

**REVIEW OF OTAY LANDFILL INC.
AB2588 HEALTH RISK ASSESSMENT (HRA)**

March 21, 2024

Emissions Inventory Facility ID: 7263

Toxics Emissions Inventory Year: 2021

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 Otay Landfill Inc. on November 15, 2022, for the Landfill at 1700 Maxwell Road in Chula Vista based on emissions that occurred in calendar year 2021. Otay Landfill Inc. submitted an HRA to the District on May 14, 2023. The District provided our comments on the HRA along with comments provided from the Office of Environmental Health Hazard Assessment (OEHHA) to Otay Landfill Inc. on October 12, 2023. Otay Landfill Inc. submitted a revised HRA to the District on December 11, 2023 (Revised HRA).

The following are the results of the Revised HRA.

Summary of District Modified Risk Assessment Results:

Point of Maximum Impact (PMI) Cancer Risk	52.0 in a million
Maximum Exposed Individual Resident (MEIR) Cancer Risk	20.2 in a million
Maximum Exposed Individual Worker (MEIW) Cancer Risk	2.0 in a million
Chronic Non-Cancer Health Hazard Index (PMI)	1.98
Chronic Non-Cancer Health Hazard Index (MEIR)	0.90
Chronic Non-Cancer Health Hazard Index (MEIW)	0.94
8-hour Chronic Non-Cancer Health Hazard Index (MEIW)	0.04
Acute Non-Cancer Health Hazard Index (PMI)	0.85
Acute Non-Cancer Health Hazard Index (MEIR)	0.63
Acute Non-Cancer Health Hazard Index (MEIW)	0.57
Population Excess Cancer Burden	0.22
Sub-Chronic Lead Exposure Risk	<0.12 µg/m ³

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The facility's sources include:

- Landfill
- Haul Roads
- Quarrying
- Stockpiles
- Engines
- Flares

Summary of Health Impacts by Pollutant and Source:

Cancer risk at the MEIR is mainly due to arsenic (63%), benzene (13%), vinyl chloride (8%), and ethyl benzene (6%).

Cancer risk at the MEIR is mainly due to the JZ flare (51%), the active face of the landfill (27%), and the unpaved roads (15%) (Note: Risk Reduction plan was not implemented in 2021).

The Revised HRA concludes that residential cancer risk exceeds the significant risk thresholds specified in District Rule 1210.

Location of Receptors at Maximum Exposure Points:

Universal Transverse Mercator (UTM)	X (m)	Y (m)
Cancer Risk at the (PMI)	498962.3	3607232.9
Cancer Risk at the (MEIR)	499494.6	3606585
Cancer Risk at (MEIW)	498267.5	3606693
Chronic Non-Cancer Health Hazard Index (PMI)	498978.20	3607622.56
Chronic Non-Cancer Health Hazard Index (MEIR)	499491	3606571
Chronic Non-Cancer Health Hazard Index (MEIW)	498267.5	3606693
8-hour Chronic Non-Cancer Health Hazard Index (MEIW)	498267.5	3606693
Acute Non-Cancer Health Hazard Index (PMI)	498962.3	3607480
Acute Non-Cancer Health Hazard Index (MEIR)	500112	3607566
Acute Non-Cancer Health Hazard Index (MEIW)	500165.9	3607692

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

Changes to the Revised HRA:

N/A

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Notification-Triggering Isoleths

Residential Cancer 10 in a million Isoleth

