San Diego County
Air Pollution
Control District

Otay Landfill, Inc.

Public Meeting

August 25, 2026

Background
Air Toxics "Hot Spots" Program

Background: Health Risk Assessments (HRA)

1. Emission Inventory

- Quantity of pollutants emitted by facility
- Prepared by facility, verified by SDAPCD
- Uses production data and emission factors

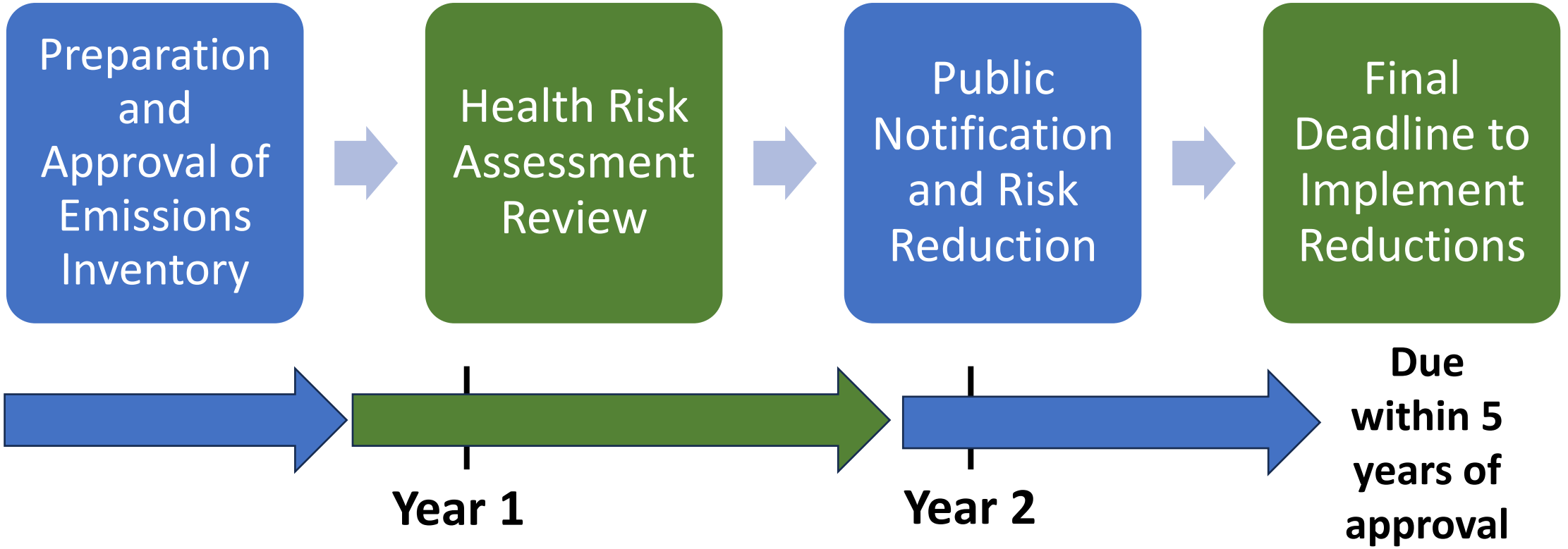
2. Air Dispersion Model

- Calculates concentration of pollutants offsite
- Based on EPA developed "AERMOD" model, data from step 1
- Estimated concentrations

3. Health Risk Model

- Integrates health effect data developed by OEHHA
- Uses pollutant concentrations from Step 2
- Health Protective/ Conservative

Background: HRA Process



Air Toxics "Hot Spots" Program

2021 – Health Risk Assessment Conducted for this year

Otay Landfill released air toxic emissions, primarily arsenic from the flares, that could increase the chances of developing cancer for people who live in the area by 20.2 in one million

2023 –Risk Reduction Plan for 2017 HRA Fully Implemented

Otay Landfill completed implementation of the Risk Reduction Plan based on their 2017 HRA which primarily reduced arsenic emissions from Haul Roads and open material storage

2024 – Approval of 2021 HRA and Initial Public Meeting

SDAPCD Approved the HRA for the 2021 Emissions Year and conducted the initial Public Notification

2024 – Risk Reduction Plan Initially Submitted

Plan proposes to utilize reductions already implemented in 2023, as well as demonstrating reduced emissions from Flares. *These reductions were expected to be fully implemented in 2025.*

2025 – SDAPCD determines additional risk reductions required

Due to combination of reasons – new developments near landfill, additional equipment added, revised risk assessment results.

2026 – Revised Risk Reduction Plan under Review

Revised plan added additional emission reductions to addressed newly found deficiencies

Elevated Health Risks from Otay Landfill's 2021 Emissions

Health Risk	2021 HRA Results	Risk Notification and Risk Reduction Threshold
Maximum Residential Cancer Risk	**20.2 in one million**	10 in one million
Maximum Worker Cancer Risk	2.0 in one million	

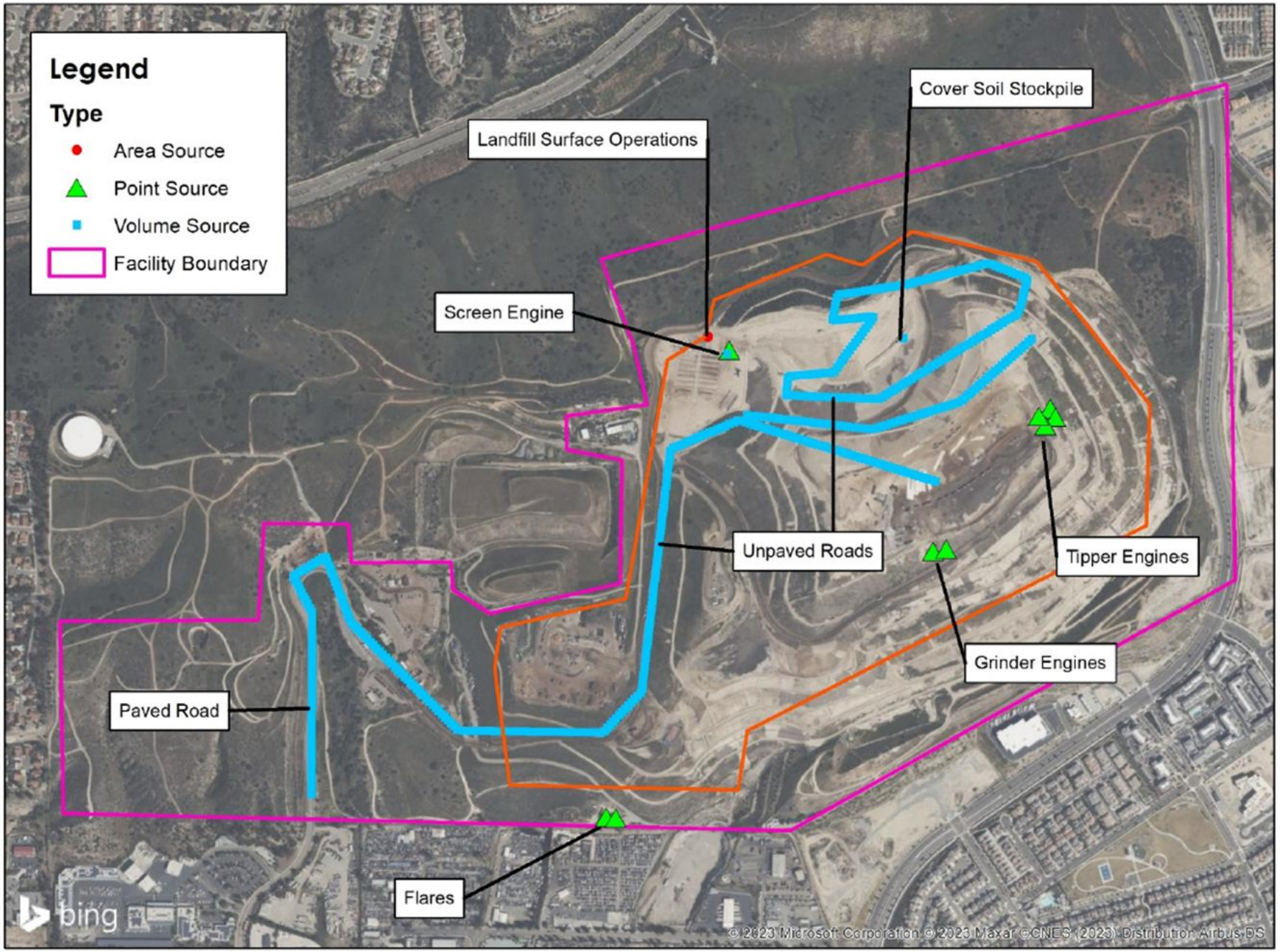
Otay Landfill

- Municipal Solid Waste Landfill
- 1700 Maxwell Road, Chula Vista, CA 91911

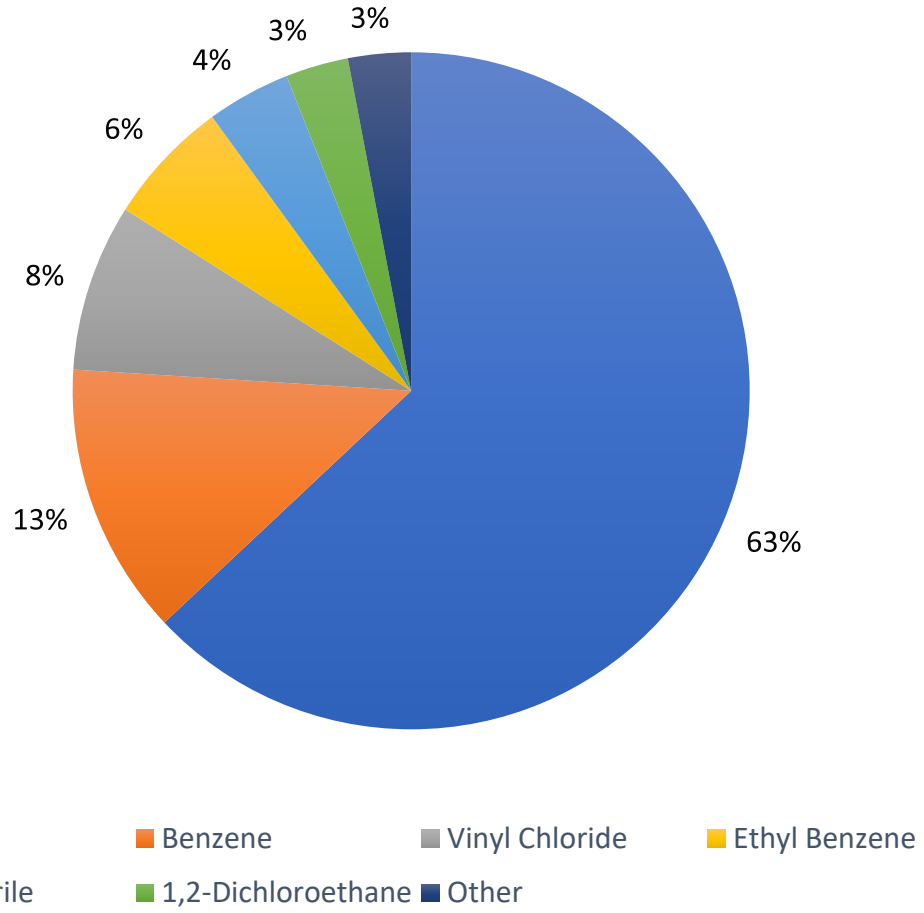
Otay Landfill Equipment

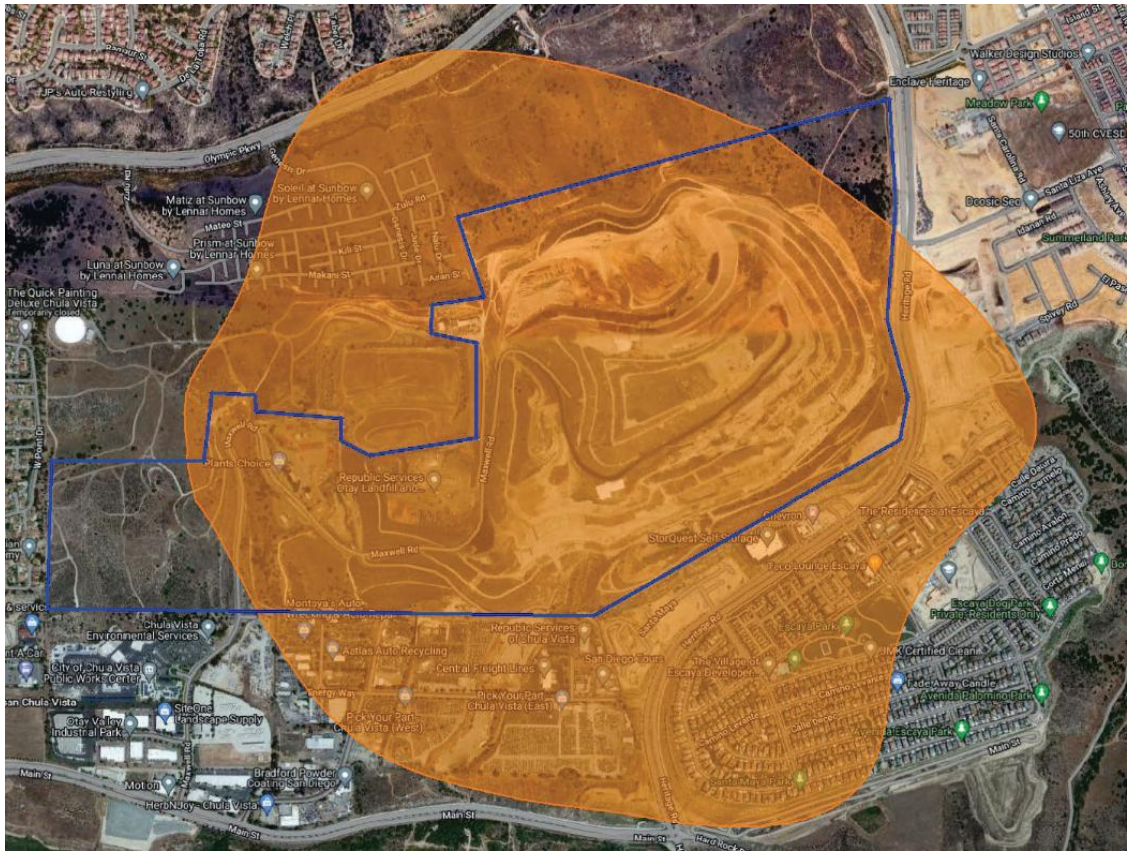
Emission Sources

- Haul Roads
- “Fugitive” Landfill Gas
- Flares
- Diesel Engines
- Haul Roads
- Surface Operations/Stockpiles



Emission Contributions
Maximum Residential Cancer Risk 20.2 in One Million





Risk Reduction Audit and Plan

- Otay Landfill implemented a previous Risk Reduction Audit and Plan (RRAP) based on 2017 emissions in 2023
- Otay Landfill, Inc. submitted a subsequent RRAP based on their 2021 HRA
- SDAPCD is currently in the final stages of reviewing the plan, which will result in issuance of modified permits
- The plan proposes risk reductions from multiple emission sources, and will reduce cancer risk
- Some Risk Reductions have already been implemented

Proposed Risk Reduction Measures

	Cancer Risk (per million)	Rule Requirement Cancer Risk (per million)
2021 HRA Risk	20.2	
Proposed Reductions	12.75	
Proposed Risk	**7.45**	**<10**

✓ Risk is proposed to be reduced below threshold

Proposed Emissions Reductions Cancer Risk

Increased Haul Road Watering Schedule

- Lowers risk from haul roads by reducing dust (particulate emissions)
- **Implemented in 2023**

Reducing Onsite Vehicle Speeds

- Reducing vehicle speeds from 15 mph to 10 mph reduces unpaved haul road emissions
- **Signs already updated, still under review as a Risk Reduction Measure**

Proposed Emissions Reductions Cancer Risk

Replacing Tipper Diesel Engines

- Replacing specific older diesel engines with new, cleaner, lower emitting engines
- **Engines already replaced**

Replacing the Flare

- The Flare will be replaced with an ultra-low emission flare
- Will include verification/testing of reduced emissions, including the arsenic emissions which contribute most to Risk

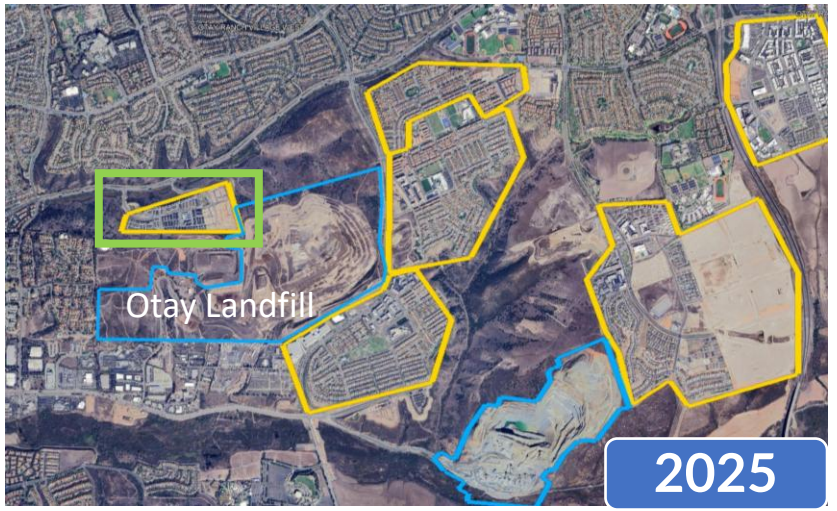
Land Use Changes since 2021 also have health risk impacts

Recently, and including since 2021, new developments have been constructed around Otay Landfill

These developments are exposed to the emissions from Otay Landfill.

Most relevant to the HRA and Risk Reduction Plan, the development circled in green was added since 2021

Potential health risks in this area are part of the reason the revised Risk Reduction Plan was required, and the plan must demonstrate future risks to this are below the 10 in one million threshold



Next Steps

- SDAPCD anticipates completing review of Risk Reduction Plan in 2026
- Plan approval will include revisions to permits to include timelines and enforceable metrics to implement risk reductions
- Otay Landfill will notify and host a public meeting annually until the Risk Reduction Plan is fully implemented
- Otay Landfill's toxic emissions from 2025 are currently under review

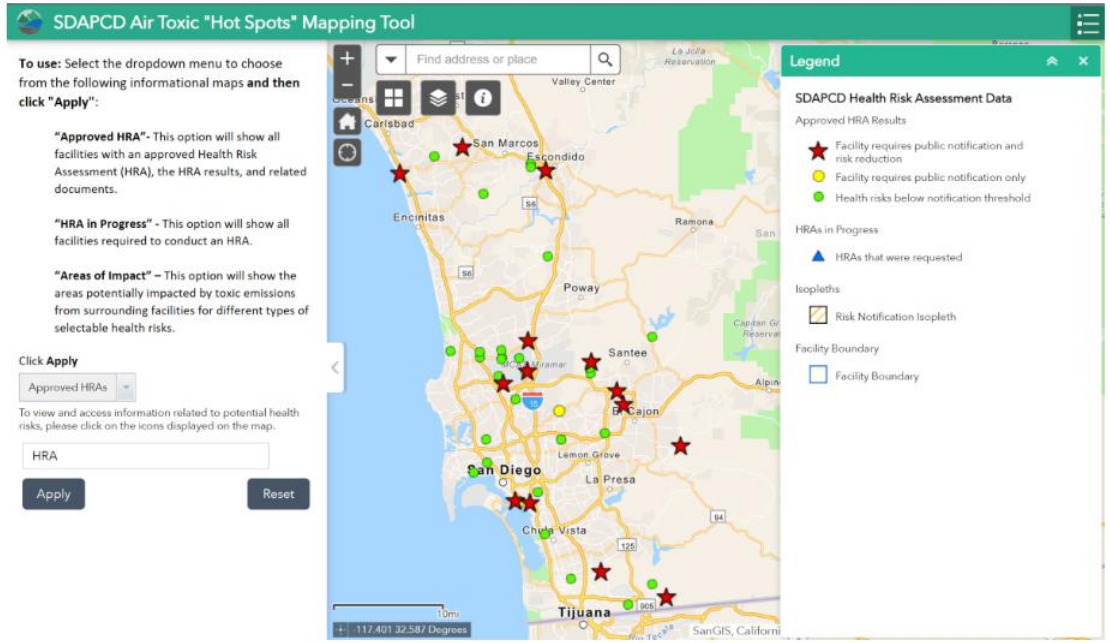
Stay Informed

Sign up for District Updates

- https://bit.ly/SDAPCD-Updates

Visit District Hot Spots Page

- https://sdapcd.org/hotspots



Public Documents for "Hot Spots" Facilities

The facilities listed below are subject to the notification requirements of the "Hot Spots" program. Select a facility to see documents related to this program. The most recent facility documents below are also available when viewing a facility record in the SDAPCD Air Toxics "Hot Spots" Mapping Tool presented above.

- Encina Wastewater Authority - Carlsbad - 92011 - 2021
- Martin Marietta San Diego Aggregates, LLC - Santee - 92071 - 2021
- Lehigh Hanson Aggregates - San Diego - 92145 - 2017
- Minnesota Methane - San Diego - 92111 - 2021
- General Dynamics NASSCO - San Diego - 92113 - 2021
- Otay Landfill - Chula Vista - 91911 - 2021
- Vulcan Materials - San Diego - 92126 - 2021
- Freeburg Industrial Fabrication Corp - Escondido - 92029 - 2021
- Naval Base San Diego - San Diego - 92136 - 2021

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For More Information

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