July 15, 2022

Emissions Inventory Facility ID: 200003995

Toxics Emissions Inventory Year: 2017

Review Conducted by: Andrew Bernabe, SDAPCD.

A Health Risk Assessment (HRA) was performed for the Compucraft facility, 8787 Olive Lane, Santee, California by Bluescape Environmental dated August 8, 2022 and subsequently revised and resubmitted on May 12, 2022, and entitled AB2588 Health Risk Assessment Hot Spots for Compucraft (Revised Submittal HRA).

The following constitute a review of the results of the revised submitted HRA.

SUMMARY OF MODIFIED HEALTH RISK ASSESSMENT RESULTS

Potential Impacts

Cancer at Point of Maximum Impact (PMI)	0.59 in one million	
Cancer at Maximum Exposed Individual Resident (MEIR) Cancer at Maximum Exposed Individual Worker (MEIW)	0.13 in one million 0.075 in one million	
Chronic Noncancer Health Hazard Index (HHI) at PMI	0.0013	
Chronic Noncancer Health Hazard Index at MEIR Chronic Noncancer Health Hazard Index at MEIW	0.0006 0.0013	
8-Hour Noncancer Health Hazard Index at MEIW	0.0025	
Acute Noncancer Health Hazard Index at PMI	1.23	
Acute Noncancer Health Hazard Index at MEIR Acute Noncancer Health Hazard Index at MEIW	0.64 1.11	
Sub-Chronic Lead Exposure Risk at Maximum Offsite Concentration (MOC)	$<0.12 \ \mu g/m^{3}$	
Population Excess Cancer Burden	0.0	

Cancer Risk	Risk (in 1 million)	x (m)	y (m)
Point of Maximum Impact	0.59	501225.3	3633034.6
Maximum Exposed Individual Resident	0.13	501300.0	3633125.0
Maximum Exposed Individual Worker	0.075	501225.3	3633125.0
Non-Cancer Chronic Health Hazard Index (HHI)	HHI	x (m)	y (m)
Non-Cancer Chronic Health Hazard Index (HHI) Point of Maximum Impact	HHI 0.0013	x (m) 501225.3	y (m) 3633034.6
Non-Cancer Chronic Health Hazard Index (HHI) Point of Maximum Impact Maximum Exposed Individual Resident	HHI 0.0013 0.006	x (m) 501225.3 501250.0	y (m) 3633034.6 3633100.0
Non-Cancer Chronic Health Hazard Index (HHI)Point of Maximum ImpactMaximum Exposed Individual ResidentMaximum Exposed Individual Worker	HHI 0.0013 0.006 0.0013	x (m) 501225.3 501250.0 501225.3	y (m) 3633034.6 3633100.0 3633034.6

Locations of Receptors at Maximum Exposure Points

Acute Health Hazard Index	HHI	x (m)	y (m)
Point of Maximum Impact	1.23	501159.0	3633054.8
Maximum Exposed Individual Resident	0.64	501150.0	3633100.0
Maximum Exposed Individual Worker	1.11	501159.0	3633059.8

The geographic coordinate system used is the Universal Transverse Mercator, Zone 11.

Summary of Health Impacts by Pollutants

The acute HHI is due to the impact of Nickel (100%) on the immune system.

Summary of Conclusions

The approved HRA results are used to determine public health risk notification and risk reduction requirements under District Rule 1210. The approved HRA results indicate that Maximum Individual Worker Acute Risk does exceed the public notification and risk reduction levels specified in District Rule 1210, sections (d)(1) and (e)(1), respectively. Therefore, by August 29, 2022 (within 45 days of the date of this letter), your facility must submit a public notification plan that specifies the procedures you intend to use to notify the public. Prior to January 11, 2023 (within 180 days of the date of this letter), Compucraft must submit a risk reduction audit and plan that details the methods that will be used to reduce the Maximum Worker Acute Index below the risk thresholds of Rule 1210, section (e)(1), based on the results of the HRA. The required elements of the plans are described in District Rule 1210, subsections (d)(2)(i) through (d)(2)(ix) and (e)(2)(i) through (e)(2)(vi), respectively.

Acute HHI Isopleth



District Comments on Revised Submittal HRA

Air Dispersion Modeling

The following were used in the Revised HRA to reflect the latest revisions to model software and availability of meteorological data.

Model: AERMOD View (Version 19191)

Meteorological Processor: AERMET (Version 19191)

Meteorological Data: Escondido meteorological sigma theta adjusted data for years 2010–2012.

Dispersion Coefficient: Rural

Air Dispersion Source Modeling

Variable Emissions: To account for the non-continuous operation of the facility, hour of day scalars were applied representing operation from 8:00 am to 4:00 pm for the coating booth, and 10:00 am to 3:00 pm for the blasting tray operation. Appropriate scalars were applied to both the annual and hourly models.

HARP Risk Calculation

Inhalation Rates: Residential cancer risks were calculated using Office of Environmental Health Hazard Assessment (OEHHA) Derived Method in the Revised Submittal HRA. The District uses the ARB Risk Management Policy (RMP) daily breathing rates (DBR) for inhalation-based residential cancer risk. For the 30-year exposure duration, uses the 95th percentile DBR for age groups less than two years old (3rd trimester through age 2) and the 80th DBR for age groups greater than two years old. The RMP method is referenced in the ARB/CAPCOA Risk Management Guidance Document, July, 2015.

Worker Adjustment Factor (WAF): A worker adjustment factor of 4.2 was used to calculate the 25-year worker risk. This coincides with the use of hour-of-day scalars in the AERMOD model.

Fraction of Time at Home: There is no school within the one in one million cancer risk isopleth, so the 3rd trimester to age 16 frequency of time at home (FAH) was appropriately applied in the Revised Submittal HRA.