E+00	5.2E+00	5E-06	1E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
MW48-0716 (Lower Gaspur; 98 to 108)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-04	3E-01
	1,1-Dichloroethane	1.3	7.6E+00	3.6E+03	2E-07	4E-04		
	1,1-Dichloroethene	1.9	-	6.8E+01	No value	3E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	15	2.3E+00	1.5E+02	7E-06	1E-01		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	13	1.9E+03	1.6E+05	7E-09	8E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	12	-	2.2E+07	No value	5E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	100	-	5.0E+01	No value	2E+00		
	Cyclohexane	0.88	-	1.0E+03	No value	9E-04		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	6.3	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	1.3	1.2E+00	5.2E+00	1E-06	2E-01		
	Vinyl Chloride	1.1	8.3E-03	8.8E+01	1E-04	1E-02		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW6A-0716 (Shallow Gaspur; 58 to 68)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	0E+00	0E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0	-	5.0E+01	No value	-		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW6B-0716 (Intermediate Gaspur; 76 to 81)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-06	5E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	14	-	5.0E+01	No value	3E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	3.7	-	2.2E+02	No value	2E-02		
	Trichloroethene (TCE)	2.7	1.2E+00	5.2E+00	2E-06	5E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		
	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW6C-0716 (Lower Gaspur; 90 to 100)	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-	1E-04	4E-01
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0.31	2.3E+00	1.5E+02	1E-07	2E-03		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	6.3	-	2.2E+07	No value	3E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	17	-	5.0E+01	No value	3E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	2.9	-	2.2E+02	No value	1E-02		
	Trichloroethene (TCE)	2	1.2E+00	5.2E+00	2E-06	4E-01		
	Vinyl Chloride	1.2	8.3E-03	8.8E+01	1E-04	1E-02		
	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-		
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW5A-0716 (Shallow Gaspur; 58 to 68)	1,1-Dichloroethene	0	-	6.8E+01	No value	-	1E-06	3E-01
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	1	1.9E+03	1.6E+05	5E-10	6E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	210	-	5.0E+01	No value	4E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	19	-	2.2E+02	No value	9E-02		
	Trichloroethene (TCE)	1.3	1.2E+00	5.2E+00	1E-06	2E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW8-0716 (Exposition; 124 to 134)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-06	3E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0.78	2.3E+00	1.5E+02	3E-07	5E-03		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	2.2	-	5.0E+01	No value	4E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0.31	-	2.2E+02	No value	1E-03		
	Trichloroethene (TCE)	1.3	1.2E+00	5.2E+00	1E-06	2E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW5B-0716 (Intermediate Gaspur; 76 to 86)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-03	1E+00
	1,1-Dichloroethane	6.5	7.6E+00	3.6E+03	9E-07	2E-03		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	30	1.9E+03	1.6E+05	2E-08	2E-04		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	2100	-	5.0E+01	No value	4E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	79	-	2.2E+02	No value	4E-01		
	Trichloroethene (TCE)	3	1.2E+00	5.2E+00	3E-06	6E-01		
	Vinyl Chloride	20	8.3E-03	8.8E+01	2E-03	2E-01		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW5C-0716 (Lower Gaspur; 96 to 106)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-06	4E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	1.6	2.3E+00	1.5E+02	7E-07	1E-02		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	2.4	1.9E+03	1.6E+05	1E-09	2E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	95	-	5.0E+01	No value	2E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	11	-	2.2E+02	No value	5E-02		
	Trichloroethene (TCE)	1.6	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW13-0716 (Exposition; 128 to 138)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-06	4E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	11	-	2.2E+07	No value	5E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	190	-	5.0E+01	No value	4E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	29	-	2.2E+02	No value	1E-01		
	Trichloroethene (TCE)	1.5	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW4A-0716 (Shallow Gaspur; 58 to 68)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	2E-06	5E-03
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0.16	-	5.0E+01	No value	3E-03		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW4B-0716 (Intermediate Gaspur; 74 to 84)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	7E-06	2E+00
	1,1-Dichloroethane	16	7.6E+00	3.6E+03	2E-06	4E-03		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	62	1.9E+03	1.6E+05	3E-08	4E-04		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	4200	-	5.0E+01	No value	8E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	210	-	2.2E+02	No value	1E+00		
	Trichloroethene (TCE)	6.6	1.2E+00	5.2E+00	6E-06	1E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW4C-0716 (Lower Gaspur; 92 to 102)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	5E-03	2E+00
	1,1-Dichloroethane	5.9	7.6E+00	3.6E+03	8E-07	2E-03		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	2	2.3E+00	1.5E+02	9E-07	1E-02		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	7.7	1.9E+03	1.6E+05	4E-09	5E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	1.3	-	1.7E+01	No value	8E-02		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	870	-	5.0E+01	No value	2E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	1.3	-	1.2E+03	No value	1E-03		
	trans-1,2-Dichloroethene	120	-	2.2E+02	No value	6E-01		
	Trichloroethene (TCE)	2.7	1.2E+00	5.2E+00	2E-06	5E-01		
	Vinyl Chloride	45	8.3E-03	8.8E+01	5E-03	5E-01		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW12A-0716 (Shallow Gaspur; 70 to 80)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	5E-07	1E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1	-	5.0E+01	No value	2E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0.67	4.6E+02	1.3E+05	1E-09	5E-06		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0.2	-	2.2E+02	No value	9E-04		
	Trichloroethene (TCE)	0.63	1.2E+00	5.2E+00	5E-07	1E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW12B-0716 (Intermediate Gaspur; 94 to 99)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	0E+00	0E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0.73	1.9E+03	1.6E+05	4E-10	5E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0.77	-	5.0E+01	No value	2E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW12C-0716 (Lower Gaspur; 110 to 115)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	3E-09	3E-05
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0.66	-	5.0E+01	No value	1E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW9A-0916 (Shallow Gaspur; 55 to 60)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	5E-10	6E-06
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	5.5	1.9E+03	1.6E+05	3E-09	3E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0.3	-	5.0E+01	No value	6E-03		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW9B-0916 (Intermediate Gaspur; 73 to 78)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-06	3E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	1	1.9E+03	1.6E+05	5E-10	6E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	18	-	5.0E+01	No value	4E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	1.4	-	2.2E+02	No value	6E-03		
	Trichloroethene (TCE)	1.4	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW9C-0916 (Lower Gaspur; 94 to 104)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	9E-05	3E-01
	1,1-Dichloroethane	0.88	7.6E+00	3.6E+03	1E-07	2E-04		
	1,1-Dichloroethene	0.82	-	6.8E+01	No value	1E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	2.1	1.9E+03	1.6E+05	1E-09	1E-05		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	500	-	5.0E+01	No value	1E+01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	35	-	2.2E+02	No value	2E-01		
	Trichloroethene (TCE)	0.79	1.2E+00	5.2E+00	7E-07	2E-01		
	Vinyl Chloride	0.71	8.3E-03	8.8E+01	9E-05	8E-03		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW10-0916 (Exposition; 128 to 138)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	8E-05	4E-01
	1,1-Dichloroethane	0.32	7.6E+00	3.6E+03	4E-08	9E-05		
	1,1-Dichloroethene	1.2	-	6.8E+01	No value	2E-02		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	1.1	1.9E+03	1.6E+05	6E-10	7E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0.66	-	2.6E+02	No value	3E-03		
	cis-1,2-Dichloroethylene	480	-	5.0E+01	No value	1E+01		
	Cyclohexane	0.21	-	1.0E+03	No value	2E-04		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	19	-	2.2E+02	No value	9E-02		
	Trichloroethene (TCE)	1.4	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0.67	8.3E-03	8.8E+01	8E-05	8E-03		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW13-0916 (Exposition; 128 to 138)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	4E-05	5E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0.47	-	6.8E+01	No value	7E-03		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0.22	1.9E+03	1.6E+05	1E-10	1E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	10	-	2.2E+07	No value	4E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	250	-	5.0E+01	No value	5E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	32	-	2.2E+02	No value	1E-01		
	Trichloroethene (TCE)	2	1.2E+00	5.2E+00	2E-06	4E-01		
	Vinyl Chloride	0.36	8.3E-03	8.8E+01	4E-05	4E-03		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW12A-0916 (Shallow Gaspur; 70 to 80)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	8E-07	2E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0.72	1.9E+03	1.6E+05	4E-10	5E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	5.3	-	2.2E+07	No value	2E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1.5	-	5.0E+01	No value	3E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0.56	4.6E+02	1.3E+05	1E-09	4E-06		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0.35	-	2.2E+02	No value	2E-03		
	Trichloroethene (TCE)	0.97	1.2E+00	5.2E+00	8E-07	2E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW12B-0916 (Intermediate Gaspur; 94 to 99)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-06	3E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	1	1.9E+03	1.6E+05	5E-10	6E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	1.7	-	5.0E+01	No value	3E-02		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	1.3	4.6E+02	1.3E+05	3E-09	1E-05		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0.42	-	2.2E+02	No value	2E-03		
	Trichloroethene (TCE)	1.6	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW12C-0916 (Lower Gaspur; 110 to 115)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-06	3E-01
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0.48	1.9E+03	1.6E+05	3E-10	3E-06		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	9	-	2.2E+07	No value	4E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	8	-	5.0E+01	No value	2E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0.51	4.6E+02	1.3E+05	1E-09	4E-06		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0.67	-	2.2E+02	No value	3E-03		
	Trichloroethene (TCE)	1.5	1.2E+00	5.2E+00	1E-06	3E-01		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW11A-0916 (Shallow Gaspur; 74 to 79)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	0E+00	3E-07
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	0	-	5.0E+01	No value	-		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	0	-	2.2E+02	No value	-		
	Trichloroethene (TCE)	0	1.2E+00	5.2E+00	-	-		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW11B-0916 (Intermediate Gaspur; 96 to 106)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	1E-05	3E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0	-	6.8E+01	No value	-		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	7.1	-	2.2E+07	No value	3E-07		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	40	-	5.0E+01	No value	8E-01		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	3.7	-	2.2E+02	No value	2E-02		
	Trichloroethene (TCE)	15	1.2E+00	5.2E+00	1E-05	3E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

Table 6-10c
Risk Characterization (Vapor Intrusion), Residential Receptor
Southern Avenue Industrial Area Superfund Site
South Gate, California

Sample (Aquifer; Screened Interval in ft bgs)	Groundwater COPC	Groundwater Concentration (mg/L)	Groundwater RBC (from Table 6-5) (mg/L)		ILCR (unitless)	HQ (unitless)	Cumulative Risk Values	
			Cancer	Noncancer			ILCR (unitless)	HI (unitless)
SAIA-MW11C-0916 (Lower Gaspur; 114.5 to 119.5)	1,1,2-Trichloroethane	0	5.3E+00	6.2E+00	-	-	9E-06	2E+00
	1,1-Dichloroethane	0	7.6E+00	3.6E+03	-	-		
	1,1-Dichloroethene	0.27	-	6.8E+01	No value	4E-03		
	1,2,3-Trichlorobenzene	0	-	6.5E+01	No value	-		
	1,2,4-Trichlorobenzene	0	6.7E+00	3.6E+01	-	-		
	1,2-Dichloroethane	0	2.3E+00	1.5E+02	-	-		
	1,2-Dichloropropane	0	2.4E+00	3.6E+01	-	-		
	1,3-Dichlorobenzene	0	-	-	No value	-		
	1,4-Dichlorobenzene	0	2.6E+00	8.4E+03	-	-		
	1,4-Dioxane (p-Dioxane)	0	1.9E+03	1.6E+05	-	-		
	1-Pentene	0	-	-	No value	-		
	4-Methyl-2-pentanone (MIBK)	0	-	5.5E+05	No value	-		
	Acetone	0	-	2.2E+07	No value	-		
	Benzene	0	4.3E-01	1.4E+01	-	-		
	bis(2-Ethylhexyl) Phthalate	0	1.1E+05	-	-	-		
	Bromomethane	0	-	1.7E+01	No value	-		
	Carbazole	0	-	-	No value	-		
	Carbon Disulfide	0	-	1.2E+03	No value	-		
	Chlorobenzene	0	-	4.1E+02	No value	-		
	Chloroethane	0	-	-	No value	-		
	Chloroform	0	8.0E-01	6.7E+02	-	-		
	Chloromethane	0	-	2.6E+02	No value	-		
	cis-1,2-Dichloroethylene	55	-	5.0E+01	No value	1E+00		
	Cyclohexane	0	-	1.0E+03	No value	-		
	Ethylbenzene	0	3.4E+00	3.1E+03	-	-		
	Isopropylbenzene (Cumene)	0	-	8.9E+02	No value	-		
	m,p-Xylene	0	-	3.7E+02	No value	-		
	Methyl Butane	0	-	-	No value	-		
	Methylcyclobutane	0	-	-	No value	-		
	Methylcyclohexane	0	-	-	No value	-		
	Methylene Chloride	0	7.6E+00	3.1E+03	-	-		
	o-Xylene	0	-	4.7E+02	No value	-		
	Styrene	0	-	8.3E+03	No value	-		
	tert-Butyl Ethyl Ether	0	-	-	No value	-		
	tert-Butyl Methyl Ether (MTBE)	0	4.6E+02	1.3E+05	-	-		
	Tetrachloroethene (PCE)	0	6.4E-01	5.8E+01	-	-		
	Toluene	0	-	1.2E+03	No value	-		
	trans-1,2-Dichloroethene	7.2	-	2.2E+02	No value	3E-02		
	Trichloroethene (TCE)	11	1.2E+00	5.2E+00	9E-06	2E+00		
	Vinyl Chloride	0	8.3E-03	8.8E+01	-	-		

FIGURES

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APPENDICES

(On CD Only)

A Historical Reference Maps and Figures
B CPT, Boring, and Well Installation Logs
C Field Documentation (Sampling Forms, Indoor Air Quality Survey Forms, Groundwater Elevation Forms and Waste Manifests)
D Survey Data Reports
E Analytical Data Tables and Laboratory Report
F Data Quality Summary Report and Data Validation Reports
G Pump Test and Modeling Technical Memorandum

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APPENDIX A

Historical Reference Maps and Figures

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APPENDIX B

CPT, Boring, and Well Installation Logs

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APPENDIX C

Field Documentation

(Sampling Forms, Indoor Air Quality Survey Forms, Groundwater Elevation Forms, and Waste Manifests)

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APPENDIX D

Survey Data Reports

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APPENDIX E

Analytical Data Tables and Commercial Laboratory Reports

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APPENDIX F

Data Quality Summary Report and Data Validation Reports

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APPENDIX G

Pump Test and Modeling Technical Memorandum

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