



AB 2588 AIR TOXICS HOTSPOTS PROGRAM PUBLIC MEETING

Sterigenics US, LLC
Ontario Facility
June 11, 2026

INTERPRETATION SERVICES AVAILABLE SERVICIOS DE INTERPRETACIÓN DISPONIBLES

Call-in

To listen by telephone in Spanish call **1-669-254-5252** and enter the meeting ID number **161 568 2761**.

Para escuchar en español, llame al **1-669-254-5252** e ingrese el número de identificación de la reunión **161 175 7966**.

Zoom



Select desired language by clicking the Globe icon located at the bottom of the screen

All Zoom participants must select a language and mute original audio

Seleccione el idioma deseado haciendo clic en el ícono del globo ubicado en la parte inferior de la pantalla.

Todos los participantes de Zoom deben seleccionar un idioma y silenciar el audio original.

SELECT LANGUAGE TO VIEW PRESENTATION

1 At the top center of screen, select desired language from the language specific tab



AB 2588 AIR TOXICS HOTSPOTS PROGRAM PUBLIC MEETING

Sterigenics US, LLC
Ontario Facility
June 11, 2026

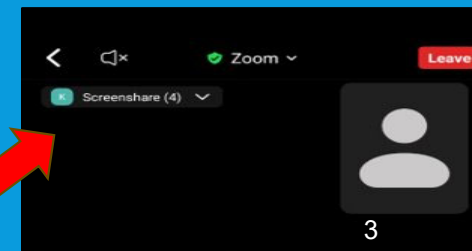
2 Once selected, the presentation slides will display in desired language



REUNIÓN PÚBLICA DEL PROGRAMA DE PUNTOS CRÍTICOS DE CONTAMINANTES ATMOSFÉRICOS TÓXICOS DE LA AB 2588

Sterigenics US, LLC
Instalación de Ontario
11 de junio de 2026

3 If you are on your cell phone, there is a drop-down menu to select the language of the presentation slides



SOUTH COAST AQMD STAFF



Dr. Scott Epstein

Planning Manager

909-396-3754

sepstein@aqmd.gov

Vanessa Tanik

Senior Staff Specialist







909-396-2578

vtanik@aqmd.gov

PURPOSE OF THIS MEETING

- Provide an overview of the AB 2588 Air Toxics “Hotspots” Program
- Provide an overview of South Coast AQMD’s efforts to reduce Ethylene Oxide (EtO) emissions
- Discuss the results of the Health Risk Assessment for Sterigenics US, LLC in Ontario
- Describe risk reduction measures that have already been implemented

MEETING OUTLINE

-  Background Information
-  South Coast AQMD Investigation at Sterigenics Ontario
-  Potential Air Toxics Health Risk From Facility
-  Next Steps
-  Presentation by Sterigenics US, LLC
-  Public Input and Comments

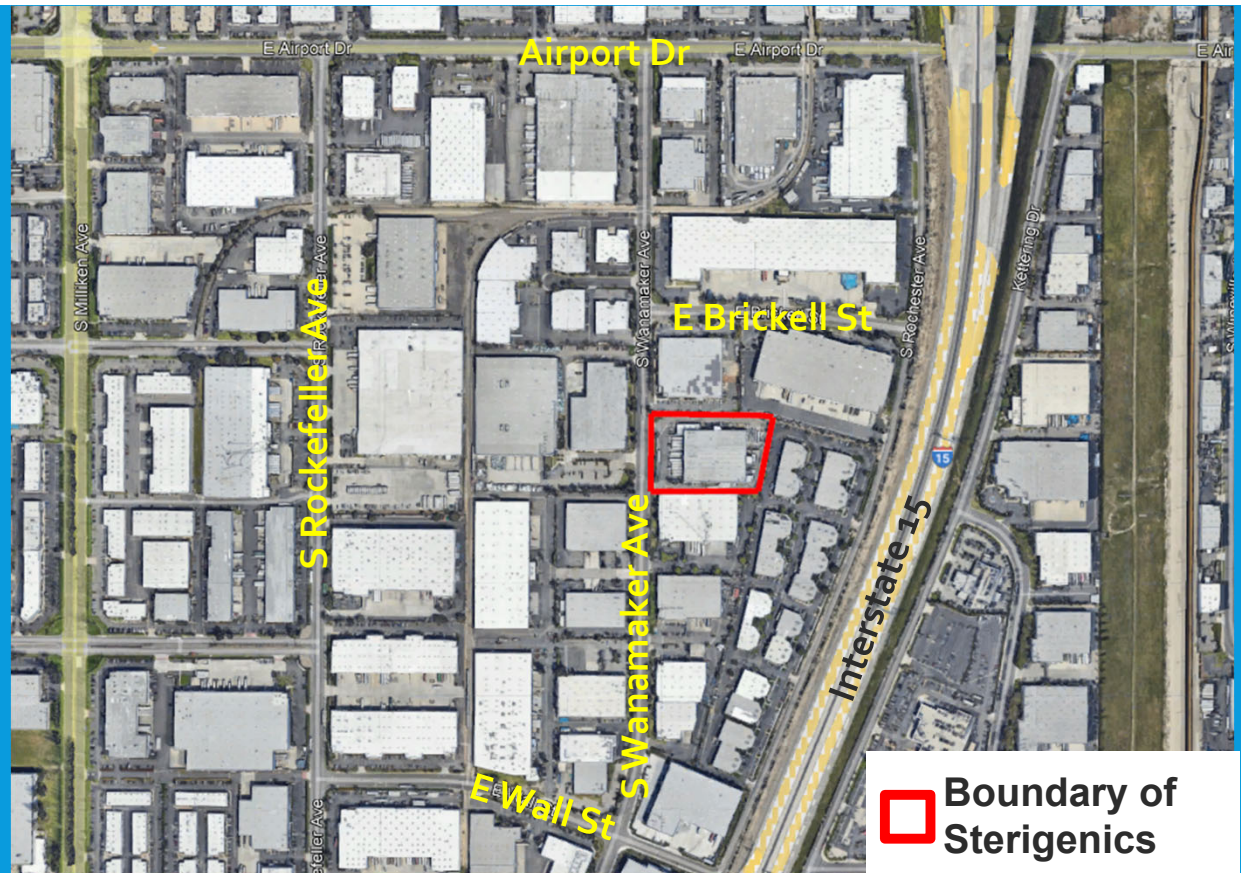
WHO IS SOUTH COAST AQMD?

- Government agency overseeing air quality in major portions of four counties
- Over 17 million people
- Over 28,000 permitted facilities
- Agency is tasked with meeting state and federal air quality standards and regulating toxic air pollution



STERIGENICS US, INC

- Located at 687 Wanamaker Ave in Ontario
- Sterilizes medical supplies and devices with EtO



ETHYLENE OXIDE (EtO)

Properties

- A flammable, colorless gas
- Odorless at low concentrations

Industrial Uses

- Used to sterilize medical devices or to make products including antifreeze, textiles, solvents, detergents, and adhesives

Exposure

- Long-term exposure over decades increases health risks

Potential Health Effects*

- May elevate cancer risk, including lymphoid and breast cancer

* Although EtO can also cause short-term health effects, these health effects are not expected at the EtO levels around Sterigenics

OPERATIONS AT STERIGENICS

Step 1:
Preconditioning

- Heat from boilers is used to bring medical supplies and devices to a set temperature and humidity

Step 2:
Sterilization

- Ethylene oxide is injected into a chamber to sterilize the medical devices inside

Step 3:
Aeration

- The sterilized products are transferred to the aeration room for a designated time to capture and control some of the residual ethylene oxide

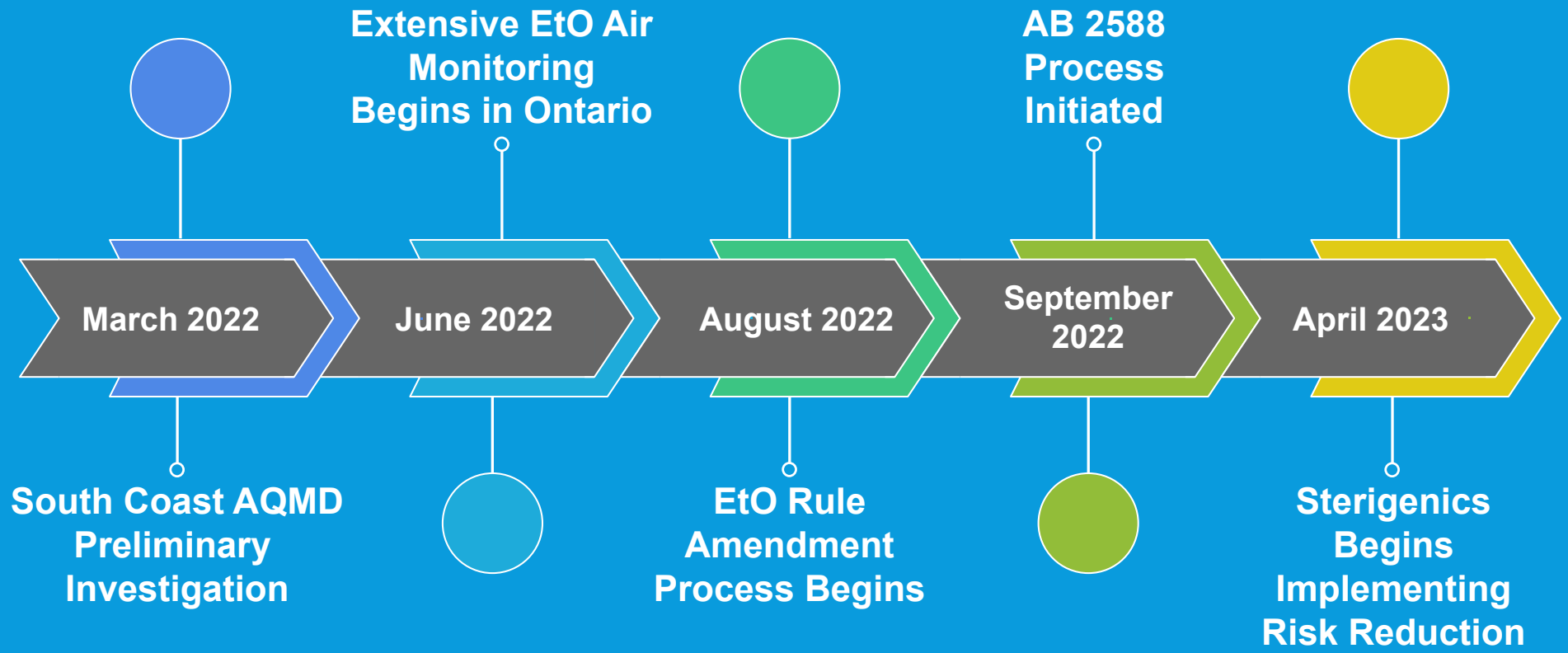
Step 4:
Post-aeration

- The sterilized products are moved to the shipping and storage areas to await pickup



**Above picture is for illustration purposes only and is not an actual photo of processes at Sterigenics

TAKING ACTION TO IDENTIFY SOURCES AND REDUCE EMISSIONS

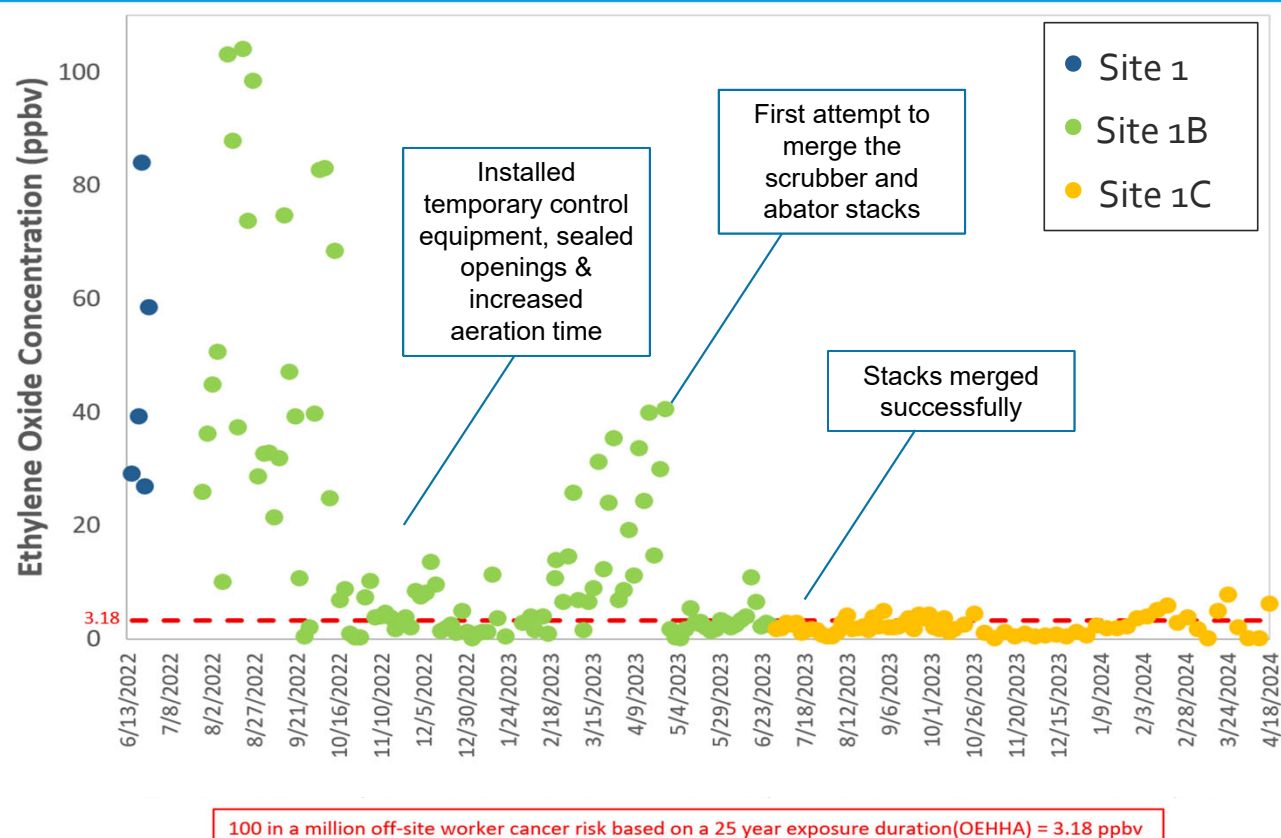


MONITORING & ANALYSIS

- Site evaluations conducted to identify potential EtO leaks and source of EtO emissions that were reaching the public
- Mobile monitoring and grab samples used to verify that Sterigenics was a source of EtO
- South Coast AQMD conducted fenceline and downwind sampling and analysis for EtO from June 2022 to April 2024
- Fenceline monitoring from April 2024 to present is conducted on behalf of the facility through a third party and reported to South Coast AQMD

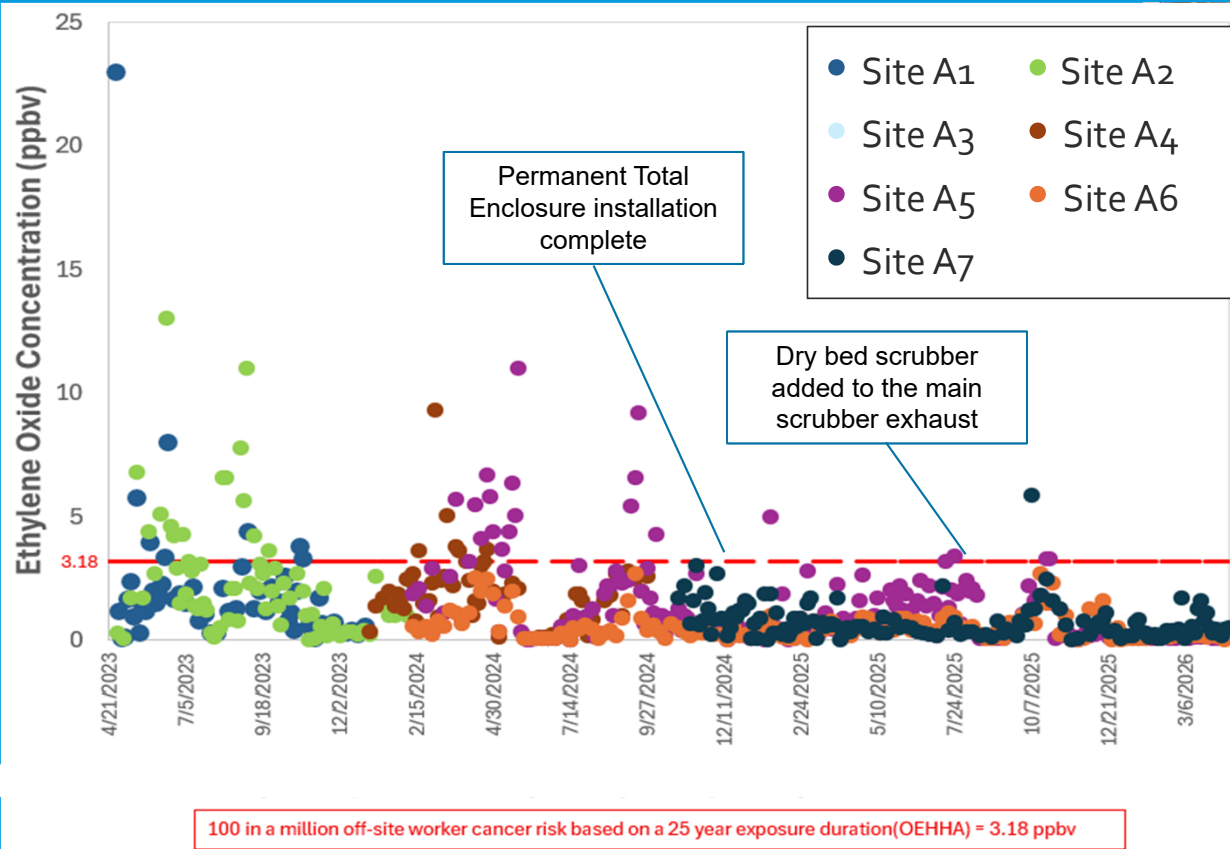


SOUTH COAST AQMD MONITORING DATA FOR NEARBY NON-RESIDENTIAL AREAS



The results of mobile monitoring efforts were used to determine the locations of maximum impact and siting of ambient samplers.

STERIGENICS MONITORING DATA FOR NEARBY NON-RESIDENTIAL AREAS



- Facility's monitoring data verified by South Coast AQMD
- Current EtO levels near the facility are approximately 98% lower than they were in 2022

ENFORCEMENT ACTIVITIES FOR STERIGENICS ONTARIO



- Annual inspections and other field activities, with the last inspection in December 2025
- Since 2022, inspectors have investigated over 50 facility notifications for equipment breakdowns and similar issues
- Starting in June 2022, inspectors have issued 7 Notices of Violation (NOVs) based on public nuisance, failing to follow permit conditions, and other air quality requirements
- One NOV identified two records violations of the Early Action Reduction Plan (EARP)
- No complaints received in the past five years

ETHYLENE OXIDE RULE AMENDMENTS

Rule 1405 was amended on December 1, 2023 to strengthen requirements for sterilization and storage facilities.

	Key Requirements
Stack Emission Requirements	
Control Efficiency	99.99% for Large Facilities, 99.9% for others
Concentration Alternative	0.01 ppm, rolling 30-day average*
Mass Emission Rate for Large Facilities	0.015 lb/hr, rolling 30-day average*
CEMS/SCEMS	Required for Large Facilities
Fugitive Emission Requirements	
Permanent Total Enclosure (PTE)	Required for Large Facilities and certain areas of Medium Facilities
Leak Detection and Repair (LDAR)	Audio/visual checks every day, leak checks every 60 days
Fenceline Monitoring	Interim requirement for Large Facilities, subject to curtailment
Warehouses	Pallet tracking and reporting. Large warehouses also have emission study or fenceline monitoring

*Averaging period only applicable to CEMS/SCEMS performance standard

WHAT IS THE AIR TOXICS HOTSPOTS PROGRAM (AB 2588)?

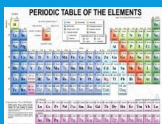
- State law enacted in 1987
- Public **Right-to-Know** Program
- Purpose
 - Collect emissions data with updates every 4 years
 - Identify facilities having localized impacts
 - **Evaluate potential health risks through Health Risk Assessments**
 - Notify residents of those potential health risks, if above South Coast AQMD notification thresholds
 - Reduce health risks below certain thresholds, if above South Coast AQMD risk reduction thresholds
- Rule 1402
 - Implements requirements of AB 2588
 - More stringent requirements for reducing health risk than state law

GOALS OF AB 2588



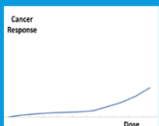
DETERMINING COMMUNITY IMPACTS WITH A HEALTH RISK ASSESSMENT (HRA)

- Estimates chance a person will experience a health effect from a toxic air contaminant
- Based on a "snapshot" of emissions from an inventory year
- Conservatively assumes person is outdoors in one location 24 hours/day and 7 days/week
- HRA process estimates potential health risk* and involves:



Hazard Identification

Identifies health problems and potency of toxic air contaminants



Dose-Response

Accounts for the increased chances of having health effects when pollutant levels are higher



Exposure

Estimates the amount of time a person could be exposed to toxic air contaminants



Sensitivity

Accounts for children being more sensitive to the health effects of air toxics

* Uses methodology established by the California Office of Environmental Health Hazard Assessment

DETERMINING COMMUNITY IMPACTS WITH A HEALTH RISK ASSESSMENT (HRA)



Cancer Risk

- Probability of a cancer case in “chances in-one-million”
- Estimates cancer risks for both residents and workers
- Cancer Burden is the expected excess cancers in exposed population

Chronic Non-Cancer Risk

- Long-term exposure (>1 year)
- Expressed in terms of Hazard Index

Acute and 8-hour chronic health effects also evaluated, but these health effects not expected at emissions levels around Sterigenics

POTENTIALLY HIGH-RISK LEVEL FACILITIES

What is a Potentially High-Risk Level Facility?

- Facilities that have the potential to or have exceeded the Significant Risk Level (Cancer Risk \geq 100 in-one-million)
- Determination for Sterigenics based on ambient monitoring data and on-site investigations
- The Sterigenics Ontario facility was designated as a Potentially High-Risk Level facility on September 29, 2022

Addresses High Health Risks Early

- Submittal and implementation of Early Action Reduction Plan

Expedited Implementation

- Submittal of: Air Toxics Inventory Report (ATIR), HRA, Risk Reduction Plan (RRP) on **accelerated timeline**

Better Overall Public Health Sooner

- Completes overall Risk Reduction sooner than traditional AB 2588 Program

KEY EARLY ACTION REDUCTION MEASURES



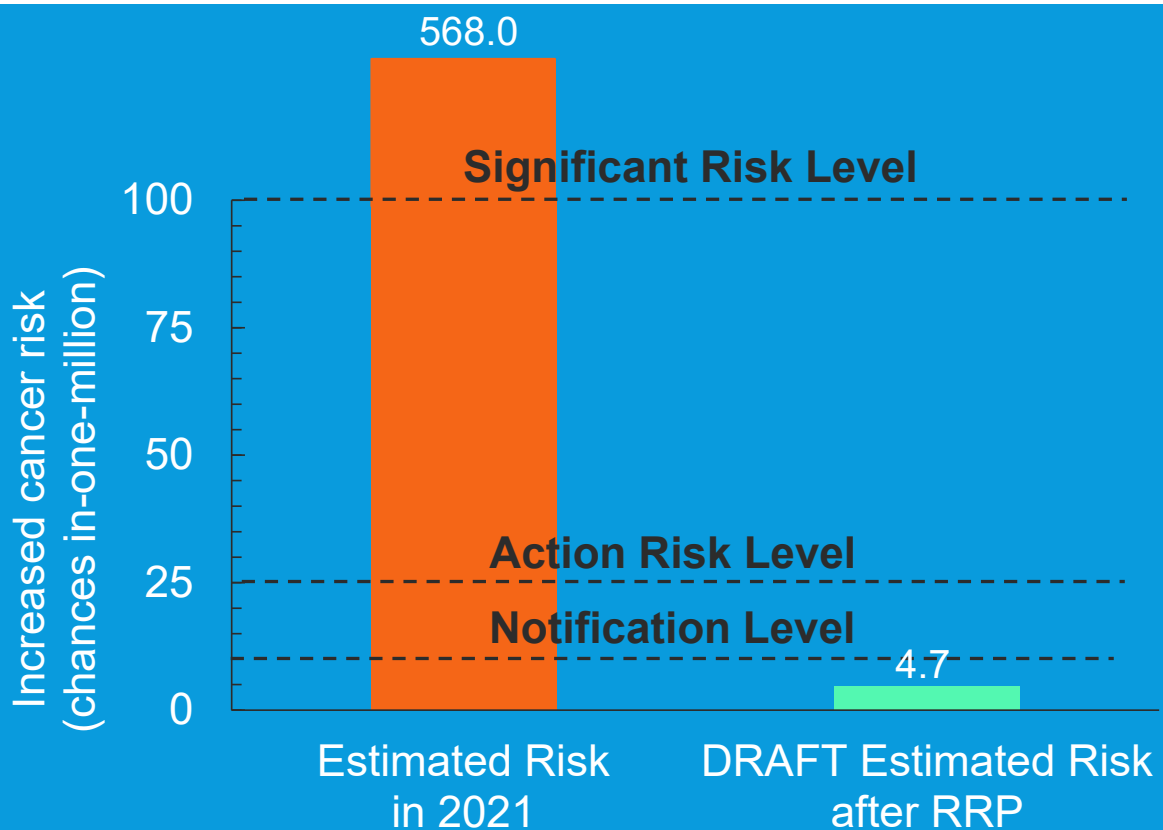
- Sealed off the building
- Added temporary control devices (portable Timilon filters)
- Increased aeration time temporarily
- Enhanced leak monitoring
- Began monitoring EtO levels and curtailing operations if thresholds exceeded
- Temporarily installed dry bed scrubbers to control fugitive EtO in the building
- Began maintaining negative pressure within the buildings
- Permits have been issued for all proposed changes/additions to their control systems

RULE 1402 RISK REDUCTION PLANS

Risk Reduction Plan – Required if Risk \geq Risk Reduction Threshold

- Permanent, verifiable, and enforceable risk reduction measures
- Must reduce the facility-wide health risk below 25 in-one-million for cancer risk and a Hazard Index of 3 for non-cancer health effects
- Must be implemented within 2 years from the approval of plan or sooner

ESTIMATED OFF-SITE WORKER CANCER RISKS AT MOST IMPACTED LOCATION



- EtO emissions contribute over 99% of the cancer risks from this facility
- The main sources of cancer risks are from fugitive emissions of EtO

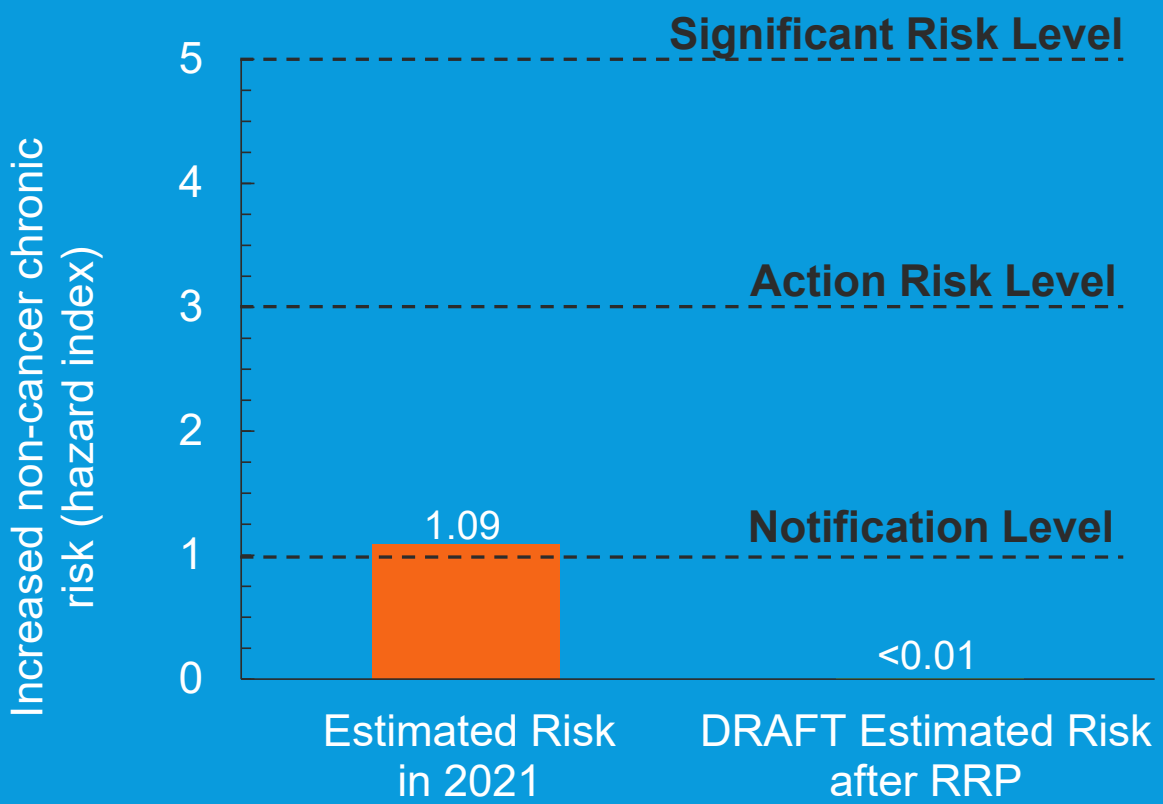
NON-CANCER CHRONIC RISK FROM EMISSIONS IN 2021

— Facility Boundary

— Worker non-cancer chronic risk (hazard index) ≥ 1



ESTIMATED NON-CANCER CHRONIC RISKS AT MOST IMPACTED LOCATION



- The main source of non-cancer chronic risk is fugitive emissions of EtO

NEXT STEPS

Risk Reduction Plan (RRP)

A Risk Reduction Plan has been submitted

* The proposed RRP includes all requirements of the EARP plus additional controls for the scrubber and an enhanced stack

RRP Implementation

Sterigenics has implemented or is in the process of implementing all of the risk reduction measures

Monitoring

Sterigenics will continue ambient monitoring of EtO emissions near the facility. South Coast AQMD will continue to monitor their progress

Enforcement

South Coast AQMD inspectors will continue to conduct field activities, evaluate compliance with RRP, rule, and permit requirements, and take appropriate enforcement action

TAKING ACTION TO IDENTIFY SOURCES AND REDUCE EMISSIONS

Extensive EtO air monitoring has shown significant risk reduction

On-site investigations continue to ensure that Sterigenics is in compliance

Sterigenics has submitted AB 2588 Risk Reduction Plan

EtO rule was finalized in Dec. 2023 and is being enforced

Sterigenics continues to implement additional EtO risk reduction strategies

All of these efforts have led to significant reductions in EtO levels and risk to the community

MORE INFORMATION ON THE EtO COMMUNITY INVESTIGATION

The screenshot shows the South Coast AQMD website at <https://www.aqmd.gov/home/eto>. The navigation menu includes: Select Language, F.I.N.D., About, Contact, Grants & Bids, Online Services, I'm Looking For, Sign Up, and Search. The main menu categories are: AIR QUALITY, INCENTIVE PROGRAMS, RULES & COMPLIANCE, PERMITS, NEWS, WEBCASTS, & CALENDAR, TECHNOLOGY ADVANCEMENT, RESOURCES, and MEETING AGENDAS & MINUTES. The breadcrumb trail is: Home / News, Webcasts, & Calendar / Community Investigations / EtO Sterilization. The page title is "Ethylene Oxide (EtO) Emissions Investigation". The introductory text states: "South Coast AQMD began investigating facilities that emit Ethylene Oxide (EtO) in March 2022, following the Protection Agency's (U.S. EPA) reconsideration of the potential toxicity of EtO. U.S. EPA has recently been collecting data about emissions from facilities that handle EtO throughout the country."

Visit www.aqmd.gov/eto for additional information including:

- Background on EtO and EtO facilities
- Ambient Air Monitoring Data
- Comments by Leaders and the Community
- Enforcement Activity
- Rulemaking Activity

MORE INFORMATION ON THE AB 2588 PROGRAM

- South Coast AQMD AB 2588 Website
 - <http://www.aqmd.gov/ab2588>
- Email: ab2588@aqmd.gov
- Hotline: 909-396-3616
- Link and QR code to the 2026 Approved HRA
 - <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/sterigenics/hra.pdf>



The screenshot shows the South Coast AQMD website. The header includes the AQMD logo and navigation icons. The breadcrumb trail reads: Home / Rules & Compliance / Compliance / Toxic "Hot Spots" (AB 2588). The main heading is "Air Toxics 'Hot Spots' Program (AB 2588)". Below this, there are sections for "Upcoming Events" and "Recent AB 2588 Activity". The activity list includes: Sterigenics (Ontario) HRA Approved - Apr. 3, 2026; Updated Template for Emission Factor Reference Source Table - Jan. 30, 2026; Southern California Edison (Mountainview Generating Station) HRA Approved - Jan. 16, 2026; All American Asphalt (Irwindale) HRA Approved - Jan. 9, 2026; and AB 2588 Annual Report Approved - Dec. 5, 2025. At the bottom, there is a section for "AB 2588 Guidance Documents and Reports:" with a sub-section for "Annual Report" and a link for "AB 2588 2024 Annual Report (Dec. 2025)".

MEETING CONDUCT GUIDELINES

PAUTAS DE CONDUCTA DE LA REUNIÓN



Please make public comments with courtesy and civility.

Profanity or discriminatory comments are prohibited.

Any violation of the above rules can result in your mic being muted or you being dropped from the ZOOM or teleconference meeting lines.

Por favor, haga comentarios públicos con cortesía y civilidad.

Se prohíbe la profanidad o los comentarios discriminatorios.

Cualquier violación de las reglas puede resultar en que su micrófono sea silenciado o que seas expulsado de las líneas de reunión de ZOOM o teleconferencia.



PUBLIC COMMENT OR ASK A QUESTION / HACER UN COMENTARIO PÚBLICO O HACER UNA PREGUNTA



ZOOM: Click on the “raise your hand” button at the bottom of your screen.

TELECONFERENCE: Dial *9 to “raise your hand”

Your name will be called when it is your turn to comment and the host will unmute your line automatically.

For Technical or General Assistance: Please call: 909-396-2311.

ZOOM: Haga clic en el botón "levantar la mano" en la parte inferior de la pantalla.

TELECONFERENCE: Marque *9 para "levantar la mano"

Su nombre será llamado cuando sea su turno de comentar y el anfitrión activará automáticamente su línea.

Para asistencia técnica o general: Por favor llame al: 909-396-2311