

**REVIEW OF GKN AEROSPACE CHEMTRONICS INC.  
AB2588 HEALTH RISK ASSESSMENT (HRA)**

August 4, 2022

Emissions Inventory Facility ID: 100

Toxics Emissions Inventory Year: 2016

Review Conducted by: Peter Ossowski, SDAPCD

As required by the California Health and Safety (H&S) code, section 44360, the San Diego County Air Pollution Control District (District) requested a Health Risk Assessment (HRA) from GKN Aerospace Chemtronics Inc. on February 12, 2021, for the facility at 1150 West Bradley Avenue in El Cajon based on emissions that occurred in calendar year 2016. GKN Aerospace Chemtronics Inc. submitted an HRA to the District on December 21, 2021. The District provided our comments on the HRA along with comments provided from the Office of Environmental Health Hazard Assessment (OEHHA) to GKN Aerospace Chemtronics Inc. on June 7, 2022. GKN Aerospace Chemtronics Inc. submitted a revised HRA to the District on July 5, 2022. Subsequently, the District approved the revised HRA on August 4, 2022.

The following are the results of the revised HRA.

**Summary of Revised Risk Assessment Results:**

Cancer at Point of Maximum Impact (PMI)	10.3 in one million
Cancer at Maximum Exposed Individual Resident (MEIR)	0.23 in one million
Cancer at Maximum Exposed Individual Worker (MEIW)	1.85 in one million
Chronic Noncancer Health Hazard Index at PMI	1.87
Chronic Noncancer Health Hazard Index at MEIR	0.37
Chronic Noncancer Health Hazard Index at MEIW	0.94
8-Hour Noncancer Health Hazard Index at MEIW	0.007
Acute Noncancer Health Hazard Index at PMI	1.45
Acute Noncancer Health Hazard Index at MEIR	0.38
Acute Noncancer Health Hazard Index at MEIW	1.36
Sub-Chronic Lead Exposure Risk at Maximum Offsite Concentration (MOC)	<0.12 $\mu\text{g}/\text{m}^3$
Population Excess Cancer Burden	0.0

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The facility's sources include:

- Etching Lines and Tanks
- Abrasive Booths
- Thermal Spray Booths
- Paint Spray Booths
- Diesel Engines
- Welding
- Solvent Usage

**Summary of Health Impacts by Pollutant and Source:**

The Acute HHI at the MEIW is primarily due to nickel (99%).

The Acute HHI at the MEIW is due to Chem. Mill Sandblast (68%), Thermal Spray Booth 2 (7%), Enclosed Plasma/Flame/HVOF Thermal Metal Spray Booth (7%), Thermal Spray Booth 1 (6%), Alum. Oxide Blast Booth (4%), Diesel powered emergency engine - Dev. 401 (3%), Alum. Oxide Blast Booth (2%), Alum. Oxide Blast Booth (2%), Alum. Oxide Blast Booth (1%), and Welding - Dev. 0 (1%).

The revised HRA concludes that worker acute non-cancer HHI does exceed the significant risk thresholds specified in District Rule 1210.

**Location of Receptors at Maximum Exposure Points:**

<b>Universal Transverse Mercator (UTM)</b>	<b>X (m)</b>	<b>Y (m)</b>
Cancer Risk at the (PMI)	502113	3631126
Cancer Risk at the (MEIR)	501878	3630937
Cancer Risk at (MEIW)	502118	3631137
Chronic Non-Cancer Health Hazard Index (PMI)	502113	3631126
Chronic Non-Cancer Health Hazard Index (MEIR)	501858	3630957
Chronic Non-Cancer Health Hazard Index (MEIW)	502278	3631137
8-hour Chronic Non-Cancer Health Hazard Index (MEIW)	502178	3631137
Acute Non-Cancer Health Hazard Index (PMI)	502016	3631127
Acute Non-Cancer Health Hazard Index (MEIR)	501878	3631097
Acute Non-Cancer Health Hazard Index (MEIW)	502016	3631127

UTM was used for the geographic coordinate system with the North American Datum of 1983 (NAD83).

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**Notification-Triggering Isopleths**

**Acute Non-Cancer Health Hazard Index**

