

2024 Annual Report AB 2588 Air Toxics "Hot Spots" Program

Board of Directors

May 15, 2025

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Executive Director / APCO

Charlotte Mountain Engineering Division

Our Mission To protect the people and the environment of Santa Barbara County from the effects of air pollution.

Background

- Assembly Bill (AB) 2588 Air Toxics "Hot Spots" Information and Assessment Act of 1987 requires facilities to:
 - Quantify and report emissions of air toxics
 - Assess the possible health risks from emissions
 - Notify members of the public who are exposed to significant risk
- Later modified in 1992 to require risk reduction
- State defines "air toxics"



https://www.ourair.org/ab-2588-air-toxics-hot-spots-program/



Health Risk

- Likelihood that exposure to air toxics will result in an adverse health effect
- Cancer risks: chances-in-a-million, lifetime exposure above background risk
- Non-cancer risks (chronic, 8-hour chronic, acute):

Hazard Index = Modeled Concentration
Reference Exposure Level

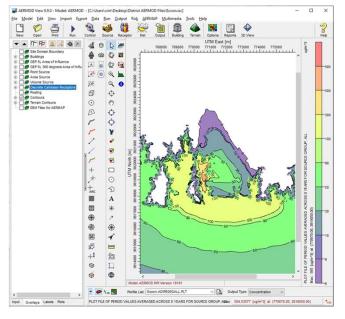
Risk Type	Notification Thresholds	Risk Reduction Thresholds
Cancer	≥10/million	≥10/million
Chronic Non-Cancer	>1.0	>1.0
8-Hour Chronic Non-Cancer	>1.0	>1.0
Acute Non-Cancer	>1.0	>1.0

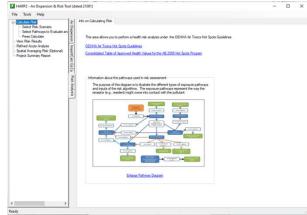


Health Risk Assessment Process

Emission Inventory + Air Dispersion Modeling + Risk Analysis

			Device Desc	Sulfur Loading (POPCO)
			Device ID	150160
			Location	Truck Loading Station
			Air Flow (scfm)	245
			H2S Conc. (ppmv)	69
			Sulfur Loading Rate (lb S/hr)	50540
CAS# AE	AB2588 No.		Sulfur Emission Rate (lb/min)	0.0015
7783-06-4	7783064	Hydrogen Sulfide	lb/hr	4.54E-02
			Device Desc	Sulfur Loading (POPCO)
			Device ID	150160
			Location	Truck Loading Station
			Air Flow (scfm)	245
			H2S Conc. (ppmv)	69
			Sulfur Loading Rate (lb S/min)	1670
			Sulfur Emission Rate (lb/min)	0.0015
CAS#	AB2588 No.		Sulfur Loaded (lbs/year)	4,336,640.00
7783-06-4	7783064	Hydrogen Sulfide	lb/year	3.90E+00







AB 2588 Prioritization Procedures

- Intent to address sources with highest potential to cause significant health risk first
- Calculated using Board-approved procedures, based on the emission rate and toxicity of each pollutant at the facility, as well as the proximity to the public

Total Facility Score (TFS)	Facility Designation	
TFS > 10	High Priority – HRA is required	
1 < TFS < 10	Intermediate Priority – HRA is required	
TFS < 1	Low Priority – HRA is not required	



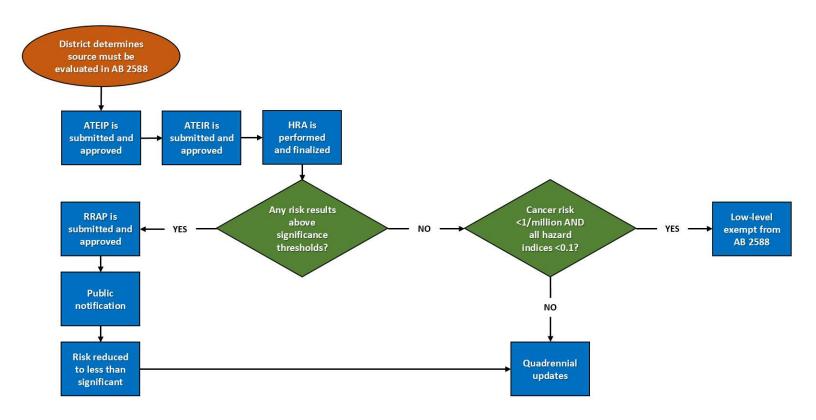
AB 2588 History in Santa Barbara County

- 1990's prioritization and subsequent HRAs
- 1991: 51 significant risk sources began implementing voluntary risk reduction measures
- 2000: 6 significant risk sources remaining
- 2015: all significant risk sources had reduced risk below thresholds
- In 2015, the state updated their guidance for conducting Health Risk Assessments (HRAs)
- 2024: one new significant risk source, Lockheed Martin SB Focalplane



AB 2588 Reassessment in Santa Barbara County

• Facilities were re-prioritized: 71 high priority and 71 intermediate priority



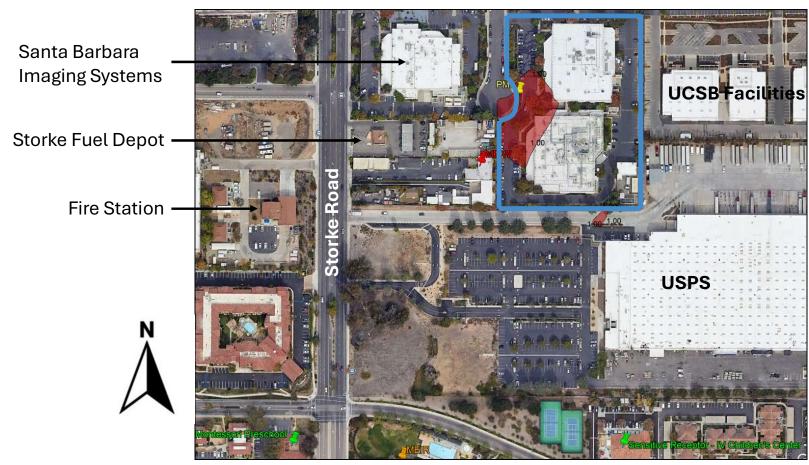


Status of AB 2588 Sources in 2024

Stationary Source Name	Air Toxics Emission Inventory Plan (ATEIP) Status	Air Toxics Emission Inventory Report (ATEIR) Status	Health Risk Assessment (HRA) Status
Pacific Coast Energy Company – Orcutt Hill	District first provided comments on 11/21/2024 (conditionally approved updated ATEIP on 3/10/2025)	NA	NA
NuSil Technology	District provided comments on 8/14/2024 and again on 11/21/2024	NA	NA
Santa Maria Regional Landfill	Under review	NA	NA
UCSB	District approved 3/30/2023	District approved 5/3/2023	District provided comments on 3/27/2024 and 6/5/2024 (currently under review)
Vandenberg Space Force Base	District approved 2/3/2022	District conditionally approved 3/29/2023	Submitted 7/1/2024 (District sent to OEHHA on 3/20/2025)
Lockheed Martin – SB Focalplane	District conditionally approved 1/31/2022	District conditionally approved 1/31/2022	District sent to OEHHA on 12/19/2024



Lockheed Martin – SB Focalplane





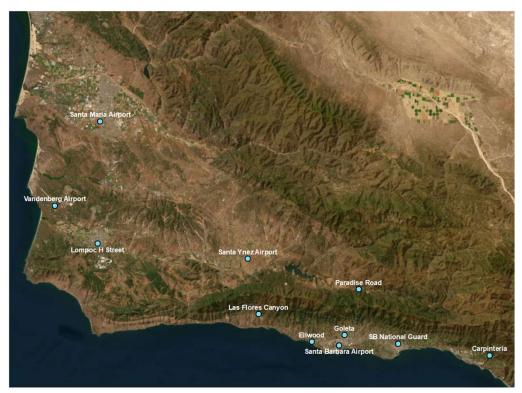
Preventing New Significant Risk Sources

- Per state guidelines, the District uses analyses conducted as part of the permitting process to satisfy the requirements of AB 2588
- Updates to the District's Modeling Guidelines for Health Risk Assessments
- New Source Review (NSR) and California Environmental Quality Act (CEQA)
- 26 HRAs approved in 2024
- Efficient use of limited resources



Streamlining Toxics Review

- ATEIP/R Guidelines and Modeling Protocol Tables
- Air toxics emission factors database and document
- Continual updates to our *Modeling Guidelines for Health Risk Assessments*
- Screening tools: diesel engines and contaminated soil vapor extraction systems
- Updated meteorological data sets



https://www.ourair.org/metdata/



Summary

- Existing significant risk sources are reduced under AB 2588
- NSR and CEQA review prevent creation of new significant risk sources
- In 2024:
 - Six facilities under review in the AB 2588 program
 - One AB 2588 HRA completed for Lockheed Martin
 - 27 NSR/CEQA HRAs completed
- Streamline tools increase efficiency
- Limited staff resources



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