



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182

(909) 396-2000 • www.aqmd.gov

HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : _____
Facility Address: _____
Type of Business: _____
SCAQMD ID No.: _____

A. Cancer Risk

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

1. Inventory Reporting Year : _____
2. Maximum Cancer Risk to Receptors : (Offsite and residence = 30-year exposure, worker = 25-year exposure)
a. Offsite _____ in a million Location: _____
b. Residence _____ in a million Location: _____
c. Worker _____ in a million Location: _____
3. Substances Accounting for 90% of Cancer Risk: _____
Processes Accounting for 90% of Cancer Risk: _____
4. Cancer Burden for a 70-yr exposure: (Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])
a. Cancer Burden _____
b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure _____
c. Maximum distance to edge of 70-year, 1 x 10^-6 cancer risk isopleth (meters) _____

B. Hazard Indices

[Long Term Effects (chronic) and Short Term Effects (acute)]
(non-carcinogenic impacts are estimated by comparing calculated concentration to identified Reference Exposure Levels, and expressing this comparison in terms of a "Hazard Index")

1. Maximum Chronic Hazard Indices:
a. Residence HI: _____ Location: _____ toxicological endpoint: _____
b. Worker HI : _____ Location: _____ toxicological endpoint: _____
2. Substances Accounting for 90% of Chronic Hazard Index: _____
3. Maximum 8-hour Chronic Hazard Index:
8-Hour Chronic HI: _____ Location: _____ toxicological endpoint: _____
4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: _____
5. Maximum Acute Hazard Index:
PMI: _____ Location: _____ toxicological endpoint: _____
6. Substances Accounting for 90% of Acute Hazard Index: _____

C. Public Notification and Risk Reduction

1. Public Notification Required? _____ Yes _____ No
a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI >1

2. Risk Reduction Required? _____ Yes _____ No



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HEALTH RISK ASSESSMENT

**PACIFIC CLAY PRODUCTS
LAKE ELSINORE, CA
AQMD FACILITY ID 017953**

AB 2588 California Air Toxics “Hot Spots” Information and Assessment Act of 1987

January 9, 2024

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**Health Risk Assessment
Pacific Clay Products
Lake Elsinore, CA
January 9, 2024**

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LIST OF ABBREVIATIONS/ACROYMNS

AB 2588	Air Toxics "Hot Spots" Information and Assessment Act
ADMRT	Air Dispersion Modeling Risk Tool
AER	Annual Emissions Report
AERMOD	American Meteorological Society Regulatory Model
AMS	American Meteorological Society
ATIR	Air Toxics Inventory Report
BPIP PRIME	Building Profile Input Program
CARB	California Air Resources Board
CAS	Chemical Abstract System
CPF	Cancer Potency Factors
CY	Calendar Year
EIM	Emissions Inventory Module
HARP2	Hot Spots Analysis Reporting Program
HI	Hazard Index
HRA	Health Risk Assessment
MEIR	Maximum exposed individual resident
MEIW	Maximum exposed individual worker
MICR	Maximum Individual Cancer Risk
OEHHA	Office of Environmental Health Hazard Assessment
PMI	Point of Maximum Impact
REL	Reference Exposure Level
RfD	Reference Dose
SCAQMD	South Coast Air Quality Management District
TAC	Toxic Air Contaminant
URF	Unit Risk Factor
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
WGS	World Geodetic System
ZOI	Zone of Impact

KEY DEFINITIONS

8-Hour Health Impacts - Non-cancer health impacts for exposures that occur on a recurrent basis, but only during a portion of each day. The 8-hour RELs are designed to protect against periodic exposure that could occur as often as daily and may share characteristics of both acute and chronic exposure. These RELs were developed because of concerns that applying the chronic REL in some scenarios was overly conservative. An 8-hour REL is an exposure that is not likely to cause adverse health effects in a human population, including sensitive subgroups, exposed to that concentration for an 8-hour exposure duration on a regular (including daily) basis.

Action Risk Level - MICR of twenty-five in one million (25×10^{-6}), cancer burden of one half (0.5), a total acute or chronic HI of three (3.0) for any target organ system at any receptor location, or the National Ambient Air Quality Standard (NAAQS) for lead.

Acute Health Impacts - An effect caused by initial exposure of a hazardous chemical on the body. The effects are generally severe but are often reversible after exposure stops.

Air Toxics Inventory Report – A detailed facility toxics emissions inventory listed by device or process along with source parameter and location information as outlined in SCAQMD “Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics ‘Hot Spots’ Information and Assessment Act”.

Cancer Burden - The estimated number of theoretical cancer cases in a defined population resulting from lifetime exposure to pollutants emitted from a facility.

Cancer Health Impacts - the estimated increase in the occurrence of cancer cases in a population subject to a MICR of greater than or equal to one in one million (1.0×10^{-6}) resulting from exposure to toxic air contaminants.

Chronic Health Impacts - An effect caused by prolonged or repeated exposures over time. Symptoms may not be apparent immediately but develop over time and are often irreversible.

Dose-Response Assessment - The process of characterizing the relationship between the exposure to an agent and the incidence of an adverse health effect in exposed populations.

Health Risk Assessment - A technical study identifying toxic air contaminant emissions released from a facility, exposure assessment, dose-response assessment and risk characterization as outlined by the Office of Environmental Health Hazard Assessment (OEHHA) “Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments” and the SCAQMD “Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics ‘Hot Spots’ Information and Assessment Act”.

Hot Spots Act - Means the Air Toxics "Hot Spots" Information and Assessment Act of 1987, incorporated in Health and Safety Code, Part 6, Division 26, and amendments to this act.

Individual Substance Acute Hazard Index (HI) - The ratio of the estimated maximum one-hour, or other time period as specified by the Executive Officer, concentration of a toxic air contaminant at a receptor location to its acute reference exposure level.

Individual Substance Chronic Hazard Index (HI) - The ratio of the long-term level of exposure to a toxic air contaminant for a potential maximally exposed individual to the chronic reference exposure level for the toxic air contaminant.

Maximum Individual Cancer Risk (MICR) - The estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants for residential receptor locations.

MEI - Maximum exposed individual (theoretical)

MEIR - Maximum exposed individual resident (actual)

MEIW - Maximum exposed individual worker (actual)

Multipathway Substances - A substance or chemical that once airborne from an emission source can, under environmental conditions, be taken into a human receptor by multiple exposure routes, such as inhalation, skin contact with contaminated surfaces, ingestion of soil contaminated by the emission, etc.

Notification Risk Level – A MICR of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or ambient lead concentration limit in an applicable SCAQMD rule.

PMI - Off-site point of maximum impact. A location, with or without people currently present, at which the total cancer risk, or the total noncancer risk, has the highest numerical value.

Receptor Location - For the purpose of calculating acute HI, any location outside the boundaries of the facility at which a person could experience acute exposure; and for the purpose of calculating chronic HI and MICR, any location outside the boundaries of the facility at which a person could experience chronic exposure.

Reference Exposure Level (REL) - The concentration level at or below which no adverse non-cancer health effects are anticipated for the specified exposure duration.

Risk - The estimated probability of adverse effects to human health, in this instance from the exposure to environmental hazards.

Sensitive Receptor - A location such as a school, hospital, elder care facility, or daycare center where the human occupants are more sensitive to pollutants than “average.”

Significant Risk Level – For purposes of SCAQMD Rule 1402 this is a MICR of one hundred in one million (100×10^{-6}) or a total acute or chronic HI of five (5.0) for any target organ system at any receptor location.

Standard Industrial Classification (SIC) Code – Means the Standard Industrial Classification Code which classifies establishments by the type of business activity in which they are engaged, as defined by the Standard Industrial Classification Manual, 1987, published by the Executive Office of the President, Office of Management and Budget, 1987.

Total Acute Hazard Index (HI) - The sum of the individual substance acute HIs for all toxic air contaminants affecting the same target organ system.

Total Chronic Hazard Index (HI) - The sum of the individual substance chronic HIs for all toxic air contaminants affecting the same target organ system.

Toxic Air Contaminant (TAC) - An air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health.

Voluntary Risk Threshold – Is a MICR of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or ambient lead concentration limit in an applicable SCAQMD rule.

Zone of Impact (ZOI) - The area in the vicinity of the facility where receptors have a potential cancer risk equal or greater than one in one million (1×10^{-6}), total acute hazard index (HI) equal or greater than 0.5, or total chronic hazard index (HI) equal or greater than 0.5.



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0.0 EXECUTIVE SUMMARY

The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) is a community right-to-know act designed to inform the public of health risks from air emissions and to reduce risks to less than significant levels. AB 2588 requires specified facilities to develop and implement comprehensive plans for the creation of air toxics emission inventories. It also requires local air quality agencies to prioritize those facilities for the purpose of selecting the facilities that will be required to perform health risk assessments (HRAs).

Pacific Clay Products Inc. (“Pacific Clay,” “the facility”), Facility ID 017953, received a modified Air Toxics Inventory Report (ATIR) pursuant to AB 2588 in the form of an Emissions Inventory Module (EIM) transaction file for Calendar Year (CY) 2017 prepared by South Coast Air Quality Management District (SCAQMD) on June 3, 2022. SCAQMD requested Pacific Clay to submit an HRA based on the EIM transaction file to evaluate the risk impacts from the facility’s operations. The EIM transaction file was later updated to revise emissions from welding sources and received from SCAQMD on December 15, 2023. SCAQMD requires HRAs to be prepared in accordance with the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics “Hot Spots” Program Risk Assessment Guidelines (OEHHA HRA Guidance Manual) and guidance from the SCAQMD AB 2588 and Rule 1402 Supplemental Guidelines (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics “Hot Spots” Information and Assessment Act) (SCAQMD Guidelines). In response to SCAQMD’s request, Pacific Clay has engaged Sespe Consulting, Inc. (Sespe) to assist with developing the HRA. The OEHHA Guidelines, SCAQMD Guidelines, and EIM transaction file will serve as parameters for the HRA.

As required, this HRA reflects facility 2017 CY operations (and air pollution controls) for regulated AB 2588 toxic air contaminants (TACs) listed in OEHHA Appendix A-I. This HRA provides a comprehensive risk assessment meeting OEHHA Tier 1 requirements and includes a dispersion analysis of released TACs into the environment, the potential for human exposure, and a quantitative assessment of both individual and population-wide cancer and non-cancer health risks associated with those levels of exposure.

Facility Overview

Pacific Clay is located at 14741 Lake Street, Lake Elsinore, CA 92530 (Figure A-1). The facility is in the Alberhill-Temescal Valley, sitting at an approximate elevation ranging between 558 and 367 meters above mean sea level. The facility is a comprehensive open pit mining operation in conjunction with a clay brick manufacturing plant, aggregate processing plants, a ready-mix concrete batch plant, and associated support, maintenance, and administrative facilities. The total area of the facility is approximately 1,375 acres. For clay brick manufacturing, the facility operates under SIC Code 3251 – Brick and Structural Clay Tile. For aggregate extraction/processing and ready mix-concrete batching operations, the facility operates under SIC Code 1442 - Construction Sand and Gravel and SIC Code 3273 - Ready-Mixed Concrete, respectively.

Pacific Clay operates sixty-two (62) emission sources (i.e., release data entries in the EIM transaction file provided by SCAQMD). Only fifty-four (54) of the 62 sources had associated air toxics emissions in the EIM transaction file, with eight (8) sources not operating during the 2017 CY. Therefore, the HRA incorporates emissions from these 54 sources. Emission rates for each source for this HRA are provided in Table B-2a, which includes source names, Chemical Abstract System (CAS) numbers, maximum hourly emissions, and annual average emissions. Emission rates are based on the EIM file provided by the SCAQMD. Please note that eighteen (18) of the 54 total sources with emissions for the 2017 CY were aggregated/combined for the purposes of air dispersion modeling (Table B-5). Combined sources from the EIM file are indicated in bold in Table B-5. Modeled emission sources with emissions during the 2017 CY are identified in Figures A-2 and A-3.

Health Risk Modeling

This HRA report is prepared according to OEHHA HRA Guidance Manual and SCAQMD Guidelines. This HRA utilizes the Hot Spots Analysis Reporting Program (HARP2) software version 22118 based on air dispersion modeling output from U.S. EPA's AERMOD software version 23132. The results obtained from HARP2 provide the necessary information to generate the zones of impact (ZOIs) and identify the potentially exposed populations. In addition, potential health effects were evaluated for the maximum exposed individual resident (MEIR) and the maximum exposed individual worker (MEIW) for both noncancer and carcinogenic health impacts. Data projections were based on World Geodetic System (WGS) 1984 Datum UTM Zone 11N.

In this HRA, there were fifty (50)¹ AB 2588 chemicals that were modeled based on the facility's ATIR emissions for CY 2017. For reference, Table B-2b provides emissions rates for each TAC in this HRA. Table B-3 identifies non-inhalation exposure pathways modeled for residential receptors, which are dermal absorption, soil ingestion, mother's milk, and homegrown produce. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion. For those receptors that are impacted by noncancer health hazards, these chemicals may potentially affect the cardiovascular system, central nervous system, immune system, gastrointestinal tract & liver or alimentary tract, kidneys, reproductive system & developmental, respiratory system, skin, eyes, bone/teeth, endocrine system, hematological system (blood), and others as identified Table B-4.

Summary of Results

Table B-1 summarizes the cancer risk, chronic hazard, 8-hour chronic hazard, and acute hazard results of this HRA. Appendix C contains the SCAQMD Health Risk Summary Form.

¹ The EIM transaction file also includes emissions of Titanium Dioxide (CAS No. 13463677), Tin (CAS No. 7440315), and Magnesium (CAS No. 7439954). These substances are included in Tables B-2a and B-2b to completely characterize emission from the facility, but they are not included in the most recent HARP2 ADMRT Health Table and are therefore not incorporated into the risk assessment.

Potential Carcinogenic Results

Table B-1 summarizes the cancer risk results of this HRA. All receptors were evaluated for the inhalation exposure pathway. The non-inhalation exposure pathways modeled for residential receptors included dermal absorption, soil ingestion, mother's milk, and homegrown produce. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion.

The receptor ID, UTM coordinates, and cancer risk for the Point of Maximum Impact (PMI) are listed below. Also listed is the total cancer risk from multipathway substances at the PMI, which is presented in Table B-7. The PMI is located on the facility fenceline (northern side of property) (Figure A-4).

Point of Maximum Impact (PMI): Cancer Risk

Receptor ID:	35815
UTM Coordinates:	462656.78, 3732208.25 (UTM E, UTM N)
Cancer Risk (per 10 ⁶ individuals exposed):	33.94
Multipathway Cancer Risk (per 10 ⁶ individuals exposed):	26.37

The receptor ID, UTM coordinates, and cancer risk for the Maximum Exposed Individual Resident (MEIR) are listed below. Also listed is the total cancer risk from multipathway substances at the MEIR, which is presented in Table B-9. The MEIR is located at a residence north of the facility on Black Powder Road (Figure A-4).

Maximum Exposed Individual Resident (MEIR): Cancer Risk

Receptor ID:	1
UTM Coordinates:	462509.00, 3732882.33 (UTM E, UTM N)
Cancer Risk (per 10 ⁶ individuals exposed):	6.51
Multipathway Cancer Risk (per 10 ⁶ individuals exposed):	5.59

The receptor ID, UTM coordinates, and cancer risk for the Maximum Exposed Individual Worker (MEIW) are listed below. Also listed is the total cancer risk from multipathway substances at the MEIW, which is presented in Table B-11. The MEIW is located to the north of the facility at the Jungle Island Paintball Park with the address 14881 Temescal Canyon Rd, Lake Elsinore, CA 92530 (Figure A-4).

Maximum Exposed Individual Worker (MEIW): Cancer Risk

Receptor ID:	13723
UTM Coordinates:	462556.00, 3732314.54 (UTM E, UTM N)
Cancer Risk (per 10 ⁶ individuals exposed):	0.99
Multipathway Cancer Risk (per 10 ⁶ individuals exposed):	0.58

Figure A-4 identifies the location of the PMI, MEIR, and MEIW for cancer risk. For the PMI, MEIR, and MEIW, arsenic and cobalt comprise more than 90% of the contribution to the total cancer risk (Table B-7, B-9, and B-11). Four (4) sources account for 91.48% of the cancer risk at the PMI including the Tunnel Kiln No. 4 (**S0076**), C139 Baghouse Control on Brick Forming (**S0139**), C143 Baghouse on Clay Handling System (**S0143**), and Mined Clay Stockpile (**S1019**). The same four sources with the addition of Tunnel Kiln No. 2 (**S0107**), Aggregates Quarry (**S0906**), and Clay Quarry (**S0907**) comprise 93.64% of the total cancer risk at the MEIR. Tunnel Kiln No. 4 (**S0076**), C139 Baghouse Control on Brick Forming (**S0139**), C143 Baghouse on Clay Handling System (**S0143**), Mined Clay Stockpile (**S1019**), and Clay Quarry (**S0907**) contribute 93.93% of the total cancer risk at the MEIW. Tables B-8, B-10, and B-12 report the cancer risk by source for the PMI, MEIR, and MEIW, respectively.

The MEIR and MEIW cancer risk values do not exceed the notification risk level (1×10^{-5} or ten-in-one million) for which SCAQMD requires public notification.

Cancer risk isopleths for the residential cancer risk analysis (30-year exposure duration) and worker cancer risk analysis (25-year exposure duration) are shown in Figures A-5 and A-6. The zone of impact (ZOI) for cancer risk refers to the area where receptors have a potential cancer risk equal to or greater than one in one million (1×10^{-6}). There are several sensitive receptor areas near the facility located within the ZOI derived from the residential cancer risk analysis (Figure A-5 and Table B-6). There are no sensitive receptors with a 30-year exposure duration cancer risk higher than (1×10^{-5} or 10 in 1 million). The Alberhill Elementary School, approximately 280 meters from the facility boundary, is the closest sensitive receptor; 30-year exposure duration cancer risk at the school was 3.92 per million exposed. The Alberhill Elementary School is also the sensitive receptor with the highest 30-year exposure duration cancer risk. No sensitive receptors are in the ZOI derived from the worker cancer risk analysis (Figure A-6).

240 census tracts were used to calculate the cancer burden based on the ZOI determined from the residential cancer risk analysis assuming a 30-year exposure (Figure A-14). 140 census tracts were found in which the lifetime (70-year exposure duration) cancer risk is greater than 1×10^{-6} , equating to 12,527 people (refer to Table B-29 and Appendix C). The total cancer burden is estimated to be 0.025 as shown in Table B-29. This value does not exceed the SCAQMD action risk level for cancer burden (0.5). For completeness,

Figure A-15 shows the one chance in-one-million risk isopleth based on a 70-year lifetime exposure for population cancer risk.

Chronic Noncarcinogenic Health Hazards

Table B-1 summarizes the noncancer chronic health hazard results of this HRA. The non-inhalation exposure pathways modeled for residential receptors included dermal absorption, soil ingestion, mother's milk, and homegrown produce. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion.

The receptor ID, UTM coordinates, total chronic hazard index (HI), and maximum target organ for the PMI are listed below. The PMI is located on the facility fenceline (northern side of property) (Figure A-7).

Point of Maximum Impact (PMI): Total Chronic Hazard Index (HI)

Receptor ID:	35815
UTM Coordinates:	462656.78, 3732208.25 (UTM E, UTM N)
Total Chronic Hazard Index (HI):	2.24
Max Target Organ:	Respiratory System

The receptor ID, UTM coordinates, total chronic HI, and maximum target organ for the MEIR are listed below. The MEIR is located at a residence southeast of the facility along Ladrillo Street (Figure A-7).

Maximum Exposed Individual Resident (MEIR): Total Chronic Hazard Index (HI)

Receptor ID:	30189
UTM Coordinates:	464140.00, 3729780.00 (UTM E, UTM N)
Total Chronic Hazard Index (HI):	0.46
Max Target Organ:	Respiratory System

The receptor ID, UTM coordinates, total chronic HI, and maximum target organ for the MEIW are listed below. The MEIW is located to the north of the facility at the Jungle Island Paintball Park with the address 14881 Temescal Canyon Rd, Lake Elsinore, CA 92530 (Figure A-7).

Maximum Exposed Individual Worker (MEIW): Total Chronic Hazard Index (HI)

Receptor ID:	13723
UTM Coordinates:	462556.00, 3732314.54 (UTM E, UTM N)
Total Chronic Hazard Index (HI):	0.34
Max Target Organ:	Respiratory System

Figure A-7 identifies the location of the PMI, MEIR, and MEIW for total chronic HI. For PMI, emissions of arsenic comprise 95.95% of the contribution to total chronic HI and appear to drive the potential health impacts (Table B-13). For MEIR and MEIW, emissions of arsenic and crystalline silica comprise over 90% of the total chronic HI and appear to drive the potential health impacts (Table B-15 and B-17). The top four sources contributing to the total chronic HI at the PMI and MEIW include Tunnel Kiln No. 4 (**S0076**), C139 Baghouse Control on Brick Forming (**S0139**), C143 Baghouse on Clay Handling System (**S0143**), and the Mined Clay Stockpile (**S1019**). These sources comprise 90.48% and 83.47% of the total chronic HI at the PMI and MEIW, respectively. The top four sources contributing to the total chronic HI at the MEIR include the Aggregates Quarry (**S0906**), Clay Quarry (**S0907**) Unpaved Roads for Shipped Aggregate and Ready-Mix (**S1052**), and Feed and Production Stockpiles for the Aggregate Wash Plant/Simplicity Screen (**S1009**). These sources contributed 61.47% of the total chronic HI at the MEIR. Tables B-14, B-16, and B-18 report the total chronic HI by source for the PMI, MEIR, and MEIW, respectively.

The MEIR and MEIW total chronic HI values do not exceed the notification risk level (1.0) for which SCAQMD requires public notification. There are no sensitive receptors that are above a total chronic HI of 0.5 based on the modeling performed for residential receptors (Table B-6). Therefore, no sensitive receptors exist in the ZOI for chronic hazards (Figures A-8 and A-9).

8-hour Chronic Noncarcinogenic Health Hazards

Table B-1 summarizes the noncancer 8-hour chronic health hazard results of this HRA. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion.

The receptor ID, UTM coordinates, total 8-hour chronic hazard index (HI), and maximum target organ for the PMI are below. The PMI is located on the southeast facility fenceline adjacent to Lake Street (Figure A-10).

Point of Maximum Impact (PMI): Total 8-Hour Chronic Hazard Index (HI)

Receptor ID:	35922
UTM Coordinates:	464140.49, 3729937.11 (UTM E, UTM N)
Total 8-Hour Chronic Hazard Index (HI):	0.23
Max Target Organ:	Central Nervous System

The receptor ID, UTM coordinates, and total 8-hour chronic HI for the MEIW are listed below. The MEIW is located southeast of the facility at the Alberhill Ranch Community Park (Figure A-10).

Maximum Exposed Individual Worker (MEIW): Total 8-Hour Chronic Hazard Index (HI)

Receptor ID:	31931
UTM Coordinates:	464450.00, 3730170.00 (UTM E, UTM N)
Total 8-Hour Chronic Hazard Index (HI):	0.03
Max Target Organ:	Central Nervous System

Figure A-10 identifies the location of the PMI and MEIW. For PMI, emissions of manganese comprise over 90% of the contribution to total 8-hour chronic HI (Table B-25). For MEIW, emissions of manganese and arsenic make up over 90% of the contribution to 8-hour chronic health hazard (Table B-27). The Unpaved Roads for Shipped Aggregate and Ready-Mix (**S1052**) contribute 89.14% of the maximum 8-hour chronic hazard index at the PMI. The top two sources contributing to the maximum 8-hour chronic hazard index at the MEIW include the Unpaved Roads for Shipped Aggregate and Ready-Mix (**S1052**) and Aggregate Quarry (**S0906**). **S1052** and **S0906** contribute 59.36% of total maximum 8-hour chronic hazard index at the MEIW. Tables B-26 and B-28 report the 8-hour chronic hazard index by source for the PMI and MEIW, respectively.

The MEIW value does not exceed the notification risk level (1.0) for which SCAQMD requires public notification. No sensitive receptors exist in the ZOI for noncancer 8-hour chronic worker hazards. 8-hour chronic hazards are under the threshold for ZOI and does not meet the minimum requirement for a ZOI (i.e., total 8-hour chronic HI equal or greater than 0.5). Therefore, no figure showing the isopleths for 8-hour chronic hazards is provided.

Acute Noncarcinogenic Health Hazards

Table B-1 summarizes the noncancer acute health hazard results of this HRA. The receptor ID, UTM coordinates, total acute hazard index (HI), and maximum target organ for the PMI are listed below. The PMI is located on the northern facility fenceline (Figure A-11).

Point of Maximum Impact (PMI): Total Acute Hazard Index (HI)

Receptor ID:	12741
UTM Coordinates:	462636.00, 3732214.54 (UTM E, UTM N)
Total Acute Hazard Index (HI):	0.16
Max Target Organ:	Reproductive System

The receptor ID, UTM coordinates, and total acute HI for the MEIR are listed below. The MEIR is located at a residence south of the facility on Bayberry Drive (Figure A-11).

Maximum Exposed Individual Resident (MEIR): Total Acute Hazard Index (HI)

Receptor ID:	26107
UTM Coordinates:	463440.00, 3729400.00 (UTM E, UTM N)
Total Acute Hazard Index (HI):	0.10
Max Target Organ:	Immune System

The receptor ID, UTM coordinates, and total acute HI for the MEIW are listed below. The MEIW is located north of the facility at Jungle Island Paintball Park with an address of 14881 Temescal Canyon Rd, Lake Elsinore, CA 92530 (Figure A-11).

Maximum Exposed Individual Worker (MEIW): Total Acute Hazard Index (HI)

Receptor ID:	13622
UTM Coordinates:	462536.00, 3732304.54 (UTM E, UTM N)
Total Acute Hazard Index (HI):	0.08
Max Target Organ:	Reproductive System

Figure A-11 identifies the location of the PMI, MEIR, and MEIW. Emissions of arsenic and benzene comprise over 90% of the total acute HI at the PMI and MEIW, and appear to drive the potential health impacts (Tables B-19 and B-23). Emissions of nickel comprise over 90% of the total acute HI at the MEIR (Table B-21). Tunnel Kiln No. 4 (**S0076**), Tunnel Kiln No. 2 (**S0107**), C139 Baghouse Control on Brick Forming (**S0139**), C143 Baghouse on Clay Handling System (**S0143**), and Mined Clay Stockpile (**S1019**) account for 91.13% and 83.94% of the total acute HI at the PMI and MEIW, respectively. Unpaved Roads for Shipped Aggregate and Ready-Mix (**S1052**) contribute 98.21% of the total acute HI at the MEIR. Tables B-22, B-24, and B-26 report the total acute HI by source for the PMI, MEIR, and MEIW, respectively.

The MEIR and MEIW total acute HI values do not exceed the notification risk level (1.0) for which SCAQMD requires public notification. There are no sensitive receptors that are above a noncancer acute hazard index of 0.5 (Table B-6). Therefore, no sensitive receptors exist in the ZOI for acute hazards (Figure A-12).

1.0 INTRODUCTION

This HRA was prepared for Pacific Clay Inc. (“Pacific Clay,” “the facility”) pursuant to California Air Resources Board’s Air Toxics Hot Spots Program (Hot Spots Program), which is implemented per the requirements of AB 2588. Guidelines used in the preparation of this HRA included OEHHA’s “Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (May 2015)” (OEHHA HRA Guidance Manual) and SCAQMD’s “AB 2588 and Rule 1402 Supplemental Guidelines (October 2020)” (SCAQMD Guidelines).

The objectives of this HRA are to (1) estimate off-site air concentrations of the substances identified in AB 2588 and emitted from the facility, (2) evaluate potential exposures to the surrounding community, (3) characterize the potential health risks to individuals and the exposed population associated with those levels of exposure, and (4) determine if additional actions are required per Rule 1402. This report presents the results of the HRA analysis utilizing refined air dispersion modeling based on OEHHA Guidelines.

1.1 Facility Identification

Name: Pacific Clay Products
Address: 14741 Lake Street Lake Elsinore, CA 92530
Facility ID: 017953

1.2 Applicable Regulations

SCAQMD is responsible for implementing AB 2588 for facilities within its jurisdiction, which requires an HRA, public notification, and risk reduction measures for facilities that exceed applicable risk levels. SCAQMD public notification and risk reduction audit and plan levels for carcinogenic impacts, non-cancer acute, and non-cancer chronic hazard impacts are provided on the “Air Toxics “Hot Spots” Program (AB 2588)” page available on the SCAQMD website. The following key requirements are provided:

- Public Notification Risk Levels – The SCAQMD requires public notification to affected populations that equal or exceed the Rule 1402 Notification Risk Level:
 - Maximum Increased Cancer Risk (MICR) = 1×10^{-5} (i.e., ten-in-one million)
 - Chronic Hazard Index (HI) or Acute HI = 1.0
- Action Risk Levels – The SCAQMD requires facilities to implement risk reduction measures if affected populations are exposed to health risk levels that equal or exceed the following: Maximum Increased Cancer Risk (MICR) = 25×10^{-6} (i.e., 25-in-one million), Chronic HI or Acute HI = 3.0, or Cancer Burden = 0.5.
- Significant Risk Levels – The SCAQMD requires facilities to implement risk reduction measures if affected populations are exposed to health risk levels that equal or exceed the following: MICR = 10×10^{-5} (i.e., 100 in 1 million) or Chronic HI or Acute HI = 5.0.

1.3 Background

SCAQMD requested the facility to submit a Health Risk Assessment (HRA) based on a modified air toxics inventory report (ATIR) for the 2017 calendar year (CY). The ATIR was provided by SCAQMD to Pacific Clay in

the form of an Emissions Inventory Module (EIM) transaction file. The EIM transaction file was later updated to revise emissions from welding sources and received from SCAQMD on December 15, 2023. Consequently, the facility is submitting this HRA using the data from the modified ATIR supplied by SCAQMD.

1.4 Report Format

The report format for this HRA is consistent with SCAQMD requirements, and based on guidance in the OEHHA HRA Guidance Manual, as well as Appendix B of the SCAQMD Guidelines.

- Section 0.0 **Executive Summary** – This section summarizes facility information, emission sources, modeling parameters, and key findings of this HRA.
- Section 1.0 **Introduction** – This section discusses applicable regulatory requirements, project background, and report format.
- Section 2.0 **Hazard Identification** – This section identifies the reported substances emitted from the facility. The substances evaluated for cancer and noncancer endpoints are identified for Appendix A-I substances.
- Section 3.0 **Exposure Assessment** – This section describes the estimated emissions for the chemicals of interest, the air dispersion modeling for determining airborne concentrations, the exposure pathways evaluated, and off-site receptors evaluated.
- Section 4.0 **Risk Characterization** – This section presents the results of the risk assessment for the exposure scenarios evaluated. An evaluation of the zone of impact (ZOI), sensitive receptors, and population health risks are presented where appropriate.
- Section 5.0 **References** – This section identifies the various publications, sources, and other references used to prepare this HRA.

In addition to this HRA report, a File Transfer Protocol (FTP) link has been submitted which includes required and supplemental electronic files, including modeling input and output files.

Electronic files included are as follows:

- AERMOD Input Files
- AERMOD Files
- AERMOD Output Files
- AERMAP Input and Output Text Files
- AERMOD Plot Files by 1 Hour and Period by Source (.plt)
- USGS Terrain File (usgs_ned_1_n34w118_gridfloat.tif)
- Meteorological Files (SLSI_v9.PFL, SLSI_v9.SFC)
- HARP2 input files (*HRAInput.hra)
- Supplemental input file with health values (*PoIDB.csv)
- Supplemental input file with GLCs (*GLCList.csv)
- Output log file (*output.txt)
- Output files with cancer risk details (*CancerRisk.csv)

- Output file with chronic non-cancer risk details (*NCChronicRisk.csv)
- Output file with acute non-cancer risk details (*NCAcuteRisk.csv)
- Pathway Receptor Information (*PathwayRec.csv)

2.0 HAZARD IDENTIFICATION

In this initial step of HRA development, hazard identification involves identifying if a hazard exists, and if so, what are the pollutant(s) of concern and whether a pollutant has potential human carcinogen and/or other adverse health effects. In general, OEHHA Guidelines require chemicals identified as Appendix A-I Substances per AB 2588 regulations to be included in HRAs. This section provides descriptions of the facility, applicable processes, pollutants of concern, and emission estimates.

2.1 Facility Description

Pacific Clay is located at 14741 Lake Street, Lake Elsinore, CA 92530. The facility is a comprehensive open pit mining operation in conjunction with a clay brick manufacturing plant, aggregate processing plants, a ready-mix concrete batch plant, and associated support, maintenance, and administrative facilities. Equipment used at the site in the mining operations includes mobile equipment such as dozers and front-end loaders. For clay brick manufacturing, the facility operates under SIC Code 3251 – Brick and Structural Clay Tile. For aggregate extraction/processing and ready mix-concrete batching operations, the facility operates under SIC Code 1442 - Construction Sand and Gravel and SIC Code 3273 - Ready-Mixed Concrete, respectively.

Emission rates for each source for this HRA are provided in Table B-2a, which includes source names, chemical abstract system (CAS) numbers, maximum hourly emissions, and annual average emissions. Emission rates are based on the modified 2017 ATIR provided by SCAQMD (i.e., EIM transaction file).

Pacific Clay is located near residential areas, which vary in density. To the west and southeast of the facility are residential land use. Southwest of the facility is rural residential land use. The facility sits in the Alberhill-Temescal Valley at an approximate elevation ranging between 558 and 367 meters above mean sea level and is surrounded by hilly topography. The total area of the facility is approximately 1,375 acres. Figure A-1 identifies the facility's immediate vicinity and boundary.

2.2 Process Description

Pacific Clay provides a variety of quality clay brick products including face brick, thin brick, clay bullnose, clay pavers, and wall caps that are produced from clay that is mined onsite. The facility also performs aggregate quarrying and concrete batching operations. For the purposes of this HRA, the primary toxic air contaminant emission sources for Pacific Clay's operations include aggregate/clay quarrying, haul roads, brick manufacturing, aggregate processing, concrete batching, and ancillary/support operations. The below subsections summarize the sources that resulted in releases of toxic air contaminant (TAC) emissions during the 2017 CY that were included in the HRA. Please note that source IDs from sources listed in Table B-2a are indicated in bold below.

2.2.1 Clay and Aggregate Quarrying

Clay is excavated from the clay quarry in the northern part of the facility. This includes removing overburden material and clay using heavy earthmoving equipment and stockpiling the overburden and clay into separate stockpiles. Stockpiled overburden is used as backfill in the quarried area. Clay is transferred from the clay quarry to mixing area via a haul road and stockpiled using front-end loaders. During the 2017 CY the facility operated the following clay quarrying sources with TAC emissions (Figure A-2 and Table B-2a):

- Clay Quarry (**S0907**)
- Paved Haul Road – Clay Mined for Brick (**S1055**)
- Mined Clay Stockpile (**S1019**)

Aggregate is mined from the aggregate quarry in the southern part of the facility. Like clay quarrying, aggregate quarrying includes removing overburden material and aggregate using heavy earthmoving equipment and stockpiling the overburden and aggregate into separate stockpiles. Stockpiled overburden is used as backfill in the quarried area. Aggregates are transferred to the aggregate processing area via a haul road to processing equipment. During the 2017 CY the facility operated the following aggregate quarrying sources with TAC emissions (Figure A-3 and Table B-2a):

- Aggregate Quarry (**S0906**)
- Paved Haul Road – Mined Aggregate (**S1056**)

The principal TACs associated with clay and aggregate quarrying include metal species of fugitive particulate matter from earthmoving, haul roads, and stockpiles including arsenic, manganese, copper, nickel, zinc, barium, chromium (hexavalent and non-hexavalent), selenium, beryllium, crystalline silica, and cobalt. Metal emissions from quarrying are modeled as volume sources, while haul roads are modeled as line volume sources. Stockpiles are modeled as polygon area sources (Figure A-2, Figure A-3, and Table B-5).

2.2.2 Brick Manufacturing

Brick manufacturing involves blending stockpiled clay with imported clay; grinding and classifying clay blends; and wetting, storing, extruding, mixing, forming, drying, oven firing, tumbling, cutting, grading, and warehousing bricks. During the 2017 CY the facility operated the following clay manufacturing sources with TAC emissions (Figure A-2 and Table B-2a):

- C143 Baghouse on Clay Handling System (**S0143**)
- C139 Baghouse Control on Brick Forming (**S0139**)
- Tunnel Kiln No. 3 (**S0062**)
- Envelope Kiln (**S0075**)
- Tunnel Kiln No. 4 (**S0076**)
- Tunnel Kiln No. 2 (**S0107**)
- C173 Baghouse on Brick Tumbler No. 1 (**S0173**)

- C175 Baghouse on Brick Tumbler No. 2 (**S0175**)
- Brick Tumblers, Coatings (**S0100**)

The clay handling and brick forming systems at the facility are equipped with baghouses. The principal toxic air contaminants associated with the clay handling system (e.g., transfer points, crushing, grinding, and screening) include metal species of fugitive particulate matter including arsenic, manganese, copper, nickel, zinc, crystalline silica, barium, and cobalt. The principal TACs associated with the brick forming systems (e.g., transfer points and milling) consist of the same metal species of fugitive particulate matter as the clay handling system. All toxic air contaminants from the clay handling and brick forming systems are modeled as volume sources (Figure A-2 and Table B-5).

The facility uses several tunnel and envelope kilns fired by natural gas to produce bricks. The TACs associated with the kilns include several metals and organic compounds from natural gas combustion and the raw material being fired. All TACs from kilns are modeled as point sources (Figure A-2 and Table B-5).

The facility uses tumblers to create a weathered look and apply coating to certain brick products. The tumblers are equipped with baghouses. The TACs associated with tumblers include several metals species of fugitive particulate matter emissions and organic compounds associated with brick coatings. All TACs from tumblers are modeled as volume sources (Figure A-2 and Table B-5).

2.2.3 Aggregate Processing

The facility operates conveyors, stackers, crushers, screens, and wash plants used to process mined aggregates. Some aggregate processing equipment at the facility is portable. Additionally, some equipment is used to crush waste brick and concrete. During the 2017 CY the facility operated the following aggregate processing sources with toxic air contaminant emissions (Figure A-3 and Table B-2a):

- Process 8, System 2: D191 through D193 (Aggregate Receiving and Stacking) (**S0803**)
- Process 8, System 3: D196, D198 (Aggregate Receiving) (**S0804**)
- Process 8, System 3: D197 through 204 and C209 (Aggregate Receiving, Screening, and Stacking) (**S0209**)
- Process 8, Systems 3 and 4: D205 through D212 (Aggregate Wash Plant Feed) (**S0805**)
- Process 8, System 6: D228 through 233, and C234 (Aggregate, Brick, and Concrete Crushing – Base Plant) (**S0802**)
- Feed and Production Stockpiles for the Aggregate Wash Plant/Simplicity Screen (**S1000, S1001, S1002, S1003, S1004, S1005, S1006, S1007, S1008, S1009, S1022**)
- Feed and Production Stockpiles for the Base Plant (**S1011, S1012**)

Please note that for the purposes of air dispersion modeling the feed and production stockpiling sources for each of the Aggregate Wash Plant/Simplicity Screen and Base Plant were aggregated (Table B-5). For example, the eleven (11) stockpile sources for the Aggregate Wash Plant/Simplicity Screen were combined into one (1) polygon source for the model (Model Source ID: S1009) (Figure A-3 and Table B-5).

The principal TACs associated with the aggregate processing sources listed above include metal species of fugitive particulate matter from transfer points, crushing, screening, and stockpiling. The fugitive metal species include arsenic, manganese, copper, nickel, zinc, barium, chromium (hexavalent and non-hexavalent), selenium, beryllium, crystalline silica, mercury, and cobalt. All TACs from aggregate processing operations are modeled as volume or polygon area sources (Figure A-3 and Table B-5).

2.2.4 Concrete Batch Plant

The facility operated one (1) ready-mix concrete batch plant during the 2017 CY (Concrete Batch Plant No. 2). During the 2017 CY the facility operated the following concrete batching sources with TAC emissions (Figure A-3 and Table B-2a):

- Process 9, System 2: D213, D217 – D220 (Truck Unloading, Concrete Batching) (**S0806**)
- C216 Fabric Filter Control (S3 Cement Silo) (**S0216**)
- C227 Baghouse Control (2 Silo Cement, 1 Flyash, 1 Mixer, 1 Loadout) (**S0227**)
- Ready-Mix Plant No. 2 Feed Stockpiles (**S1013, S1014, S1015, S016, S1017, S1018**)

Please note that for the purposes of air dispersion modeling the ready-mix stockpile feed sources were aggregated (Table B-5). For example, the six (6) stockpile sources for the ready-mix plant were combined into one (1) polygon source for the model (Model Source ID: S1018) (Figure A-3 and Table B-5).

The principal TACs associated with the concrete batch plant sources listed above include metal species of fugitive particulate matter. The fugitive metal species include lead, barium, cadmium, arsenic, manganese, copper, nickel, zinc, aluminum, chromium (hexavalent and non-hexavalent), selenium, beryllium, cobalt, mercury, and crystalline silica. All TACs from the concrete batch plant operations are modeled as volume sources, while the feed stockpile is modeled as an area source (Figure A-3 and Table B-5).

2.2.5 Ancillary/Support Operations

Support operations at the facility include:

- Vehicle and equipment maintenance and repair activities;
- Soil amendment production; and
- Offsite shipping of bricks, aggregates, and ready-mix concrete.

Emission producing vehicle and equipment maintenance activities at the facility includes fueling vehicles and welding. During the 2017 CY the facility operated the following vehicle and equipment maintenance and repair sources with TAC emissions (Figure A-2, Figure A-3, and Table B-2a):

- Gasoline Storage and Dispensing (**S0114**)
- Portable Equipment Welding (**S0901**)
- Equipment Welding (**S0902**)

The principal TACs associated with gasoline storage and dispensing include organic compounds from fugitive reactive organic gas vapors. For welding, TACs include oxides of metals caused by contact between the oxygen in the air and the vaporized metals. All TACs from the vehicle and equipment maintenance activities were modeled as volume sources (Figure A-2, Figure A-3, and Table B-5).

The facility uses portable screening plants to produce soil amendment from topsoil. During the 2017 CY the facility operated the following soil amendment production sources with TAC emissions (Figure A-2, Figure A-3, and Table B-2a):

- Trans-American Portable Screening Plant and Engine (**S0253**)
- Extec Portable Screening Plant and Engine (**S0122**)
- Feed and Production Stockpiles for the Trans-American Portable Screening Plant (**S1020, S1021**)
- Feed and Production Stockpiles for the Extec Portable Screening Plant (**S1010**)

For the purposes of air dispersion modeling the feed and production stockpiling sources for the Trans-American Screening Plant (i.e., **S1020, S1021**) were aggregated (Model Source ID: S1021) (Table B-5).

The principal TACs associated with the topsoil producing sources listed above include metal species of fugitive particulate matter from transfer points, screening, and stockpiling. The fugitive metal species include arsenic, manganese, copper, nickel, zinc, barium, chromium (hexavalent and non-hexavalent), selenium, beryllium, crystalline silica, mercury, and cobalt. Diesel particulate matter emissions are associated with the Trans-American and Extec portable screening plant engines. All metal and diesel particulate matter emissions from aggregate processing operations are modeled as volume or polygon area sources (Figures A-2, A-3, and Table B-5).

The facility ships produced bricks, aggregates, and ready-mix offsite. During the 2017 CY the facility operated the following haul road sources with TAC emissions (Figure A-2, Figure A-3, and Table B-2a):

- Unpaved Haul Road – Finished Brick (**S1051**)
- Unpaved and Paved Haul Road – Ready-Mix Concrete (**S1050, S1053**)
- Unpaved and Paved Haul Road – Aggregates (**S1052, S1054**)

Please note that for the purposes of air dispersion modeling, the unpaved haul road sources for the ready-mix concrete and aggregates (i.e., **S1050, S1052**) were aggregated into one (1) model source (Model Source ID: S1052) (Figure A-3 and Table B-5).

The principal TACs associated with the unpaved and paved road sources listed above include metal species of fugitive particulate matter from road traffic. The fugitive metal species include arsenic, aluminum, lead, manganese, copper, nickel, zinc, barium, chromium (hexavalent and non-hexavalent), cadmium, mercury, beryllium, selenium, and crystalline silica. All TACs from roads are modeled as volume line sources (Figure A-2, Figure A-3, and Table B-5).

2.3 Emissions Inventory

For purposes of this HRA, emissions and other information were utilized as identified in the approved 2017 modified ATIR (i.e., EIM transaction file provided by SCAQMD) and reported emissions. These processes were modeled as point, volume, line volume, and polygon area sources (Figure A-2, Figure A-3, and Table B-5). Hours of operation for sources are included in the EIM transaction file provided by SCAQMD. Emission rates for each source with TAC emissions for this HRA are provided in Table B-2a, which include source names, CAS numbers for chemicals, maximum hourly emissions, and annual average emissions. Emission rates by substance are presented in Table B-2b. Emission rates are based on the 2017 modified ATIR, as provided by the SCAQMD. Modeled sources are provided in Table B-5, which includes several emission sources shown in Table B-2a that were aggregated/combined, as previously discussed in Section 1.6.

3.0 EXPOSURE ASSESSMENT

Exposure assessment involves estimating the extent of public exposure to each regulated substance for which there exists potential cancer risk and/or noncancer health hazard effects. This involves modeling of environmental transport, evaluation of environmental fate, identification of exposure routes, identification of exposed populations, and estimation of short-term and long-term exposure levels. This section describes air dispersion modeling and associated parameters used to estimate the potential for human exposure to the AB 2588 emissions from this facility, including: (1) summarize and describe the source information and emission estimates used in the environmental transport models; (2) describe potentially exposed populations; (3) describe the assumptions used in the assessment of chemical exposure model; and (4) identify primary methodologies for calculating health risk impacts.

3.1 Chemicals of Interest

Per OEHHA Guidelines, the modeled chemicals in this HRA from the facility emission sources were identified from AB 2588 Appendix A-I list of substances. The chemicals that were identified from the listed Appendix A-I substances are displayed in Tables B-2a and B-2b. Chemical profiles of these air toxics are well established by OEHHA and regulatory authorities, such as physical characteristics, general uses, and toxicity information. As shown by Table B-3, of the 50 identified AB 2588 emitted substances, 16 substances have carcinogenic impacts, 33 substances have chronic noncancer hazard impacts, and 21 substances have acute noncancer hazard impacts. Some substances have multiple health impacts.

As shown by Table B-4, potential target organs for the acute and chronic noncancer health effects are as follows: cardiovascular system (CV), central nervous system (CNS), immune system (IMMUN), kidney (KIDN), alimentary liver system (GILV), reproductive system (REPRO), respiratory system (RESP), skin (SKIN), eye (EYE), endocrine system (ENDO), and hematopoietic system (HEM).

3.2 Air Dispersion Modeling

Air dispersion modeling is used to estimate off-site air concentrations of chemicals associated with facility emissions. For this HRA, Sespe used the HARP2 Air Dispersion Modeling and Risk Tool (ADMRT) (Version

22118). U.S. EPA compiled version of AERMOD is integrated within HARP2 ADMRT along with its related processors such as AERMAP, AERPLOT, and BPIP PRIME.

Model Options

The following AERMOD model options were used in the modeling analysis:

- AERMOD Version 23132
- HARP2 Version 22118
- Projection Universal Transverse Mercator (UTM)
- Datum World Geodetic System 1984
- UTM Zone 11
- Hemisphere Northern
- Selection Hourly and Period
- AERMOD File .ADI and .isc
- AERMOD Output File .ADO and Plot File by Source (.PLT)

The following default model options were used:

- Use regulatory default? Yes
- Urban or Rural? Urban
- Flagpole Receptors No
- Gradual plume rise? No
- Stack-tip downwash? Yes
- Buoyancy-induced dispersion? Yes
- Calms processing? No
- Missing data processing? No
- Include building downwash? No
- Lowbound option? No

To determine noncarcinogenic acute health hazards, the HARP2 ADMRT calculated ground level concentrations for the maximum 1-hour averaging period. To determine noncarcinogenic chronic health hazards and carcinogenic health impacts, HARP2 ADMRT dispersion calculated ground level concentrations for the annual average period.

3.2.1 Source Parameters

Based on the 2017 CY EIM transaction file provided by SCAQMD, modeling sources were identified for purposes of this HRA. Modeling sources are generally identified as point, line, volume, or area sources. For purposes of this HRA, all the emission sources for this facility are either point, line, volume, or area sources. Table B-2a provides maximum 1-hour and annual average emission rates by each source and regulated chemical. Table B-2b provides facility-wide total emissions of each regulated chemical. Table B-5 identifies each modeled source and the key parameters that were applied to applicable emission sources, which

includes modeled source ID, source name, UTM coordinates, base elevation, heights, stack velocity, stack temperature, and other dimensions. For inputted sources, AERMOD calculates concentrations based on inputted source-specific parameters, including the emission rate, stack height, stack inside diameter, stack exit velocity, and stack gas temperature.

3.2.2 Receptors

According to OEHHA guidance, HRAs must provide a detailed analysis of the potentially exposed population. This analysis includes identification of the maximum exposed individuals (MEIs) for nearby workers (MEIW) and residences (MEIR), identification of sensitive receptors within the zone of impact (ZOI), identification of fence line receptors, and evaluation of potential population impacts within the ZOI. As required, various receptor locations were inputted into AERMOD, which covered the property fence line, nearby residences and workers, sensitive receptors, and census block receptors. Additional detail for each receptor type is provided as follows:

- **Fenceline** - Fenceline receptors were defined at 20-meter increments along the property border, in accordance with SCAQMD guidance.
- **Nearby Residences and Workers (Cartesian Grids)** – The general locations of potential MEIs were determined based on the location of sources and the surrounding land use. The nearest immediate residential receptors are located on the southeast side and northwest side of the facility boundary. Worker receptors and a few residences are located immediately north of the facility boundary. A total of five (5) cartesian grids were established summarized and shown in Figure A-13 to adequately characterize cancer risk and noncancer health hazards at receptors and establish ZOIs.
- **Nearby Residences (Discrete Receptors)** – Several nearby residences were identified and represented as discrete receptors, specifically to determine the MEIR for cancer risk.
- **Sensitive Receptors** – In accordance with OEHHA guidance, sensitive receptors must be identified within the ZOI, such as K-12 schools, hospitals, nursing/convalescent homes, daycares, and senior centers. As applicable, to determine the location of nearby sensitive receptors within the ZOI, Sespe reviewed applicable public sources of information and databases, including Google and online search. Sensitive receptors are identified in Table B-6 and shown in Figure A-1.
- **Census Block Receptors** - AB2588 also requires an estimate of the number of impacted individuals in residences and off-site workplaces within the ZOI. Census data is used to determine affected populations within geographic areas defined by census tracts. A census tract centroid (geographical center) is identified as a receptor location, which represents exposure to the population within that census tract. Census tract information was obtained directly from HARP2. 240 census tracts were used (140 of which had a population greater than 0), which overlapped the ZOI derived from 30-year exposure duration residential cancer risk (Figure A-14). The total cancer burden is estimated to be 0.025 as shown in Table B-29.

3.2.3 Meteorological and Elevation Data

The facility is in Lake Elsinore at an elevation ranging from approximately 367 to 559 meters above mean sea level. In general, the local topography around the facility is hilly within an urban environmental setting. Air dispersion modeling at the facility was conducted for the facility using surface and upper air meteorological (met) data for 2012 to 2016 from Lake Elsinore met station provided by SCAQMD. The ASCII data are in the format specified by AERMOD for standard ASCII input. The surface file (ELSI_v9.SFC) and profile file (SLSI_v9.PFL) were inputted into AERMOD and processed with all receptors and sources. Terrain data (usgs_ned_1_n34w118_gridfloat.tif) were obtained from the USGS in the form of National Elevation Dataset (NED) files at 1/3 arc second resolution (approximately 10 meters).

3.2.4 Variable Emissions

Non-continuous operations for the below mining related sources at the facility were accounted for in AERMOD using variable emission factors. The model was run using emission scalars to sum annual emissions up to 31,536 kg/yr assuming an emission rate of 1 g/s. It was assumed all mining related sources operate 12 hours/day, 7 days/week, 52 weeks/ year. Therefore, an emission scalar of 2 was applied for hours when the mining related sources are operating (i.e., 6 AM to 6 PM), and an emission scalar of 0 was applied for the remaining hours when the mining related sources are not operating.

Model IDs with Variable Emissions	Description
S0235	EXTEC SCREENING PLANT AND ENGINE
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE
S0801	PROCESS 8. SYSTEM 1. COLD FEED PLANT
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193
S0804	PROCESS 8, SYSTEM 3: D196, D198
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220
S901	PAI PORTABLE WELDERS
S906	AGGREGATES QUARRY
S907	CLAY QUARRY

3.3 Assessment of Chemical Exposure

SCAQMD requires that AB2588 HRAs be prepared using the HARP2 model. The most recent version of HARP2 Air Dispersion Modeling and Risk Tool (ADMRT) (Version 22118) was used to prepare this HRA. The HARP2 ADMRT incorporates the current OEHHA guidelines, exposure factors and most recent toxicity values for modeled substances.

3.3.1 Exposure Pathways

Exposure pathways are generally classified as primary pathways and secondary pathways. Inhalation is the primary exposure pathway for all modeled sources and substances. For multipathway substances, there are non-inhalation exposure pathways that should also be evaluated. As applicable, the non-inhalation pathways include dermal exposure, water ingestion, crop ingestion (direct deposition), soil ingestion, ingestion of mother's milk, fish, and dairy products or other.

In general, most air toxics assessed under the Hot Spots Program are volatile organic compounds that remain as gases when emitted into the air. These volatile chemicals are not subject to appreciable deposition to soil, surface waters, or plants. Therefore, human exposure does not normally occur to any appreciable extent via ingestion or dermal exposure. Rather, the primary exposure pathway to these volatiles occurs through the inhalation pathway. A small subset of regulated substances (i.e., semi-volatile organics and metals), are emitted partially or totally as particles subject to deposition. In these cases, the ingestion and dermal pathways must be evaluated, in addition to the inhalation pathway.

Based on SCAQMD guidelines, in addition to the inhalation pathway, residential cancer risk for multipathway substances evaluated the following exposure pathways: home grown produce (fraction = .0137), dermal absorption (warm climate), soil ingestion (deposition rate = 0.02 m/s), and mother's milk. In addition to the inhalation pathway, worker cancer risks for multipathway substances were modeled with the pathways of dermal absorption and soil ingestion (deposition rate = 0.02 m/s). The water ingestion pathway was not considered since the drinking water supply in the vicinity is not derived from local surface water and is not required by SCAQMD. The fish, beef, dairy, pig, chicken, and egg pathways were not considered since they are not required by SCAQMD.

3.3.2 Carcinogenic Health Impacts

In accordance with the SCAQMD and OEHHA guidance, cancer risk estimates based on the theoretical upper-bound excess cancer risk were evaluated for the MEIR, MEIW and PMI. The guidelines also require cancer risk to be evaluated for affected sensitive receptors and populations within the ZOI.

The HARP2 model computes the total excess cancer risk from both inhalation and noninhalation pathways at each receptor location. For example, the inhalation risk for each pollutant at a receptor location is calculated by multiplying the inhalation dosage by its cancer potency factor (CPF). The estimated risks for individual substances emitted by the facility are added to provide the total excess cancer risk for individual receptor locations. For inhalation exposures, the theoretical upper-bound excess cancer risk is estimated assuming that an individual is exposed continuously to the annual average air concentrations over a 30-year lifetime. Once these annual average air concentrations are estimated for each receptor, the excess cancer risk is calculated for the carcinogenic effects in the model.

For residential and sensitive receptors, OEHHA requires a lifetime exposure of 30 years. At a minimum, the HRA must show the results of cancer risk assuming a 30-year exposure duration for all residential (and sensitive) receptors and exposure duration is 70 years for cancer burden calculations.

In the case of worker receptors, OEHHA requires exposure durations of a 25-year exposure period. OEHHA guidelines provide adjustment factors for inhalation risks for offsite workers. The concentration to which workers are exposed may be different than the annual average concentration calculated by AERMOD. The annual average estimated by AERMOD is 24 hours per day, 7 days per week, 365 days per year average, regardless of the actual operating schedule of the emitting facility. However, the off-site worker may be impacted only during work hours. Thus, the model-predicted concentrations are adjusted by a multiplying factor, the worker adjustment factor (WAF), to reflect the pollutant concentration that the worker breathes. The WAF factors are applied when estimating worker cancer risks and non-cancer chronic 8-hour HI for facilities that do not operate continuously. As previously discussed, non-continuous operations were assumed in the AERMOD model for several mining related sources. These sources with non-continuous operations were addressed in HARP2 by activating the WAF option in the inhalation pathway and entering the appropriate WAF factor of 2 (i.e., $7/7 \times 24/12$) to reflect 12 hours of operation 7 days per week.

3.3.3 Noncarcinogenic Health Impacts

Potential noncarcinogenic health effects (i.e., total acute hazard index (HI), total 8-hour chronic HI, and total chronic HI) associated with exposure to chemical emissions were evaluated using the HARP2 model. Acute and chronic health hazards for different substances impact different target human organs (e.g., central nervous system, reproductive system, liver, etc.). For inhalation exposures, the model divides the predicted average air concentrations for each chemical at the receptor locations by the appropriate inhalation reference exposure levels (RELs) provided by the SCAQMD and OEHHA. These ratios are chemical-specific to the chronic or acute hazard quotients.

Noncarcinogenic health effects were also evaluated in terms of their assumed potential additive effect on target organs or systems. For inhalation exposures, the target organ-specific HI is the sum of the individual hazard quotients for each chemical affecting a specific target organ. In the case of a multipathway pollutant (i.e., pollutants with non-inhalation exposures), health risk impacts consider the additional noncancer risks associated with non-inhalation routes of exposure from certain pollutants.

As previously discussed for the carcinogenic health impacts, a WAF factor of 2 was applied when estimating worker non-cancer 8-hour HI.

4.0 RISK CHARACTERIZATION

The risk characterization section discusses the results of the modeling, including, carcinogenic health risks, noncancer health hazards, zone of impact (ZOI), maximum exposures, cancer burden calculations, and affected populations. The following summarizes the key modeling parameters and results from this HRA.

4.1 Zone of Impact

As required, modeling receptor points were identified to include the property fenceline, nearby workers, and local residential neighborhoods. The ZOI is commonly defined as the area surrounding the facility where receptors have a potential cancer risk equal or greater than 1 in 1 million, total acute HIs equal or greater than 0.5, or total chronic HIs equal or greater than 0.5. The results from the HARP2 model provide the information necessary to identify the ZOI by generating the associated risk isopleths (i.e., a geographical presentation of areas of equal risk). Maps depicting the ZOIs for this HRA are provided in Figures A-5, A-6, A-8, A-9, and A-12.

4.2 Carcinogenic Health Effects

Table B-1 summarizes the cancer risk results of this HRA. All receptors were evaluated for the inhalation exposure pathway. The non-inhalation exposure pathways modeled for residential receptors included dermal absorption, soil ingestion, mother's milk, and homegrown produce. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion. As previously discussed for the carcinogenic health impacts, a WAF factor of 2 was applied when estimating worker cancer risk.

4.2.1 Point of Maximum Impact (PMI)

Results for the PMI for each pollutant and by each source are presented in Tables B-7 and B-8. As shown in Figure A-4, the PMI (Receptor #35815, UTM E 462656.78, UTM N 3732208.25) for carcinogenic health effects is located on the northern facility fenceline with a predicted excess cancer risk of 33.94 cases per million exposed.

4.2.2 Maximum Exposed Individual Resident (MEIR)

Estimated excess cancer risks for the MEIR by each pollutant and by each source are presented in Tables B-9 and B-10. As shown in Figure A-4, the MEIR (Receptor #1, UTM E 462509.00, UTM N 3732882.33) for carcinogenic health risk is located north of the facility boundary at a residence on Black Powder Road with a predicted excess cancer risk of 6.51 cases per million exposed. Based on this HRA, the MEIR is below the notification risk level of 10 in 1 million as per SCAQMD Rule 1402. For reference, Figure A-5 presents the cancer risk contours identifying the ZOI for residential modeling scenarios (30-year exposure duration).

4.2.3 Maximum Exposed Individual Worker (MEIW)

Estimated excess cancer risks for the MEIW by each pollutant and by each source are presented in Tables B-11 and B-12. As shown in Figure A-4, the MEIW (Receptor #13723, UTM E 462556.00, UTM N 3732314.54) is located north of the facility at Jungle Island Paintball Park (14881 Temescal Canyon Rd, Lake Elsinore, CA

92530) with an estimated excess cancer risk of 0.99 cases per million exposed. Based on this HRA, the MEIW is below the notification risk level of 10 in 1 million as per SCAQMD Rule 1402. For reference, Figure A-6 presents the cancer risk contours identifying the ZOI for worker modeling scenarios (25-year exposure duration).

4.2.4 Sensitive Receptors

There are several sensitive receptor areas near the facility. There are no sensitive receptors with a cancer risk greater than 1×10^{-5} (i.e., 10 in 1 million) (Figure A-5 and Table B-6). The Alberhill Elementary School, located approximately 280 meters from the facility boundary, is the closest sensitive receptor; cancer risk at the school is 3.92 per million exposed. The Alberhill Elementary School is also the sensitive receptor with the highest cancer risk (Table B-6).

4.2.5 Population Cancer Burden

Population cancer burdens are calculated for affected populations within the ZOI. 240 census tracts were used, which overlapped the zone of impact (ZOI) derived from 30-year exposure duration residential cancer risk (Figure A-14). 140 census tracts were found in which the lifetime (70-year) cancer risk is greater than 1×10^{-6} , equating to 12,527 people (refer to Table B-29 and Appendix C). The total cancer burden is estimated as 0.025 as shown in Table B-29, which is below the SCAQMD action risk level of 0.5. For completeness, Figure A-15 shows the one chance in-one-million risk isopleth based on a 70-year lifetime exposure for population cancer risk.

4.3 Noncarcinogenic Chronic Health Effects

Table B-1 summarizes the noncancer chronic health hazard results of this HRA. The non-inhalation exposure pathways modeled for residential receptors included dermal absorption, soil ingestion, mother's milk, and homegrown produce. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion.

4.3.1 Point of Maximum Impact (PMI)

The total chronic HI for the PMI by each pollutant and by each source is presented in Tables B-13 and B-14. As shown in Figure A-7, the PMI (Receptor #35815, UTM E 462656.78, UTM N 3732208.25) for chronic noncancer health effects is located on the northern facility fenceline with a total chronic HI of 2.24.

4.3.2 Maximum Exposed Individual Resident (MEIR)

The total chronic HI for the MEIR by each pollutant and by each source is presented in Tables B-15 and B-16. As shown in Figure A-7, the MEIR (Receptor #30189, UTM E 464140.00, UTM N 3729780.00) for chronic noncancer health effects is located at a residence southeast of the facility along Ladrillo Street with a total chronic HI of 0.46. Based on this HRA, the MEIR is below the notification risk level of 1.0 as per SCAQMD Rule 1402. For reference, Figure A-8 presents the total chronic HI contours for residential modeling scenarios.

4.3.3 Maximum Exposed Individual Worker (MEIW)

The total chronic HI for the MEIW by each pollutant and by each source is presented in Tables B-17 and B-18. As shown by Figure A-7, the MEIW (Receptor #13723, UTM E 462556.00, UTM N 3732314.54) is located north of the facility at Jungle Paintball Park (14881 Temescal Canyon Rd, Lake Elsinore, CA 92530) with a total chronic HI of 0.34. Based on this HRA, the MEIW is below the notification risk level of 1.0 as per SCAQMD Rule 1402. For reference, Figure A-9 presents the total chronic HI contours for worker modeling scenarios.

4.3.4 Sensitive Receptors

There are several sensitive receptor areas near the facility. There are no sensitive receptors with a total chronic HI greater than 0.5 (Figure A-8 and Table B-6).

4.4 Noncarcinogenic 8-hour Chronic Health Effects

Table B-1 summarizes the noncancer 8-hour chronic health hazard results of this HRA. As previously discussed for the carcinogenic health impacts, a WAF factor of 2 was applied when estimating worker non-cancer 8-hour HI.

4.4.1 Point of Maximum Impact (PMI)

The total 8-hour chronic HI for the PMI by each pollutant and by each source are presented in Tables B-25 and B-26. As shown in Figure A-10, the PMI (Receptor #35922, UTM E 464140.49, UTM N 3729937.11) for 8-hour chronic noncancer health effects is located on the southeast facility fenceline adjacent to Lake Street with a total 8-hour chronic HI of 0.23.

4.4.2 Maximum Exposed Individual Resident (MEIR)

Per SCAQMD guidance, 8-hour chronic health hazards only apply to workers.

4.4.3 Maximum Exposed Individual Worker (MEIW)

The total 8-hour chronic HI for the MEIW by each pollutant and by each source are presented in Tables B-27 and B-28. As shown by Figure A-10, the MEIW (Receptor #31931, UTM E 464450.00, UTM N 3730170.00) for 8-hour chronic noncancer health effects is southeast of the facility at the Alberhill Ranch Community Park with a total 8-hour chronic HI of 0.03. The MEIW is below the notification risk level of 1.0 as per SCAQMD Rule 1402.

Note that 8-hour chronic hazards are under the threshold for ZOI and does not meet the minimum requirement for a ZOI (i.e., total 8-hour chronic HI greater or equal to 0.5). Therefore, no figure showing the isopleths for 8-hour chronic hazards is provided.

4.4.4 Sensitive Receptors

There are several sensitive receptor areas near the facility. There are no sensitive receptors with a total 8-hour chronic HI greater than 0.5 (Table B-6).

4.5 Noncarcinogenic Acute Health Effects

Table B-1 summarizes the noncancer acute health hazard results of this HRA.

4.5.1 Point of Maximum Impact (PMI)

The total acute HI for the PMI by each pollutant and by each source is presented in Tables B-19 and B-20. As shown by Figure A-11, the PMI (Receptor #12741, UTM E 462636.00, UTM N 3732214.54) for acute noncancer health effects is located on the northern facility fence line with a total acute HI of 0.16.

4.5.2 Maximum Exposed Individual Resident (MEIR)

The total acute HI for the MEIR by each pollutant and by each source is presented in Tables B-21 and B-22. As shown in Figure A-11, the MEIR (Receptor #26107, UTM E 463440.00, UTM N 3729400.00) for acute noncancer health effects is located at a residence south of the facility on Bayberry Drive with a total acute HI of 0.10. The MEIR is below the notification risk level of 1.0 as per SCAQMD Rule 1402. For reference, Figure A-12 presents the noncancer acute hazard index contours for the acute modeling scenario.

4.5.3 Maximum Exposed Individual Worker (MEIW)

The total acute HI for the MEIW by each pollutant and by each source is presented in Tables B-23 and B-24. As shown in Figure A-11, the MEIW (Receptor #13622, UTM E 462536.00, UTM N 3732304.54) for acute noncancer health effects is located north of the facility at Jungle Paintball Park (14881 Temescal Canyon Rd, Lake Elsinore, CA 92530) with a total acute HI of 0.08. Based on this HRA, the MEIW is below the notification risk level of 1.0 as per SCAQMD Rule 1402. For reference, Figure A-12 presents the noncancer acute hazard index contours for the acute modeling scenarios.

4.5.4 Sensitive Receptors

There are several sensitive receptor areas near the facility. There are no sensitive receptors with a total acute HI greater than 0.5 (Figure A-12 and Table B-6).

5.0 REFERENCES

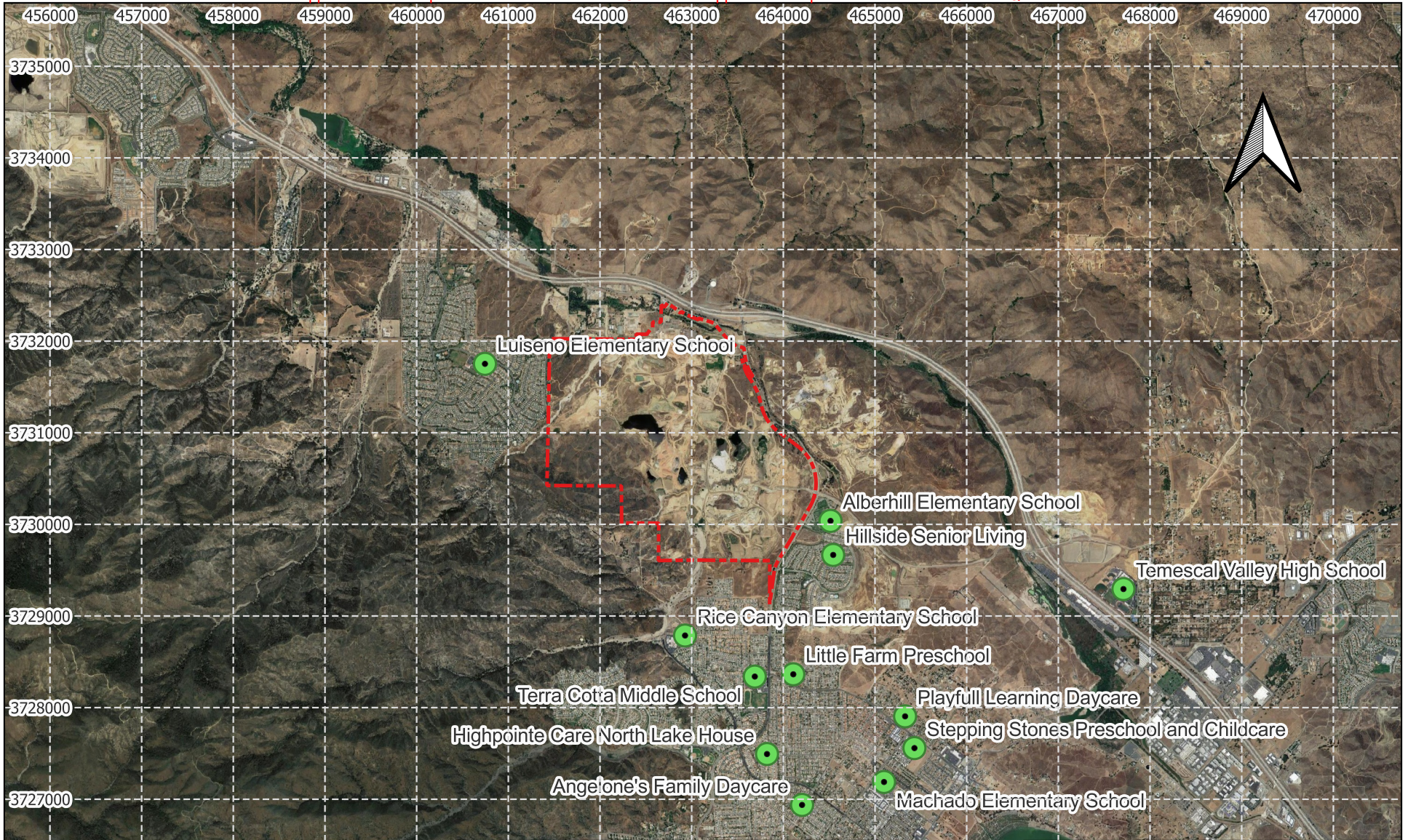
- (1) Office of Environmental Health Hazard Assessment (OEHHA), California Environmental Protection Agency, Toxicity Criteria Database, <http://www.oehha.ca.gov/risk>
- (2) Office of Environmental Health Hazard Assessment (OEHHA), The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, February 2015
- (3) California Environmental Protection Agency, Air Resources Board, March 17, 2015, USER MANUAL FOR THE HOTSPOTS ANALYSIS AND REPORTING PROGRAM AIR DISPERSION MODELING AND RISK ASSESSMENT TOOL VERSION 2
- (4) United States Census Bureau, the 2010 Census, <http://www.factfinder.census.gov>
- (5) Google Earth, <http://www.earth.google.com>

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.

2017 Health Risk Assessment
Pacific Clay Products (FID 017953)

APPENDIX A. FIGURES

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- SENSITIVE RECEPTOR

SESPE
CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-1**

Facility and Nearby Sensitive
Receptors
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



FACILITY BOUNDARY	POINT SOURCE
LINE VOLUME SOURCE	POLYGON AREA SOURCE
VOLUME SOURCE	

A Trinity Consultants Company

FIGURE A-2	TAC Sources - Clay Quarrying, Brick Manufacturing, and Related Ancillary Operations 2017 Health Risk Assessment Pacific Clay Products		
	PROJECT #:	230510.0008	DATE:
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



FACILITY BOUNDARY	POINT SOURCE
LINE VOLUME SOURCE	POLYGON AREA SOURCE
VOLUME SOURCE	

SESPE
 CONSULTING, INC.
A Trinity Consultants Company

FIGURE A-3	TAC Sources - Aggregate Mining/Processing, Ready-Mix Production, and Related Ancillary Operations 2017 Health Risk Assessment Pacific Clay Products		
	PROJECT #:	230510.0008	DATE:
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- ▲ PMI
- MEIR
- ◆ MEIW

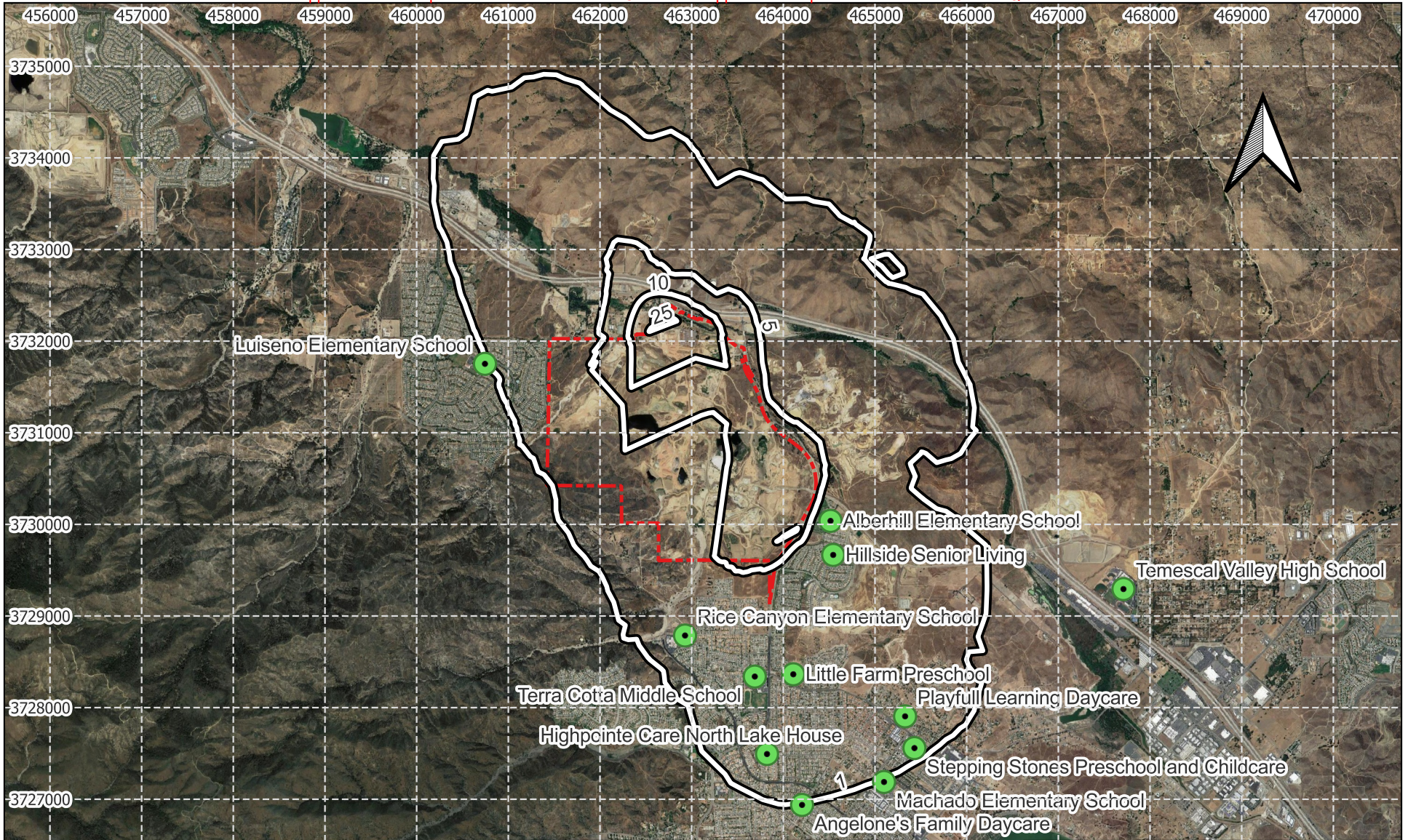
SESPE
CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-4**

Cancer Risk PMI, MEIR, & MEIW
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- CANCER RISK ISOPLETH (PER MILLION EXPOSED)
- SENSITIVE RECEPTOR

SESPE
CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-5**

Residential Cancer Risk Isopleth
(30-Year Exposure)
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



--- FACILITY BOUNDARY
 = CANCER RISK ISOPLETH
 (PER MILLION EXPOSED)

SESPE
 CONSULTING, INC.
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**FIGURE
 A-6**

Worker Cancer Risk Isopleth
 (25-Year Exposure)
 2017 Health Risk Assessment
 Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- ▲ PMI
- MEIR
- ◆ MEIW

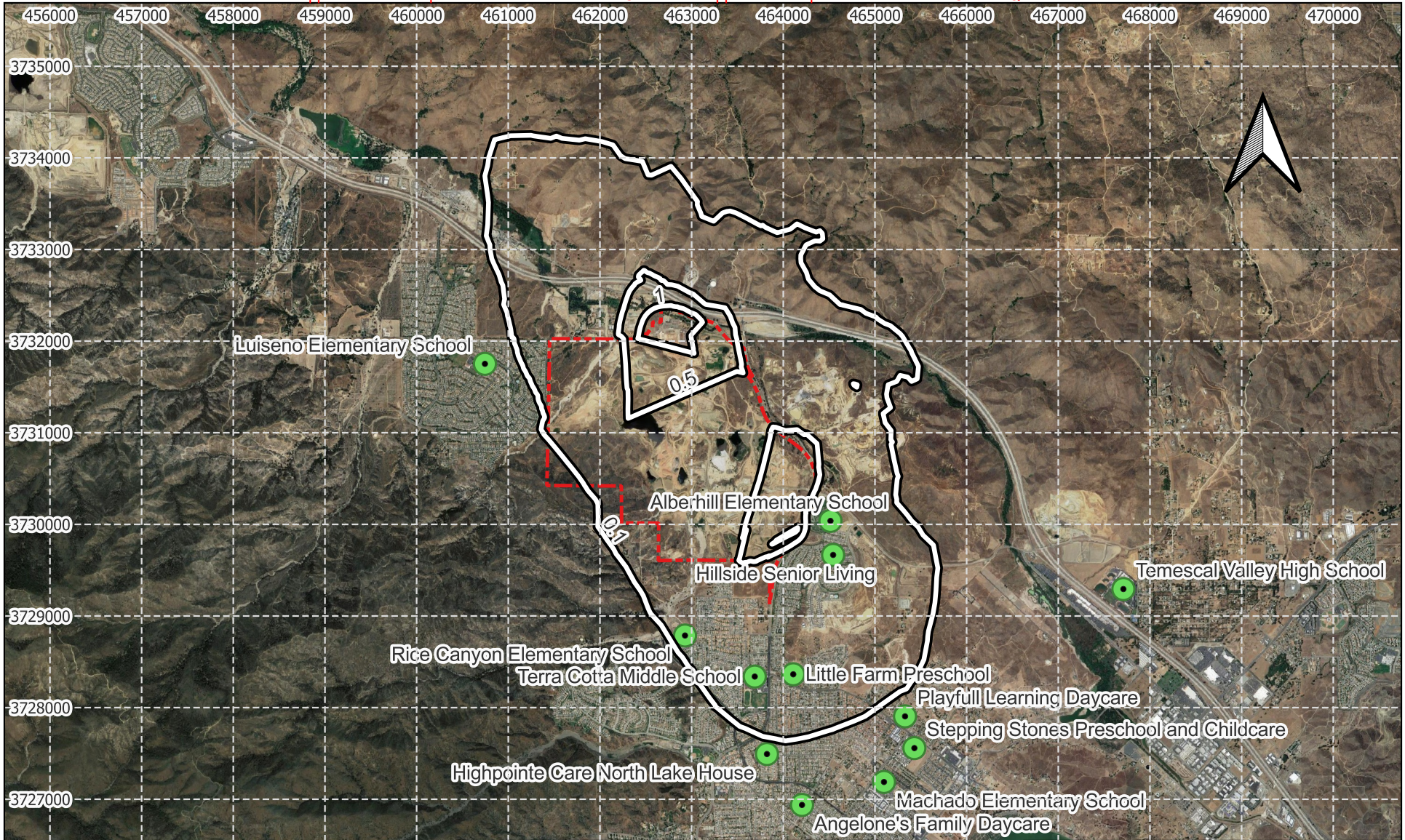
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CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-7**

Noncancer Chronic Maximum
Hazard PMI, MEIR, & MEIW
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/3/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- NONCANCER CHRONIC MAXIMUM HAZARD INDEX ISOPLETH
- SENSITIVE RECEPTOR

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CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-8**

Residential Noncancer Chronic
Maximum Hazard Index Isopleth
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



--- FACILITY BOUNDARY
 NONCANCER CHRONIC MAXIMUM HAZARD INDEX ISOPLETH

SESPE
CONSULTING, INC.

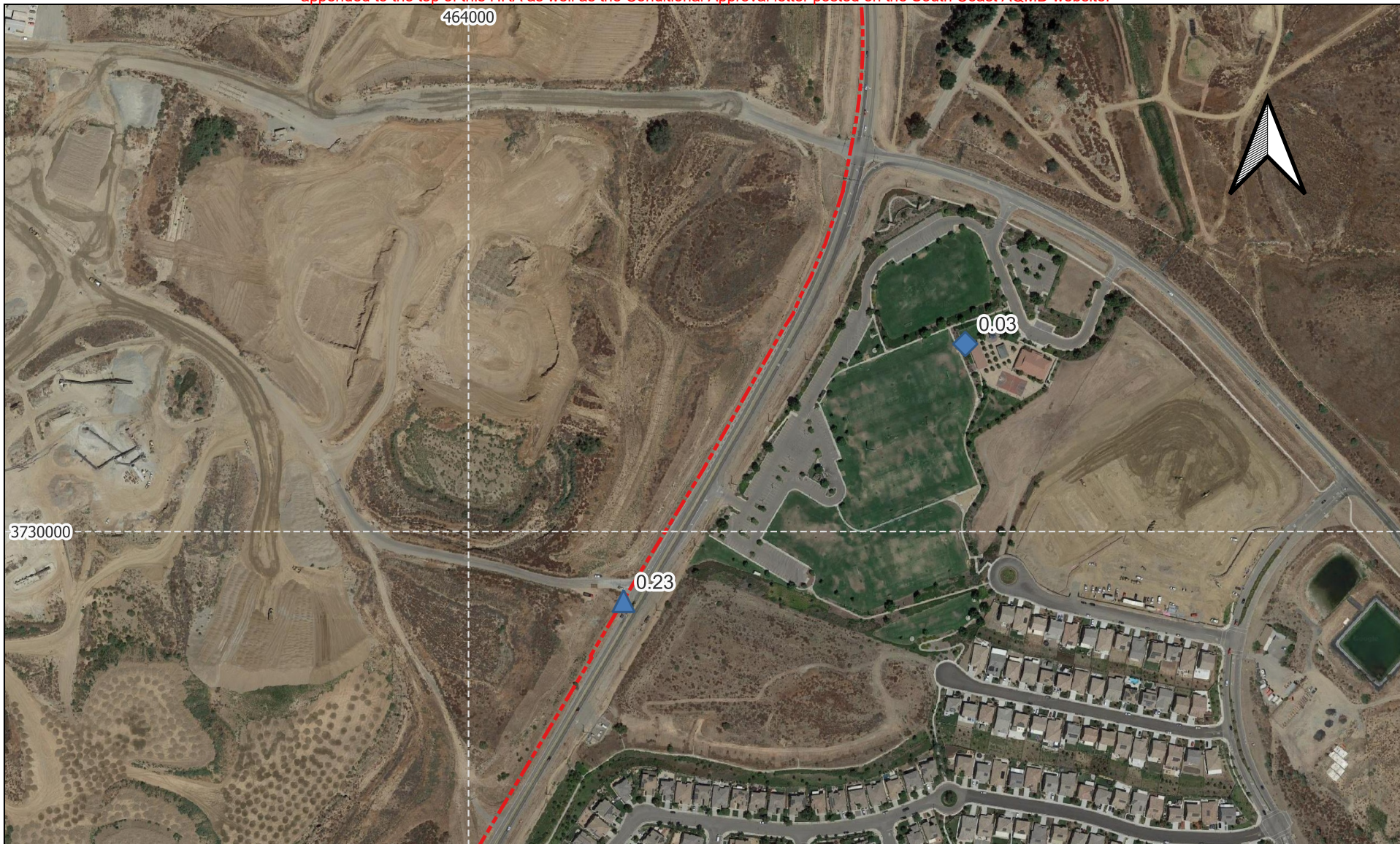
A Trinity Consultants Company

**FIGURE
A-9**

Worker Noncancer Chronic
Maximum Hazard Index Isopleth
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- ▲ PMI
- ◆ MEIW

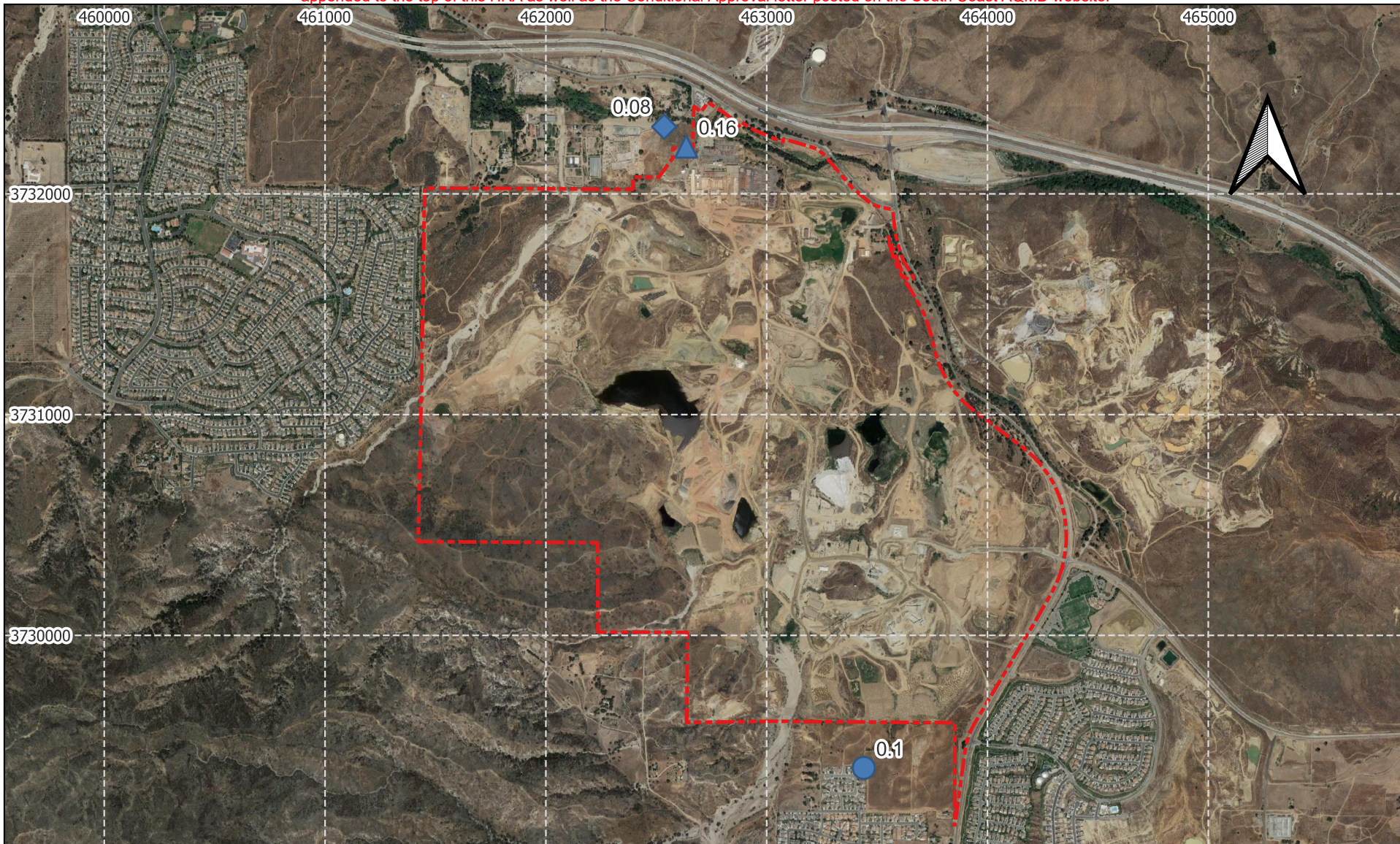
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CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-10**

Noncancer 8-hr Chronic Maximum
Hazard PMI, MEIR, & MEIW
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/3/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- FACILITY BOUNDARY
- ▲ PMI
- MEIR
- ◆ MEIW

SESPE
CONSULTING, INC.
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**FIGURE
A-11**

Noncancer Acute Maximum Hazard
PMI, MEIR, & MEIW
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/3/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
- NONCANCER ACUTE MAXIMUM HAZARD INDEX ISOPLETH
- SENSITIVE RECEPTOR

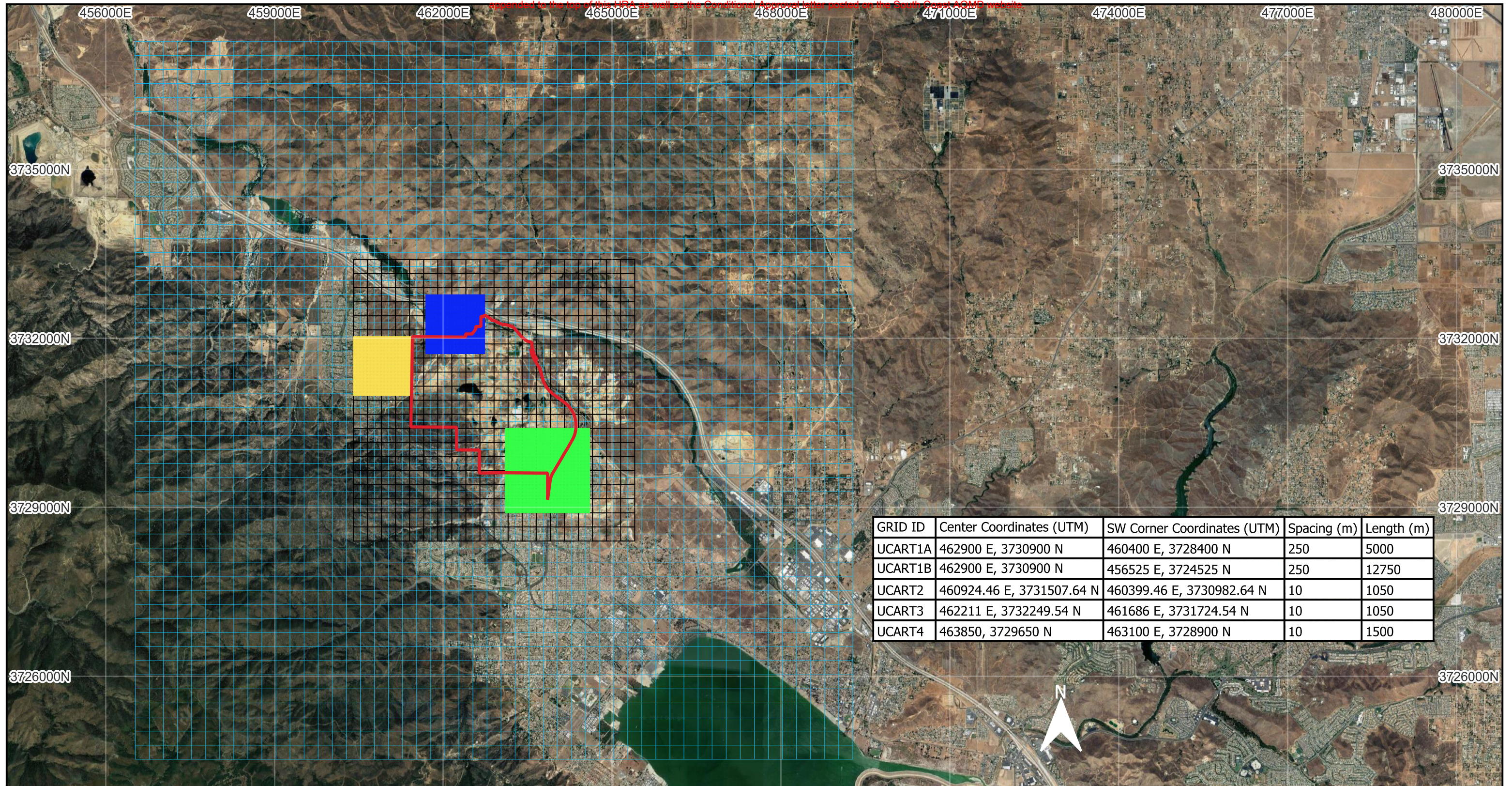
SESPE
CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-12**

Noncancer Acute Maximum Hazard
Index Isopleth
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



GRID ID	Center Coordinates (UTM)	SW Corner Coordinates (UTM)	Spacing (m)	Length (m)
UCART1A	462900 E, 3730900 N	460400 E, 3728400 N	250	5000
UCART1B	462900 E, 3730900 N	456525 E, 3724525 N	250	12750
UCART2	460924.46 E, 3731507.64 N	460399.46 E, 3730982.64 N	10	1050
UCART3	462211 E, 3732249.54 N	461686 E, 3731724.54 N	10	1050
UCART4	463850, 3729650 N	463100 E, 3728900 N	10	1500

- Facility Boundary
- UCART1A
- UCART1B
- UCART2
- UCART3
- UCART4

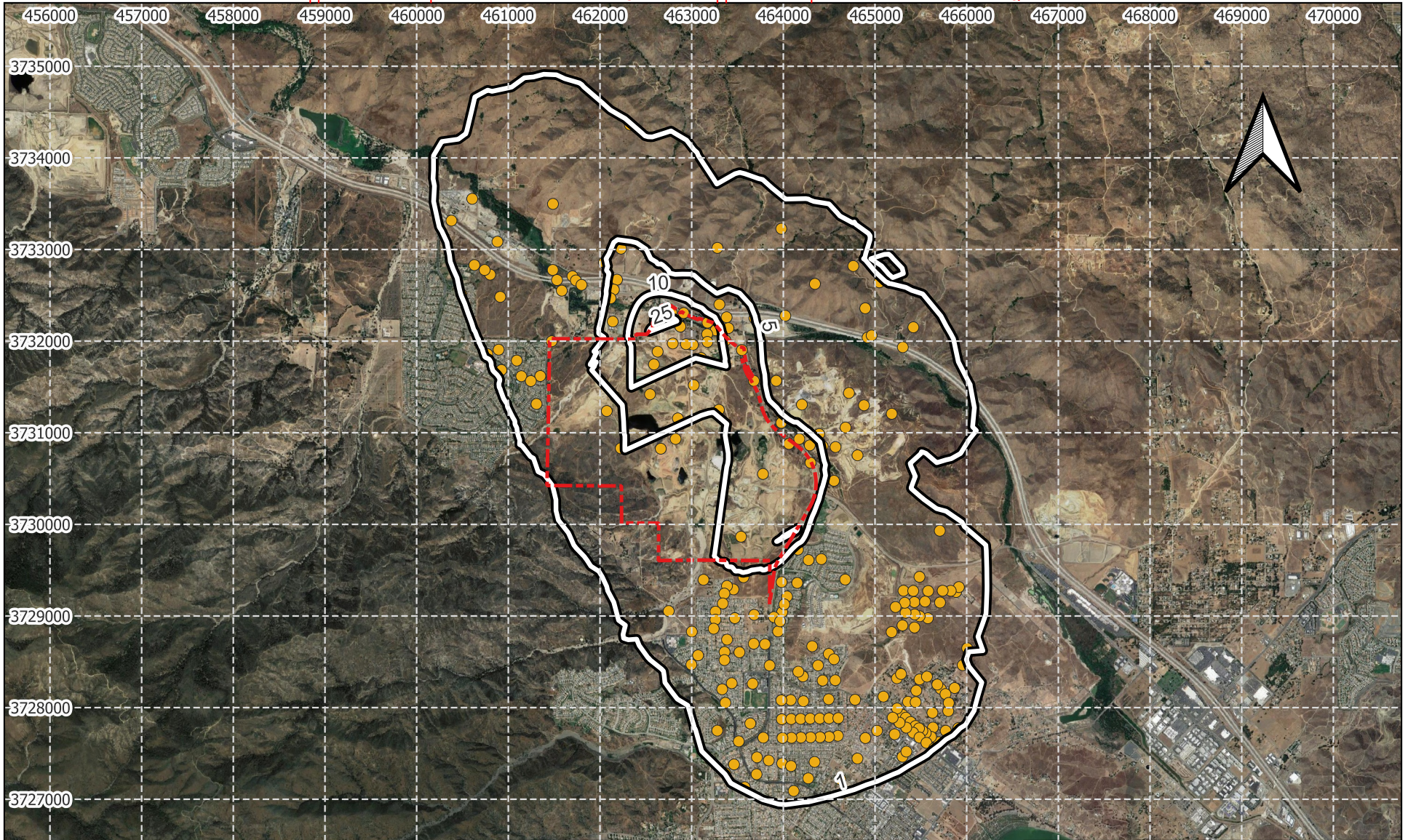
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CONSULTING, INC.
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Receptor Grids - 2017 HRA
Pacific Clay Products
Lake Elsinore, CA
AQMD Facility ID 017953

**FIGURE
A-13**

PROJECT #:	210509.0160	DRAWN BY:	SJM
SCALE:	AS SHOWN, UTM	DATE:	08/11/2022

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- FACILITY BOUNDARY
- CANCER RISK ISOPLETH
BASED ON 30-YEAR EXPOSURE
(PER MILLION EXPOSED)
- CENSUS RECEPTOR

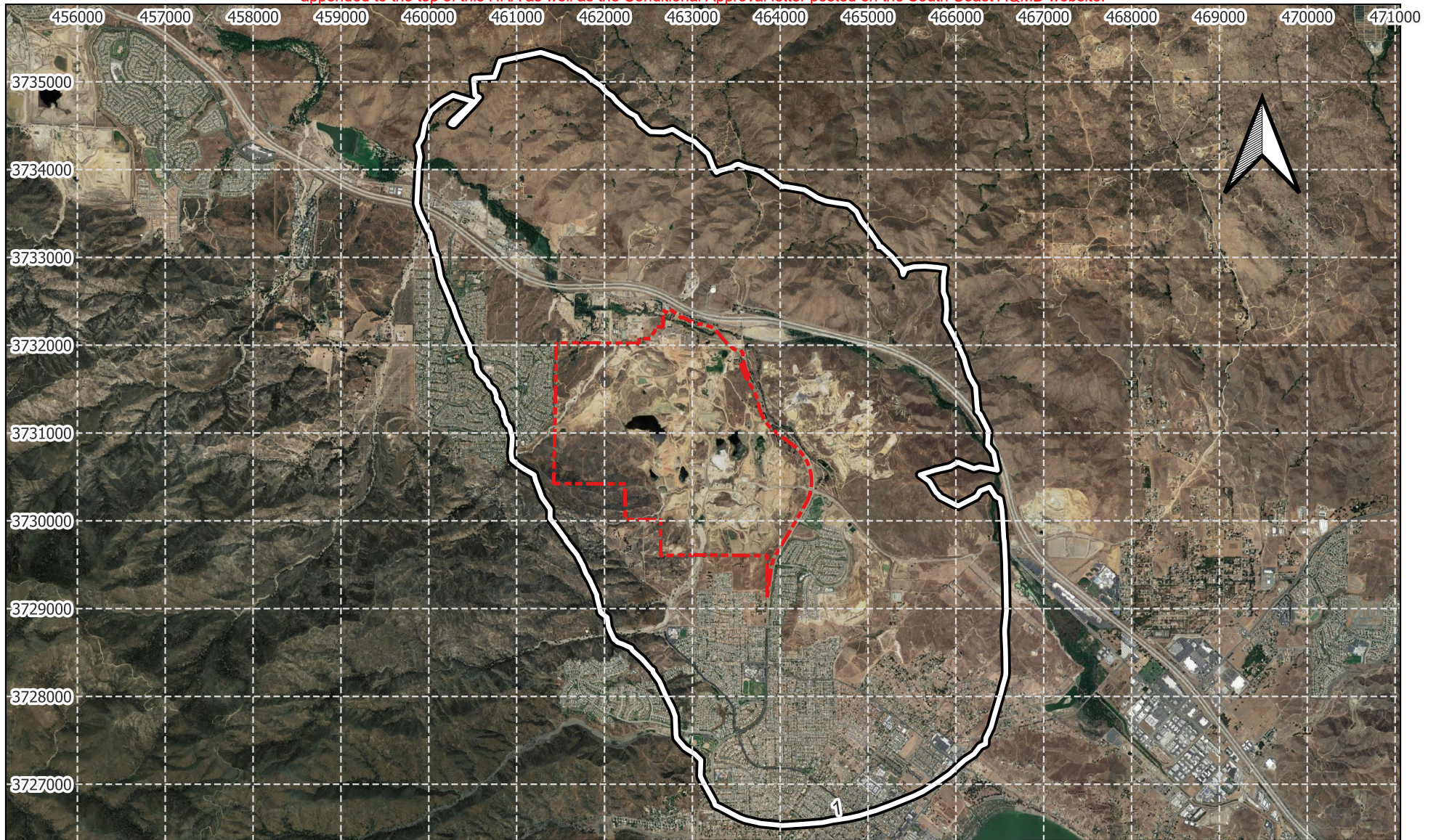
SESPE
CONSULTING, INC.
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**FIGURE
A-14**

Cancer Burden Receptors
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/3/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.



- - - FACILITY BOUNDARY
 CANCER RISK ISOPLETH
 (PER MILLION EXPOSED)

SESPE
 CONSULTING, INC.
A Trinity Consultants Company

**FIGURE
A-15**

Population Cancer Risk Isopleth
(70-Year Exposure)
2017 Health Risk Assessment
Pacific Clay Products

PROJECT #:	230510.0008	DATE:	1/4/2024
SCALE:	As shown	DRAWN BY:	SJM

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.

2017 Health Risk Assessment
Pacific Clay Products (FID 017953)

APPENDIX B. TABLES

Table B-1. Summary of Health Risk Assessment Results

Pacific Clay Products Inc.
 Facility ID: 017953

Receptor Description	Cancer Risk			NC Chronic Hazard			Worker NC Chronic Hazard (8-hr)			NC Acute Hazard Hazard Index		
	Receptor ID ¹	Cancer Risk per 1E6	UTM Coordinates (Easting, Northing)	Receptor ID ¹	Total Chronic Hazard Index	UTM Coordinates (Easting, Northing)	Receptor ID ¹	Total Chronic 8-hr Hazard Index	UTM Coordinates (Easting, Northing)	Receptor ID ¹	Total Acute Hazard Index	UTM Coordinates (Easting, Northing)
PMI (Point of Maximum Impact)	35815	33.94	462656.78, 3732208.25	35815	2.24	462656.78, 3732208.25	35922	0.23	464140.49, 3729937.11	12741	0.16	462636.00, 3732214.54
MEIR (Residence)	1	6.51	462509.00, 3732882.33	30189	0.46	464140.00, 3729780.00				26107	0.10	463440.00, 3729400.00
MEIW (Worker)	13723	0.99	462556.00, 3732314.54	13723	0.34	462556.00, 3732314.54	31931	0.03	464450.00, 3730170.00	13622	0.08	462536.00, 3732304.54

1. Receptor IDs correspond to HRA results contained in `PacificClay2017HRA` and `PacificClay2017MEIR` folders in supplied modeling and HRA files.
 NC = Noncancer
 Values rounded to nearest hundredth.

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0062	KILN NO. 3	NH3	7664417	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0062	KILN NO. 3	Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0062	KILN NO. 3	Naphthalene	91203	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0062	KILN NO. 3	Benzene	71432	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0075	ENVELOPE KILN	NH3	7664417	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0075	ENVELOPE KILN	Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0075	ENVELOPE KILN	Naphthalene	91203	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0075	ENVELOPE KILN	Benzene	71432	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0076	TUNNEL KILN NO. 4	Mercury	7439976	2.18E-04	2.74E-05	4.59E-01	6.60E-06
S0076	TUNNEL KILN NO. 4	MEK	78933	6.38E-03	8.04E-04	1.35E+01	1.94E-04
S0076	TUNNEL KILN NO. 4	Methyl Chloride	74873	1.94E-02	2.45E-03	4.10E+01	5.90E-04
S0076	TUNNEL KILN NO. 4	Perc	127184	8.12E-05	1.02E-05	1.71E-01	2.46E-06
S0076	TUNNEL KILN NO. 4	Benzene	71432	8.41E-02	1.06E-02	1.77E+02	2.55E-03
S0076	TUNNEL KILN NO. 4	Chlorine	7782505	3.77E-02	4.75E-03	7.95E+01	1.14E-03
S0076	TUNNEL KILN NO. 4	Di2-EthHxPhthal	117817	5.80E-02	7.31E-03	1.22E+02	1.76E-03
S0076	TUNNEL KILN NO. 4	p-DiClBenzene	106467	1.39E-03	1.75E-04	2.94E+00	4.22E-05
S0076	TUNNEL KILN NO. 4	CS2	75150	1.25E-03	1.57E-04	2.63E+00	3.78E-05
S0076	TUNNEL KILN NO. 4	Methyl Iodide	74884	2.70E-03	3.40E-04	5.69E+00	8.18E-05
S0076	TUNNEL KILN NO. 4	Beryllium	7440417	1.22E-05	1.54E-06	2.57E-02	3.70E-07
S0076	TUNNEL KILN NO. 4	1,1,1-TCA	71556	1.36E-04	1.72E-05	2.88E-01	4.14E-06
S0076	TUNNEL KILN NO. 4	o-Xylene	95476	1.78E-03	2.24E-04	4.16E+00	5.98E-05
S0076	TUNNEL KILN NO. 4	Diethanolamine	111422	7.62E-04	9.60E-05	4.75E+00	6.84E-05
S0076	TUNNEL KILN NO. 4	2MeNaphthalene	91576	1.73E-03	2.17E-04	3.94E+00	5.66E-05
S0076	TUNNEL KILN NO. 4	Cumene	98828	1.75E-05	2.20E-06	1.09E-01	1.57E-06
S0076	TUNNEL KILN NO. 4	TriMeBenzens	25551137	6.84E-04	8.61E-05	4.27E+00	6.14E-05
S0076	TUNNEL KILN NO. 4	Ethyl Benzene	100414	1.33E-03	1.68E-04	3.04E+00	4.37E-05
S0076	TUNNEL KILN NO. 4	Phenol	108952	2.49E-03	3.14E-04	5.26E+00	7.57E-05
S0076	TUNNEL KILN NO. 4	Xylenes	1330207	2.23E-03	2.81E-04	5.87E+00	8.45E-05
S0076	TUNNEL KILN NO. 4	Manganese	7439965	8.41E-03	1.06E-03	1.77E+01	2.55E-04
S0076	TUNNEL KILN NO. 4	Arsenic	7440382	8.99E-04	1.13E-04	1.90E+00	2.73E-05
S0076	TUNNEL KILN NO. 4	Naphthalene	91203	1.91E-03	2.41E-04	4.14E+00	5.95E-05
S0076	TUNNEL KILN NO. 4	ButylBenzPhthal	85687	5.22E-04	6.58E-05	1.10E+00	1.58E-05
S0076	TUNNEL KILN NO. 4	Toluene	108883	4.77E-03	6.01E-04	1.06E+01	1.52E-04
S0076	TUNNEL KILN NO. 4	Ethyl Chloride	75003	1.65E-02	2.08E-03	3.49E+01	5.02E-04
S0076	TUNNEL KILN NO. 4	Styrene	100425	5.80E-04	7.31E-05	1.22E+00	1.76E-05
S0076	TUNNEL KILN NO. 4	DiButyl Phthal	84742	4.06E-03	5.12E-04	8.56E+00	1.23E-04
S0100	BRICK TUMBLERS, COATINGS	NH3	7664417	3.84E-02	4.84E-03	2.39E-02	3.43E-07
S0100	BRICK TUMBLERS, COATINGS	Formaldehyde	50000	2.94E-02	3.71E-03	5.97E-03	8.59E-08
S0107	TUNNEL KILN NO. 2	Perc	127184	5.88E-05	7.41E-06	4.13E-02	5.94E-07
S0107	TUNNEL KILN NO. 2	Beryllium	7440417	8.82E-06	1.11E-06	6.19E-03	8.91E-08
S0107	TUNNEL KILN NO. 2	Methyl Chloride	74873	1.41E-02	1.77E-03	9.88E+00	1.42E-04
S0107	TUNNEL KILN NO. 2	ButylBenzPhthal	85687	3.78E-04	4.76E-05	2.65E-01	3.82E-06
S0107	TUNNEL KILN NO. 2	MEK	78933	4.62E-03	5.82E-04	3.24E+00	4.67E-05
S0107	TUNNEL KILN NO. 2	Benzene	71432	6.09E-02	7.67E-03	4.28E+01	6.15E-04
S0107	TUNNEL KILN NO. 2	Chlorine	7782505	2.73E-02	3.44E-03	1.92E+01	2.76E-04
S0107	TUNNEL KILN NO. 2	Naphthalene	91203	1.37E-03	1.72E-04	9.58E-01	1.38E-05
S0107	TUNNEL KILN NO. 2	Toluene	108883	3.36E-03	4.23E-04	2.36E+00	3.39E-05
S0107	TUNNEL KILN NO. 2	o-Xylene	95476	1.22E-03	1.53E-04	8.55E-01	1.23E-05
S0107	TUNNEL KILN NO. 2	p-DiClBenzene	106467	1.01E-03	1.27E-04	7.08E-01	1.02E-05
S0107	TUNNEL KILN NO. 2	DiButyl Phthal	84742	2.94E-03	3.70E-04	2.06E+00	2.97E-05
S0107	TUNNEL KILN NO. 2	Phenol	108952	1.81E-03	2.28E-04	1.27E+00	1.82E-05
S0107	TUNNEL KILN NO. 2	Arsenic	7440382	6.51E-04	8.20E-05	4.57E-01	6.57E-06
S0107	TUNNEL KILN NO. 2	Styrene	100425	4.20E-04	5.29E-05	2.95E-01	4.24E-06
S0107	TUNNEL KILN NO. 2	2MeNaphthalene	91576	1.20E-03	1.51E-04	8.40E-01	1.21E-05
S0107	TUNNEL KILN NO. 2	Ethyl Benzene	100414	9.24E-04	1.16E-04	6.49E-01	9.33E-06
S0107	TUNNEL KILN NO. 2	Di2-EthHxPhthal	117817	4.20E-02	5.29E-03	2.95E+01	4.24E-04
S0107	TUNNEL KILN NO. 2	Methyl Iodide	74884	1.95E-03	2.46E-04	1.37E+00	1.97E-05
S0107	TUNNEL KILN NO. 2	Mercury	7439976	1.58E-04	1.98E-05	1.11E-01	1.59E-06
S0107	TUNNEL KILN NO. 2	Ethyl Chloride	75003	1.20E-02	1.51E-03	8.40E+00	1.21E-04
S0107	TUNNEL KILN NO. 2	Manganese	7439965	6.09E-03	7.67E-04	4.28E+00	6.15E-05
S0107	TUNNEL KILN NO. 2	Xylenes	1330207	1.41E-03	1.77E-04	9.88E-01	1.42E-05
S0107	TUNNEL KILN NO. 2	CS2	75150	9.03E-04	1.14E-04	6.34E-01	9.12E-06
S0107	TUNNEL KILN NO. 2	1,1,1-TCA	71556	9.87E-05	1.24E-05	6.93E-02	9.97E-07

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0114	GASOLINE STORAGE AND DISPENSING	2,2,4TriMePentn	540841	3.66E-06	4.61E-07	5.05E-03	7.26E-08
S0114	GASOLINE STORAGE AND DISPENSING	Benzene	71432	2.09E-06	2.63E-07	2.88E-03	4.14E-08
S0114	GASOLINE STORAGE AND DISPENSING	Ethyl Benzene	100414	5.21E-07	6.56E-08	7.20E-04	1.04E-08
S0114	GASOLINE STORAGE AND DISPENSING	Hexane	110543	5.21E-07	6.56E-08	7.20E-04	1.04E-08
S0114	GASOLINE STORAGE AND DISPENSING	Xylenes	1330207	2.09E-06	2.63E-07	2.88E-03	4.14E-08
S0114	GASOLINE STORAGE AND DISPENSING	Toluene	108883	5.72E-06	7.21E-07	7.90E-03	1.14E-07
S0122	EXTEC SCREENING	Manganese	7439965	6.73E-04	8.48E-05	1.09E-02	1.57E-07
S0122	EXTEC SCREENING	Cobalt	7440484	1.40E-05	1.76E-06	2.26E-04	3.25E-09
S0122	EXTEC SCREENING	Selenium	7782492	1.27E-06	1.60E-07	2.05E-05	2.95E-10
S0122	EXTEC SCREENING	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0122	EXTEC SCREENING	Barium	7440393	2.86E-04	3.60E-05	4.62E-03	6.65E-08
S0122	EXTEC SCREENING	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0122	EXTEC SCREENING	Beryllium	7440417	1.27E-06	1.60E-07	2.05E-05	2.95E-10
S0122	EXTEC SCREENING	Arsenic	7440382	1.52E-05	1.92E-06	2.46E-04	3.54E-09
S0122	EXTEC SCREENING	DieselExhPM	9901	9.16E-09	1.15E-09	1.34E-06	1.93E-11
S0122	EXTEC SCREENING	Lead	7439921	6.35E-05	8.00E-06	1.03E-03	1.48E-08
S0122	EXTEC SCREENING	Zinc	7440666	1.26E-04	1.58E-05	2.03E-03	2.92E-08
S0122	EXTEC SCREENING	Silica, Crystln	1175	5.59E-02	7.04E-03	9.04E-01	1.30E-05
S0122	EXTEC SCREENING	Copper	7440508	4.70E-05	5.92E-06	7.60E-04	1.09E-08
S0122	EXTEC SCREENING	Nickel	7440020	3.56E-05	4.49E-06	5.75E-04	8.27E-09
S0122	EXTEC SCREENING	Aluminum	7429905	1.91E-02	2.40E-03	3.08E-01	4.43E-06
S0122	EXTEC SCREENING	Cadmium	7440439	1.27E-06	1.60E-07	2.05E-05	2.95E-10
S0122	EXTEC SCREENING	Chromium	7440473	3.56E-05	4.49E-06	5.75E-04	8.27E-09
S0139	C139 CONTROL (BRICK FORMING)	Barium	7440393	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0139	C139 CONTROL (BRICK FORMING)	Silica, Crystln	1175	1.49E-01	1.87E-02	2.05E+02	2.95E-03
S0139	C139 CONTROL (BRICK FORMING)	Zinc	7440666	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0139	C139 CONTROL (BRICK FORMING)	Copper	7440508	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0139	C139 CONTROL (BRICK FORMING)	Manganese	7439965	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0139	C139 CONTROL (BRICK FORMING)	Nickel	7440020	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0139	C139 CONTROL (BRICK FORMING)	Cobalt	7440484	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0139	C139 CONTROL (BRICK FORMING)	Arsenic	7440382	2.75E-04	3.47E-05	3.80E-01	5.46E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Silica, Crystln	1175	1.49E-01	1.87E-02	2.19E+02	3.15E-03
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Cobalt	7440484	2.75E-04	3.46E-05	4.06E-01	5.84E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Manganese	7439965	2.75E-04	3.46E-05	4.06E-01	5.84E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Zinc	7440666	2.75E-04	3.46E-05	4.06E-01	5.84E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Barium	7440393	2.75E-04	3.46E-05	4.06E-01	5.84E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Nickel	7440020	2.75E-04	3.46E-05	4.06E-01	5.84E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Arsenic	7440382	2.75E-04	3.46E-05	4.06E-01	5.84E-06
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	Copper	7440508	2.75E-04	3.46E-05	4.06E-01	5.84E-06

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0173	C173 BRICK TUMBLER NO. 1	Nickel	7440020	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0173	C173 BRICK TUMBLER NO. 1	Zinc	7440666	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0173	C173 BRICK TUMBLER NO. 1	Manganese	7439965	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0173	C173 BRICK TUMBLER NO. 1	Arsenic	7440382	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0173	C173 BRICK TUMBLER NO. 1	Barium	7440393	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0173	C173 BRICK TUMBLER NO. 1	Silica, Crystln	1175	0.00E+00	0.00E+00	2.52E+00	3.63E-05
S0173	C173 BRICK TUMBLER NO. 1	Cobalt	7440484	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0173	C173 BRICK TUMBLER NO. 1	Copper	7440508	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Nickel	7440020	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Silica, Crystln	1175	0.00E+00	0.00E+00	2.52E+00	3.63E-05
S0175	C175 BRICK TUMBLER NO. 2	Copper	7440508	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Zinc	7440666	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Barium	7440393	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Cobalt	7440484	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Manganese	7439965	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0175	C175 BRICK TUMBLER NO. 2	Arsenic	7440382	0.00E+00	0.00E+00	4.67E-03	6.72E-08
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Cadmium	7440439	1.65E-06	2.08E-07	5.25E-04	7.56E-09
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Manganese	7439965	8.75E-04	1.10E-04	2.78E-01	4.00E-06
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Nickel	7440020	4.62E-05	5.82E-06	1.47E-02	2.12E-07
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Aluminum	7429905	2.48E-02	3.12E-03	7.88E+00	1.13E-04
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Chromium	7440473	4.62E-05	5.82E-06	1.47E-02	2.12E-07
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Lead	7439921	8.25E-05	1.04E-05	2.63E-02	3.78E-07
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Selenium	7782492	1.65E-06	2.08E-07	5.25E-04	7.56E-09
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Arsenic	7440382	1.98E-05	2.49E-06	6.30E-03	9.07E-08
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Beryllium	7440417	1.65E-06	2.08E-07	5.25E-04	7.56E-09
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Barium	7440393	3.71E-04	4.68E-05	1.18E-01	1.70E-06
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Cobalt	7440484	1.82E-05	2.29E-06	5.78E-03	8.31E-08
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Silica, Crystln	1175	7.26E-02	9.15E-03	2.31E+01	3.32E-04
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Copper	7440508	6.11E-05	7.70E-06	1.94E-02	2.80E-07
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	Zinc	7440666	1.63E-04	2.06E-05	5.20E-02	7.48E-07

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0216	C216 CONTROL (S3 CEMENT SILO)	Selenium	7782492	0.00E+00	0.00E+00	1.02E-05	1.47E-10
S0216	C216 CONTROL (S3 CEMENT SILO)	Arsenic	7440382	0.00E+00	0.00E+00	2.24E-04	3.23E-09
S0216	C216 CONTROL (S3 CEMENT SILO)	Beryllium	7440417	0.00E+00	0.00E+00	1.02E-05	1.47E-10
S0216	C216 CONTROL (S3 CEMENT SILO)	Cr(VI)	18540299	0.00E+00	0.00E+00	5.10E-05	7.34E-10
S0216	C216 CONTROL (S3 CEMENT SILO)	Silica, Crystln	1175	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0216	C216 CONTROL (S3 CEMENT SILO)	Cadmium	7440439	0.00E+00	0.00E+00	1.02E-05	1.47E-10
S0216	C216 CONTROL (S3 CEMENT SILO)	Copper	7440508	0.00E+00	0.00E+00	3.06E-04	4.40E-09
S0216	C216 CONTROL (S3 CEMENT SILO)	Lead	7439921	0.00E+00	0.00E+00	1.22E-04	1.76E-09
S0216	C216 CONTROL (S3 CEMENT SILO)	Nickel	7440020	0.00E+00	0.00E+00	2.55E-04	3.67E-09
S0216	C216 CONTROL (S3 CEMENT SILO)	Zinc	7440666	0.00E+00	0.00E+00	9.39E-04	1.35E-08
S0216	C216 CONTROL (S3 CEMENT SILO)	Manganese	7439965	0.00E+00	0.00E+00	4.08E-03	5.87E-08
S0216	C216 CONTROL (S3 CEMENT SILO)	Chromium	7440473	0.00E+00	0.00E+00	5.92E-04	8.51E-09
S0216	C216 CONTROL (S3 CEMENT SILO)	Aluminum	7429905	0.00E+00	0.00E+00	1.63E-01	2.35E-06
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Cr(VI)	18540299	1.43E-06	1.80E-07	2.34E-04	3.36E-09
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Lead	7439921	7.04E-06	8.87E-07	9.54E-04	1.37E-08
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Cadmium	7440439	4.71E-07	5.93E-08	6.68E-05	9.61E-10
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Beryllium	7440417	9.35E-07	1.18E-07	1.17E-04	1.69E-09
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Selenium	7782492	4.71E-07	5.93E-08	6.68E-05	9.61E-10
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Zinc	7440666	1.46E-05	1.84E-06	3.03E-03	4.36E-08
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Copper	7440508	1.09E-05	1.38E-06	1.65E-03	2.38E-08
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Chromium	7440473	1.25E-05	1.58E-06	2.27E-03	3.26E-08
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Silica, Crystln	1175	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Nickel	7440020	5.74E-06	7.23E-07	1.02E-03	1.46E-08
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Manganese	7439965	4.00E-05	5.04E-06	1.06E-02	1.53E-07
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Aluminum	7429905	8.23E-03	1.04E-03	1.15E+00	1.65E-05
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	Arsenic	7440382	7.11E-06	8.96E-07	1.12E-03	1.61E-08

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Barium	7440393	3.24E-04	4.08E-05	8.59E-02	1.24E-06
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	DieselExhPM	9901	2.50E-03	3.14E-04	9.08E+00	1.31E-04
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Silica, Crystln	1175	6.34E-02	7.99E-03	1.68E+01	2.42E-04
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Zinc	7440666	1.43E-04	1.80E-05	3.78E-02	5.43E-07
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Beryllium	7440417	1.44E-06	1.82E-07	3.82E-04	5.49E-09
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Lead	7439921	7.21E-05	9.08E-06	1.91E-02	2.74E-07
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Cadmium	7440439	1.44E-06	1.82E-07	3.82E-04	5.49E-09
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Nickel	7440020	4.04E-05	5.09E-06	1.07E-02	1.54E-07
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Manganese	7439965	7.64E-04	9.62E-05	2.02E-01	2.91E-06
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Aluminum	7429905	2.16E-02	2.72E-03	5.73E+00	8.23E-05
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Cobalt	7440484	1.58E-05	2.00E-06	4.20E-03	6.04E-08
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Selenium	7782492	1.44E-06	1.82E-07	3.82E-04	5.49E-09
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Copper	7440508	5.34E-05	6.72E-06	1.41E-02	2.03E-07
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Chromium	7440473	4.04E-05	5.09E-06	1.07E-02	1.54E-07
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	Arsenic	7440382	1.73E-05	2.18E-06	4.58E-03	6.59E-08
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Cobalt	7440484	1.35E-05	1.71E-06	6.45E-03	9.28E-08
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Barium	7440393	2.77E-04	3.49E-05	1.32E-01	1.90E-06
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Cadmium	7440439	1.23E-06	1.55E-07	5.86E-04	8.44E-09
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Beryllium	7440417	1.23E-06	1.55E-07	5.86E-04	8.44E-09
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Zinc	7440666	1.22E-04	1.53E-05	5.81E-02	8.35E-07
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Nickel	7440020	3.45E-05	4.34E-06	1.64E-02	2.36E-07
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Silica, Crystln	1175	5.41E-02	6.82E-03	2.58E+01	3.71E-04
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Chromium	7440473	3.45E-05	4.34E-06	1.64E-02	2.36E-07
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Selenium	7782492	1.23E-06	1.55E-07	5.86E-04	8.44E-09
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Copper	7440508	4.55E-05	5.73E-06	2.17E-02	3.12E-07
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Manganese	7439965	6.52E-04	8.21E-05	3.11E-01	4.47E-06
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Aluminum	7429905	1.84E-02	2.32E-03	8.80E+00	1.27E-04
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Arsenic	7440382	1.48E-05	1.86E-06	7.04E-03	1.01E-07
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	Lead	7439921	6.15E-05	7.75E-06	2.93E-02	4.22E-07

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Lead	7439921	4.10E-05	5.17E-06	1.25E-02	1.81E-07
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Arsenic	7440382	9.84E-06	1.24E-06	3.01E-03	4.33E-08
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Silica, Crystln	1175	3.61E-02	4.55E-03	1.10E+01	1.59E-04
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Cadmium	7440439	8.20E-07	1.03E-07	2.51E-04	3.61E-09
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Nickel	7440020	2.30E-05	2.89E-06	7.03E-03	1.01E-07
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Barium	7440393	1.85E-04	2.33E-05	5.65E-02	8.12E-07
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Zinc	7440666	8.12E-05	1.02E-05	2.48E-02	3.57E-07
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Beryllium	7440417	8.20E-07	1.03E-07	2.51E-04	3.61E-09
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Chromium	7440473	2.30E-05	2.89E-06	7.03E-03	1.01E-07
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Cobalt	7440484	9.03E-06	1.14E-06	2.76E-03	3.97E-08
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Selenium	7782492	8.20E-07	1.03E-07	2.51E-04	3.61E-09
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Copper	7440508	3.04E-05	3.82E-06	9.29E-03	1.34E-07
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Manganese	7439965	4.35E-04	5.48E-05	1.33E-01	1.91E-06
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Aluminum	7429905	1.23E-02	1.55E-03	3.76E+00	5.42E-05
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0804	PROCESS 8, SYSTEM 3: D196, D198	Lead	7439921	6.30E-06	7.94E-07	1.67E-03	2.40E-08
S0804	PROCESS 8, SYSTEM 3: D196, D198	Cadmium	7440439	1.26E-07	1.59E-08	3.34E-05	4.80E-10
S0804	PROCESS 8, SYSTEM 3: D196, D198	Nickel	7440020	3.53E-06	4.45E-07	9.36E-04	1.35E-08
S0804	PROCESS 8, SYSTEM 3: D196, D198	Zinc	7440666	1.25E-05	1.57E-06	3.31E-03	4.76E-08
S0804	PROCESS 8, SYSTEM 3: D196, D198	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0804	PROCESS 8, SYSTEM 3: D196, D198	Chromium	7440473	3.53E-06	4.45E-07	9.36E-04	1.35E-08
S0804	PROCESS 8, SYSTEM 3: D196, D198	Selenium	7782492	1.26E-07	1.59E-08	3.34E-05	4.80E-10
S0804	PROCESS 8, SYSTEM 3: D196, D198	Copper	7440508	4.66E-06	5.87E-07	1.24E-03	1.78E-08
S0804	PROCESS 8, SYSTEM 3: D196, D198	Manganese	7439965	6.68E-05	8.42E-06	1.77E-02	2.55E-07
S0804	PROCESS 8, SYSTEM 3: D196, D198	Aluminum	7429905	1.89E-03	2.38E-04	5.01E-01	7.21E-06
S0804	PROCESS 8, SYSTEM 3: D196, D198	Arsenic	7440382	1.51E-06	1.90E-07	4.01E-04	5.77E-09
S0804	PROCESS 8, SYSTEM 3: D196, D198	Barium	7440393	2.84E-05	3.58E-06	7.52E-03	1.08E-07
S0804	PROCESS 8, SYSTEM 3: D196, D198	Silica, Crystln	1175	5.54E-03	6.99E-04	1.47E+00	2.12E-05
S0804	PROCESS 8, SYSTEM 3: D196, D198	Beryllium	7440417	1.26E-07	1.59E-08	3.34E-05	4.80E-10
S0804	PROCESS 8, SYSTEM 3: D196, D198	Cobalt	7440484	1.39E-06	1.75E-07	3.68E-04	5.29E-09
S0804	PROCESS 8, SYSTEM 3: D196, D198	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Lead	7439921	4.73E-05	5.95E-06	3.07E-02	4.42E-07
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Arsenic	7440382	1.13E-05	1.43E-06	7.38E-03	1.06E-07
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Cobalt	7440484	1.04E-05	1.32E-06	6.76E-03	9.73E-08
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Barium	7440393	2.12E-04	2.68E-05	1.38E-01	1.99E-06
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Silica, Crystln	1175	4.16E-02	5.24E-03	2.71E+01	3.89E-04
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Selenium	7782492	9.45E-07	1.19E-07	6.15E-04	8.84E-09
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Copper	7440508	3.50E-05	4.41E-06	2.28E-02	3.27E-07
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Manganese	7439965	5.01E-04	6.32E-05	3.26E-01	4.69E-06
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Aluminum	7429905	1.42E-02	1.79E-03	9.22E+00	1.33E-04
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Beryllium	7440417	9.45E-07	1.19E-07	6.15E-04	8.84E-09
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Zinc	7440666	9.36E-05	1.18E-05	6.09E-02	8.76E-07
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Nickel	7440020	2.65E-05	3.33E-06	1.72E-02	2.48E-07
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Chromium	7440473	2.65E-05	3.33E-06	1.72E-02	2.48E-07
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	Cadmium	7440439	9.45E-07	1.19E-07	6.15E-04	8.84E-09

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Silica, Crystln	1175	1.62E-01	2.04E-02	3.51E+02	5.06E-03
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Zinc	7440666	4.99E-04	6.28E-05	1.12E+00	1.61E-05
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Selenium	7782492	3.67E-06	4.63E-07	7.99E-03	1.15E-07
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Beryllium	7440417	3.67E-06	4.63E-07	7.99E-03	1.15E-07
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Nickel	7440020	7.01E-05	8.84E-06	1.44E-01	2.07E-06
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Copper	7440508	1.66E-04	2.09E-05	3.67E-01	5.28E-06
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Cadmium	7440439	3.67E-06	4.63E-07	7.99E-03	1.15E-07
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Barium	7440393	8.86E-05	1.12E-05	9.40E-03	1.35E-07
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Manganese	7439965	1.59E-03	2.00E-04	3.36E+00	4.83E-05
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Chromium	7440473	1.75E-04	2.21E-05	3.98E-01	5.73E-06
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Aluminum	7429905	4.86E-02	6.12E-03	1.04E+02	1.49E-03
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Arsenic	7440382	5.39E-05	6.79E-06	1.20E-01	1.72E-06
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Lead	7439921	1.28E-04	1.61E-05	2.64E-01	3.80E-06
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Cobalt	7440484	4.35E-06	5.48E-07	4.59E-04	6.61E-09
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	Cr(VI)	18540299	6.56E-06	8.27E-07	1.59E-02	2.29E-07
S0906	Aggregates Quarry	Nickel	7440020	1.33E-04	1.68E-05	1.17E+00	1.68E-05
S0906	Aggregates Quarry	Silica, Crystln	1175	2.93E-01	3.69E-02	2.57E+03	3.69E-02
S0906	Aggregates Quarry	Barium	7440393	1.07E-03	1.34E-04	9.34E+00	1.34E-04
S0906	Aggregates Quarry	Beryllium	7440417	6.66E-06	8.39E-07	5.83E-02	8.39E-07
S0906	Aggregates Quarry	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0906	Aggregates Quarry	Lead	7439921	1.27E-04	1.59E-05	1.11E+00	1.59E-05
S0906	Aggregates Quarry	Zinc	7440666	5.66E-04	7.13E-05	4.96E+00	7.13E-05
S0906	Aggregates Quarry	Selenium	7782492	6.66E-06	8.39E-07	5.83E-02	8.39E-07
S0906	Aggregates Quarry	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S0906	Aggregates Quarry	Copper	7440508	4.80E-04	6.04E-05	4.20E+00	6.04E-05
S0906	Aggregates Quarry	Manganese	7439965	2.10E-03	2.64E-04	1.84E+01	2.64E-04
S0906	Aggregates Quarry	Chromium	7440473	2.26E-04	2.85E-05	1.98E+00	2.85E-05
S0906	Aggregates Quarry	Aluminum	7429905	1.33E-01	1.68E-02	1.17E+03	1.68E-02
S0906	Aggregates Quarry	Arsenic	7440382	7.99E-05	1.01E-05	7.00E-01	1.01E-05
S0907	Clay Quarry	Barium	7440393	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S0907	Clay Quarry	Nickel	7440020	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S0907	Clay Quarry	Cobalt	7440484	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S0907	Clay Quarry	Copper	7440508	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S0907	Clay Quarry	Silica, Crystln	1175	3.06E-02	3.85E-03	2.68E+02	3.85E-03
S0907	Clay Quarry	Zinc	7440666	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S0907	Clay Quarry	Arsenic	7440382	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S0907	Clay Quarry	Manganese	7439965	1.29E-04	1.62E-05	1.13E+00	1.62E-05
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Zinc	7440666	4.00E-03	5.04E-04	3.82E+00	5.49E-05
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Silica, Crystln	1175	8.79E-01	1.11E-01	8.40E+02	1.21E-02
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Selenium	7782492	9.99E-05	1.26E-05	9.54E-02	1.37E-06
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Beryllium	7440417	2.00E-05	2.52E-06	1.91E-02	2.74E-07
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Nickel	7440020	4.00E-04	5.04E-05	3.82E-01	5.49E-06
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Cadmium	7440439	2.00E-05	2.52E-06	1.91E-02	2.74E-07
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Manganese	7439965	9.99E-03	1.26E-03	9.54E+00	1.37E-04
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Chromium	7440473	9.99E-04	1.26E-04	9.54E-01	1.37E-05
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Arsenic	7440382	2.40E-04	3.02E-05	2.29E-01	3.29E-06
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Lead	7439921	9.99E-04	1.26E-04	9.54E-01	1.37E-05
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S1010	EXTEC FEED & PROD	Silica, Crystln	1175	4.11E-01	5.18E-02	6.65E+00	9.56E-05
S1010	EXTEC FEED & PROD	Zinc	7440666	1.87E-03	2.36E-04	3.02E-02	4.35E-07
S1010	EXTEC FEED & PROD	Nickel	7440020	1.87E-04	2.36E-05	3.02E-03	4.35E-08
S1010	EXTEC FEED & PROD	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1010	EXTEC FEED & PROD	Arsenic	7440382	1.12E-04	1.41E-05	1.81E-03	2.61E-08
S1010	EXTEC FEED & PROD	Selenium	7782492	4.67E-05	5.89E-06	7.56E-04	1.09E-08
S1010	EXTEC FEED & PROD	Beryllium	7440417	9.35E-06	1.18E-06	1.51E-04	2.17E-09
S1010	EXTEC FEED & PROD	Lead	7439921	4.67E-04	5.89E-05	7.55E-03	1.09E-07
S1010	EXTEC FEED & PROD	Cadmium	7440439	9.35E-06	1.18E-06	1.51E-04	2.17E-09
S1010	EXTEC FEED & PROD	Manganese	7439965	4.67E-03	5.89E-04	7.56E-02	1.09E-06
S1010	EXTEC FEED & PROD	Chromium	7440473	4.67E-04	5.89E-05	7.56E-03	1.09E-07
S1010	EXTEC FEED & PROD	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Beryllium	7440417	1.12E-05	1.41E-06	5.36E-03	7.71E-08
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Nickel	7440020	2.24E-04	2.83E-05	1.07E-01	1.54E-06
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Selenium	7782492	5.61E-05	7.07E-06	2.68E-02	3.85E-07
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Arsenic	7440382	1.35E-04	1.70E-05	6.43E-02	9.25E-07
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Silica, Crystln	1175	4.94E-01	6.22E-02	2.36E+02	3.39E-03
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Lead	7439921	5.61E-04	7.07E-05	2.68E-01	3.85E-06
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Chromium	7440473	5.61E-04	7.07E-05	2.68E-01	3.85E-06
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Cadmium	7440439	1.12E-05	1.41E-06	5.36E-03	7.71E-08
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Manganese	7439965	5.61E-03	7.07E-04	2.68E+00	3.85E-05
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	Zinc	7440666	2.24E-03	2.83E-04	1.07E+00	1.54E-05
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Zinc	7440666	1.66E-03	2.09E-04	2.46E-01	3.55E-06
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Manganese	7439965	4.15E-03	5.22E-04	6.16E-01	8.87E-06
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Nickel	7440020	1.66E-04	2.09E-05	2.47E-02	3.55E-07
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Selenium	7782492	4.15E-05	5.22E-06	6.16E-03	8.86E-08
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Arsenic	7440382	9.94E-05	1.25E-05	1.48E-02	2.13E-07
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Beryllium	7440417	8.28E-06	1.04E-06	1.23E-03	1.77E-08
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Lead	7439921	4.15E-04	5.22E-05	6.16E-02	8.86E-07
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Chromium	7440473	4.15E-04	5.22E-05	6.16E-02	8.86E-07
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Cadmium	7440439	8.28E-06	1.04E-06	1.23E-03	1.77E-08
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	Silica, Crystln	1175	3.65E-01	4.59E-02	5.42E+01	7.80E-04

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S1019	MINED CLAY STOCKPILE	Zinc	7440666	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Nickel	7440020	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Copper	7440508	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Cobalt	7440484	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Barium	7440393	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Manganese	7439965	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Arsenic	7440382	3.86E-04	4.86E-05	3.16E-01	4.54E-06
S1019	MINED CLAY STOCKPILE	Silica, Crystln	1175	9.16E-02	1.15E-02	7.51E+01	1.08E-03
S1021	1020 & 1021 - TRANSAMERICAN	Nickel	7440020	3.41E-04	4.30E-05	9.04E-02	1.30E-06
S1021	1020 & 1021 - TRANSAMERICAN	Manganese	7439965	8.53E-03	1.07E-03	2.26E+00	3.25E-05
S1021	1020 & 1021 - TRANSAMERICAN	Cadmium	7440439	1.71E-05	2.15E-06	4.52E-03	6.50E-08
S1021	1020 & 1021 - TRANSAMERICAN	Arsenic	7440382	2.05E-04	2.58E-05	5.42E-02	7.80E-07
S1021	1020 & 1021 - TRANSAMERICAN	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1021	1020 & 1021 - TRANSAMERICAN	Lead	7439921	8.53E-04	1.07E-04	2.26E-01	3.25E-06
S1021	1020 & 1021 - TRANSAMERICAN	Zinc	7440666	3.41E-03	4.30E-04	9.04E-01	1.30E-05
S1021	1020 & 1021 - TRANSAMERICAN	Silica, Crystln	1175	7.51E-01	9.46E-02	1.99E+02	2.86E-03
S1021	1020 & 1021 - TRANSAMERICAN	Beryllium	7440417	1.71E-05	2.15E-06	4.52E-03	6.50E-08
S1021	1020 & 1021 - TRANSAMERICAN	Chromium	7440473	8.53E-04	1.07E-04	2.26E-01	3.25E-06
S1021	1020 & 1021 - TRANSAMERICAN	Selenium	7782492	8.53E-05	1.07E-05	2.26E-02	3.25E-07
S1021	1020 & 1021 - TRANSAMERICAN	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1051	FINISHED BRICK - HAUL ROAD	Zinc	7440666	6.88E-05	8.67E-06	5.59E-02	8.04E-07
S1051	FINISHED BRICK - HAUL ROAD	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1051	FINISHED BRICK - HAUL ROAD	Arsenic	7440382	1.48E-06	1.86E-07	1.20E-03	1.72E-08
S1051	FINISHED BRICK - HAUL ROAD	Lead	7439921	1.84E-05	2.32E-06	1.50E-02	2.15E-07
S1051	FINISHED BRICK - HAUL ROAD	Selenium	7782492	6.15E-07	7.75E-08	4.99E-04	7.18E-09
S1051	FINISHED BRICK - HAUL ROAD	Cadmium	7440439	6.15E-07	7.75E-08	4.99E-04	7.18E-09
S1051	FINISHED BRICK - HAUL ROAD	Copper	7440508	2.46E-05	3.10E-06	2.00E-02	2.87E-07
S1051	FINISHED BRICK - HAUL ROAD	Silica, Crystln	1175	2.70E-02	3.41E-03	2.20E+01	3.16E-04
S1051	FINISHED BRICK - HAUL ROAD	Nickel	7440020	2.89E-06	3.64E-07	2.35E-03	3.37E-08
S1051	FINISHED BRICK - HAUL ROAD	Chromium	7440473	1.54E-05	1.94E-06	1.25E-02	1.79E-07
S1051	FINISHED BRICK - HAUL ROAD	Aluminum	7429905	9.22E-03	1.16E-03	7.49E+00	1.08E-04
S1051	FINISHED BRICK - HAUL ROAD	Barium	7440393	8.91E-05	1.12E-05	7.24E-02	1.04E-06
S1051	FINISHED BRICK - HAUL ROAD	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1051	FINISHED BRICK - HAUL ROAD	Beryllium	7440417	6.15E-07	7.75E-08	4.99E-04	7.18E-09
S1051	FINISHED BRICK - HAUL ROAD	Manganese	7439965	3.01E-04	3.79E-05	2.45E-01	3.52E-06
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Aluminum	7429905	4.07E-01	5.13E-02	3.18E+02	4.57E-03
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Barium	7440393	3.93E-03	4.96E-04	3.07E+00	4.42E-05
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Cadmium	7440439	2.71E-05	3.41E-06	2.12E-02	3.05E-07
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Copper	7440508	1.09E-03	1.37E-04	8.47E-01	1.22E-05
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Chromium	7440473	6.79E-04	8.55E-05	5.30E-01	7.62E-06
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Manganese	7439965	1.33E-02	1.67E-03	1.04E+01	1.49E-04
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Beryllium	7440417	2.71E-05	3.41E-06	2.12E-02	3.05E-07
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Selenium	7782492	2.71E-05	3.41E-06	2.12E-02	3.05E-07
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Arsenic	7440382	6.51E-05	8.20E-06	5.08E-02	7.31E-07
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Nickel	7440020	1.28E-04	1.61E-05	9.96E-02	1.43E-06
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Lead	7439921	8.14E-04	1.03E-04	6.35E-01	9.14E-06
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Silica, Crystln	1175	1.19E+00	1.50E-01	9.32E+02	1.34E-02
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	Zinc	7440666	3.04E-03	3.83E-04	2.37E+00	3.41E-05

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Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S1053	RMC UNPAVED ROAD DUST	Cadmium	7440439	4.98E-06	6.27E-07	1.07E-03	1.54E-08
S1053	RMC UNPAVED ROAD DUST	Manganese	7439965	2.44E-03	3.08E-04	5.26E-01	7.57E-06
S1053	RMC UNPAVED ROAD DUST	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1053	RMC UNPAVED ROAD DUST	Beryllium	7440417	4.98E-06	6.27E-07	1.07E-03	1.54E-08
S1053	RMC UNPAVED ROAD DUST	Nickel	7440020	2.34E-05	2.95E-06	5.05E-03	7.26E-08
S1053	RMC UNPAVED ROAD DUST	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1053	RMC UNPAVED ROAD DUST	Lead	7439921	1.50E-04	1.88E-05	3.22E-02	4.63E-07
S1053	RMC UNPAVED ROAD DUST	Copper	7440508	1.99E-04	2.51E-05	4.29E-02	6.18E-07
S1053	RMC UNPAVED ROAD DUST	Barium	7440393	7.23E-04	9.10E-05	1.56E-01	2.24E-06
S1053	RMC UNPAVED ROAD DUST	Chromium	7440473	1.25E-04	1.57E-05	2.68E-02	3.86E-07
S1053	RMC UNPAVED ROAD DUST	Zinc	7440666	5.58E-04	7.03E-05	1.20E-01	1.73E-06
S1053	RMC UNPAVED ROAD DUST	Silica, Crystln	1175	2.19E-01	2.76E-02	4.72E+01	6.79E-04
S1053	RMC UNPAVED ROAD DUST	Aluminum	7429905	7.48E-02	9.42E-03	1.61E+01	2.32E-04
S1053	RMC UNPAVED ROAD DUST	Selenium	7782492	4.98E-06	6.27E-07	1.07E-03	1.54E-08
S1053	RMC UNPAVED ROAD DUST	Arsenic	7440382	1.20E-05	1.51E-06	2.58E-03	3.71E-08
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Chromium	7440473	2.66E-04	3.35E-05	3.76E-01	5.41E-06
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Aluminum	7429905	1.59E-01	2.01E-02	2.26E+02	3.25E-03
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Manganese	7439965	5.21E-03	6.56E-04	7.37E+00	1.06E-04
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Barium	7440393	1.54E-03	1.94E-04	2.18E+00	3.14E-05
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Silica, Crystln	1175	4.68E-01	5.89E-02	6.62E+02	9.52E-03
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Beryllium	7440417	1.06E-05	1.34E-06	1.50E-02	2.16E-07
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Cadmium	7440439	1.06E-05	1.34E-06	1.50E-02	2.16E-07
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Zinc	7440666	1.19E-03	1.50E-04	1.68E+00	2.42E-05
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Copper	7440508	4.25E-04	5.36E-05	6.02E-01	8.65E-06
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Lead	7439921	3.19E-04	4.02E-05	4.51E-01	6.49E-06
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Selenium	7782492	1.06E-05	1.34E-06	1.50E-02	2.16E-07
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Arsenic	7440382	2.55E-05	3.21E-06	3.61E-02	5.19E-07
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Nickel	7440020	5.00E-05	6.30E-06	7.07E-02	1.02E-06
S1054	AGGREGATES SHIPPED UNPAVED ROAD	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1055	CLAY MINED FOR BRICK	Manganese	7439965	2.39E-05	3.01E-06	1.62E-01	2.33E-06
S1055	CLAY MINED FOR BRICK	Selenium	7782492	4.88E-08	6.15E-09	3.30E-04	4.75E-09
S1055	CLAY MINED FOR BRICK	Beryllium	7440417	4.88E-08	6.15E-09	3.30E-04	4.75E-09
S1055	CLAY MINED FOR BRICK	Copper	7440508	1.95E-06	2.46E-07	1.32E-02	1.90E-07
S1055	CLAY MINED FOR BRICK	Aluminum	7429905	7.32E-04	9.22E-05	4.95E+00	7.12E-05
S1055	CLAY MINED FOR BRICK	Cadmium	7440439	4.88E-08	6.15E-09	3.30E-04	4.75E-09
S1055	CLAY MINED FOR BRICK	Lead	7439921	1.46E-06	1.84E-07	9.90E-03	1.42E-07
S1055	CLAY MINED FOR BRICK	Nickel	7440020	2.29E-07	2.89E-08	1.55E-03	2.23E-08
S1055	CLAY MINED FOR BRICK	Silica, Crystln	1175	2.15E-03	2.70E-04	1.45E+01	2.09E-04
S1055	CLAY MINED FOR BRICK	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1055	CLAY MINED FOR BRICK	Arsenic	7440382	1.17E-07	1.47E-08	7.92E-04	1.14E-08
S1055	CLAY MINED FOR BRICK	Chromium	7440473	1.22E-06	1.54E-07	8.25E-03	1.19E-07
S1055	CLAY MINED FOR BRICK	Barium	7440393	7.07E-06	8.91E-07	4.79E-02	6.88E-07
S1055	CLAY MINED FOR BRICK	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1055	CLAY MINED FOR BRICK	Zinc	7440666	5.46E-06	6.88E-07	3.70E-02	5.32E-07

Table B-2a. Emission Rate by Substance and Source (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Source ID	Source Name	Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Selenium	7782492	1.12E-06	1.41E-07	7.60E-03	1.09E-07
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Barium	7440393	1.63E-04	2.05E-05	1.10E+00	1.58E-05
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Nickel	7440020	5.28E-06	6.65E-07	3.57E-02	5.14E-07
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Cadmium	7440439	1.12E-06	1.41E-07	7.60E-03	1.09E-07
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Silica, Crystln	1175	4.94E-02	6.23E-03	3.34E+02	4.81E-03
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Lead	7439921	3.37E-05	4.25E-06	2.28E-01	3.28E-06
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Mercury	7439976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Aluminum	7429905	1.68E-02	2.12E-03	1.14E+02	1.64E-03
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Zinc	7440666	1.26E-04	1.59E-05	8.51E-01	1.22E-05
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Manganese	7439965	5.50E-04	6.93E-05	3.72E+00	5.35E-05
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Chromium	7440473	2.81E-05	3.54E-06	1.90E-01	2.73E-06
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Copper	7440508	4.49E-05	5.66E-06	3.04E-01	4.37E-06
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Arsenic	7440382	2.70E-06	3.40E-07	1.82E-02	2.62E-07
S1056	PAVED HAUL ROAD - MINED AGGREGAE	Beryllium	7440417	1.12E-06	1.41E-07	7.60E-03	1.09E-07
S0901	PAI PORTABLE WELDERS	Titanium Dioxide	13463677	2.00E-03	2.52E-04	6.67E-02	9.59E-07
S0901	PAI PORTABLE WELDERS	Tin	7440315	2.00E-03	2.52E-04	7.60E-04	1.09E-08
S0901	PAI PORTABLE WELDERS	Magnesium	7439954	2.00E-03	2.52E-04	8.55E-03	1.23E-07
S0901	PAI PORTABLE WELDERS	Naphthalene	91203	2.12E-03	2.67E-04	2.13E-01	3.06E-06
S0901	PAI PORTABLE WELDERS	Benzene	71432	5.61E-02	7.07E-03	5.63E+00	8.10E-05
S0901	PAI PORTABLE WELDERS	Formaldehyde	50000	5.09E-02	6.41E-03	5.11E+00	7.34E-05
S0901	PAI PORTABLE WELDERS	Quartz	14808607	2.00E-03	2.52E-04	2.14E-02	3.08E-07
S0901	PAI PORTABLE WELDERS	Barium	7440393	2.00E-03	2.52E-04	2.85E-02	4.10E-07
S0901	PAI PORTABLE WELDERS	Cr(VI)	18540299	2.00E-03	2.52E-04	9.69E-02	1.39E-06
S0901	PAI PORTABLE WELDERS	Manganese	7439965	2.00E-03	2.52E-04	6.22E-02	8.94E-07
S0901	PAI PORTABLE WELDERS	Copper	7440508	2.00E-03	2.52E-04	4.14E-02	5.96E-07
S0901	PAI PORTABLE WELDERS	Chromium	7440473	2.00E-03	2.52E-04	7.93E-02	1.14E-06
S0901	PAI PORTABLE WELDERS	1,2,4TriMeBenze	95636	2.05E-02	2.59E-03	2.06E+00	2.97E-05
S0901	PAI PORTABLE WELDERS	Lead	7439921	2.00E-03	2.52E-04	3.45E-03	4.97E-08
S0901	PAI PORTABLE WELDERS	Aluminum	7429905	2.00E-03	2.52E-04	9.50E-03	1.37E-07
S0901	PAI PORTABLE WELDERS	Alumin Oxide	1344281	2.00E-03	2.52E-04	6.91E-03	9.94E-08
S0901	PAI PORTABLE WELDERS	Chlorine	7782505	6.71E-03	8.45E-04	6.73E-01	9.68E-06
S0901	PAI PORTABLE WELDERS	Xylenes	1330207	1.12E-02	1.41E-03	1.12E+00	1.62E-05
S0901	PAI PORTABLE WELDERS	Hexane	110543	7.94E-02	1.00E-02	7.97E+00	1.15E-04
S0901	PAI PORTABLE WELDERS	Toluene	108883	1.52E-01	1.91E-02	1.52E+01	2.19E-04
S0901	PAI PORTABLE WELDERS	Acrolein	107028	2.94E-03	3.70E-04	2.95E-01	4.24E-06
S0901	PAI PORTABLE WELDERS	1,3-Butadiene	106990	1.35E-02	1.71E-03	1.36E+00	1.95E-05
S0901	PAI PORTABLE WELDERS	Ethyl Benzene	100414	3.48E-02	4.38E-03	3.49E+00	5.02E-05
S0902	PCP WELDERS, EXEMPT DIESEL	Titanium Dioxide	13463677	4.00E-03	5.04E-04	4.39E-02	6.32E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Tin	7440315	4.00E-03	5.04E-04	5.01E-04	7.20E-09
S0902	PCP WELDERS, EXEMPT DIESEL	Magnesium	7439954	4.00E-03	5.04E-04	5.63E-03	8.10E-08
S0902	PCP WELDERS, EXEMPT DIESEL	Cr(VI)	18540299	4.00E-03	5.04E-04	6.38E-02	9.18E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Quartz	14808607	4.00E-03	5.04E-04	1.41E-02	2.03E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Copper	7440508	4.00E-03	5.04E-04	2.73E-02	3.93E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Chromium	7440473	4.00E-03	5.04E-04	5.22E-02	7.51E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Barium	7440393	4.00E-03	5.04E-04	1.88E-02	2.70E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Manganese	7439965	4.00E-03	5.04E-04	4.10E-02	5.89E-07
S0902	PCP WELDERS, EXEMPT DIESEL	Lead	7439921	4.00E-03	5.04E-04	2.28E-03	3.27E-08
S0902	PCP WELDERS, EXEMPT DIESEL	Aluminum	7429905	4.00E-03	5.04E-04	6.26E-03	9.01E-08
S0902	PCP WELDERS, EXEMPT DIESEL	Alumin Oxide	1344281	4.00E-03	5.04E-04	4.55E-03	6.55E-08
S0902	PCP WELDERS, EXEMPT DIESEL	DieselExhPM	9901	1.20E-01	1.51E-02	1.07E+01	1.54E-04

Table B-2b. Emission Rate by Substance (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
Silica, Crystln	1175	6.06E+00	7.64E-01	7.14E+03	1.03E-01
DieselExhPM	9901	1.22E-01	1.54E-02	1.98E+01	2.85E-04
Formaldehyde	50000	8.03E-02	1.01E-02	5.11E+00	7.35E-05
Benzene	71432	2.01E-01	2.53E-02	2.26E+02	3.25E-03
1,1,1-TCA	71556	2.35E-04	2.96E-05	3.57E-01	5.13E-06
Methyl Chloride	74873	3.35E-02	4.22E-03	5.09E+01	7.32E-04
Methyl Iodide	74884	4.65E-03	5.86E-04	7.06E+00	1.02E-04
Ethyl Chloride	75003	2.85E-02	3.59E-03	4.33E+01	6.22E-04
CS2	75150	2.15E-03	2.71E-04	3.26E+00	4.70E-05
MEK	78933	1.10E-02	1.39E-03	1.67E+01	2.40E-04
DiButyl Phthal	84742	7.00E-03	8.82E-04	1.06E+01	1.53E-04
ButylBenzPhthal	85687	9.00E-04	1.13E-04	1.37E+00	1.97E-05
Naphthalene	91203	5.40E-03	6.80E-04	5.31E+00	7.64E-05
2MeNaphthalene	91576	2.92E-03	3.68E-04	4.78E+00	6.87E-05
o-Xylene	95476	3.00E-03	3.78E-04	5.02E+00	7.21E-05
1,2,4TriMeBenze	95636	2.05E-02	2.59E-03	2.06E+00	2.97E-05
Cumene	98828	1.75E-05	2.20E-06	1.09E-01	1.57E-06
Ethyl Benzene	100414	3.70E-02	4.67E-03	7.18E+00	1.03E-04
Styrene	100425	1.00E-03	1.26E-04	1.52E+00	2.18E-05
p-DiClBenzene	106467	2.40E-03	3.02E-04	3.64E+00	5.24E-05
1,3-Butadiene	106990	1.35E-02	1.71E-03	1.36E+00	1.95E-05
Acrolein	107028	2.94E-03	3.70E-04	2.95E-01	4.24E-06
Toluene	108883	1.60E-01	2.02E-02	2.82E+01	4.05E-04
Phenol	108952	4.30E-03	5.42E-04	6.53E+00	9.39E-05
Hexane	110543	7.94E-02	1.00E-02	7.97E+00	1.15E-04
Diethanolamine	111422	7.62E-04	9.60E-05	4.75E+00	6.84E-05
Di2-EthHxPhthal	117817	1.00E-01	1.26E-02	1.52E+02	2.18E-03
Perc	127184	1.40E-04	1.76E-05	2.13E-01	3.06E-06
2,2,4TriMePentn	540841	3.66E-06	4.61E-07	5.05E-03	7.26E-08
Xylenes	1330207	1.48E-02	1.87E-03	7.99E+00	1.15E-04

Table B-2b. Emission Rate by Substance (Emissions Provided by EIM Transaction File)

Pacific Clay Products Inc.
 Facility ID: 017953

Substance Name	CAS No.	1-hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
Alumin Oxide	1344281	6.00E-03	7.56E-04	1.15E-02	1.65E-07
Aluminum	7429905	9.76E-01	1.23E-01	1.99E+03	2.87E-02
Lead	7439921	1.13E-02	1.42E-03	4.39E+00	6.31E-05
Magnesium	7439954	6.00E-03	7.56E-04	1.42E-02	2.04E-07
Manganese	7439965	8.40E-02	1.06E-02	8.50E+01	1.22E-03
Mercury	7439976	3.75E-04	4.72E-05	5.69E-01	8.19E-06
Nickel	7440020	3.01E-03	3.79E-04	4.44E+00	6.39E-05
Tin	7440315	6.00E-03	7.56E-04	1.26E-03	1.81E-08
Arsenic	7440382	3.74E-03	4.72E-04	5.92E+00	8.51E-05
Barium	7440393	1.64E-02	2.06E-03	1.88E+01	2.70E-04
Beryllium	7440417	1.50E-04	1.89E-05	1.77E-01	2.54E-06
Cadmium	7440439	1.22E-04	1.54E-05	8.65E-02	1.24E-06
Chromium	7440473	1.10E-02	1.39E-03	5.24E+00	7.54E-05
Cobalt	7440484	1.15E-03	1.45E-04	2.26E+00	3.26E-05
Copper	7440508	9.78E-03	1.23E-03	8.79E+00	1.26E-04
Zinc	7440666	2.11E-02	2.65E-03	1.97E+01	2.84E-04
NH3	7664417	3.84E-02	4.84E-03	2.39E-02	3.43E-07
Selenium	7782492	3.92E-04	4.94E-05	2.66E-01	3.83E-06
Chlorine	7782505	7.17E-02	9.03E-03	9.94E+01	1.43E-03
Titanium Dioxide	13463677	6.00E-03	7.56E-04	1.11E-01	1.59E-06
Quartz	14808607	6.00E-03	7.56E-04	3.55E-02	5.11E-07
Cr(VI)	18540299	6.01E-03	7.57E-04	1.77E-01	2.54E-06
TriMeBenzns	25551137	6.84E-04	8.61E-05	4.27E+00	6.14E-05

Table B-3. Toxicity Data by Substance - Exposure Pathways

Pacific Clay Products Inc.
Facility ID: 017953

Substance Name	CAS No.	Cancer Potency Values ¹		Chronic RELs ²		Chronic 8-HR ² Inhalation REL (µg/m ³)	Acute ² Inhalation REL (µg/m ³)	Multi Pathway Substance	Modeled Exposure Pathways ³								
		Inhalation (mg/kg-day) ⁻¹	Oral (mg/kg-day) ⁻¹	Inhalation (µg/m ³)	Oral (µg/kg BW-day)				Inhalation	Soil Ingestion	Dermal	Mother's Milk	Homegrown Produce				
													Leafy	Root	Exposed	Protected	
Silica, Crystln	1175	--	--	3.00E+00	--	--	--		W,R								
DieselExhPM	9901	1.10E+00	--	5.00E+00	--	--	--		W,R								
Formaldehyde	50000	2.10E-02	--	9.00E+00	--	9.00E+00	5.50E+01		W,R								
Benzene	71432	1.00E-01	--	3.00E+00	--	3.00E+00	2.70E+01		W,R								
1,1,1-TCA	71556	--	--	1.00E+03	--	--	6.80E+04		W,R								
Methyl Chloride	74873	--	--	--	--	--	--		W,R								
Methyl Iodide	74884	--	--	--	--	--	--		W,R								
Ethyl Chloride	75003	--	--	3.00E+04	--	--	--		W,R								
CS2	75150	--	--	8.00E+02	--	--	6.20E+03		W,R								
MEK	78933	--	--	--	--	--	1.30E+04		W,R								
DiButyl Phthal	84742	--	--	--	--	--	--		W,R								
ButylBenzPhthal	85687	--	--	--	--	--	--		W,R								
Naphthalene	91203	1.20E-01	--	9.00E+00	--	--	--		W,R								
2MeNaphthalene	91576	--	--	--	--	--	--		W,R								
o-Xylene	95476	--	--	7.00E+02	--	--	2.20E+04		W,R								
1,2,4TriMeBenze	95636	--	--	4.00E+00	--	8.00E+00	2.40E+03		W,R								
Cumene	98828	--	--	--	--	--	--		W,R								
Ethyl Benzene	100414	8.70E-03	--	2.00E+03	--	--	--		W,R								
Styrene	100425	--	--	9.00E+02	--	--	2.10E+04		W,R								
p-DiClBenzene	106467	4.00E-02	--	8.00E+02	--	--	--		W,R								
1,3-Butadiene	106990	6.00E-01	--	2.00E+00	--	9.00E+00	6.60E+02		W,R								
Acrolein	107028	--	--	3.50E-01	--	7.00E-01	2.50E+00		W,R								
Toluene	108883	--	--	4.20E+02	--	8.30E+02	5.00E+03		W,R								
Phenol	108952	--	--	2.00E+02	--	--	5.80E+03		W,R								
Hexane	110543	--	--	7.00E+03	--	--	--		W,R								
Diethanolamine	111422	--	--	3.00E+00	--	--	--		W,R								
Di2-EthHxPhthal	117817	8.40E-03	8.40E-03	--	--	--	--	X	W,R	W,R	W,R		R	R	R	R	
Perc	127184	2.10E-02	--	3.50E+01	--	--	2.00E+04		W,R								
2,2,4TriMePentn	540841	--	--	--	--	--	--		W,R								
Xylenes	1330207	--	--	7.00E+02	--	--	2.20E+04		W,R								
Alumin Oxide	1344281	--	--	--	--	--	--		W,R								
Aluminum	7429905	--	--	--	--	--	--		W,R								
Lead	7439921	4.20E-02	8.50E-03	--	--	--	--	X	W,R	W,R	W,R	R	R	R	R	R	
Manganese	7439965	--	--	9.00E-02	--	1.70E-01	--		W,R								
Mercury	7439976	--	--	3.00E-02	1.60E-04	6.00E-02	6.00E-01	X	W,R	W,R	W,R		R	R	R	R	
Nickel	7440020	9.10E-01	--	1.40E-02	1.10E-02	6.00E-02	2.00E-01	X	W,R	W,R	W,R		R	R	R	R	
Arsenic	7440382	1.20E+01	1.50E+00	1.50E-02	3.50E-06	1.50E-02	2.00E-01	X	W,R	W,R	W,R		R	R	R	R	
Barium	7440393	--	--	--	--	--	--		W,R								
Beryllium	7440417	8.40E+00	--	7.00E-03	2.00E-03	--	--	X	W,R	W,R	W,R		R	R	R	R	
Cadmium	7440439	1.50E+01	--	2.00E-02	5.00E-04	--	--	X	W,R	W,R	W,R		R	R	R	R	
Chromium	7440473	--	--	--	--	--	--		W,R								
Cobalt	7440484	2.70E+01	--	--	--	--	--		W,R								
Copper	7440508	--	--	--	--	--	1.00E+02		W,R								
Zinc	7440666	--	--	--	--	--	--		W,R								
NH3	7664417	--	--	2.00E+02	--	--	3.20E+03		W,R								
Selenium	7782492	--	--	2.00E+01	5.00E-03	--	--		W,R								
Chlorine	7782505	--	--	2.00E-01	--	--	2.10E+02		W,R								
Quartz	14808607	--	--	3.00E+00	--	--	--		W,R								
Cr(VI)	18540299	5.10E+02	5.00E-01	2.00E-01	2.00E-02	--	--	X	W,R	W,R	W,R		R	R	R	R	
TriMeBenzns	25551137	--	--	4.00E+00	--	8.00E+00	2.40E+03		W,R								

1. Cancer potency values from OEHHA Appendix A: Hot Spots Unit Risk and Cancer Potency Values, updated October 2020.
 2. Noncancer chronic and acute RELs from OEHHA Acute, 8-hour and Chronic Reference Exposure Level (REL) Summary, updated November 2019.
 3. W: Modeled for worker receptors, R: Modeled for residential receptors

Table B-5. Model Emission Source IDs and Parameters

Pacific Clay Products Inc.
Facility ID: 017953

Model Source Type	Model Source ID	Model Source Name/Description	UTM East (m)	UTM North (m)	Source Parameters							
					Base Elevation (m)	Source Height (m)	Stack Diameter (m)	Stack Velocity (m/s)	Stack Temperature (K)	Sigma Y (m)	Sigma Z (m)	Length X (m)
VOLUME	S0007	CONCRETE BATCH PLANT NO. 1	462744	3731984	371.57	1.52	--	--	--	--	3.05	13.11
POINT	S0062	KILN NO. 3	462849	3732020	370.78	7.47	0.88	27.68	436.48	0.00	--	--
VOLUME	S0071	LPG STORAGE NO. 1	462880	3732219	368.65	1.52	--	--	--	--	1.52	6.55
VOLUME	S0073	LPG STORAGE NO. 2	462883	3732216	368.66	1.52	--	--	--	--	1.52	6.55
POINT	S0075	ENVELOPE KILN	462753	3732048	370.87	7.06	0.89	6.54	685.93	0.00	--	--
POINT	S0076	TUNNEL KILN NO. 4	462735	3732083	370.88	12.40	1.27	6.34	436.98	0.00	--	--
VOLUME	S0089	C89 - BRICK FORMING #4	462830	3732127	370.70	7.62	--	--	--	--	1.52	6.55
VOLUME	S0100	BRICK TUMBLERS, COATINGS	462884	3732084	369.96	3.66	--	--	--	--	3.05	13.11
POINT	S0107	TUNNEL KILN NO. 2	462795	3732044	370.79	5.54	0.76	14.54	474.26	0.00	--	--
VOLUME	S0114	GASOLINE STORAGE AND DISPENSING	462634	3731971	373.13	0.91	--	--	--	--	0.91	3.93
VOLUME	S0122	EXTEC SCREENING	463621	3730127	430.92	3.66	--	--	--	--	3.05	13.11
VOLUME	S0139	C139 CONTROL (BRICK FORMING)	462764	3731974	372.21	3.66	--	--	--	--	3.05	13.11
VOLUME	S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	462793	3731953	372.77	6.10	--	--	--	--	1.52	6.55
VOLUME	S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	462826	3732040	370.88	4.57	--	--	--	--	0.91	3.93
VOLUME	S0150	SPRAY COATING OPERATION	462704	3732057	370.85	6.10	--	--	--	--	1.22	5.24
VOLUME	S0173	C173 BRICK TUMBLER NO. 1	462876	3732086	370.36	7.62	--	--	--	--	1.52	6.55
VOLUME	S0175	C175 BRICK TUMBLER NO. 2	462859	3731972	371.09	7.62	--	--	--	--	1.52	6.55
VOLUME	S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	463575	3730005	427.86	3.05	--	--	--	--	0.71	6.09
VOLUME	S0216	C216 CONTROL (S3 CEMENT SILO)	463463	3730276	426.32	3.66	--	--	--	--	3.05	13.11
VOLUME	S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	463463	3730275	426.32	3.05	--	--	--	--	3.05	13.11
VOLUME	S0235	EXTEC SCREENING PLANT AND ENGINE	463859	3730560	402.12	1.52	--	--	--	--	0.71	6.09
VOLUME	S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	461817	3731211	409.92	1.52	--	--	--	--	0.71	6.09
VOLUME	S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	463623	3730037	428.56	1.52	--	--	--	--	0.70	3.01
VOLUME	S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	463651	3730133	429.88	1.52	--	--	--	--	0.70	6.82
VOLUME	S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	463451	3730044	441.57	5.00	--	--	--	--	1.16	22.28
VOLUME	S0804	PROCESS 8, SYSTEM 3: D196, D198	463578	3730114	432.23	5.00	--	--	--	--	1.16	16.70
VOLUME	S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	463385	3729999	446.37	5.00	--	--	--	--	1.16	31.46
VOLUME	S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	463443	3730041	441.92	5.00	--	--	--	--	1.16	47.90
VOLUME	S0901	PAI PORTABLE WELDERS	463500	3730100	437.35	1.52	--	--	--	--	0.61	6.10

Table B-5. Model Emission Source IDs and Parameters

Pacific Clay Products Inc.
Facility ID: 017953

Model Source Type	Model Source ID	Model Source Name/Description	UTM East (m)	UTM North (m)	Source Parameters							
					Base Elevation (m)	Source Height (m)	Stack Diameter (m)	Stack Velocity (m/s)	Stack Temperature (K)	Sigma Y (m)	Sigma Z (m)	Length X (m)
VOLUME	S0902	PCP WELDERS, EXEMPT DIESEL	462788	3732053	370.87	1.52	--	--	--	--	0.61	2.62
VOLUME	S0906	Aggregates Quarry	464007	3730620	407.98	1.00	--	--	--	--	0.47	50.00
VOLUME	S0907	Clay Quarry	462850	3731369	393.61	1.00	--	--	--	--	0.93	50.00
AREA_POLY	S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	463489	3730114	437.42	2.00	--	--	--	--	--	--
AREA_POLY	S1010	EXTEC FEED & PROD	463857	3730588	401.49	2.00	--	--	--	--	--	--
AREA_POLY	S1012	1011 AND 1012 BASE PLANT FEED & PROD.	463680	3730157	430.78	2.00	--	--	--	--	--	--
AREA_POLY	S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	463630	3730417	424.73	2.00	--	--	--	--	--	--
AREA_POLY	S1019	MINED CLAY STOCKPILE	462689	3731964	372.38	2.00	--	--	--	--	--	--
AREA_POLY	S1021	1020 & 1021 - TRANSAMERICAN	461805	3731281	414.64	2.00	--	--	--	--	--	--
LINE_VOLUME	S1051	FINISHED BRICK - HAUL ROAD	462805	3732387	--	--	--	--	--	--	--	--
LINE_VOLUME	S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	464133	3729954	--	--	--	--	--	--	--	--
LINE_VOLUME	S1053	RMC UNPAVED ROAD DUST	463757	3730181	--	--	--	--	--	--	--	--
LINE_VOLUME	S1054	AGGREGATES SHIPPED UNPAVED ROAD	463407	3730061	--	--	--	--	--	--	--	--
LINE_VOLUME	S1055	CLAY MINED FOR BRICK	462881	3731377	--	--	--	--	--	--	--	--
LINE_VOLUME	S1056	PAVED HAUL ROAD - MINED AGGREGAE	463985	3730602	--	--	--	--	--	--	--	--

Bolded model source names/descriptions are aggregated sources from Table B-2. Emission Rate by Substance and Source (Emissions Provided by EIM File).

Highlighted cells are model sources left in AERMOD runs, despite not operating during the 2017 calendar year (i.e., no TAC emissions). Therefore, they do not contribute to cancer and noncancer health risks.

Table B-6. Sensitive Receptors and Risk Results

Pacific Clay Products Inc.
 Facility ID: 017953

Receptor ID ¹	Name	East UTM	North UTM	Cancer Risk per Million Exposed (30-Year Exposure)	Chronic Hazard Index	Chronic 8-Hr Hazard Index	Acute Hazard Index
1	Luiseno Elementary School	460745.42	3731752.85	0.99	0.067	0.003	0.042
2	Rice Canyon Elementary School	462928.27	3728787.68	1.60	0.114	0.007	0.055
3	Terra Cotta Middle School	463689.11	3728339.74	1.90	0.140	0.009	0.038
4	Aberhill Elementary School	464515.28	3730038.55	3.92	0.310	0.023	0.069
5	Little Farm Preschool	464109.09	3728364.41	1.92	0.142	0.009	0.033
6	Machado Elementary School	465098.95	3727188.96	1.04	0.075	0.004	0.014
7	Playfull Learning Daycare	465328.72	3727905.47	1.25	0.089	0.005	0.016
8	Stepping Stones Preschool and Childcare	465430.55	3727558.89	1.10	0.079	0.004	0.014
9	Angelone's Family Daycare	464204.73	3726938.62	1.04	0.074	0.004	0.015
10	Hillside Senior Living	464544.28	3729667.17	2.92	0.227	0.017	0.070
11	Highpointe Care North Lake House	463822.29	3727493.96	1.27	0.092	0.005	0.024
12	Temescal Valley High School	463822.29	3727493.96	0.57	0.040	0.002	0.010

1. Receptor IDs correspond to HRA results contained in `PacificClay2017SensitiveReceptors` folder in supplied modeling and HRA files.

Table B-7. PMI Cancer Risk by Substance and Exposure Pathway

Pacific Clay Products Inc.
Facility ID: 017953

PMI INFO

Location: 462656.78, 3732208.25 (UTM E, UTM N)
Cancer Risk: 33.94 per million exposed

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution to Total	Multipathway?	Multipathway Total
Naphthalene	91203	1.15E-04	1.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-08	0.04%		--
Benzene	71432	4.95E-03	4.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-07	1.41%		--
Formaldehyde	50000	1.06E-06	2.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-11	0.00%		--
NH3	7664417	4.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cumene	98828	2.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Toluene	108883	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Ethyl Benzene	100414	8.37E-05	7.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-10	0.00%		--
Xylenes	1330207	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
p-DiClBenzene	106467	8.19E-05	3.17E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-09	0.01%		--
o-Xylene	95476	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
TriMeBenzns	25551137	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
2MeNaphthalene	91576	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Diethanolamine	111422	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Chlorine	7782505	2.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
DiButyl Phthal	84742	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Methyl Iodide	74884	1.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
MEK	78933	3.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Methyl Chloride	74873	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Ethyl Chloride	75003	9.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
1,1,1-TCA	71556	8.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Perc	127184	4.78E-06	9.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70E-11	0.00%		--
CS2	75150	7.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
ButylBenzPhthal	85687	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Styrene	100425	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--

Table B-7. PMI Cancer Risk by Substance and Exposure Pathway

Pacific Clay Products Inc.
Facility ID: 017953

PMI INFO

Location: 462656.78, 3732208.25 (UTM E, UTM N)
Cancer Risk: 33.94 per million exposed

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution to Total	Multipathway?	Multipathway Total
Di2-EthHxPhthal	117817	3.41E-03	2.77E-08	4.23E-10	1.02E-10	0.00E+00	1.12E-07	1.40E-07	0.41%	X	1.40E-07
Phenol	108952	1.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Arsenic	7440382	3.30E-04	2.70E-06	1.02E-05	6.94E-07	0.00E+00	1.23E-05	2.59E-05	76.33%	X	2.59E-05
Manganese	7439965	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Beryllium	7440417	1.98E-06	1.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-08	0.05%	X	1.61E-08
Mercury	7439976	1.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%	X	0.00E+00
2,2,4TriMePentn	540841	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Hexane	110543	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
DieselExhPM	9901	5.85E-05	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-08	0.18%		--
Cr(VI)	18540299	3.88E-08	1.91E-08	1.69E-10	9.06E-12	0.00E+00	1.01E-08	2.93E-08	0.09%	X	2.93E-08
Lead	7439921	4.32E-05	1.24E-09	7.55E-09	2.57E-10	1.58E-10	2.92E-09	1.21E-08	0.04%	X	1.21E-08
Aluminum	7429905	1.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Chromium	7440473	4.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cadmium	7440439	1.09E-06	1.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-08	0.05%	X	1.59E-08
Copper	7440508	3.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Nickel	7440020	2.83E-04	2.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-07	0.73%	X	2.49E-07
Selenium	7782492	2.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Zinc	7440666	4.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Silica, Crystln	1175	1.77E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Barium	7440393	4.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cobalt	7440484	2.69E-04	7.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-06	20.67%		--
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Total:			1.06E-05	1.02E-05	6.94E-07	1.58E-10	1.25E-05	3.39E-05	100.00%		2.64E-05

Table B-8. PMI Cancer Risk by Source and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

PMI INFO

Location: 462656.78, 3732208.25 (UTM E, UTM N)

*Cancer Risk: 33.94 per million exposed

¹ Model Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	8.40E-07	1.43E-06	9.72E-08	0.00E+00	1.82E-06	4.19E-06	12.34%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	2.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-11	0.00%
S0107	TUNNEL KILN NO. 2	1.22E-07	2.08E-07	1.42E-08	0.00E+00	2.66E-07	6.11E-07	1.80%
S0114	GASOLINE STORAGE AND DISPENSING	6.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-11	0.00%
S0122	EXTEC SCREENING	4.90E-11	4.28E-11	2.88E-12	2.06E-14	5.11E-11	1.46E-10	0.00%
S0139	C139 CONTROL (BRICK FORMING)	3.46E-06	3.04E-06	2.07E-07	0.00E+00	3.68E-06	1.04E-05	30.62%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	3.15E-06	2.77E-06	1.89E-07	0.00E+00	3.35E-06	9.46E-06	27.86%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	2.94E-08	2.58E-08	1.76E-09	0.00E+00	3.12E-08	8.81E-08	0.26%
S0175	C175 BRICK TUMBLER NO. 2	2.99E-08	2.62E-08	1.79E-09	0.00E+00	3.18E-08	8.97E-08	0.26%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	1.18E-09	1.03E-09	6.94E-11	4.97E-13	1.23E-09	3.51E-09	0.01%
S0216	C216 CONTROL (S3 CEMENT SILO)	1.75E-10	4.58E-11	3.09E-12	2.86E-15	1.38E-10	3.62E-10	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	8.11E-10	2.28E-10	1.54E-11	2.22E-14	6.54E-10	1.71E-09	0.01%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	6.33E-08	9.33E-10	6.28E-11	4.50E-13	1.11E-09	6.54E-08	0.19%
S0801	PROCESS 8. SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	6.13E-10	5.35E-10	3.61E-11	2.58E-13	6.38E-10	1.82E-09	0.01%

Table B-8. PMI Cancer Risk by Source and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

PMI INFO

Location: 462656.78, 3732208.25 (UTM E, UTM N)
 *Cancer Risk: 33.94 per million exposed

¹ Model Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	2.53E-10	2.21E-10	1.49E-11	1.07E-13	2.64E-10	7.54E-10	0.00%
S0804	PROCESS 8, SYSTEM 3: D196, D198	3.48E-11	3.04E-11	2.05E-12	1.47E-14	3.62E-11	1.03E-10	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	6.07E-10	5.30E-10	3.57E-11	2.56E-13	6.32E-10	1.80E-09	0.01%
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	2.12E-08	8.85E-09	5.97E-10	2.25E-12	2.00E-08	5.07E-08	0.15%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0906	Aggregates Quarry	2.07E-08	6.21E-08	4.21E-09	1.15E-11	7.48E-08	1.62E-07	0.48%
S0907	Clay Quarry	4.36E-07	3.83E-07	2.61E-08	0.00E+00	4.64E-07	1.31E-06	3.85%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	3.09E-08	8.37E-08	5.64E-09	4.04E-11	9.99E-08	2.20E-07	0.65%
S1010	EXTEC FEED & PROD	2.90E-10	7.87E-10	5.30E-11	3.79E-13	9.39E-10	2.07E-09	0.01%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	9.08E-09	2.46E-08	1.66E-09	1.19E-11	2.94E-08	6.47E-08	0.19%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	2.47E-09	6.69E-09	4.51E-10	3.23E-12	7.98E-09	1.76E-08	0.05%
S1019	MINED CLAY STOCKPILE	2.34E-06	2.05E-06	1.40E-07	0.00E+00	2.49E-06	7.01E-06	20.66%
S1021	1020 & 1021 - TRANSAMERICAN	6.11E-09	1.66E-08	1.12E-09	7.98E-12	1.97E-08	4.35E-08	0.13%
S1051	FINISHED BRICK - HAUL ROAD	2.19E-08	3.68E-08	2.42E-09	5.08E-11	4.25E-08	1.04E-07	0.31%
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	4.79E-09	8.03E-09	5.29E-10	1.11E-11	9.29E-09	2.26E-08	0.07%
S1053	RMC UNPAVED ROAD DUST	3.15E-10	5.28E-10	3.48E-11	7.31E-13	6.11E-10	1.49E-09	0.00%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	3.95E-09	6.62E-09	4.37E-10	9.16E-12	7.67E-09	1.87E-08	0.06%
S1055	CLAY MINED FOR BRICK	7.37E-10	1.24E-09	8.15E-11	1.71E-12	1.43E-09	3.49E-09	0.01%
S1056	PAVED HAUL ROAD - MINED AGGREGAE	2.21E-09	3.71E-09	2.44E-10	5.13E-12	4.29E-09	1.05E-08	0.03%
*Total:		1.06E-05	1.02E-05	6.94E-07	1.58E-10	1.25E-05	3.39E-05	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.

*Summing risk by individual source will not necessarily add up to the same total when comparing to the sources as a whole. This is more prevalent when calculating risk using a derived scenario.

Table B-9. MEIR Cancer Risk by Substance and Exposure Pathway

Pacific Clay Products Inc.
Facility ID: 017953

MEIR INFO

Location: 462509.00, 3732882.33 (UTM E, UTM N)
Cancer Risk: 6.51 per million exposed

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution to Total	Multipathway?	Multipathway Total
Naphthalene	91203	2.78E-05	2.26E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-09	0.03%		--
Benzene	71432	1.20E-03	8.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-08	1.25%		--
Formaldehyde	50000	2.55E-07	3.63E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-12	0.00%		--
NH3	7664417	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cumene	98828	5.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Toluene	108883	7.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Ethyl Benzene	100414	2.01E-05	1.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-10	0.00%		--
Xylenes	1330207	3.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
p-DiClBenzene	106467	1.99E-05	5.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.38E-10	0.01%		--
o-Xylene	95476	2.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
TriMeBenzns	25551137	2.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
2MeNaphthalene	91576	2.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Diethanolamine	111422	2.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Chlorine	7782505	5.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
DiButyl Phthal	84742	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Methyl Iodide	74884	3.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
MEK	78933	9.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Methyl Chloride	74873	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Ethyl Chloride	75003	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
1,1,1-TCA	71556	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Perc	127184	1.16E-06	1.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-11	0.00%		--
CS2	75150	1.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
ButylBenzPhthal	85687	7.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Styrene	100425	8.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--

Table B-9. MEIR Cancer Risk by Substance and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIR INFO

Location: 462509.00, 3732882.33 (UTM E, UTM N)
 Cancer Risk: 6.51 per million exposed

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution to Total	Multipathway?	Multipathway Total
Di2-EthHxPhthal	117817	8.29E-04	4.71E-09	1.44E-10	2.48E-11	0.00E+00	2.72E-08	3.21E-08	0.49%	X	3.21E-08
Phenol	108952	3.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Arsenic	7440382	6.21E-05	3.56E-07	2.68E-06	1.31E-07	0.00E+00	2.32E-06	5.49E-06	84.39%	X	5.49E-06
Manganese	7439965	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Beryllium	7440417	7.57E-07	4.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-09	0.07%	X	4.30E-09
Mercury	7439976	3.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%	X	0.00E+00
2,2,4TriMePentn	540841	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Hexane	110543	1.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
DieselExhPM	9901	3.30E-05	2.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-08	0.38%		--
Cr(VI)	18540299	2.83E-08	9.76E-09	1.72E-10	6.61E-12	0.00E+00	7.34E-09	1.73E-08	0.27%	X	1.73E-08
Lead	7439921	2.09E-05	4.20E-10	5.12E-09	1.25E-10	9.29E-11	1.42E-09	7.17E-09	0.11%	X	7.17E-09
Aluminum	7429905	5.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Chromium	7440473	2.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cadmium	7440439	4.59E-07	4.66E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-09	0.07%	X	4.66E-09
Copper	7440508	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Nickel	7440020	5.27E-05	3.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-08	0.50%	X	3.25E-08
Selenium	7782492	1.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Zinc	7440666	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Silica, Crystln	1175	4.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Barium	7440393	9.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cobalt	7440484	4.43E-05	8.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.10E-07	12.44%		--
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Total:			1.33E-06	2.69E-06	1.31E-07	9.29E-11	2.36E-06	6.51E-06	100.00%		5.59E-06

Table B-10. MEIR Cancer Risk by Source and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIR INFO

Location: 462509.00, 3732882.33 (UTM E, UTM N)

*Cancer Risk: 6.51 per million exposed

¹ Model Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	1.31E-07	4.44E-07	2.16E-08	0.00E+00	4.06E-07	1.00E-06	15.41%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	3.63E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-12	0.00%
S0107	TUNNEL KILN NO. 2	3.26E-08	1.11E-07	5.39E-09	0.00E+00	1.01E-07	2.50E-07	3.84%
S0114	GASOLINE STORAGE AND DISPENSING	5.33E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-12	0.00%
S0122	EXTEC SCREENING	2.43E-11	4.25E-11	2.05E-12	1.78E-14	3.62E-11	1.05E-10	0.00%
S0139	C139 CONTROL (BRICK FORMING)	3.01E-07	5.28E-07	2.57E-08	0.00E+00	4.57E-07	1.31E-06	20.14%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	3.20E-07	5.61E-07	2.73E-08	0.00E+00	4.86E-07	1.39E-06	21.42%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	4.92E-09	8.63E-09	4.20E-10	0.00E+00	7.47E-09	2.14E-08	0.33%
S0175	C175 BRICK TUMBLER NO. 2	3.98E-09	6.98E-09	3.40E-10	0.00E+00	6.04E-09	1.73E-08	0.27%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	5.92E-10	1.03E-09	4.98E-11	4.33E-13	8.81E-10	2.56E-09	0.04%
S0216	C216 CONTROL (S3 CEMENT SILO)	8.37E-11	4.37E-11	2.11E-12	2.37E-15	9.43E-11	2.24E-10	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	3.87E-10	2.18E-10	1.05E-11	1.84E-14	4.46E-10	1.06E-09	0.02%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	2.50E-08	7.37E-10	3.55E-11	3.09E-13	6.28E-10	2.64E-08	0.41%
S0801	PROCESS 8. SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%

Table B-10. MEIR Cancer Risk by Source and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIR INFO

Location: 462509.00, 3732882.33 (UTM E, UTM N)
 *Cancer Risk: 6.51 per million exposed

¹ Model Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Total	Contribution
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	3.13E-10	5.47E-10	2.64E-11	2.29E-13	4.66E-10	1.35E-09	0.02%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	1.30E-10	2.27E-10	1.09E-11	9.49E-14	1.93E-10	5.61E-10	0.01%
S0804	PROCESS 8, SYSTEM 3: D196, D198	1.78E-11	3.11E-11	1.50E-12	1.30E-14	2.65E-11	7.69E-11	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	3.12E-10	5.45E-10	2.62E-11	2.28E-13	4.64E-10	1.35E-09	0.02%
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	1.09E-08	9.07E-09	4.37E-10	2.00E-12	1.47E-08	3.50E-08	0.54%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0906	Aggregates Quarry	1.07E-08	6.45E-08	3.12E-09	1.04E-11	5.55E-08	1.34E-07	2.06%
S0907	Clay Quarry	1.27E-07	2.23E-07	1.09E-08	0.00E+00	1.93E-07	5.55E-07	8.52%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	1.44E-08	7.80E-08	3.75E-09	3.26E-11	6.64E-08	1.63E-07	2.50%
S1010	EXTEC FEED & PROD	1.60E-10	8.67E-10	4.17E-11	3.63E-13	7.39E-10	1.81E-09	0.03%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	4.41E-09	2.39E-08	1.15E-09	1.00E-11	2.04E-08	4.98E-08	0.77%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	1.17E-09	6.34E-09	3.05E-10	2.65E-12	5.40E-09	1.32E-08	0.20%
S1019	MINED CLAY STOCKPILE	3.32E-07	5.83E-07	2.84E-08	0.00E+00	5.05E-07	1.45E-06	22.26%
S1021	1020 & 1021 - TRANSAMERICAN	2.58E-09	1.40E-08	6.74E-10	5.86E-12	1.19E-08	2.92E-08	0.45%
S1051	FINISHED BRICK - HAUL ROAD	1.05E-09	3.54E-09	1.66E-10	4.24E-12	2.92E-09	7.68E-09	0.12%
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	2.46E-09	8.27E-09	3.89E-10	9.93E-12	6.84E-09	1.80E-08	0.28%
S1053	RMC UNPAVED ROAD DUST	1.52E-10	5.09E-10	2.39E-11	6.11E-13	4.20E-10	1.10E-09	0.02%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	1.94E-09	6.53E-09	3.07E-10	7.83E-12	5.39E-09	1.42E-08	0.22%
S1055	CLAY MINED FOR BRICK	1.74E-10	5.84E-10	2.75E-11	7.01E-13	4.82E-10	1.27E-09	0.02%
S1056	PAVED HAUL ROAD - MINED AGGREGAE	1.08E-09	3.63E-09	1.71E-10	4.36E-12	3.00E-09	7.88E-09	0.12%
*Total:		1.33E-06	2.69E-06	1.31E-07	9.29E-11	2.36E-06	6.51E-06	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.

*Summing risk by individual source will not necessarily add up to the same total when comparing to the sources as a whole. This is more prevalent when calculating risk using a derived scenario.

Table B-11. MEIW Cancer Risk by Substance and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIW INFO

Location: 462556.00, 3732314.54 (UTM E, UTM N)
 Cancer Risk: 0.99 per million exposed

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Inhalation	Soil	Dermal	Total	Contribution	Multipathway?	Multipathway Total
Naphthalene	91203	5.01E-05	6.77E-10	0.00E+00	0.00E+00	6.77E-10	0.07%		--
Benzene	71432	2.16E-03	2.43E-08	0.00E+00	0.00E+00	2.43E-08	2.45%		--
Formaldehyde	50000	6.15E-07	1.45E-12	0.00E+00	0.00E+00	1.45E-12	0.00%		--
NH3	7664417	2.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cumene	98828	1.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Toluene	108883	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Ethyl Benzene	100414	3.65E-05	3.57E-11	0.00E+00	0.00E+00	3.57E-11	0.00%		--
Xylenes	1330207	6.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
p-DiClBenzene	106467	3.58E-05	1.61E-10	0.00E+00	0.00E+00	1.61E-10	0.02%		--
o-Xylene	95476	4.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
TriMeBenzns	25551137	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
2MeNaphthalene	91576	4.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Diethanolamine	111422	4.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Chlorine	7782505	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
DiButyl Phthal	84742	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Methyl Iodide	74884	6.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
MEK	78933	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Methyl Chloride	74873	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Ethyl Chloride	75003	4.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
1,1,1-TCA	71556	3.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Perc	127184	2.09E-06	4.93E-12	0.00E+00	0.00E+00	4.93E-12	0.00%		--
CS2	75150	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
ButylBenzPhthal	85687	1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Styrene	100425	1.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--

Table B-11. MEIW Cancer Risk by Substance and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIW INFO

Location: 462556.00, 3732314.54 (UTM E, UTM N)
 Cancer Risk: 0.99 per million exposed

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Inhalation	Soil	Dermal	Total	Contribution	Multipathway?	Multipathway Total
Di2-EthHxPhthal	117817	1.49E-03	1.41E-09	2.58E-11	8.04E-12	1.44E-09	0.15%	X	1.44E-09
Phenol	108952	6.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Arsenic	7440382	1.57E-04	2.12E-07	2.86E-07	5.94E-08	5.56E-07	56.00%	X	5.56E-07
Manganese	7439965	7.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Beryllium	7440417	1.19E-06	1.13E-09	0.00E+00	0.00E+00	1.13E-09	0.11%	X	1.13E-09
Mercury	7439976	5.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%	X	0.00E+00
2,2,4TriMePentn	540841	6.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Hexane	110543	9.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
DieselExhPM	9901	5.24E-05	6.48E-09	0.00E+00	0.00E+00	6.48E-09	0.65%		--
Cr(VI)	18540299	3.52E-08	2.02E-09	2.14E-11	1.48E-12	2.04E-09	0.21%	X	2.04E-09
Lead	7439921	3.14E-05	1.48E-10	3.24E-10	3.37E-11	5.06E-10	0.05%	X	5.06E-10
Aluminum	7429905	9.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Chromium	7440473	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cadmium	7440439	7.30E-07	1.23E-09	0.00E+00	0.00E+00	1.23E-09	0.12%	X	1.23E-09
Copper	7440508	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Nickel	7440020	1.38E-04	1.42E-08	0.00E+00	0.00E+00	1.42E-08	1.43%	X	1.42E-08
Selenium	7782492	2.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Zinc	7440666	2.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Silica, Crystln	1175	9.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Barium	7440393	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Cobalt	7440484	1.27E-04	3.85E-07	0.00E+00	0.00E+00	3.85E-07	38.74%		
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%		--
Total:			6.48E-07	2.86E-07	5.94E-08	9.94E-07	100.00%		5.77E-07

Table B-12. MEIW Cancer Risk by Source and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIW INFO

Location: 462556.00, 3732314.54 (UTM E, UTM N)
 Cancer Risk: 0.99 per million exposed

¹ Model Source ID	Source Name	Inhalation	Soil	Dermal	Total	Contribution
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	4.89E-08	3.55E-08	7.38E-09	9.17E-08	9.23%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	1.45E-12	0.00E+00	0.00E+00	1.45E-12	0.00%
S0107	TUNNEL KILN NO. 2	9.24E-09	6.71E-09	1.40E-09	1.73E-08	1.75%
S0114	GASOLINE STORAGE AND DISPENSING	4.28E-12	0.00E+00	0.00E+00	4.28E-12	0.00%
S0122	EXTEC SCREENING	5.59E-12	2.26E-12	4.64E-13	8.31E-12	0.00%
S0139	C139 CONTROL (BRICK FORMING)	1.79E-07	7.28E-08	1.52E-08	2.67E-07	26.92%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	1.67E-07	6.78E-08	1.41E-08	2.49E-07	25.04%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	2.20E-09	8.94E-10	1.86E-10	3.28E-09	0.33%
S0175	C175 BRICK TUMBLER NO. 2	1.74E-09	7.06E-10	1.47E-10	2.59E-09	0.26%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	1.35E-10	5.47E-11	1.12E-11	2.01E-10	0.02%
S0216	C216 CONTROL (S3 CEMENT SILO)	1.86E-11	2.50E-12	4.94E-13	2.15E-11	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	8.61E-11	1.24E-11	2.46E-12	1.01E-10	0.01%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	6.60E-09	4.93E-11	1.01E-11	6.66E-09	0.67%
S0801	PROCESS 8. SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	7.10E-11	2.87E-11	5.90E-12	1.06E-10	0.01%

Table B-12. MEIW Cancer Risk by Source and Exposure Pathway

Pacific Clay Products Inc.
 Facility ID: 017953

MEIW INFO

Location: 462556.00, 3732314.54 (UTM E, UTM N)
 Cancer Risk: 0.99 per million exposed

¹ Model Source ID	Source Name	Inhalation	Soil	Dermal	Total	Contribution
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	2.94E-11	1.19E-11	2.44E-12	4.37E-11	0.00%
S0804	PROCESS 8, SYSTEM 3: D196, D198	4.03E-12	1.63E-12	3.35E-13	5.99E-12	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	7.05E-11	2.85E-11	5.86E-12	1.05E-10	0.01%
S0806	PROCESS 9, SYSTEM 2: D213, 217 - 220	2.35E-09	4.87E-10	9.79E-11	2.94E-09	0.30%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
S0906	Aggregates Quarry	2.86E-09	3.27E-09	6.78E-10	6.81E-09	0.69%
S0907	Clay Quarry	4.39E-08	1.78E-08	3.70E-09	6.54E-08	6.58%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	4.36E-09	4.62E-09	9.50E-10	9.93E-09	1.00%
S1010	EXTEC FEED & PROD	3.83E-11	4.06E-11	8.35E-12	8.73E-11	0.01%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	1.24E-09	1.31E-09	2.70E-10	2.83E-09	0.28%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	3.32E-10	3.52E-10	7.23E-11	7.55E-10	0.08%
S1019	MINED CLAY STOCKPILE	1.74E-07	7.08E-08	1.47E-08	2.60E-07	26.16%
S1021	1020 & 1021 - TRANSAMERICAN	8.30E-10	8.80E-10	1.81E-10	1.89E-09	0.19%
S1051	FINISHED BRICK - HAUL ROAD	1.03E-09	7.44E-10	1.50E-10	1.93E-09	0.19%
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	5.92E-10	4.27E-10	8.58E-11	1.10E-09	0.11%
S1053	RMC UNPAVED ROAD DUST	3.84E-11	2.77E-11	5.57E-12	7.17E-11	0.01%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	4.85E-10	3.50E-10	7.03E-11	9.05E-10	0.09%
S1055	CLAY MINED FOR BRICK	6.92E-11	4.99E-11	1.00E-11	1.29E-10	0.01%
S1056	PAVED HAUL ROAD - MINED AGGREGAE	2.69E-10	1.94E-10	3.90E-11	5.02E-10	0.05%
Total:		6.48E-07	2.86E-07	5.94E-08	9.94E-07	100.00%

Table B-13. PMI Total Chronic Hazard Index (HI) by Substance

Pacific Clay Products Inc. **PMI INFO**
 Facility ID: 017953 Location: 462656.78, 3732208.25 (UTM E, UTM N)
 Max HI: 2.24

Chemical Name	CAS	Average Annual Concentration (µg/m³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.28E-05	0.00%
Benzene	71432	4.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-03	0.00E+00		0.00E+00	0.00%
Formaldehyde	50000	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.18E-07	0.00%
NH3	7664417	4.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.12E-08	0.00%
Cumene	98828	2.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	8.37E-05	0.00E+00	0.00E+00	0.00E+00	4.19E-08	4.19E-08	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-08	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	1.58E-04	0.00E+00	2.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-07	0.00E+00	2.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.26E-07	0.00%
p-DiClBenzene	106467	8.19E-05	0.00E+00	1.02E-07	0.00E+00	1.02E-07	1.02E-07	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.02E-07	0.00%
o-Xylene	95476	1.14E-04	0.00E+00	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-07	0.00E+00	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.63E-07	0.00%
TriMeBenzens	25551137	1.04E-04	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2MeNaphthalene	91576	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00		3.86E-05	0.00%
Chlorine	7782505	2.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.11E-02	0.50%
DiButyl Phthal	84742	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	1.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	3.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75033	9.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-08	3.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	8.02E-06	0.00E+00	8.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	4.78E-06	0.00E+00	0.00E+00	0.00E+00	1.37E-07	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	7.34E-05	0.00E+00	9.18E-08	0.00E+00	0.00E+00	0.00E+00	9.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
ButylBenzPhthal	85687	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	3.41E-05	0.00E+00	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Di2-EthHvPhthal	117817	3.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	1.47E-04	7.34E-07	7.34E-07	0.00E+00	7.34E-07	7.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Respiratory System	0.00E+00	0.00%
Arsenic	7440382	3.30E-04	2.15E+00	2.15E+00	0.00E+00	0.00E+00	0.00E+00	2.15E+00	2.15E+00	2.15E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.15E+00	95.95%
Manganese	7439965	1.35E-03	0.00E+00	1.51E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Beryllium	7440417	1.98E-06	0.00E+00	0.00E+00	0.00E+00	2.83E-04	0.00E+00	1.27E-05	0.00E+00	2.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.83E-04	0.01%
Mercury	7439976	1.28E-05	0.00E+00	1.75E-03	0.00E+00	1.75E-03	0.00E+00	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2,2,4TriMePentn	540841	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	1.69E-07	0.00E+00	2.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieseExhPM	9901	5.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.17E-05	0.00%
Cr(VI)	18540299	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-07	0.00E+00		1.94E-07	0.00%
Lead	7439921	4.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	1.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	4.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	1.09E-06	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	5.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.47E-05	0.00%
Copper	7440508	3.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	2.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-04	2.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-02	0.00E+00		2.02E-02	0.90%
Selenium	7782492	2.66E-06	2.99E-05	2.99E-05	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	4.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	1.77E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.89E-02	2.63%
Barium	7440393	4.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	2.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			2.15E+00	2.16E+00	2.83E-04	1.86E-03	4.36E-05	2.15E+00	2.24E+00	2.15E+00	1.09E-06	0.00E+00						

Table B-14. PMI Total Chronic Hazard Index (HI) by Source

Pacific Clay Products Inc. **PMI INFO**
 Facility ID: 017953 Location: 462656.78, 3732208.25 (UTM E, UTM N)
 Max HI: 2.24

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	3.00E-01	3.07E-01	8.94E-05	1.52E-03	4.92E-06	3.02E-01	3.10E-01	3.00E-01	9.63E-07	0.00E+00	3.70E-08	1.48E-03	0.00E+00		3.10E-01	13.87%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.39E-07	0.00%
S0107	TUNNEL KILN NO. 2	4.38E-02	4.47E-02	1.30E-05	2.22E-04	7.17E-07	4.40E-02	4.52E-02	4.38E-02	1.22E-07	0.00E+00	4.78E-09	2.10E-04	0.00E+00		4.52E-02	2.02%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	9.87E-10	0.00E+00	8.43E-11	8.43E-11	8.43E-11	9.63E-10	0.00E+00	5.37E-09	0.00E+00	8.43E-11	2.25E-07	0.00E+00		9.63E-10	0.00%
S0122	EXTEC SCREENING	8.81E-06	9.48E-06	1.61E-08	1.18E-08	1.99E-09	8.82E-06	1.07E-05	8.81E-06	0.00E+00	0.00E+00	0.00E+00	2.26E-07	0.00E+00		1.07E-05	0.00%
S0139	C139 CONTROL (BRICK FORMING)	6.41E-01	6.42E-01	0.00E+00	0.00E+00	0.00E+00	6.41E-01	6.65E-01	6.41E-01	0.00E+00	0.00E+00	0.00E+00	7.04E-03	0.00E+00		6.65E-01	29.76%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	5.83E-01	5.84E-01	0.00E+00	0.00E+00	0.00E+00	5.83E-01	6.05E-01	5.83E-01	0.00E+00	0.00E+00	0.00E+00	6.40E-03	0.00E+00		6.05E-01	27.07%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	5.43E-03	5.44E-03	0.00E+00	0.00E+00	0.00E+00	5.43E-03	5.64E-03	5.43E-03	0.00E+00	0.00E+00	0.00E+00	5.96E-05	0.00E+00		5.64E-03	0.25%
S0175	C175 BRICK TUMBLER NO. 2	5.53E-03	5.54E-03	0.00E+00	0.00E+00	0.00E+00	5.53E-03	5.74E-03	5.53E-03	0.00E+00	0.00E+00	0.00E+00	6.07E-05	0.00E+00		5.74E-03	0.26%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	2.12E-04	2.28E-04	3.88E-07	2.84E-07	4.80E-08	2.12E-04	2.58E-04	2.12E-04	0.00E+00	0.00E+00	0.00E+00	5.43E-06	0.00E+00		2.58E-04	0.01%
S0216	C216 CONTROL (S3 CEMENT SILO)	9.32E-06	9.60E-06	9.30E-09	6.81E-09	1.15E-09	9.32E-06	9.44E-06	9.31E-06	0.00E+00	0.00E+00	0.00E+00	1.21E-07	0.00E+00		9.44E-06	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	4.64E-05	4.71E-05	1.07E-07	4.46E-08	9.58E-09	4.64E-05	4.70E-05	4.64E-05	0.00E+00	0.00E+00	0.00E+00	4.84E-07	0.00E+00		4.70E-05	0.00%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	1.92E-04	2.07E-04	3.52E-07	2.58E-07	4.35E-08	1.92E-04	2.45E-04	1.92E-04	0.00E+00	0.00E+00	0.00E+00	4.92E-06	0.00E+00		2.45E-04	0.01%
S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	1.10E-04	1.19E-04	2.02E-07	1.48E-07	2.49E-08	1.10E-04	1.34E-04	1.10E-04	0.00E+00	0.00E+00	0.00E+00	2.82E-06	0.00E+00		1.34E-04	0.01%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	4.56E-05	4.90E-05	8.34E-08	6.11E-08	1.03E-08	4.56E-05	5.54E-05	4.56E-05	0.00E+00	0.00E+00	0.00E+00	1.17E-06	0.00E+00		5.54E-05	0.00%
S0804	PROCESS 8, SYSTEM 3: D196, D198	6.26E-06	6.73E-06	1.14E-08	8.39E-09	1.41E-09	6.26E-06	7.61E-06	6.26E-06	0.00E+00	0.00E+00	0.00E+00	1.60E-07	0.00E+00		7.61E-06	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	1.09E-04	1.17E-04	2.00E-07	1.46E-07	2.47E-08	1.09E-04	1.33E-04	1.09E-04	0.00E+00	0.00E+00	0.00E+00	2.80E-06	0.00E+00		1.33E-04	0.01%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	1.81E-03	1.90E-03	2.65E-06	1.94E-06	3.28E-07	1.81E-03	2.11E-03	1.81E-03	0.00E+00	0.00E+00	0.00E+00	2.45E-05	0.00E+00		2.11E-03	0.09%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	1.30E-02	1.35E-02	2.37E-05	0.00E+00	2.93E-06	1.30E-02	1.57E-02	1.30E-02	0.00E+00	0.00E+00	0.00E+00	2.37E-04	0.00E+00		1.57E-02	0.70%
S0907	Clay Quarry	8.06E-02	8.07E-02	0.00E+00	0.00E+00	0.00E+00	8.06E-02	8.25E-02	8.06E-02	0.00E+00	0.00E+00	0.00E+00	8.86E-04	0.00E+00		8.25E-02	3.69%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	1.73E-02	1.85E-02	3.16E-05	2.31E-05	1.38E-05	1.72E-02	2.08E-02	1.72E-02	0.00E+00	0.00E+00	0.00E+00	3.16E-04	0.00E+00		2.08E-02	0.93%
S1010	EXTEC FEED & PROD	1.62E-04	1.74E-04	2.97E-07	2.17E-07	1.30E-07	1.62E-04	1.96E-04	1.62E-04	0.00E+00	0.00E+00	0.00E+00	2.97E-06	0.00E+00		1.96E-04	0.01%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	5.07E-03	5.43E-03	9.28E-06	6.80E-06	4.07E-06	5.07E-03	6.13E-03	5.07E-03	0.00E+00	0.00E+00	0.00E+00	9.28E-05	0.00E+00		6.13E-03	0.27%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	1.38E-03	1.48E-03	2.52E-06	1.85E-06	1.11E-06	1.38E-03	1.66E-03	1.38E-03	0.00E+00	0.00E+00	0.00E+00	2.52E-05	0.00E+00		1.66E-03	0.07%
S1019	MINED CLAY STOCKPILE	4.32E-01	4.33E-01	0.00E+00	0.00E+00	0.00E+00	4.32E-01	4.42E-01	4.32E-01	0.00E+00	0.00E+00	0.00E+00	4.75E-03	0.00E+00		4.42E-01	19.78%
S1021	1020 & 1021 - TRANSAMERICAN	3.41E-03	3.65E-03	6.24E-06	4.57E-06	2.74E-06	3.41E-03	4.12E-03	3.41E-03	0.00E+00	0.00E+00	0.00E+00	6.24E-05	0.00E+00		4.12E-03	0.18%
S1051	FINISHED BRICK - HAUL ROAD	7.24E-03	9.76E-03	6.62E-05	4.85E-05	8.18E-06	7.24E-03	1.43E-02	7.23E-03	0.00E+00	0.00E+00	0.00E+00	1.56E-04	0.00E+00		1.43E-02	0.64%
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	1.58E-03	2.13E-03	1.45E-05	1.06E-05	1.79E-06	1.58E-03	3.12E-03	1.58E-03	0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00		3.12E-03	0.14%
S1053	RMC UNPAVED ROAD DUST	1.04E-04	1.40E-04	9.52E-07	6.97E-07	1.18E-07	1.04E-04	2.05E-04	1.04E-04	0.00E+00	0.00E+00	0.00E+00	2.24E-06	0.00E+00		2.05E-04	0.01%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	1.30E-03	1.76E-03	1.19E-05	8.75E-06	1.48E-06	1.30E-03	2.57E-03	1.30E-03	0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00		2.57E-03	0.12%
S1055	CLAY MINED FOR BRICK	2.43E-04	3.28E-04	2.23E-06	1.63E-06	2.75E-07	2.43E-04	4.80E-04	2.43E-04	0.00E+00	0.00E+00	0.00E+00	5.23E-06	0.00E+00		4.80E-04	0.02%
S1056	PAVED HAUL ROAD - MINED AGGREGATE	7.30E-04	9.84E-04	6.68E-06	4.89E-06	8.25E-07	7.30E-04	1.44E-03	7.29E-04	0.00E+00	0.00E+00	0.00E+00	1.57E-05	0.00E+00		1.44E-03	0.06%
Total:		2.15E+00	2.16E+00	6.28E-04	1.86E-03	4.36E-05	2.15E+00	2.24E+00	2.14E+00	1.09E-06	0.00E+00	4.19E-08	2.19E-02	0.00E+00		2.24E+00	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
 2. Contribution by source is based on the target organ with the maximum chronic hazard.

Table B-15. MEIR Total Chronic Hazard Index (HI) by Substance

Pacific Clay Products Inc.
Facility ID: 017953

MEIR INFO
Location: 464140.00, 3729780.00 (UTM E, UTM N)
Max HI: 0.46

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.49E-06	0.00%
Benzene	71432	5.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04	0.00E+00		0.00E+00	0.00%
Formaldehyde	50000	3.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.79E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.79E-09	0.00%
NH3	7664417	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.82E-10	0.00%
Cumene	98828	2.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	9.70E-06	0.00E+00	0.00E+00	0.00E+00	4.85E-09	4.85E-09	4.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-09	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	1.81E-05	0.00E+00	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-08	0.00E+00	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.58E-08	0.00%
p-DiClBenzene	106467	9.58E-06	0.00E+00	1.20E-08	0.00E+00	1.20E-08	1.20E-08	0.00E+00	1.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.20E-08	0.00%
o-Xylene	95476	1.32E-05	0.00E+00	1.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-08	0.00E+00	1.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.88E-08	0.00%
TriMeBenzns	2.6E+07	1.12E-05	0.00E+00	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2MeNaphthalene	91576	1.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	1.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-06	0.00E+00		4.16E-06	0.00%
Chlorine	7782505	2.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.30E-03	0.28%
DiButyl Phthal	84742	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	1.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	4.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.79E-09	3.79E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	9.38E-07	0.00E+00	9.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	5.59E-07	0.00E+00	0.00E+00	0.00E+00	1.60E-08	1.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	8.58E-06	0.00E+00	1.07E-08	0.00E+00	0.00E+00	0.00E+00	1.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
ButylBenzPhtal	85687	3.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	3.99E-06	0.00E+00	4.44E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Di2-EthHxPhtal	117817	3.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	1.72E-05	8.59E-08	8.59E-08	0.00E+00	8.59E-08	8.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Respiratory System	0.00E+00	0.00%
Arsenic	7440382	5.33E-05	3.46E-01	3.46E-01	0.00E+00	0.00E+00	0.00E+00	3.46E-01	3.46E-01	3.46E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.46E-01	74.72%
Manganese	7439965	3.53E-03	0.00E+00	3.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Beryllium	7440417	7.44E-06	0.00E+00	0.00E+00	1.06E-03	0.00E+00	4.76E-05	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.06E-03	0.23%
Mercury	7439976	1.50E-06	0.00E+00	2.04E-04	0.00E+00	2.04E-04	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2,2,4TriMePentn	540841	2.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	4.23E-09	0.00E+00	6.04E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	1.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.68E-06	0.00%
Cr(VI)	1.9E+07	2.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.22E-06	0.00%
Lead	7439921	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	1.02E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	2.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	6.54E-06	0.00E+00	0.00E+00	0.00E+00	6.85E-04	0.00E+00	0.00E+00	3.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.27E-04	0.07%
Copper	7440508	2.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	7.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	5.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-03	0.00E+00		5.30E-03	1.14%
Selenium	7782492	1.07E-05	1.20E-04	1.20E-04	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	8.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	3.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.09E-01	23.55%
Barium	7440393	9.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	1.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	1.5E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			3.47E-01	3.86E-01	1.06E-03	8.89E-04	1.68E-04	3.47E-01	4.64E-01									

Table B-16. MEIR Total Chronic Hazard Index (HI) by Source

Pacific Clay Products Inc.
Facility ID: 017953

MEIR INFO

Location: 464140.00, 3729780.00 (UTM E, UTM N)
Max HI: 0.46

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	3.24E-02	3.31E-02	9.64E-06	1.64E-04	5.31E-07	3.25E-02	3.34E-02	3.24E-02	1.04E-07	0.00E+00	3.99E-09	1.59E-04	0.00E+00		3.34E-02	7.21%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.47E-09	0.00%
S0107	TUNNEL KILN NO. 2	7.87E-03	8.03E-03	2.34E-06	3.99E-05	1.29E-07	7.91E-03	8.12E-03	7.87E-03	2.18E-08	0.00E+00	8.59E-10	3.77E-05	0.00E+00		8.12E-03	1.75%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	2.48E-11	0.00E+00	2.11E-12	2.11E-12	2.11E-12	2.42E-11	0.00E+00	1.35E-10	0.00E+00	2.11E-12	5.64E-09	0.00E+00		2.42E-11	0.00%
S0122	EXTEC SCREENING	8.62E-05	9.27E-05	1.57E-07	1.15E-07	1.95E-08	8.62E-05	1.05E-04	8.62E-05	0.00E+00	0.00E+00	0.00E+00	2.21E-06	0.00E+00		1.05E-04	0.02%
S0139	C139 CONTROL (BRICK FORMING)	1.48E-02	1.48E-02	0.00E+00	0.00E+00	0.00E+00	1.48E-02	1.54E-02	1.48E-02	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00		1.54E-02	3.31%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	1.60E-02	1.60E-02	0.00E+00	0.00E+00	0.00E+00	1.60E-02	1.66E-02	1.60E-02	0.00E+00	0.00E+00	0.00E+00	1.76E-04	0.00E+00		1.66E-02	3.58%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	1.72E-04	1.72E-04	0.00E+00	0.00E+00	0.00E+00	1.72E-04	1.78E-04	1.72E-04	0.00E+00	0.00E+00	0.00E+00	1.89E-06	0.00E+00		1.78E-04	0.04%
S0175	C175 BRICK TUMBLER NO. 2	1.82E-04	1.82E-04	0.00E+00	0.00E+00	0.00E+00	1.82E-04	1.89E-04	1.82E-04	0.00E+00	0.00E+00	0.00E+00	2.00E-06	0.00E+00		1.89E-04	0.04%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	1.91E-03	2.05E-03	3.50E-06	2.56E-06	4.32E-07	1.91E-03	2.32E-03	1.91E-03	0.00E+00	0.00E+00	0.00E+00	4.90E-05	0.00E+00		2.32E-03	0.50%
S0216	C216 CONTROL (S3 CEMENT SILO)	4.96E-05	5.11E-05	4.95E-08	3.62E-08	6.11E-09	4.96E-05	5.02E-05	4.95E-05	0.00E+00	0.00E+00	0.00E+00	6.43E-07	0.00E+00		5.02E-05	0.01%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	2.47E-04	2.51E-04	5.68E-07	2.37E-07	5.10E-08	2.47E-04	2.50E-04	2.47E-04	0.00E+00	0.00E+00	0.00E+00	2.58E-06	0.00E+00		2.50E-04	0.05%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	6.04E-05	6.49E-05	1.11E-07	8.10E-08	1.37E-08	6.04E-05	7.71E-05	6.04E-05	0.00E+00	0.00E+00	0.00E+00	1.55E-06	0.00E+00		7.71E-05	0.02%
S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	1.10E-03	1.18E-03	2.01E-06	1.47E-06	2.48E-07	1.10E-03	1.33E-03	1.10E-03	0.00E+00	0.00E+00	0.00E+00	2.81E-05	0.00E+00		1.33E-03	0.29%
S0803	PROCESS 8, SYSTEM 2: D191 THROUGH 193	2.93E-04	3.15E-04	5.37E-07	3.93E-07	6.63E-08	2.93E-04	3.57E-04	2.93E-04	0.00E+00	0.00E+00	0.00E+00	7.52E-06	0.00E+00		3.57E-04	0.08%
S0804	PROCESS 8, SYSTEM 3: D196, D198	5.18E-05	5.57E-05	9.47E-08	6.94E-08	1.17E-08	5.18E-05	6.30E-05	5.18E-05	0.00E+00	0.00E+00	0.00E+00	1.33E-06	0.00E+00		6.30E-05	0.01%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	6.41E-04	6.89E-04	1.17E-06	8.59E-07	1.45E-07	6.41E-04	7.79E-04	6.41E-04	0.00E+00	0.00E+00	0.00E+00	1.64E-05	0.00E+00		7.79E-04	0.17%
S0806	PROCESS 9, SYSTEM 2: D213, 217, 220	1.15E-02	1.20E-02	1.69E-05	1.24E-05	2.08E-06	1.15E-02	1.34E-02	1.15E-02	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00		1.34E-02	2.89%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	6.34E-02	6.63E-02	1.16E-04	0.00E+00	1.44E-05	6.34E-02	7.66E-02	6.34E-02	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00		7.66E-02	16.53%
S0907	Clay Quarry	2.84E-02	2.85E-02	0.00E+00	0.00E+00	0.00E+00	2.84E-02	2.91E-02	2.84E-02	0.00E+00	0.00E+00	0.00E+00	3.12E-04	0.00E+00		2.91E-02	6.27%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	3.19E-02	3.41E-02	5.83E-05	4.27E-05	2.56E-05	3.19E-02	3.85E-02	3.18E-02	0.00E+00	0.00E+00	0.00E+00	5.83E-04	0.00E+00		3.85E-02	8.30%
S1010	EXTEC FEED & PROD	5.12E-04	5.48E-04	9.36E-07	6.86E-07	4.11E-07	5.12E-04	6.18E-04	5.11E-04	0.00E+00	0.00E+00	0.00E+00	9.36E-06	0.00E+00		6.18E-04	0.13%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	2.57E-02	2.76E-02	4.71E-05	3.45E-05	2.07E-05	2.57E-02	3.11E-02	2.57E-02	0.00E+00	0.00E+00	0.00E+00	4.71E-04	0.00E+00		3.11E-02	6.71%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	5.66E-03	6.06E-03	1.04E-05	7.59E-06	4.54E-06	5.66E-03	6.84E-03	5.66E-03	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00		6.84E-03	1.47%
S1019	MINED CLAY STOCKPILE	1.58E-02	1.58E-02	0.00E+00	0.00E+00	0.00E+00	1.58E-02	1.61E-02	1.58E-02	0.00E+00	0.00E+00	0.00E+00	1.73E-04	0.00E+00		1.61E-02	3.48%
S1021	1020 & 1021 - TRANSAMERICAN	1.51E-03	1.62E-03	2.76E-06	2.02E-06	1.21E-06	1.51E-03	1.82E-03	1.51E-03	0.00E+00	0.00E+00	0.00E+00	2.76E-05	0.00E+00		1.82E-03	0.39%
S1051	FINISHED BRICK - HAUL ROAD	4.00E-05	5.39E-05	3.66E-07	2.68E-07	4.52E-08	3.99E-05	7.88E-05	3.99E-05	0.00E+00	0.00E+00	0.00E+00	8.59E-07	0.00E+00		7.88E-05	0.02%
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	6.92E-02	9.33E-02	6.33E-04	4.64E-04	7.82E-05	6.92E-02	1.36E-01	6.91E-02	0.00E+00	0.00E+00	0.00E+00	1.49E-03	0.00E+00		1.36E-01	29.43%
S1053	RMC UNPAVED ROAD DUST	7.93E-04	1.07E-03	7.25E-06	5.31E-06	8.96E-07	7.92E-04	1.56E-03	7.92E-04	0.00E+00	0.00E+00	0.00E+00	1.70E-05	0.00E+00		1.56E-03	0.34%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	1.03E-02	1.39E-02	9.40E-05	6.89E-05	1.16E-05	1.03E-02	2.03E-02	1.03E-02	0.00E+00	0.00E+00	0.00E+00	2.21E-04	0.00E+00		2.03E-02	4.37%
S1055	CLAY MINED FOR BRICK	4.27E-05	5.76E-05	3.91E-07	2.86E-07	4.83E-08	4.27E-05	8.42E-05	4.27E-05	0.00E+00	0.00E+00	0.00E+00	9.18E-07	0.00E+00		8.42E-05	0.02%
S1056	PAVED HAUL ROAD - MINED AGGREGATE	6.01E-03	8.10E-03	5.49E-05	4.03E-05	6.79E-06	6.00E-03	1.18E-02	6.00E-03	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00		1.18E-02	2.55%
Total:		3.47E-01	3.86E-01	1.06E-03	8.89E-04	1.68E-04	3.47E-01	4.64E-01	3.46E-01	1.26E-07	0.00E+00	4.85E-09	5.50E-03	0.00E+00		4.64E-01	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
2. Contribution by source is based on the target organ with the maximum chronic hazard.

Table B-17. MEIW Total Chronic Hazard Index (HI) by Substance

Pacific Clay Products Inc.
Facility ID: 017953

MEIW INFO
Location: 462556.00, 3732314.54 (UTM E, UTM N)
Max HI: 0.34

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	5.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.57E-06	0.00%
Benzene	71432	2.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-04	0.00E+00		0.00E+00	0.00%
Formaldehyde	50000	6.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.83E-08	0.00%
NH3	7664417	2.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.23E-08	0.00%
Cumene	98828	1.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-07	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-08	1.82E-08	1.82E-08	0.00E+00	0.00E+00	0.00E+00	1.82E-08	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	6.85E-05	0.00E+00	9.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.79E-08	0.00E+00	9.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.79E-08	0.00%
p-DiClBenzene	106467	3.58E-05	0.00E+00	4.48E-08	0.00E+00	4.48E-08	0.00E+00	0.00E+00	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.48E-08	0.00%
o-Xylene	95476	4.95E-05	0.00E+00	7.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-08	0.00E+00	7.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.08E-08	0.00%
TriMeBenzns	25551137	4.37E-05	0.00E+00	1.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2MeNaphthalene	91576	4.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	4.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-05	0.00E+00		1.62E-05	0.00%
Chlorine	7782505	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.85E-03	1.42%
DiButyl Phtal	84742	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	6.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	4.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-08	1.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	3.51E-06	0.00E+00	3.51E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	2.09E-06	0.00E+00	0.00E+00	0.00E+00	5.97E-08	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	3.21E-05	0.00E+00	4.01E-08	0.00E+00	0.00E+00	0.00E+00	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
ButylBenzPhthal	85687	1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	1.49E-05	0.00E+00	1.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Di2-EthHxPhthal	117817	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	6.41E-05	3.21E-07	3.21E-07	0.00E+00	3.21E-07	3.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Respiratory System	0.00E+00	0.00%
Arsenic	7440382	1.57E-04	2.96E-01	2.96E-01	0.00E+00	0.00E+00	0.00E+00	2.96E-01	2.96E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.96E-01	86.63%
Manganese	7439965	7.49E-04	0.00E+00	8.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Beryllium	7440417	1.19E-06	0.00E+00	0.00E+00	1.70E-04	0.00E+00	3.38E-06	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.70E-04	0.05%
Mercury	7439976	5.59E-06	0.00E+00	3.93E-04	0.00E+00	3.93E-04	0.00E+00	3.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2,2,4TriMePentn	540841	6.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	9.31E-08	0.00E+00	1.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	5.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.05E-05	0.00%
Cr(VI)	18540299	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-09		1.76E-07	0.00%
Lead	7439921	3.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	9.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	7.30E-07	0.00E+00	0.00E+00	0.00E+00	4.38E-05	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.65E-05	0.01%
Copper	7440508	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05	9.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.88E-03	0.00E+00		9.88E-03	2.89%
Selenium	7782492	2.17E-06	2.57E-06	2.57E-06	0.00E+00	0.00E+00	2.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	2.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	9.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.08E-02	8.99%
Barium	7440393	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			2.96E-01	3.05E-01	1.70E-04	4.37E-04	6.41E-06	2.97E-01	3.42E-01									

Table B-18. MEIW Total Chronic Hazard Index (HI) by Source

Pacific Clay Products Inc.
Facility ID: 017953

MEIW INFO

Location: 462556.00, 3732314.54 (UTM E, UTM N)
Max HI: 0.34

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	3.68E-02	3.91E-02	3.76E-05	3.31E-04	1.13E-06	3.71E-02	4.09E-02	3.68E-02	4.05E-07	0.00E+00	1.56E-08	6.23E-04	0.00E+00		4.09E-02	11.96%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.06E-08	0.00%
S0107	TUNNEL KILN NO. 2	6.96E-03	7.40E-03	7.12E-06	6.26E-05	2.14E-07	7.02E-03	7.74E-03	6.96E-03	6.64E-08	0.00E+00	2.61E-09	1.15E-04	0.00E+00		7.74E-03	2.26%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	5.45E-10	0.00E+00	4.65E-11	4.65E-11	4.65E-11	5.32E-10	0.00E+00	2.96E-09	0.00E+00	4.65E-11	1.24E-07	0.00E+00		5.32E-10	0.00%
S0122	EXTEC SCREENING	2.29E-06	2.88E-06	1.44E-08	6.05E-09	4.05E-10	2.29E-06	3.99E-06	2.29E-06	0.00E+00	0.00E+00	0.00E+00	2.02E-07	0.00E+00		3.99E-06	0.00%
S0139	C139 CONTROL (BRICK FORMING)	7.56E-02	7.60E-02	0.00E+00	0.00E+00	0.00E+00	7.56E-02	8.56E-02	7.56E-02	0.00E+00	0.00E+00	0.00E+00	2.85E-03	0.00E+00		8.56E-02	25.04%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	7.03E-02	7.07E-02	0.00E+00	0.00E+00	0.00E+00	7.03E-02	7.97E-02	7.03E-02	0.00E+00	0.00E+00	0.00E+00	2.66E-03	0.00E+00		7.97E-02	23.29%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	9.28E-04	9.34E-04	0.00E+00	0.00E+00	0.00E+00	9.28E-04	1.05E-03	9.28E-04	0.00E+00	0.00E+00	0.00E+00	3.50E-05	0.00E+00		1.05E-03	0.31%
S0175	C175 BRICK TUMBLER NO. 2	7.33E-04	7.37E-04	0.00E+00	0.00E+00	0.00E+00	7.33E-04	8.30E-04	7.33E-04	0.00E+00	0.00E+00	0.00E+00	2.77E-05	0.00E+00		8.30E-04	0.24%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	5.54E-05	6.98E-05	3.49E-07	1.47E-07	9.83E-09	5.55E-05	9.66E-05	5.54E-05	0.00E+00	0.00E+00	0.00E+00	4.88E-06	0.00E+00		9.66E-05	0.03%
S0216	C216 CONTROL (S3 CEMENT SILO)	2.40E-06	2.66E-06	8.24E-09	3.46E-09	2.32E-10	2.40E-06	2.52E-06	2.40E-06	0.00E+00	0.00E+00	0.00E+00	1.03E-07	0.00E+00		2.52E-06	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	1.20E-05	1.26E-05	9.47E-08	2.26E-08	2.33E-09	1.20E-05	1.25E-05	1.20E-05	0.00E+00	0.00E+00	0.00E+00	4.11E-07	0.00E+00		1.25E-05	0.00%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	5.00E-05	6.29E-05	3.15E-07	1.32E-07	8.86E-09	5.00E-05	9.76E-05	5.00E-05	0.00E+00	0.00E+00	0.00E+00	4.40E-06	0.00E+00		9.76E-05	0.03%
S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	2.91E-05	3.67E-05	1.83E-07	7.70E-08	5.16E-09	2.91E-05	5.07E-05	2.91E-05	0.00E+00	0.00E+00	0.00E+00	2.56E-06	0.00E+00		5.07E-05	0.01%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	1.21E-05	1.52E-05	7.58E-08	3.19E-08	2.14E-09	1.21E-05	2.10E-05	1.21E-05	0.00E+00	0.00E+00	0.00E+00	1.06E-06	0.00E+00		2.10E-05	0.01%
S0804	PROCESS 8, SYSTEM 3: D196, D198	1.65E-06	2.08E-06	1.04E-08	4.36E-09	2.92E-10	1.65E-06	2.88E-06	1.65E-06	0.00E+00	0.00E+00	0.00E+00	1.45E-07	0.00E+00		2.88E-06	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	2.89E-05	3.64E-05	1.82E-07	7.64E-08	5.12E-09	2.89E-05	5.04E-05	2.89E-05	0.00E+00	0.00E+00	0.00E+00	2.55E-06	0.00E+00		5.04E-05	0.01%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	4.78E-04	5.57E-04	2.41E-06	1.01E-06	6.79E-08	4.79E-04	7.51E-04	4.78E-04	0.00E+00	0.00E+00	0.00E+00	2.18E-05	0.00E+00		7.51E-04	0.22%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	3.37E-03	3.89E-03	2.12E-05	0.00E+00	5.97E-07	3.37E-03	5.78E-03	3.37E-03	0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00		5.78E-03	1.69%
S0907	Clay Quarry	1.85E-02	1.86E-02	0.00E+00	0.00E+00	0.00E+00	1.85E-02	2.00E-02	1.85E-02	0.00E+00	0.00E+00	0.00E+00	6.98E-04	0.00E+00		2.00E-02	5.83%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	4.69E-03	5.83E-03	2.95E-05	1.24E-05	1.81E-06	4.69E-03	8.05E-03	4.69E-03	0.00E+00	0.00E+00	0.00E+00	2.95E-04	0.00E+00		8.05E-03	2.35%
S1010	EXTEC FEED & PROD	4.12E-05	5.13E-05	2.59E-07	1.09E-07	1.59E-08	4.12E-05	7.08E-05	4.12E-05	0.00E+00	0.00E+00	0.00E+00	2.59E-06	0.00E+00		7.08E-05	0.02%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	1.33E-03	1.66E-03	8.39E-06	3.52E-06	5.15E-07	1.33E-03	2.29E-03	1.33E-03	0.00E+00	0.00E+00	0.00E+00	8.39E-05	0.00E+00		2.29E-03	0.67%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	3.56E-04	4.44E-04	2.24E-06	9.42E-07	1.38E-07	3.57E-04	6.12E-04	3.56E-04	0.00E+00	0.00E+00	0.00E+00	2.24E-05	0.00E+00		6.12E-04	0.18%
S1019	MINED CLAY STOCKPILE	7.35E-02	7.39E-02	0.00E+00	0.00E+00	0.00E+00	7.35E-02	7.93E-02	7.35E-02	0.00E+00	0.00E+00	0.00E+00	2.77E-03	0.00E+00		7.93E-02	23.18%
S1021	1020 & 1021 - TRANSAMERICAN	8.92E-04	1.11E-03	5.61E-06	2.36E-06	3.45E-07	8.93E-04	1.53E-03	8.92E-04	0.00E+00	0.00E+00	0.00E+00	5.61E-05	0.00E+00		1.53E-03	0.45%
S1051	FINISHED BRICK - HAUL ROAD	7.21E-04	1.59E-03	2.27E-05	9.53E-06	6.39E-07	7.21E-04	3.13E-03	7.21E-04	0.00E+00	0.00E+00	0.00E+00	5.33E-05	0.00E+00		3.13E-03	0.92%
S1052	1050 & 1052 - PAVED ROAD DUST AGGREGATES & RMC SHIPPED	4.14E-04	9.10E-04	1.30E-05	5.47E-06	3.67E-07	4.14E-04	1.80E-03	4.14E-04	0.00E+00	0.00E+00	0.00E+00	3.06E-05	0.00E+00		1.80E-03	0.53%
S1053	RMC UNPAVED ROAD DUST	2.68E-05	5.90E-05	8.44E-07	3.55E-07	2.38E-08	2.68E-05	1.17E-04	2.68E-05	0.00E+00	0.00E+00	0.00E+00	1.98E-06	0.00E+00		1.17E-04	0.03%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	3.39E-04	7.45E-04	1.07E-05	4.48E-06	3.00E-07	3.39E-04	1.47E-03	3.39E-04	0.00E+00	0.00E+00	0.00E+00	2.51E-05	0.00E+00		1.47E-03	0.43%
S1055	CLAY MINED FOR BRICK	4.84E-05	1.06E-04	1.52E-06	6.40E-07	4.29E-08	4.84E-05	2.10E-04	4.84E-05	0.00E+00	0.00E+00	0.00E+00	3.58E-06	0.00E+00		2.10E-04	0.06%
S1056	PAVED HAUL ROAD - MINED AGGREGATE	1.88E-04	4.14E-04	5.92E-06	2.49E-06	1.67E-07	1.88E-04	8.18E-04	1.88E-04	0.00E+00	0.00E+00	0.00E+00	1.39E-05	0.00E+00		8.18E-04	0.24%
	Total:	2.96E-01	3.05E-01	1.70E-04	4.37E-04	6.41E-06	2.97E-01	3.42E-01	2.96E-01	4.75E-07	0.00E+00	1.82E-08	1.06E-02	0.00E+00		3.42E-01	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
2. Contribution by source is based on the target organ with the maximum chronic hazard.

Table B-19. PMI Total Acute Hazard Index (HI) by Substance

Pacific Clay Products Inc.
Facility ID: 017953

PMI INFO
Location: 462636.00, 3732214.54 (UTM E, UTM N)
Max Acute HI: 0.16

Chemical Name	CAS	Hourly Average Concentration (µg/m³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Acute HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	1.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Benzene	71432	6.24E-01	0.00E+00	0.00E+00	2.31E-02	0.00E+00	0.00E+00	2.31E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-02	0.00E+00		2.31E-02	14.47%
Formaldehyde	50000	5.30E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-03	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
NH3	7664417	6.92E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cumene	98828	8.297448e-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	100883	3.52E-02	0.00E+00	7.033e-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.033e-06	0.00E+00	0.00E+00	7.033e-06	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	9.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	1.58E-02	0.00E+00	7.1874e-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.1874e-07	0.00E+00	0.00E+00	7.1874e-07	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
p-DiClBenzene	106467	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
o-Xylene	95476	1.29E-02	0.00E+00	5.8798e-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.8798e-07	0.00E+00	0.00E+00	5.8798e-07	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
TriMeBenzns	25551137	3.24E-03	0.00E+00	1.3505e-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2MeNaphthalene	91576	1.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	3.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chlorine	7782505	2.79E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DiButyl Phthal	84742	3.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	4.73E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.6385e-06	0.00E+00	0.00E+00	3.6385e-06	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	1.44E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	1.23E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	1.01E-03	0.00E+00	1.486e-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	6.02E-04	0.00E+00	3.01e-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01e-08	0.00E+00	0.00E+00	3.01e-08	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	9.24E-03	0.00E+00	1.4911e-06	0.00E+00	0.00E+00	0.00E+00	1.4911e-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.4911e-06	0.00%
ButylBenzPhthal	85687	3.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	4.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.0476e-07	2.0476e-07	0.00E+00	0.00E+00	2.0476e-07	0.00E+00	0.00E+00	0.00E+00		2.0476e-07	0.00%
Di2-EthHxPhthal	117817	4.30E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	1.85E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.1879e-06	0.00E+00	0.00E+00	3.1879e-06	0.00E+00	0.00E+00	0.00E+00	Reproductive System	0.00E+00	0.00%
Arsenic	7440382	2.68E-02	1.34E-01	1.34E-01	0.00E+00	0.00E+00	0.00E+00	1.34E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.34E-01	83.84%
Manganese	7439965	1.92E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Beryllium	7440417	3.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Mercury	7439976	1.61E-03	0.00E+00	2.69E-03	0.00E+00	0.00E+00	0.00E+00	2.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.69E-03	1.68%
2,2,4TriMePentn	540841	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	1.482394e-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	2.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cr(VI)	18540299	2.826231e-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Lead	7439921	1.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	6.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	2.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Copper	7440508	1.94E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	2.18E-02	0.00E+00	0.00E+00	1.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Selenium	7782492	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	5.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	1.69E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Barium	7440393	2.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	1.77E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			1.34E-01	1.36E-01	1.32E-01	0.00E+00	0.											

Table B-20. PMI Total Acute Hazard Index (HI) by Source

Pacific Clay Products Inc.
Facility ID: 017953

PMI INFO
Location: 462636.00, 3732214.54 (UTM E, UTM N)
Max Acute HI: 0.16

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GLV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Acute HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	2.13E-02	2.30E-02	1.48E-02	0.00E+00	0.00E+00	3.78E-02	8.61E-04	0.00E+00	8.61E-04	0.00E+00	1.48E-02	0.00E+00	0.00E+00		3.78E-02	23.69%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	9.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0107	TUNNEL KILN NO. 2	1.20E-02	1.30E-02	8.32E-03	0.00E+00	0.00E+00	2.13E-02	4.85E-04	0.00E+00	4.85E-04	0.00E+00	0.00E+00	8.32E-03	0.00E+00		2.13E-02	13.35%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	3.53E-08	2.20E-06	0.00E+00	0.00E+00	2.20E-06	3.53E-08	0.00E+00	3.53E-08	0.00E+00	0.00E+00	2.20E-06	0.00E+00		2.20E-06	0.00%
S0122	EXTEC SCREENING	1.59E-05	1.59E-05	3.73E-05	0.00E+00	0.00E+00	1.59E-05	9.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.59E-05	0.01%
S0139	C139 CONTROL (BRICK FORMING)	2.57E-02	2.57E-02	2.57E-02	0.00E+00	0.00E+00	2.57E-02	5.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.57E-02	16.08%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	2.10E-02	2.10E-02	2.10E-02	0.00E+00	0.00E+00	2.10E-02	4.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.10E-02	13.14%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0175	C175 BRICK TUMBLER NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	1.94E-05	1.94E-05	4.53E-05	0.00E+00	0.00E+00	1.94E-05	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.94E-05	0.01%
S0216	C216 CONTROL (S3 CEMENT SILO)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	8.43E-06	8.43E-06	6.81E-06	0.00E+00	0.00E+00	8.43E-06	2.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.43E-06	0.01%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	1.01E-04	1.01E-04	2.36E-04	0.00E+00	0.00E+00	1.01E-04	6.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.01E-04	0.06%
S0801	PROCESS 8, SYSTEM 1, COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	3.98E-05	3.98E-05	9.30E-05	0.00E+00	0.00E+00	3.98E-05	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.98E-05	0.02%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	1.87E-05	1.87E-05	4.37E-05	0.00E+00	0.00E+00	1.87E-05	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.87E-05	0.01%
S0804	PROCESS 8, SYSTEM 3: D196, D198	2.80E-06	2.80E-06	6.56E-06	0.00E+00	0.00E+00	2.80E-06	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.80E-06	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	2.29E-05	2.29E-05	5.34E-05	0.00E+00	0.00E+00	2.29E-05	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.29E-05	0.01%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	1.02E-04	1.02E-04	1.33E-04	0.00E+00	0.00E+00	1.02E-04	6.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.02E-04	0.06%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	2.57E-04	2.57E-04	4.28E-04	0.00E+00	0.00E+00	2.57E-04	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.57E-04	0.16%
S0907	Clay Quarry	2.02E-03	2.02E-03	2.02E-03	0.00E+00	0.00E+00	2.02E-03	4.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.02E-03	1.27%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	2.57E-03	2.57E-03	4.28E-03	0.00E+00	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.57E-03	1.61%
S1010	EXTEC FEED & PROD	1.54E-03	1.54E-03	2.57E-03	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.54E-03	0.96%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	1.51E-03	1.51E-03	2.51E-03	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.51E-03	0.95%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	1.23E-03	1.23E-03	2.05E-03	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.23E-03	0.77%
S1019	MINED CLAY STOCKPILE	3.97E-02	3.97E-02	3.97E-02	0.00E+00	0.00E+00	3.97E-02	7.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.97E-02	24.88%
S1021	1020 & 1021 - TRANSAMERICAN	4.33E-03	4.33E-03	7.22E-03	0.00E+00	0.00E+00	4.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.33E-03	2.71%
S1051	FINISHED BRICK - HAUL ROAD	1.93E-04	1.93E-04	3.77E-04	0.00E+00	0.00E+00	1.93E-04	6.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.93E-04	0.12%
S1052	1050 & 1052 - PAVED ROAD DUST AGGREGATES & RMC SHIPPED	9.98E-05	9.98E-05	1.95E-04	0.00E+00	0.00E+00	9.98E-05	3.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.98E-05	0.06%
S1053	RMC UNPAVED ROAD DUST	2.19E-05	2.19E-05	4.27E-05	0.00E+00	0.00E+00	2.19E-05	7.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.19E-05	0.01%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	3.79E-05	3.79E-05	7.43E-05	0.00E+00	0.00E+00	3.79E-05	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.79E-05	0.02%
S1055	CLAY MINED FOR BRICK	2.78E-06	2.78E-06	5.45E-06	0.00E+00	0.00E+00	2.78E-06	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.78E-06	0.00%
S1056	PAVED HAUL ROAD - MINED AGGREGAE	3.77E-06	3.77E-06	7.37E-06	0.00E+00	0.00E+00	3.77E-06	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.77E-06	0.00%
Total:		1.34E-01	1.36E-01	1.32E-01	0.00E+00	0.00E+00	1.60E-01	1.76E-03	0.00E+00	1.12E-02	0.00E+00	0.00E+00	2.31E-02	0.00E+00		1.60E-01	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
2. Contribution by source is based on the target organ with the maximum acute hazard.

Table B-21. MEIR Total Acute Hazard Index (HI) by Substance

Pacific Clay Products Inc.
Facility ID: 017953

MEIR INFO
Location: 463440.00, 3729400.00 (UTM E, UTM N)
Max Acute HI: 0.10

Chemical Name	CAS	Hourly Average Concentration (µg/m ³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Acute HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Benzene	71432	4.83E-02	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00		1.79E-03	1.79%
Formaldehyde	50000	3.85E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
NH3	7664417	5.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cumene	98828	5.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	2.72E-03	0.00E+00	0.00E+00	5.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	7.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	133027	1.22E-03	0.00E+00	0.00E+00	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
p-DiCBenzene	106467	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
o-Xylene	95476	9.99E-04	0.00E+00	0.00E+00	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
TriMeBenzns	25551137	2.28E-04	0.00E+00	0.00E+00	9.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2MeNaphthalene	91576	9.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	2.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chlorine	7782505	2.17E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DiButyl Phthal	84742	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	1.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	3.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	1.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	9.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	7.83E-05	0.00E+00	0.00E+00	1.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	4.66E-05	0.00E+00	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	1.16E-04	0.00E+00	0.00E+00	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
ButylBenzPhthal	85687	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	3.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-08	0.00E+00	1.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Di2-EthHxPhthal	117817	3.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	1.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Arsenic	7440382	1.30E-02	6.50E-02	6.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Manganese	7439965	4.76E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Beryllium	7440417	9.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Mercury	7439976	1.25E-04	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2,2,4TriMePentn	540841	7.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	1.09E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cr(VI)	18540299	9.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Lead	7439921	4.22E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	5.62E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	4.13E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	9.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Copper	7440508	1.87E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	1.96E-02	0.00E+00	0.00E+00	9.79E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.79E-02	98.21%
Selenium	7782492	3.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	1.63E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	4.33E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Barium	7440393	5.51E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	3.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			6.50E-02	6.52E-02	9.97E-02	0.00E+00	0.00E+00	6.70E-02	3.07E-04	0.00E+								

Table B-22. MEIR Total Acute Hazard Index (HI) by Source

Pacific Clay Products Inc. **MEIR INFO**
 Facility ID: 017953 Location: 463440.00, 3729400.00 (UTM E, UTM N)
 Max Acute HI: 0.10

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Acute HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.79E-03	1.79%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	0.00E+00	5.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	5.44E-07	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-08	0.00E+00	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0107	TUNNEL KILN NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-08	0.00E+00	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0122	EXTEC SCREENING	0.00E+00	9.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0139	C139 CONTROL (BRICK FORMING)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0175	C175 BRICK TUMBLER NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-07	0.00E+00	2.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0216	C216 CONTROL (S3 CEMENT SILO)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	0.00E+00	1.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-09	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	0.00E+00	1.16E-07	0.00E+00	0.00E+00	0.00E+00	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-08	1.59E-08	0.00E+00	1.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0804	PROCESS 8, SYSTEM 3: D196, D198	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-07	0.00E+00	2.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	6.50E-02	6.50E-02	0.00E+00	0.00E+00	0.00E+00	6.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0907	Clay Quarry	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1010	EXTEC FEED & PROD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1019	MINED CLAY STOCKPILE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1021	1020 & 1021 - TRANSAMERICAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1051	FINISHED BRICK - HAUL ROAD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1052	1050 & 1052 - PAVED ROAD DUST - AGGREGATES & RMC SHIPPED	0.00E+00	0.00E+00	9.79E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.79E-02	98.21%
S1053	RMC UNPAVED ROAD DUST	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1055	CLAY MINED FOR BRICK	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S1056	PAVED HAUL ROAD - MINED AGGREGATE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:		6.50E-02	6.52E-02	9.97E-02	0.00E+00	0.00E+00	6.70E-02	3.07E-04	0.00E+00	8.21E-04	0.00E+00	0.00E+00	1.79E-03	0.00E+00		9.97E-02	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
 2. Contribution by source is based on the target organ with the maximum acute hazard.

Table B-23. MEIW Total Acute Hazard Index (HI) by Substance

Pacific Clay Products Inc. **MEIW INFO**
Facility ID: 017953 Location: 462536.00, 3732304.54 (UTM E, UTM N)
Max Acute HI: 0.08

Chemical Name	CAS	Hourly Average Concentration (µg/m ³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Acute HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	6.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Benzene	71432	2.74E-01	0.00E+00	0.00E+00	0.00E+00	1.01E-02	0.00E+00	0.00E+00	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-02	0.00E+00		1.01E-02	12.29%
Formaldehyde	50000	1.31E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
NH3	7664417	1.71E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	5.35E-05	0.00E+00	0.00E+00		0.00E+00	0.00%
Cumene	98828	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	1.54E-02	0.00E+00	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-06	0.00E+00	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	4.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	6.85E-03	0.00E+00	3.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-07	0.00E+00	3.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
p-DiClBenzene	106467	4.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
o-Xylene	95476	5.65E-03	0.00E+00	2.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-07	0.00E+00	2.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
TriMeBenzns	25551137	1.21E-03	0.00E+00	5.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-07	0.00E+00	5.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
2MeNaphthalene	91576	5.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chlorine	7782505	1.23E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04	0.00E+00	5.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DiButyl Phthal	84742	1.32E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	8.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	2.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-06	0.00E+00	1.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	6.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	5.38E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	4.44E-04	0.00E+00	6.53E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-09	0.00E+00	6.53E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	2.64E-04	0.00E+00	1.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-08	0.00E+00	1.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	4.06E-03	0.00E+00	6.55E-07	0.00E+00	0.00E+00	0.00E+00	6.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.55E-07	0.00%
ButylBenzPhthal	85687	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.99E-08	8.99E-08	0.00E+00	8.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.99E-08	0.00%
Di2-EthHxPhthal	117817	1.89E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	8.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-06	0.00E+00	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Reproductive System	0.00E+00	0.00%
Arsenic	7440382	1.42E-02	7.12E-02	7.12E-02	0.00E+00	0.00E+00	0.00E+00	7.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.12E-02	86.27%
Manganese	7439965	1.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Beryllium	7440417	2.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Mercury	7439976	7.08E-04	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.18E-03	1.43%
2,2,4TriMePentn	540841	3.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	4.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	3.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cr(VI)	18540299	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Lead	7439921	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	4.60E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	1.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	2.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Copper	7440508	1.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	1.29E-02	0.00E+00	0.00E+00	6.46E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Selenium	7782492	9.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	4.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	1.24E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Barium	7440393	1.34E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	8.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			7.12E-02	7.24E-02	7.48E-02	0.00E+00	0.00E+00	0.00E+00	8.25E-02	7.47E-04	0.00E+00							

Table B-24. MEIW Total Acute Hazard Index (HI) by Source

Pacific Clay Products Inc.
Facility ID: 017953

MEIW INFO
Location: 462536.00, 3732304.54 (UTM E, UTM N)
Max Acute HI: 0.08

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Acute HI @ Max Target Organ	Contribution ²	
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Reproductive System	0.00E+00	0.00%	
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	7.96E-03	8.61E-03	5.52E-03	0.00E+00	0.00E+00	1.41E-02	3.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-03		1.41E-02	17.12%	0.00%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	2.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0107	TUNNEL KILN NO. 2	6.67E-03	7.21E-03	4.62E-03	0.00E+00	0.00E+00	1.18E-02	2.70E-04	0.00E+00	2.70E-04	0.00E+00	0.00E+00	0.00E+00	4.62E-03		1.18E-02	14.35%	0.00%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	1.04E-08	6.47E-07	0.00E+00	0.00E+00	6.47E-07	1.04E-08	0.00E+00	1.04E-08	0.00E+00	0.00E+00	6.47E-07	0.00E+00		6.47E-07	0.00%	0.00%
S0122	EXTEC SCREENING	1.54E-05	1.54E-05	3.62E-05	0.00E+00	0.00E+00	1.54E-05	9.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.54E-05	0.02%	0.00%
S0139	C139 CONTROL (BRICK FORMING)	7.72E-03	7.72E-03	7.72E-03	0.00E+00	0.00E+00	7.72E-03	1.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.72E-03	9.36%	0.00%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	6.36E-03	6.36E-03	6.36E-03	0.00E+00	0.00E+00	6.36E-03	1.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.36E-03	7.71%	0.00%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0175	C175 BRICK TUMBLER NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	1.87E-05	1.87E-05	4.37E-05	0.00E+00	0.00E+00	1.87E-05	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.87E-05	0.02%	0.00%
S0216	C216 CONTROL (S3 CEMENT SILO)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	7.55E-06	7.55E-06	6.10E-06	0.00E+00	0.00E+00	7.55E-06	2.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.55E-06	0.01%	0.00%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	1.07E-04	1.07E-04	2.51E-04	0.00E+00	0.00E+00	1.07E-04	6.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.07E-04	0.13%	0.00%
S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	3.88E-05	3.88E-05	9.05E-05	0.00E+00	0.00E+00	3.88E-05	2.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.88E-05	0.05%	0.00%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	1.72E-05	1.72E-05	4.01E-05	0.00E+00	0.00E+00	1.72E-05	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.72E-05	0.02%	0.00%
S0804	PROCESS 8, SYSTEM 3: D196, D198	2.75E-06	2.75E-06	6.43E-06	0.00E+00	0.00E+00	2.75E-06	1.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.75E-06	0.00%	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	1.96E-05	1.96E-05	4.58E-05	0.00E+00	0.00E+00	1.96E-05	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.96E-05	0.02%	0.00%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	9.43E-05	9.43E-05	1.23E-04	0.00E+00	0.00E+00	9.43E-05	5.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.43E-05	0.11%	0.00%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00%
S0906	Aggregates Quarry	2.34E-04	2.34E-04	3.91E-04	0.00E+00	0.00E+00	2.34E-04	2.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.34E-04	0.28%	0.00%
S0907	Clay Quarry	1.42E-03	1.42E-03	1.42E-03	0.00E+00	0.00E+00	1.42E-03	2.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.42E-03	1.72%	0.00%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	2.52E-03	2.52E-03	4.20E-03	0.00E+00	0.00E+00	2.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.52E-03	3.05%	0.00%
S1010	EXTEC FEED & PROD	1.36E-03	1.36E-03	2.27E-03	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.36E-03	1.65%	0.00%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	1.34E-03	1.34E-03	2.24E-03	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.34E-03	1.63%	0.00%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	1.12E-03	1.12E-03	1.87E-03	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.12E-03	1.36%	0.00%
S1019	MINED CLAY STOCKPILE	2.92E-02	2.92E-02	2.92E-02	0.00E+00	0.00E+00	2.92E-02	5.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.92E-02	35.40%	0.00%
S1021	1020 & 1021 - TRANSAMERICAN	4.69E-03	4.69E-03	7.81E-03	0.00E+00	0.00E+00	4.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.69E-03	5.68%	0.00%
S1051	FINISHED BRICK - HAUL ROAD	8.05E-05	8.05E-05	1.57E-04	0.00E+00	0.00E+00	8.05E-05	2.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.05E-05	0.10%	0.00%
S1052	1050 & 1052 - PAVED ROAD DUST AGGREGATES & RMC SHIPPED	1.05E-04	1.05E-04	2.05E-04	0.00E+00	0.00E+00	1.05E-04	3.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.05E-04	0.13%	0.00%
S1053	RMC UNPAVED ROAD DUST	2.21E-05	2.21E-05	4.30E-05	0.00E+00	0.00E+00	2.21E-05	7.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.21E-05	0.03%	0.00%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	3.50E-05	3.50E-05	6.87E-05	0.00E+00	0.00E+00	3.50E-05	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.50E-05	0.04%	0.00%
S1055	CLAY MINED FOR BRICK	8.52E-07	8.52E-07	1.67E-06	0.00E+00	0.00E+00	8.52E-07	2.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.52E-07	0.00%	0.00%
S1056	PAVED HAUL ROAD - MINED AGGREGATE	3.39E-06	3.39E-06	6.63E-06	0.00E+00	0.00E+00	3.39E-06	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.39E-06	0.00%	0.00%
Total:		7.12E-02	7.24E-02	7.48E-02	0.00E+00	0.00E+00	8.25E-02	7.47E-04	0.00E+00	3.03E-03	0.00E+00	0.00E+00	1.01E-02	0.00E+00		8.25E-02	100.00%	

1. Refer to Table B-5. Model Emission Source Parameters.
2. Contribution by source is based on the target organ with the maximum acute hazard.

Table B-25. PMI Total Chronic 8-hour Hazard Index (HI) by Substance

Pacific Clay Products Inc.
Facility ID: 017953

PMI 8-HR INFO
Location: 464140.49, 3729937.11 (UTM E, UTM N)
Max HI: 0.23

Chemical Name	CAS	Average Annual Concentration (µg/m ³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ¹
Naphthalene	91203	1.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Benzene	71432	6.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04	0.00E+00	0.00E+00	0.00%
Formaldehyde	50000	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
NH3	7664417	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cumene	98828	3.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	3.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	1.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
p-DiClBenzene	106467	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
o-Xylene	95476	1.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
TriMeBenzns	25551137	1.23E-05	0.00E+00	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.08E-06	0.00%
2MeNaphthalene	91576	1.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	1.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chlorine	7782505	2.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DiButyl Phthal	84742	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	2.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	4.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	1.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	6.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	9.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
ButylBenzPhthal	85687	3.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	4.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Di2-EthHxPhthal	117817	4.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	1.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Arsenic	7440382	1.29E-04	1.73E-02	1.73E-02	0.00E+00	0.00E+00	0.00E+00	1.73E-02	1.73E-02	1.73E-02	1.73E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.73E-02	7.60%
Manganese	7439965	1.78E-02	0.00E+00	2.10E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.10E-01	92.37%
Beryllium	7440417	3.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Mercury	7439976	1.65E-06	0.00E+00	5.49E-05	0.00E+00	5.49E-05	0.00E+00	5.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.49E-05	0.02%
2,2,4TriMePentn	540841	3.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	5.07E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cr(VI)	18540299	2.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Lead	7439921	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	5.44E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	9.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	3.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Copper	7440508	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	2.19E-04	0.00E+00	0.00E+00	7.30E-03	0.00E+00	0.00E+00	7.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Selenium	7782492	3.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	4.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	1.62E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Barium	7440393	5.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	1.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Alumin Oxide	1344281	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Quartz	14808607	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:		1.73E-02	1.73E-02	2.27E-01	7.30E-03	5.49E-05	0.00E+00	1.73E-02										

Table B-26. PMI Total Chronic 8-hour Hazard Index (HI) by Source

Pacific Clay Products Inc.
Facility ID: 017953

PMI 8-HR INFO
Location: 464140.49, 3729937.11 (UTM E, UTM N)
Max HI: 0.23

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	7.30E-04	1.38E-03	0.00E+00	4.41E-05	0.00E+00	7.74E-04	7.30E-04	7.30E-04	7.30E-04	7.36E-08	0.00E+00	0.00E+00	3.41E-04		1.38E-03	0.61%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0107	TUNNEL KILN NO. 2	1.78E-04	3.36E-04	0.00E+00	1.08E-05	0.00E+00	1.89E-04	1.78E-04	1.78E-04	1.78E-04	1.66E-08	0.00E+00	0.00E+00	8.32E-05		3.36E-04	0.15%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-10	0.00E+00	0.00E+00	1.35E-08	0.00E+00		0.00E+00	0.00%
S0122	EXTEC SCREENING	2.00E-06	9.78E-06	1.17E-06	0.00E+00	0.00E+00	2.00E-06	3.16E-06	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.78E-06	0.00%
S0139	C139 CONTROL (BRICK FORMING)	3.69E-04	4.01E-04	9.22E-05	0.00E+00	0.00E+00	3.69E-04	4.61E-04	3.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.01E-04	0.18%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	4.01E-04	4.36E-04	1.00E-04	0.00E+00	0.00E+00	4.01E-04	5.01E-04	4.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.36E-04	0.19%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	4.33E-06	4.71E-06	1.08E-06	0.00E+00	0.00E+00	4.33E-06	5.41E-06	4.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.71E-06	0.00%
S0175	C175 BRICK TUMBLER NO. 2	4.59E-06	4.99E-06	1.15E-06	0.00E+00	0.00E+00	4.59E-06	5.73E-06	4.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.99E-06	0.00%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	4.84E-05	2.37E-04	2.82E-05	0.00E+00	0.00E+00	4.84E-05	7.66E-05	4.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.37E-04	0.10%
S0216	C216 CONTROL (S3 CEMENT SILO)	1.07E-06	2.80E-06	3.05E-07	0.00E+00	0.00E+00	1.07E-06	1.38E-06	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.80E-06	0.00%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	5.36E-06	9.85E-06	1.22E-06	0.00E+00	0.00E+00	5.36E-06	6.58E-06	5.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		9.85E-06	0.00%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	1.26E-06	6.16E-06	7.34E-07	0.00E+00	0.00E+00	1.26E-06	1.99E-06	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.16E-06	0.00%
S0801	PROCESS 8, SYSTEM 1, COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	2.56E-05	1.26E-04	1.50E-05	0.00E+00	0.00E+00	2.56E-05	4.06E-05	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Central Nervous System	1.26E-04	0.06%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	6.44E-06	3.15E-05	3.75E-06	0.00E+00	0.00E+00	6.44E-06	1.02E-05	6.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.15E-05	0.01%
S0804	PROCESS 8, SYSTEM 3: D196, D198	1.19E-06	5.80E-06	6.91E-07	0.00E+00	0.00E+00	1.19E-06	1.88E-06	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.80E-06	0.00%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	1.36E-05	6.64E-05	7.91E-06	0.00E+00	0.00E+00	1.36E-05	2.15E-05	1.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.64E-05	0.03%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	2.51E-04	8.74E-04	7.57E-05	0.00E+00	0.00E+00	2.51E-04	3.27E-04	2.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.74E-04	0.38%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	1.91E-03	6.34E-03	7.96E-04	0.00E+00	0.00E+00	1.91E-03	2.71E-03	1.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.34E-03	2.79%
S0907	Clay Quarry	6.47E-04	7.04E-04	1.62E-04	0.00E+00	0.00E+00	6.47E-04	8.09E-04	6.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.04E-04	0.31%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	5.76E-04	2.69E-03	2.40E-04	0.00E+00	0.00E+00	5.76E-04	8.15E-04	5.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.69E-03	1.19%
S1010	EXTEC FEED & PROD	1.84E-05	8.61E-05	7.67E-06	0.00E+00	0.00E+00	1.84E-05	2.61E-05	1.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.61E-05	0.04%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	4.63E-04	2.17E-03	1.93E-04	0.00E+00	0.00E+00	4.63E-04	6.56E-04	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.17E-03	0.95%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	1.22E-04	5.69E-04	5.07E-05	0.00E+00	0.00E+00	1.22E-04	1.72E-04	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.69E-04	0.25%
S1019	MINED CLAY STOCKPILE	4.05E-04	4.40E-04	1.01E-04	0.00E+00	0.00E+00	4.05E-04	5.06E-04	4.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.40E-04	0.19%
S1021	1020 & 1021 - TRANSAMERICAN	3.09E-05	1.44E-04	1.29E-05	0.00E+00	0.00E+00	3.09E-05	4.38E-05	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.44E-04	0.06%
S1051	FINISHED BRICK - HAUL ROAD	9.92E-07	1.89E-05	4.86E-07	0.00E+00	0.00E+00	9.92E-07	1.48E-06	9.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.89E-05	0.01%
S1052	1050 & 1052 - PAVED ROAD DUST AGGREGATES & RMC SHIPPED	1.06E-02	2.02E-01	5.21E-03	0.00E+00	0.00E+00	1.06E-02	1.59E-02	1.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.02E-01	89.14%
S1053	RMC UNPAVED ROAD DUST	1.71E-05	3.24E-04	8.35E-06	0.00E+00	0.00E+00	1.71E-05	2.54E-05	1.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.24E-04	0.14%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	2.36E-04	4.49E-03	1.16E-04	0.00E+00	0.00E+00	2.36E-04	3.52E-04	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.49E-03	1.98%
S1055	CLAY MINED FOR BRICK	1.06E-06	2.02E-05	5.21E-07	0.00E+00	0.00E+00	1.06E-06	1.59E-06	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.02E-05	0.01%
S1056	PAVED HAUL ROAD - MINED AGGREGATE	1.44E-04	2.73E-03	7.03E-05	0.00E+00	0.00E+00	1.44E-04	2.14E-04	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.73E-03	1.20%
Total:		1.73E-02	2.27E-01	7.30E-03	5.49E-05	0.00E+00	1.73E-02	2.46E-02	1.73E-02	9.03E-08	0.00E+00	0.00E+00	4.25E-04	0.00E+00		2.27E-01	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
2. Contribution by source is based on the target organ with the maximum chronic hazard.

Table B-27. MEIW Total Chronic 8-hour Hazard Index (HI) by Substance

Pacific Clay Products Inc. MEIW 8-HR INFO
 Facility ID: 017953 Location: 464450.00, 3730170.00 (UTM E, UTM N)
 Max HI: 0.03

Chemical Name	CAS	Average Annual Concentration (µg/m³)	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution¹
Naphthalene	91203	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Benzene	71432	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-04		0.00E+00	0.00%
Formaldehyde	50000	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
NH3	7664417	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cumene	98828	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Toluene	108883	3.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Benzene	100414	1.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Xylenes	1330207	1.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
p-DiClBenzene	106467	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
o-Xylene	95476	1.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
TriMeBenzns	25551137	1.17E-05	0.00E+00	2.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.93E-06	0.01%
2MeNaphthalene	91576	1.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Diethanolamine	111422	1.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chlorine	7782505	2.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DiButyl Phthal	84742	2.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Iodide	74884	1.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
MEK	78933	4.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Methyl Chloride	74873	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Ethyl Chloride	75003	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,1,1-TCA	71556	9.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Perc	127184	5.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
CS2	75150	8.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
ButylBenzPhthal	85687	3.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Styrene	100425	4.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Di2-EthHxPhthal	117817	4.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Phenol	108952	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Arsenic	7440382	4.63E-05	6.18E-03	6.18E-03	0.00E+00	0.00E+00	0.00E+00	6.18E-03	6.18E-03	6.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.18E-03	22.53%
Manganese	7439965	1.80E-03	0.00E+00	2.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.12E-02	77.27%
Beryllium	7440417	4.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Mercury	7439976	1.57E-06	0.00E+00	5.23E-05	0.00E+00	5.23E-05	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.23E-05	0.19%
2,2,4TriMePentn	540841	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Hexane	110543	4.55E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
DieselExhPM	9901	1.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cr(VI)	18540299	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Lead	7439921	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Aluminum	7429905	6.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Chromium	7440473	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cadmium	7440439	2.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Copper	7440508	2.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Nickel	7440020	5.96E-05	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Selenium	7782492	5.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Zinc	7440666	4.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Silica, Crystln	1175	1.82E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Barium	7440393	5.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Cobalt	7440484	1.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
1,3-Butadiene	106990	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Acrolein	107028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
Total:			6.18E-03	2.74E-02	1.99E-03	5.23E-05	0.00E+00	6.23E-03	8.16E-03	6.18E-03	8.60E-08	0.00E+00	0.00E+00	4.04E-04	0.00E+00		2.74E-02	100.00%

1. Contribution by pollutant is based on the target organ with the maximum chronic hazard.

Table B-28. MEIW Total Chronic 8-hour Hazard Index (HI) by Source

Pacific Clay Products Inc.
Facility ID: 017953

MEIW 8-HR INFO
Location: 464450.00, 3730170.00 (UTM E, UTM N)
Max HI: 0.03

Model Source ID	Source Name	Cardiovascular System	Central Nervous System	Immune System	Kidney	GILV	Reproductive System	Respiratory System	Skin	Eye	Bone/Teeth	Endocrine System	Blood	Odor	Max Target Organ	Total Chronic HI @ Max Target Organ	Contribution ²
S0007	CONCRETE BATCH PLANT NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0062	KILN NO. 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0071	LPG STORAGE NO. 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0073	LPG STORAGE NO. 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0075	ENVELOPE KILN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0076	TUNNEL KILN NO. 4	6.94E-04	1.31E-03	0.00E+00	4.20E-05	0.00E+00	7.36E-04	6.94E-04	6.94E-04	6.99E-08	0.00E+00	0.00E+00	3.24E-04	0.00E+00		1.31E-03	4.77%
S0089	C89 - BRICK FORMING #4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0100	BRICK TUMBLERS, COATINGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0107	TUNNEL KILN NO. 2	1.71E-04	3.22E-04	0.00E+00	1.03E-05	0.00E+00	1.81E-04	1.71E-04	1.71E-04	1.59E-08	0.00E+00	0.00E+00	7.99E-05	0.00E+00		3.22E-04	1.18%
S0114	GASOLINE STORAGE AND DISPENSING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-10	0.00E+00	0.00E+00	1.21E-08	0.00E+00		0.00E+00	0.00%
S0122	EXTEC SCREENING	1.00E-06	4.90E-06	5.83E-07	0.00E+00	0.00E+00	1.00E-06	1.58E-06	1.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.90E-06	0.02%
S0139	C139 CONTROL (BRICK FORMING)	3.46E-04	3.76E-04	8.65E-05	0.00E+00	0.00E+00	3.46E-04	4.32E-04	3.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.76E-04	1.37%
S0143	C143 BAGHOUSE ON CLAY HANDLING SYSTEM	3.75E-04	4.08E-04	9.38E-05	0.00E+00	0.00E+00	3.75E-04	4.69E-04	3.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.08E-04	1.49%
S0144	IC ENGINE, NON-EMERGENCY, NATURAL GAS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0150	SPRAY COATING OPERATION	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0173	C173 BRICK TUMBLER NO. 1	4.33E-06	4.71E-06	1.08E-06	0.00E+00	0.00E+00	4.33E-06	5.41E-06	4.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.71E-06	0.02%
S0175	C175 BRICK TUMBLER NO. 2	4.42E-06	4.81E-06	1.11E-06	0.00E+00	0.00E+00	4.42E-06	5.52E-06	4.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.81E-06	0.02%
S0209	PROCESS 8, SYSTEM 3: D197 THROUGH 204 AND C209	2.31E-05	1.13E-04	1.35E-05	0.00E+00	0.00E+00	2.31E-05	3.65E-05	2.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.13E-04	0.41%
S0216	C216 CONTROL (S3 CEMENT SILO)	6.72E-07	1.75E-06	1.91E-07	0.00E+00	0.00E+00	6.72E-07	8.63E-07	6.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.75E-06	0.01%
S0227	C227 CONTROL (2 SILO CEMENT, 1 FLYASH, 1 MIXER, 1 LOADOUT)	3.35E-06	6.15E-06	7.60E-07	0.00E+00	0.00E+00	3.35E-06	4.11E-06	3.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.15E-06	0.02%
S0235	EXTEC SCREENING PLANT AND ENGINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0253	TRANSAMERICAN PORTABLE SCREENING PLANT AND ENGINE	1.07E-06	5.23E-06	6.23E-07	0.00E+00	0.00E+00	1.07E-06	1.69E-06	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.23E-06	0.02%
S0801	PROCESS 8, SYSTEM 1. COLD FEED PLANT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0802	PROCESS 8, SYSTEM 6: D228 THROUGH 233, AND C234	1.19E-05	5.81E-05	6.92E-06	0.00E+00	0.00E+00	1.19E-05	1.88E-05	1.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Central Nervous System	5.81E-05	0.21%
S0803	PROCESS 8, SYSTEM2: D191 THROUGH 193	3.54E-06	1.74E-05	2.07E-06	0.00E+00	0.00E+00	3.54E-06	5.61E-06	3.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.74E-05	0.06%
S0804	PROCESS 8, SYSTEM 3: D196, D198	5.97E-07	2.92E-06	3.48E-07	0.00E+00	0.00E+00	5.97E-07	9.45E-07	5.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.92E-06	0.01%
S0805	PROCESS 8, SYSTEMS 3 & 4: D205 THROUGH 212	7.78E-06	3.81E-05	4.54E-06	0.00E+00	0.00E+00	7.78E-06	1.23E-05	7.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.81E-05	0.14%
S0806	PROCESS 9, SYSTEM 2: D213, 217-220	1.39E-04	4.84E-04	4.19E-05	0.00E+00	0.00E+00	1.39E-04	1.81E-04	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		4.84E-04	1.76%
S0901	PAI PORTABLE WELDERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0902	PCP WELDERS, EXEMPT DIESEL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00%
S0906	Aggregates Quarry	2.27E-03	7.51E-03	9.44E-04	0.00E+00	0.00E+00	2.27E-03	3.21E-03	2.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.51E-03	27.41%
S0907	Clay Quarry	5.23E-04	5.69E-04	1.31E-04	0.00E+00	0.00E+00	5.23E-04	6.54E-04	5.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.69E-04	2.08%
S1009	1000 - 1009, 1022 (WASH PLANT & SIMPLICITY FEED)	3.03E-04	1.42E-03	1.26E-04	0.00E+00	0.00E+00	3.03E-04	4.29E-04	3.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.42E-03	5.17%
S1010	EXTEC FEED & PROD	1.20E-05	5.62E-05	5.01E-06	0.00E+00	0.00E+00	1.20E-05	1.70E-05	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		5.62E-05	0.21%
S1012	1011 AND 1012 BASE PLANT FEED & PROD.	1.71E-04	7.99E-04	7.12E-05	0.00E+00	0.00E+00	1.71E-04	2.42E-04	1.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		7.99E-04	2.92%
S1018	1013 THRU 1018 - READY MIX PLANT NO. 2	3.74E-05	1.75E-04	1.56E-05	0.00E+00	0.00E+00	3.74E-05	5.30E-05	3.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.75E-04	0.64%
S1019	MINED CLAY STOCKPILE	3.59E-04	3.90E-04	8.97E-05	0.00E+00	0.00E+00	3.59E-04	4.48E-04	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.90E-04	1.42%
S1021	1020 & 1021 - TRANSAMERICAN	2.21E-05	1.04E-04	9.23E-06	0.00E+00	0.00E+00	2.21E-05	3.14E-05	2.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.04E-04	0.38%
S1051	FINISHED BRICK - HALL ROAD	1.01E-06	1.92E-05	4.93E-07	0.00E+00	0.00E+00	1.01E-06	1.50E-06	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.92E-05	0.07%
S1052	1050 & 1052 - PAVED ROAD DUST AGGREGATES & RMC SHIPPED	4.61E-04	8.76E-03	2.26E-04	0.00E+00	0.00E+00	4.61E-04	6.86E-04	4.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		8.76E-03	31.95%
S1053	RMC UNPAVED ROAD DUST	9.76E-06	1.86E-04	4.78E-06	0.00E+00	0.00E+00	9.76E-06	1.45E-05	9.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.86E-04	0.68%
S1054	AGGREGATES SHIPPED UNPAVED ROAD	1.25E-04	2.38E-03	6.13E-05	0.00E+00	0.00E+00	1.25E-04	1.86E-04	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		2.38E-03	8.68%
S1055	CLAY MINED FOR BRICK	8.94E-07	1.70E-05	4.38E-07	0.00E+00	0.00E+00	8.94E-07	1.33E-06	8.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.70E-05	0.06%
S1056	PAVED HAIL ROAD - MINED AGGREGAE	9.84E-05	1.87E-03	4.82E-05	0.00E+00	0.00E+00	9.84E-05	1.47E-04	9.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.87E-03	6.83%
Total:		6.18E-03	2.74E-02	1.99E-03	5.23E-05	0.00E+00	6.23E-03	8.16E-03	6.18E-03	8.60E-08	0.00E+00	0.00E+00	4.04E-04	0.00E+00		2.74E-02	100.00%

1. Refer to Table B-5. Model Emission Source Parameters.
2. Contribution by source is based on the target organ with the maximum chronic hazard.

Table B-29. Cancer Burden for 70-Year Exposure

Pacific Clay Products Inc.
 Facility ID: 017953

Receptors ¹		Census Tract Population ²	Cancer Risk - 70-Year Exposure	No. of People Exposed to >1 per Million Cancer Risk	Cancer Burden ³
East UTM	North UTM				
461487.27	3733498.39	9	2.98E-06	9	2.68E-05
462043.94	3732858.95	4	5.48E-06	4	2.19E-05
465214.76	3727709.48	193	1.39E-06	193	2.69E-04
465022.76	3727748.21	108	1.47E-06	108	1.59E-04
464895.31	3727668.63	324	1.46E-06	324	4.73E-04
465300.44	3727465.03	11	1.27E-06	11	1.40E-05
465342.81	3727520.75	28	1.29E-06	28	3.60E-05
465707.37	3729931.41	3	1.41E-06	3	4.22E-06
466006.38	3728648.97	81	1.27E-06	81	1.03E-04
465239.59	3728320.87	39	1.69E-06	39	6.60E-05
465450.97	3728186.06	19	1.54E-06	19	2.93E-05
465486.17	3728308.78	11	1.57E-06	11	1.73E-05
465283.97	3728367.61	36	1.70E-06	36	6.11E-05
465868.78	3728214.72	16	1.35E-06	16	2.16E-05
465417.55	3729274.97	3	1.85E-06	3	5.55E-06
465334.12	3729036.22	8	1.88E-06	8	1.50E-05
465567.00	3728338.76	71	1.53E-06	71	1.08E-04
465717.59	3728205.94	22	1.39E-06	22	3.05E-05
465769.29	3728148.77	15	1.37E-06	15	2.05E-05
465680.22	3728252.53	24	1.40E-06	24	3.36E-05
464783.03	3728086.71	244	1.75E-06	244	4.27E-04
465091.97	3728121.06	149	1.65E-06	149	2.45E-04
465360.17	3728064.75	35	1.54E-06	35	5.39E-05
465269.95	3727953.32	23	1.49E-06	23	3.42E-05
465302.00	3727921.27	38	1.46E-06	38	5.54E-05
465336.83	3727890.99	26	1.43E-06	26	3.73E-05
465241.08	3727991.12	21	1.52E-06	21	3.18E-05
465443.66	3728060.68	21	1.49E-06	21	3.14E-05
465799.49	3727963.28	9	1.33E-06	9	1.20E-05
465804.53	3728051.96	15	1.34E-06	15	2.01E-05
465388.93	3727843.90	43	1.40E-06	43	6.00E-05
465443.37	3727799.91	2	1.36E-06	2	2.72E-06
465632.47	3727783.15	3	1.30E-06	3	3.89E-06
465626.94	3727945.16	16	1.39E-06	16	2.23E-05
465772.03	3727748.17	14	1.25E-06	14	1.75E-05
465697.15	3727623.15	35	1.23E-06	35	4.30E-05
465611.72	3727681.77	32	1.27E-06	32	4.06E-05
465553.39	3727723.34	16	1.30E-06	16	2.08E-05
465517.14	3727748.08	17	1.32E-06	17	2.24E-05
465480.53	3727774.49	3	1.34E-06	3	4.02E-06
465415.95	3727726.61	7	1.34E-06	7	9.40E-06

Table B-29. Cancer Burden for 70-Year Exposure

Pacific Clay Products Inc.
 Facility ID: 017953

Receptors ¹		Census Tract Population ²	Cancer Risk - 70-Year Exposure	No. of People Exposed to >1 per Million Cancer Risk	Cancer Burden ³
East UTM	North UTM				
465267.86	3727836.24	13	1.43E-06	13	1.86E-05
465193.08	3727891.51	12	1.49E-06	12	1.78E-05
465486.19	3727673.69	7	1.30E-06	7	9.11E-06
465908.84	3727777.06	34	1.25E-06	34	4.24E-05
462151.43	3732562.60	1	6.79E-06	1	6.79E-06
462115.57	3732468.28	11	6.52E-06	11	7.17E-05
462139.40	3732214.72	20	7.58E-06	20	1.52E-04
462226.85	3730831.09	54	4.57E-06	54	2.47E-04
461307.91	3731314.96	161	1.67E-06	161	2.69E-04
461348.89	3731620.04	114	2.16E-06	114	2.46E-04
461142.27	3731617.88	281	1.60E-06	281	4.50E-04
461092.57	3731788.95	50	1.62E-06	50	8.08E-05
461245.73	3731565.24	161	1.76E-06	161	2.84E-04
460924.92	3731685.52	65	1.27E-06	65	8.28E-05
460912.34	3732483.88	386	1.63E-06	386	6.30E-04
460486.60	3732513.01	83	1.20E-06	83	9.92E-05
460771.74	3731859.11	217	1.23E-06	217	2.68E-04
460894.60	3731907.50	99	1.40E-06	99	1.38E-04
463280.01	3727749.64	328	1.34E-06	328	4.40E-04
463538.70	3729866.48	5	1.65E-05	5	8.23E-05
463566.11	3729423.98	102	5.63E-06	102	5.74E-04
463682.05	3729013.30	200	3.37E-06	200	6.74E-04
463471.36	3728977.40	140	3.22E-06	140	4.51E-04
463455.97	3729290.91	43	4.34E-06	43	1.87E-04
463385.50	3729328.21	4	4.30E-06	4	1.72E-05
463357.01	3729245.38	3	3.86E-06	3	1.16E-05
463129.53	3729395.94	10	3.55E-06	10	3.55E-05
463002.33	3728830.08	318	2.05E-06	318	6.50E-04
463070.28	3728571.48	95	1.90E-06	95	1.80E-04
463339.92	3729137.68	84	3.41E-06	84	2.87E-04
463260.34	3729048.62	101	2.97E-06	101	3.00E-04
463260.00	3728960.92	80	2.76E-06	80	2.21E-04
463240.16	3728862.20	104	2.52E-06	104	2.62E-04
463386.41	3728742.90	129	2.56E-06	129	3.31E-04
463677.15	3728698.44	120	2.77E-06	120	3.32E-04
463800.76	3728692.98	52	2.77E-06	52	1.44E-04
463665.49	3728261.96	272	2.09E-06	272	5.69E-04
463521.56	3728604.67	112	2.49E-06	112	2.78E-04
463333.36	3728200.92	143	1.83E-06	143	2.62E-04
462997.05	3728470.09	168	1.72E-06	168	2.90E-04
463368.11	3728052.88	74	1.75E-06	74	1.29E-04
463513.96	3727632.55	81	1.47E-06	81	1.19E-04
463640.39	3727827.54	109	1.65E-06	109	1.80E-04
463437.51	3728266.93	98	1.96E-06	98	1.93E-04
463359.11	3728607.51	85	2.30E-06	85	1.96E-04
463358.22	3728519.59	88	2.19E-06	88	1.92E-04
464675.91	3729398.42	116	2.57E-06	116	2.99E-04
464415.04	3729621.58	68	3.74E-06	68	2.54E-04
464152.01	3729361.90	126	3.92E-06	126	4.93E-04
464159.67	3729724.98	160	5.65E-06	160	9.05E-04
464275.54	3729610.90	126	4.40E-06	126	5.54E-04
463981.99	3729370.74	73	4.51E-06	73	3.29E-04
464040.43	3729213.74	57	3.75E-06	57	2.13E-04
463987.90	3729043.75	52	3.30E-06	52	1.72E-04
464010.45	3729127.59	39	3.52E-06	39	1.37E-04

Table B-29. Cancer Burden for 70-Year Exposure

Pacific Clay Products Inc.
 Facility ID: 017953

Receptors ¹		Census Tract Population ²	Cancer Risk - 70-Year Exposure	No. of People Exposed to >1 per Million Cancer Risk	Cancer Burden ³
East UTM	North UTM				
463897.61	3728988.54	56	3.27E-06	56	1.83E-04
464214.63	3728341.39	93	2.17E-06	93	2.02E-04
464315.58	3728670.31	393	2.42E-06	393	9.51E-04
464496.27	3728587.15	75	2.35E-06	75	1.76E-04
463943.36	3728832.59	4	2.98E-06	4	1.19E-05
463965.37	3728942.71	46	3.13E-06	46	1.44E-04
464567.22	3728299.61	43	2.03E-06	43	8.71E-05
464429.20	3728296.35	92	2.07E-06	92	1.90E-04
464378.84	3728460.96	72	2.25E-06	72	1.62E-04
464553.14	3728528.84	79	2.26E-06	79	1.78E-04
464163.95	3728393.13	146	2.24E-06	146	3.28E-04
464494.81	3728092.10	229	1.86E-06	229	4.26E-04
464219.37	3728070.84	316	1.92E-06	316	6.05E-04
464081.23	3728082.99	74	1.95E-06	74	1.44E-04
463978.99	3728080.94	69	1.95E-06	69	1.35E-04
463781.61	3727672.89	198	1.59E-06	198	3.14E-04
463983.58	3727873.59	80	1.77E-06	80	1.42E-04
464085.92	3727875.86	66	1.77E-06	66	1.17E-04
464189.17	3727877.69	93	1.76E-06	93	1.64E-04
464293.82	3727880.74	95	1.74E-06	95	1.65E-04
464397.17	3727882.24	74	1.72E-06	74	1.27E-04
464498.85	3727883.97	44	1.69E-06	44	7.45E-05
464600.35	3727886.03	45	1.67E-06	45	7.50E-05
464595.65	3727693.35	64	1.54E-06	64	9.88E-05
464499.40	3727681.40	85	1.56E-06	85	1.32E-04
464400.58	3727677.77	73	1.57E-06	73	1.15E-04
464297.51	3727676.05	86	1.59E-06	86	1.37E-04
464192.49	3727674.00	86	1.61E-06	86	1.38E-04
464089.04	3727671.29	96	1.62E-06	96	1.56E-04
463990.32	3727669.44	74	1.62E-06	74	1.20E-04
463987.43	3727391.93	278	1.45E-06	278	4.02E-04
464084.46	3727362.85	168	1.43E-06	168	2.40E-04
463841.38	3727423.97	125	1.44E-06	125	1.80E-04
463712.58	3727458.27	115	1.43E-06	115	1.64E-04
463708.26	3727273.46	11	1.33E-06	11	1.46E-05
464621.98	3727218.37	214	1.29E-06	214	2.76E-04
464808.75	3727444.87	59	1.37E-06	59	8.06E-05
464341.19	3727408.01	182	1.42E-06	182	2.59E-04
464272.21	3727228.77	74	1.34E-06	74	9.89E-05
463366.47	3727284.74	134	1.22E-06	134	1.63E-04
463462.30	3727380.62	125	1.31E-06	125	1.64E-04
463579.26	3727131.92	136	1.23E-06	136	1.67E-04
464113.10	3727091.10	170	1.29E-06	170	2.19E-04
464063.18	3726955.46	162	1.22E-06	162	1.98E-04
TOTAL:				12527	0.025

1. Receptors include census receptors within the 1 x 10⁶ area of impact from the 30 year exposure duration residential cancer risk analysis. Census receptors with a population of 0 are excluded from this list.
2. Population from 2010 Census data using HARP Database
3. Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk]

This HRA was conditionally approved with adjusted risk values. For more details, please see the revised HRA Summary Form appended to the top of this HRA as well as the Conditional Approval letter posted on the South Coast AQMD website.

2017 Health Risk Assessment
Pacific Clay Products (FID 017953)

APPENDIX C. SCAQMD HEALTH RISK SUMMARY FORM



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182

(909) 396-2000 • www.aqmd.gov

HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : Pacific Clay Products Inc.
 Facility Address: 14741 Lake Street, Lake Elsinore, CA 92530
 Type of Business: Clay Brick Manufacturer (SIC Code 3251)
 SCAQMD ID No.: 17953

A. Cancer Risk

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

1. Inventory Reporting Year : 2017
2. Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*

a. Offsite	<u>33.94</u>	in a million	Location:	<u>462656.78, 3732208.25</u>
b. Residence	<u>6.51</u>	in a million	Location:	<u>462509.00, 3732882.33</u>
c. Worker	<u>0.99</u>	in a million	Location:	<u>462556.00, 3732314.54</u>
3. Substances Accounting for 90% of Cancer Risk: Arsenic, Cobalt
- Processes Accounting for 90% of Cancer Risk: Tunnel Kiln No. 4 (S0076), C139 Baghouse Control on Brick Forming (S0139), C143 Baghouse on Clay Handling System (S0143), Mined Clay Stockpile (S1019), Tunnel Kiln No. 2 (S0107), Aggregates Quarry (S0906), and Clay Quarry (S0907)
4. Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*

a. Cancer Burden	<u>0.025</u>
b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure	<u>12527</u>
c. Maximum distance to edge of 70-year, 1×10^{-6} cancer risk isopleth (meters)	<u>Approximately 3000 m</u>

B. Hazard Indices

*[Long Term Effects (chronic) and Short Term Effects (acute)]
 (non-carcinogenic impacts are estimated by comparing calculated concentration to identified Reference Exposure Levels, and expressing this comparison in terms of a "Hazard Index")*

1. Maximum Chronic Hazard Indices:

a. Residence HI:	<u>0.46</u>	Location:	<u>464140.00, 3729780.00</u>	toxicological endpoint:	<u>Respiratory System</u>
b. Worker HI :	<u>0.34</u>	Location:	<u>462556.00, 3732314.54</u>	toxicological endpoint:	<u>Respiratory System</u>
2. Substances Accounting for 90% of Chronic Hazard Index: Arsenic, Crystalline Silica
3. Maximum 8-hour Chronic Hazard Index:

8-Hour Chronic HI:	<u>0.03</u>	Location:	<u>464450.00, 3730170.00</u>	toxicological endpoint:	<u>Central Nervous System</u>
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4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: Manganese, Arsenic
5. Maximum Acute Hazard Index:

PMI:	<u>0.16</u>	Location:	<u>462636.00, 3732214.54</u>	toxicological endpoint:	<u>Reproductive System</u>
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6. Substances Accounting for 90% of Acute Hazard Index: Arsenic, Benzene

C. Public Notification and Risk Reduction

1. Public Notification Required? Yes No
 - a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI > 1
2. Risk Reduction Required? Yes No