



air pollution control district
SANTA BARBARA COUNTY

2025 Annual Report AB 2588 Air Toxics “Hot Spots” Program

Board of Directors

August 20, 2026

Aeron Arlin Genet
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.



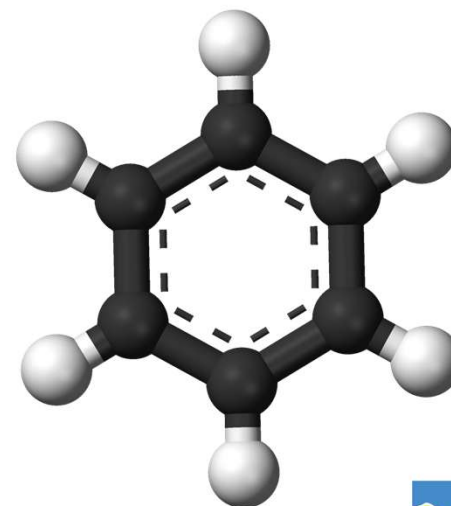
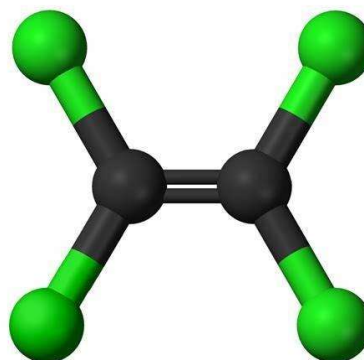
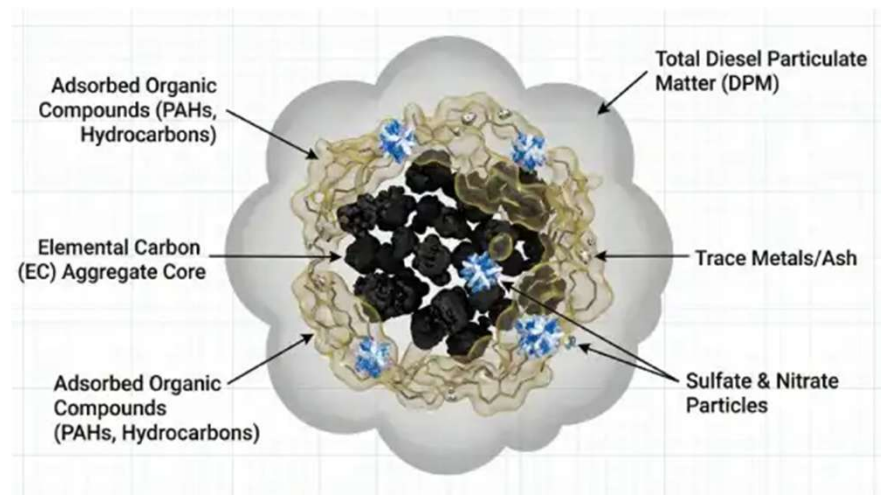
Background

- 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



Air Toxics

- State defines “air toxics”
- Two categories of pollutants:
 - Emissions must be quantified
 - Sub-set: those with health risk values that must be included in the health risk assessment
- OEHHA reviews available research studies to determine health risk values



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):

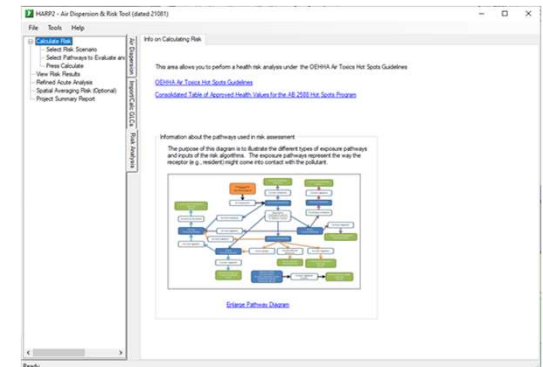
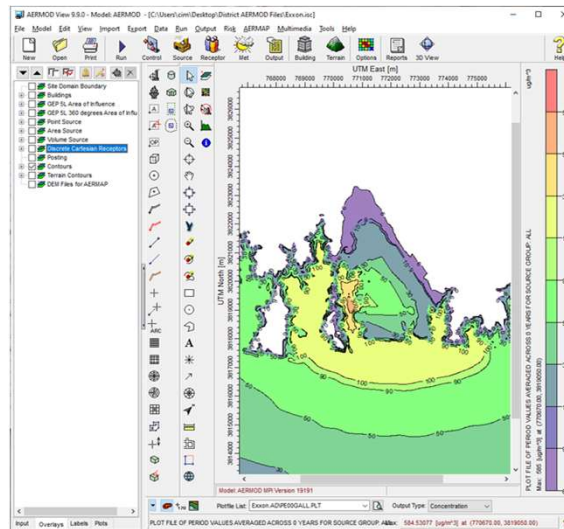
$$\text{Hazard Index} = \frac{\text{Modeled Concentration}}{\text{Reference Exposure Level}}$$

Risk Type	Notification Thresholds	Risk Reduction Thresholds
Cancer	$\geq 10/\text{million}$	$\geq 10/\text{million}$
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 #	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

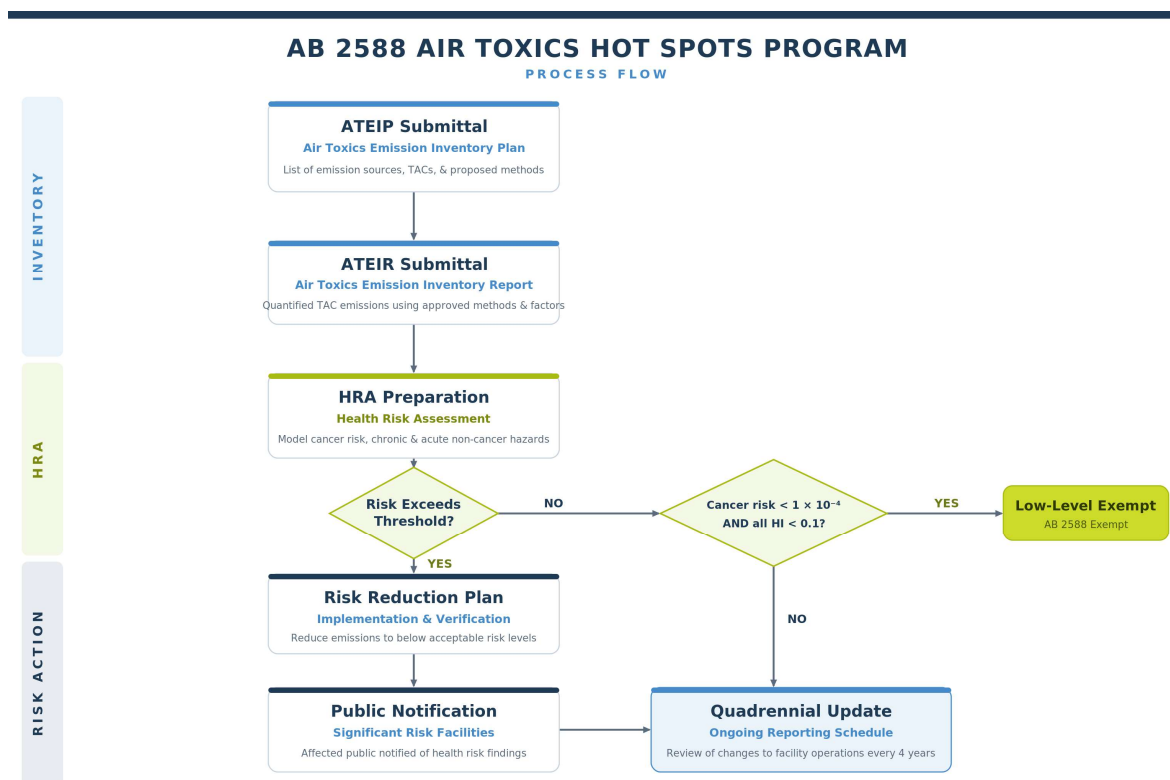


AB 2588 History in Santa Barbara County

- 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

AB 2588 Reassessment in Santa Barbara County

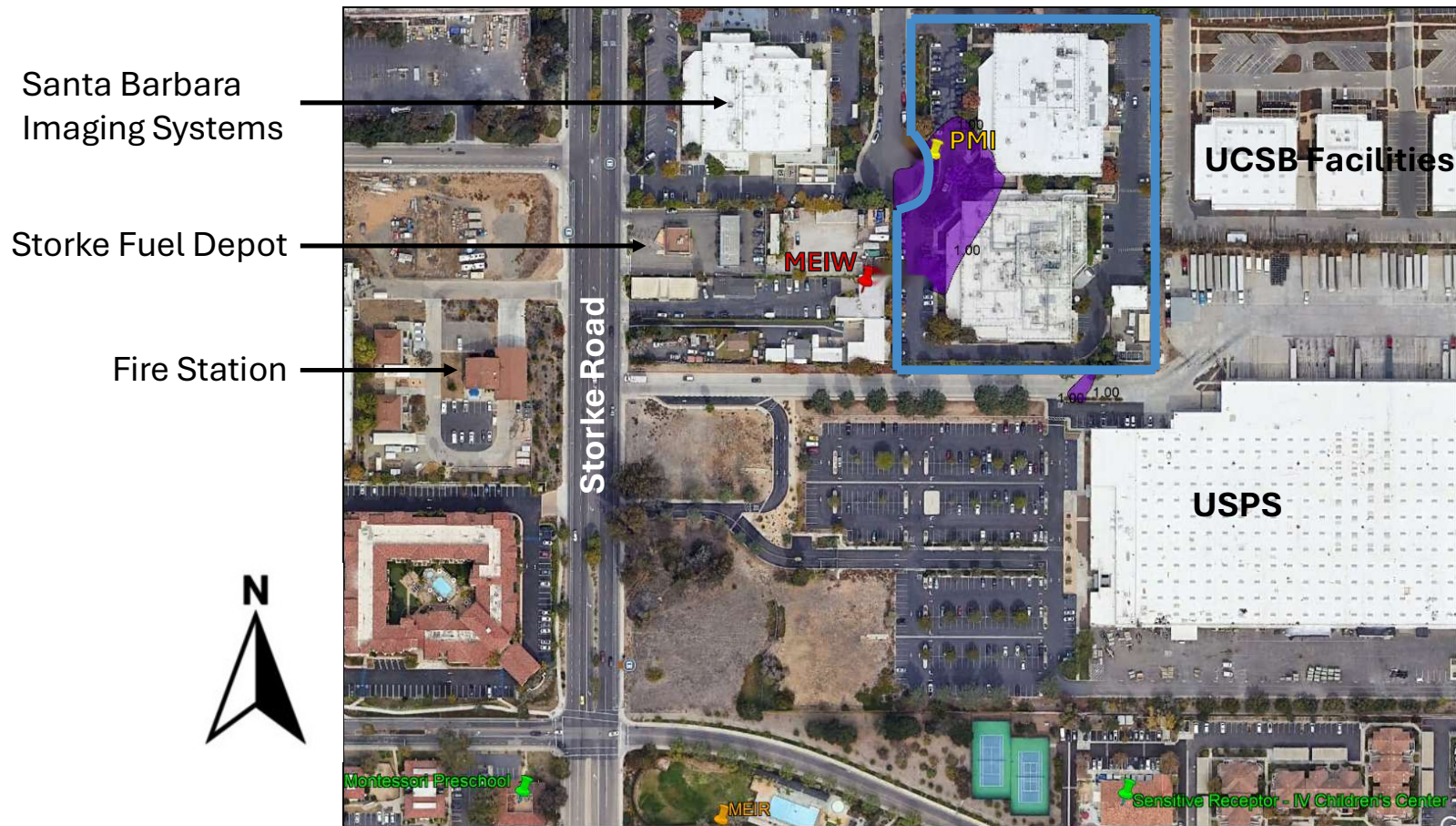
- Facilities were re-prioritized: 71 high priority and 71 intermediate priority



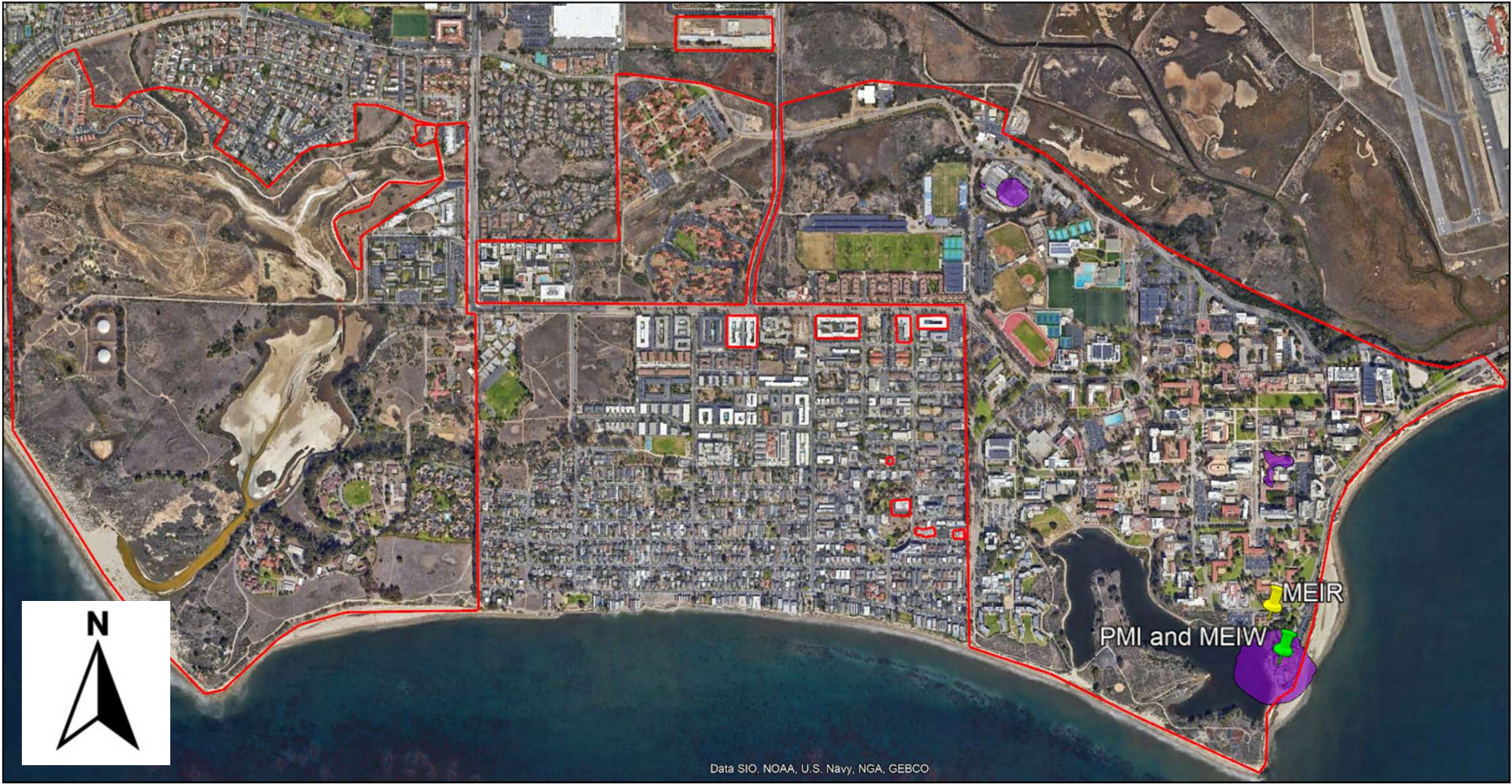
Status of AB 2588 Sources

Stationary Source	ATEIP Approval	ATEIR Approval	HRA Review	RRAP Approval	Public Notice
Lockheed	1/31/2022	1/31/2022	OEHHA Review Complete 6/12/2025	6/17/2025	October 2025
UCSB	3/1/2021	5/3/2023	OEHHA Review Complete 1/23/2026	2/24/2026	July 2026
Vandenberg	2/3/2022	3/29/2022	OEHHA Review Complete 10/10/2025	7/21/2026	Preparations in progress
PCEC – Orcutt Hill	3/10/2025	11/12/2025	Under Review by OEHHA	NA	NA
NuSil Technology	2/19/2026	2/19/2026	Under Review by OEHHA	NA	NA

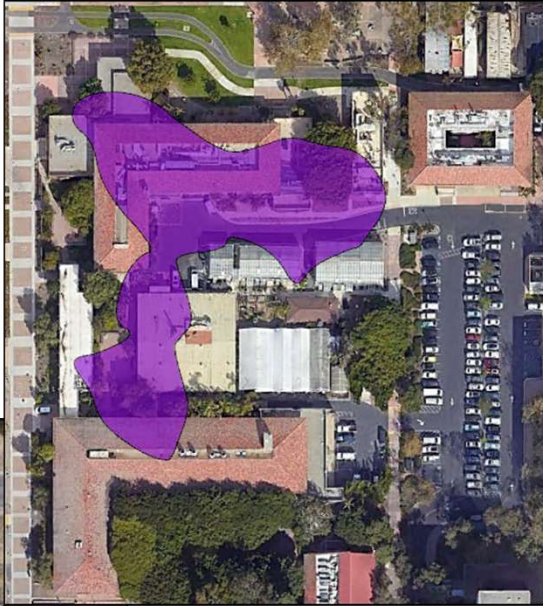
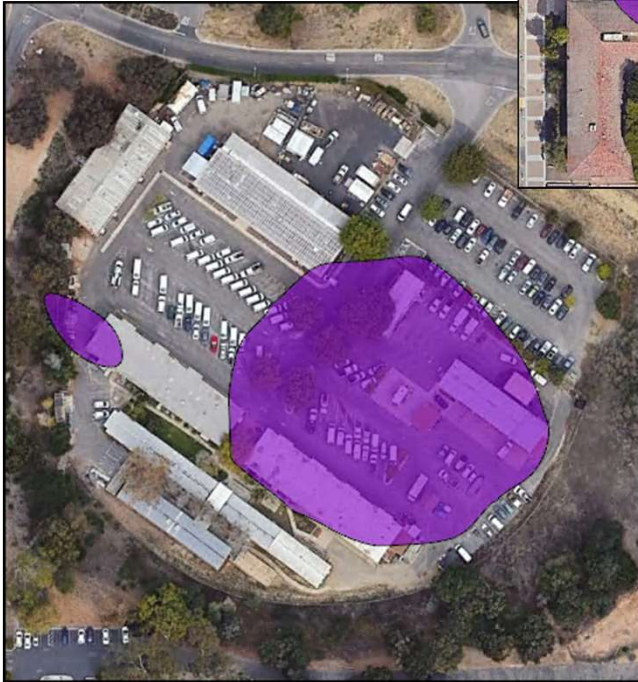
Lockheed Martin – SB Focalplane



University of California, Santa Barbara



University of California, Santa Barbara





Vandenberg Space Force Base



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 2025
- Efficient use of limited resources

Streamlining Toxics Review

- Continual updates to our *Modeling Guidelines for Health Risk Assessments*, most recently in November 2025
- Updated gas station HRA application form and emission factors in 2025
- Updated *AQIA Modeling Guidelines* and created *Modeling Protocol Tables for AQIA Report* in 2025
- DICE Screening Tool update, which began in 2024, was finalized in early 2026

Santa Barbara County Air Pollution Control District DICE Screening Tool — January 2026

Engine Data User Inputs	
Meteorological Data Set ☒ Lompoc H Street ☐ Santa Barbara National Guard ☐ Santa Barbara Airport ☐ Santa Maria Airport ☐ Santa Ynez Airport ☐ Vandenberg Airport	
Dispersion ☒ Rural ☐ Urban	Engine Rating: 500 bhp DPM Emission Factor: 0.15 g/bhp-hr Permitted Hours: 50 hr/yr Distance from Source: Nearest Resident: 50 meters Nearest Worker: 20 meters
Building Downwash ☒ No Building Downwash ☐ Include Building Downwash	

DICE Screening Health Risk Outputs		SBCAPCD Board-Approved Significance Thresholds
Cancer Risk at the MEIR:	2.7 / million	≥10.0 / million
Chronic HI at the MEIW:	<0.1	>1.0

HI stands for "hazard index."
 MEIR stands for "maximally exposed individual resident."
 MEIW stands for "maximally exposed individual worker."

CARB's Air Toxics Road Map

- Minimal non-diesel air toxics work for many years by CARB
- New commitment to existing and emerging air toxics issues
- CARB appreciates district staff filling in gaps in expertise
- CARB formed work group with CAPCOA to partner with districts to obtain our input on priorities:
 - Expand air toxics monitoring network
 - Streamline the Toxic Air Contaminant (TAC) identification process
 - Improve public data access through visualization tools

Air Toxics Emerging Issues

Acrolein and Ethylene Oxide (EtO)

- **New draft Cancer Potency Factors for both Acrolein and EtO**
 - Acrolein impacts on public health similar to diesel exhaust
 - Challenges for accurately quantifying acrolein
 - CARB identified issues with source test method
 - Unreliable emission inventories
 - Contributions by source types (mobile, stationary sources) is unknown
 - EtO – Substantial increase in revised OEHHA cancer potency factor
- **Santa Barbara County and CAPCOA working with CARB**
 - ATCM may be needed for addressing acrolein risk and statewide consistency

Air Toxics Emerging Issues

Auto Body Shops: PCBTF & Diisocyanates

- **New OEHHA Risk Data for PCBTF (Parachlorobenzotrifluoride)**
 - Risk data finalized by OEHHA in 2022
 - Risk reduction in process - paint manufacturers responded by reformulating coating products
- **New OEHHA Risk Data for Diisocyanates**
 - Risk data finalized by OEHHA in 2022 for polymeric (oligo) hexamethylene 1,6-diisocyanate (HDI)
 - OEHHA assigned risk data to other diisocyanates in 2025
 - Application of 2025 risk data indicates significant acute non-cancer risks
- **CAPCOA/CARB Auto Body Shop Workgroup**
 - Draft guidelines for Auto Body Shop HRAs, and discussions on risk reduction
 - ATCM may be needed for addressing acute non-cancer risk and statewide consistency

Summary

- Existing significant risk sources are reduced under AB 2588
- NSR and CEQA review prevent creation of new significant risk sources
- In 2025:
 - Five facilities under review in the AB 2588 program
 - One AB 2588 RRAP completed for Lockheed Martin
 - One AB 2588 public notice completed for Lockheed Martin
 - 26 NSR/CEQA HRAs completed
- Streamline tools increase efficiency
- Limited staff resources
- Coordinating with CARB/CAPCOA on statewide issues

Charlotte Mountain

Engineering Division

(805) 979-8314

MountainC@sbcapcd.org



air pollution control district
SANTA BARBARA COUNTY

ourair.org

@OurAirSBC