REVIEW OF FEEBERG INDUSTRIAL FABRICATION CORP
AB2588 HEALTH RISK ASSESSMENT (HRA)

September 17, 2024

Emissions Inventory Facility ID: 96605

Toxics Emissions Inventory Year: 2021

Review Conducted by: Maria Galvez, SDAPCD

A Health Risk Assessment (HRA) was performed for Freeberg Industrial Fabrication Corp, 2874 Progress Place, Escondido, CA, 92029 by Yorke Engineering for emissions in calendar year 2021 and submitted to the District for review on October 27, 2023. The District provided comments on the HRA along with comments provided from the Office of Environmental Health Hazard Assessment (OEHHA) to Freeberg Industrial Fabrication on June 18, 2024. Freeberg Industrial Fabrication submitted a revised HRA to the District on September 5, 2024.

The following are the approved results of the revised HRA.

Approved HRA Results

Maximum Individual Excess Cancer Risk (PMI)	27.02 in a million
Maximum Residential Excess Cancer Risk	6.03 in a million
Maximum Occupational Excess Cancer Risk	2.90 in a million
Maximum Chronic Non-Cancer Health Hazard Index (PMI)	0.24
Maximum Residential Chronic Non-Cancer Health Hazard Index	0.02
Maximum Occupational Chronic Non-Cancer Health Hazard Index	0.13
Maximum 8-Hour Occupational Non-Cancer Health Hazard Index	0.13
Maximum Acute Health Hazard Index (PMI)	5.99
Maximum Residential Acute Health Hazard Index	4.55
Maximum Occupational Acute Health Hazard Index	4.53
Population Excess Cancer Burden	0.00044

Since annual lead emissions at the site are less than the 0.038 lb/yr volume source de minimis level (modeled with AERMOD) at a distance of 10 m, the 30-day lead concentration at the point of Maximum Offsite Concentration (MOC) can be assumed to be less than the High Exposure Scenario approval level of 0.12 ug/m3 in the ARB Risk Management Guidelines for Lead, 2001. Worst-case generic release parameters were assumed, and lead emissions were estimated based on annual emissions being emitted in 30 days.

Summary of Health Impacts by Pollutant and Source

Acute risk at the MEIR is mainly due to laser cutting (47%), welding (42%), and abrasive blasting (11%). The main pollutant contributing to this risk is nickel (100%).

Acute risk at the MEIW is mainly due to laser cutting (46%), welding (42%), and abrasive blasting (12%). The main pollutant contributing to this risk is nickel (100%).

The Revised HRA concludes that the acute health hazard index exceeds the public notification levels specified in District Rule 1210.

Locations of Receptors at Maximum Exposure Points

Receptor - Cancer Risk	Risk (in 1 million)	x (m)	y (m)
Point of Maximum Impact Cancer Risk (PMI)	27.02	487,851.38	3,665,149.16
Maximum Exposed Individual Resident Cancer Risk (MEIR)	6.03	487,667.59	3,665,244.13
Maximum Exposed Individual Worker Cancer Risk (MEIW)	2.90	487,871.49	3,665,115.18

Receptor - Non-Cancer Chronic Health Hazard Index	Health Hazard Index	x (m)	y (m)
Maximum Non-Cancer Chronic Health Hazard Index (PMI)	0.24	487,851.38	3,665,149.16
Maximum Residential Non-Cancer Chronic Health Hazard Index (MEIR)	0.02	487,667.59	3,665,244.13
Maximum Worker Non-Cancer Chronic Health Hazard Index (MEIW)	0.13	487,871.49	3,665,115.18
Maximum Worker 8-Hour Non-Cancer Chronic Health Hazard Index (MEIW)	0.13	487,871.49	3,665,115.18

Receptor - Acute Health Hazard Index	Health Hazard Index	x (m)	y (m)
Maximum Acute Health Hazard Index (PMI)	5.99	487,698.97	3,665,128.13
Maximum Residential Acute Health Hazard Index (MEIR)	4.55	487,649.05	3,665,253.63
Maximum Worker Acute Health Hazard Index (MEIW)	4.53	487,627.05	3,665,083.03

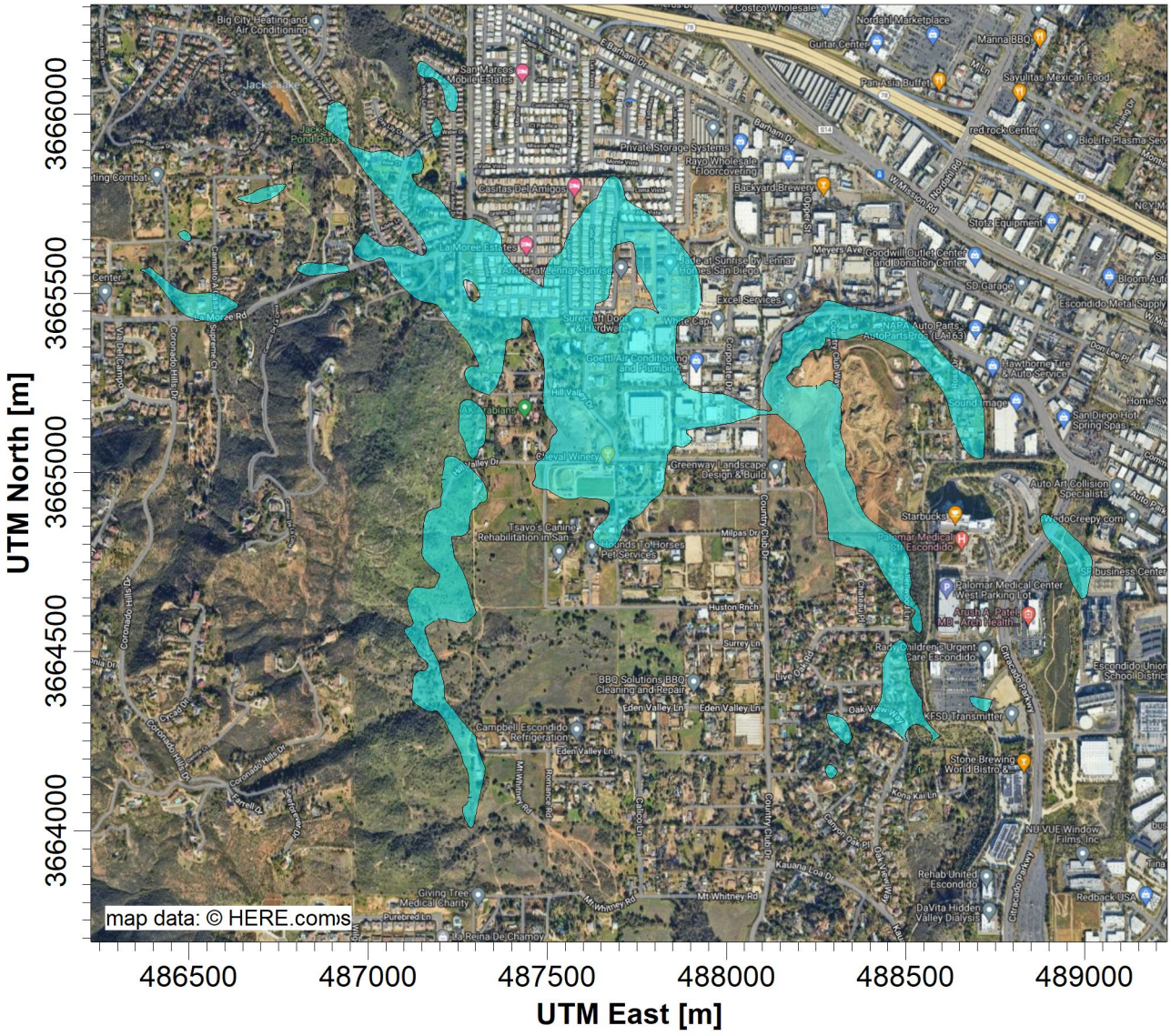
*The geographic coordinate system for the locations is the North American Datum of 1983, Zone 11.

Contours for Acute Health Hazard Index Calculations

The isopleth at the notification threshold for acute health hazard index is on the following page.

PROJECT TITLE:

2021 Freeberg Industrial AB2588 HRA
Acute Notification Isopleth



Max: 5.99 [HIA] at (487698.97, 3665128.13)

HIA

0.00 1.00

COMMENTS:	SOURCES: **11**	COMPANY NAME:	
	RECEPTORS: **4093**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:19,212 0 0.5 km	
	MAX: **5.99 HIA**	DATE: **9/17/2024**	PROJECT NO.: