



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Via Email and CERTIFIED RETURN RECEIPT to Addressee

April 3, 2026

Kevin Wagner
VP Environmental Health & Safety
Sterigenics US, LLC
2015 Spring Road, Suite 650
Oak Brook, IL 60523

Subject: Approval of the Modified Health Risk Assessment for Sterigenics US, LLC (South Coast AQMD Facility ID No. 126060)

Dear Mr. Wagner:

Pursuant to the Air Toxics “Hot Spots” Act (AB 2588) and South Coast Air Quality Management District’s (South Coast AQMD) Rule 1402, this letter provides approval of the modified Health Risk Assessment (HRA) submitted by Sterigenics US, LLC (“Sterigenics Ontario”), as modified pursuant to Rule 1402(e)(2)(D) by South Coast AQMD. As noted in the modified HRA Summary Form (Attachment A), the risks posed by Sterigenics Ontario are above the Notification Risk Level and the Action Risk Level specified in Rule 1402¹.

Background

On September 29, 2022, South Coast AQMD sent a letter designating Sterigenics Ontario as a Potentially High Risk Level facility under Rule 1402. As detailed within that letter, Rule 1402 required the submittal of an Air Toxics Inventory Report (ATIR) within 150 days of the date of notification and an HRA within 180 days of the date of notification. South Coast AQMD staff received the ATIR on February 28, 2023, and the HRA and the RRP were received on March 28, 2023.

Following staff review, South Coast AQMD rejected the ATIR on March 29, 2023, due to multiple deficiencies and provided Sterigenics Ontario 30 days to revise and resubmit the ATIR. Sterigenics Ontario did not submit a revised ATIR within the required timeframe. Therefore, in accordance with South Coast AQMD Rule 1402 (d)(4)(D), staff modified the ATIR to address the necessary corrections and approved the modified ATIR on October 5, 2023. In accordance with South Coast AQMD’s *AB 2588 and Rule 1402 Supplemental Guidelines*², the HRA must utilize the approved ATIR and associated Emissions Inventory File, which were provided to Sterigenics Ontario in electronic format.

¹ <https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf>

² <https://www.aqmd.gov/docs/default-source/planning/risk-assessment/forms-and-guidelines/ab-2588-supplemental-guidelines.pdf>

On October 31, 2023, South Coast AQMD subsequently rejected the HRA and identified deficiencies in the HRA including that the HRA was not based on the emission inventory from the approved ATIR. Sterigenics Ontario was required to submit a revised HRA within 60 days of the date of the rejection letter addressing all deficiencies. Sterigenics Ontario submitted a revised HRA on January 2, 2024, however the revised submittal did not address all deficiencies noted by staff. Consequently, the HRA was modified by staff to address the following necessary corrections:

1. The South Coast AQMD modified HRA used the U.S. Environmental Protection Agency's (U.S. EPA) methodology for estimating fugitive emissions of ethylene oxide, which is consistent with the approved ATIR. The original and revised HRA submittals by Sterigenics Ontario used an unapproved methodology to estimate emissions. On November 9, 2022, South Coast AQMD initially rejected the use of the Willowbrook study as a Reference Source, as defined under Rule 1402 (c)(17). The reasons supporting this decision included:
 - The differences between the Willowbrook facility and the Ontario facility;
 - Insufficient data regarding assessed release points;
 - The use of portable ionization detectors does not have sufficient sensitivity to accurately measure concentrations at the release points;
 - Gas chromatograph readings at the Ontario facility did not validate the results of the Willowbrook study; and
 - The fugitive emission factor used is substantially different from U.S. EPA's emission factor, which is based on a larger dataset.

Although Sterigenics Ontario maintains that the Willowbrook study is the most accurate way to calculate fugitive emissions from the Sterigenics Ontario facility, Sterigenics Ontario has not provided any specific data about the study to substantiate using the study as a Reference Source.

2. Additional minor technical adjustments were made to align the document with both the Office of Environmental Health Hazard Assessment (OEHHA) Guidelines and the approved ATIR. These changes are outlined within the modified HRA

Next Steps: Public Notification

As summarized in Attachment A, the cancer risk at the Maximum Exposed Individual Resident (MEIR) receptor is estimated to be 2.3 chances in-a-million and the cancer risk at the Maximum Exposed Individual Worker (MEIW) receptor is estimated to be 568.0 chances in-one-million. Additionally, the hazard index for chronic risk at the MEIW receptor is estimated to be 1.09. The cancer and chronic risks are due to ethylene oxide (EtO) emissions from fugitive sources. These results are based on the modified HRA which evaluated emissions from 2021. Both cancer and chronic risks at worker receptors exceed the Notification Risk Level specified in Rule 1402.

As stated in South Coast AQMD's Public Notification Procedures³, public notification typically consists of three components: distribution of the approved HRA, distribution of public notification

³https://www.aqmd.gov/docs/default-source/planning/risk-assessment/forms-and-guidelines/public_notification_procedures.pdf

materials, and a public meeting. Sterigenics Ontario must distribute the facility's approved HRA and public notification materials pursuant to South Coast AQMD Public Notification Procedures within **45** days of the approval date on this letter, or **May 19, 2026**. A map showing the areas with health risk levels exceeding the Notification Risk Level is also attached to this letter (Attachment B). The public notification materials must be approved by South Coast AQMD and sent to all addresses within the notification area contour (cancer risk of 10 chances in-one-million or greater and non-cancer chronic hazard of 1.0 or greater) found in Attachment B. The public meeting should take place within **30** days of the distribution of public notification materials.

The modified HRA and associated modeling files are provided to you in electronic format. South Coast AQMD will post the approved modified HRA on our website. If there is any business confidential information contained within the modified HRA, please let us know and provide us with a redacted version of the modified HRA, in electronic format, within two weeks, or no later than **April 17, 2026**. Any redactions made shall be limited to trade secrets and confidential information only.

In addition, given the short timeframe for conducting public notification, please schedule a meeting with us within one week to discuss the next steps for public notification. If you have any questions regarding this letter, please contact Vanessa Tanik, Senior Staff Specialist, at (909) 396-2578.

Sincerely,



Scott A. Epstein, Ph.D.
Planning & Rules Manager
Planning, Rule Development & Implementation

Attachment:

- A. HRA Summary Form
- B. Public Notification Area Map
- C. Modified HRA Report (sent by email only)
- D. Modeling Files (sent by email only)

SE:VM:VT

ATTACHMENT A Modified HRA Summary Form



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HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : Sterigenics US, LLC
 Facility Address: 687 Wanamaker Ave
 Ontario, CA 91710
 Type of Business: Medical Sterilization
 SCAQMD ID No.: 126060

A. Cancer Risk

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

- Inventory Reporting Year : 2021
- Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*
 - Offsite 8,831.5 in a million Location: 449,423.84 m E, 3,768,704.09 m N
 - Residence 2.3 in a million Location: 453,640 m E, 3,769,024 m N
 - Worker 568.0 in a million Location: 449,423.84 m E, 3,768,704.09 m N
- Substances Accounting for 90% of Cancer Risk: Ethylene Oxide
 Processes Accounting for 90% of Cancer Risk: Fugitive Emissions
- Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*
 - Cancer Burden 0.05
 - Number of people exposed to >1 per million cancer risk for a 70-yr exposure 33,008
 - Maximum distance to edge of 70-year, 1×10^{-6} cancer risk isopleth (meters) 9,340

B. Hazard Indices

*[Long Term Effects (chronic) and Short Term Effects (acute)]
 (non-carcinogenic impacts are estimated by comparing calculated concentration to identified Reference Exposure Levels, and expressing this comparison in terms of a "Hazard Index")*

- Maximum Chronic Hazard Indices:
 - Residence HI: 0.00 Location: 453,640 m E, 3,769,024 m N toxicological endpoint: Central Nervous System
 - Worker HI : 1.09 Location: 449,423.84 m E, 3,768,704.09 m N toxicological endpoint: Central Nervous System
- Substances Accounting for 90% of Chronic Hazard Index: Ethylene Oxide
- Maximum 8-hour Chronic Hazard Index:

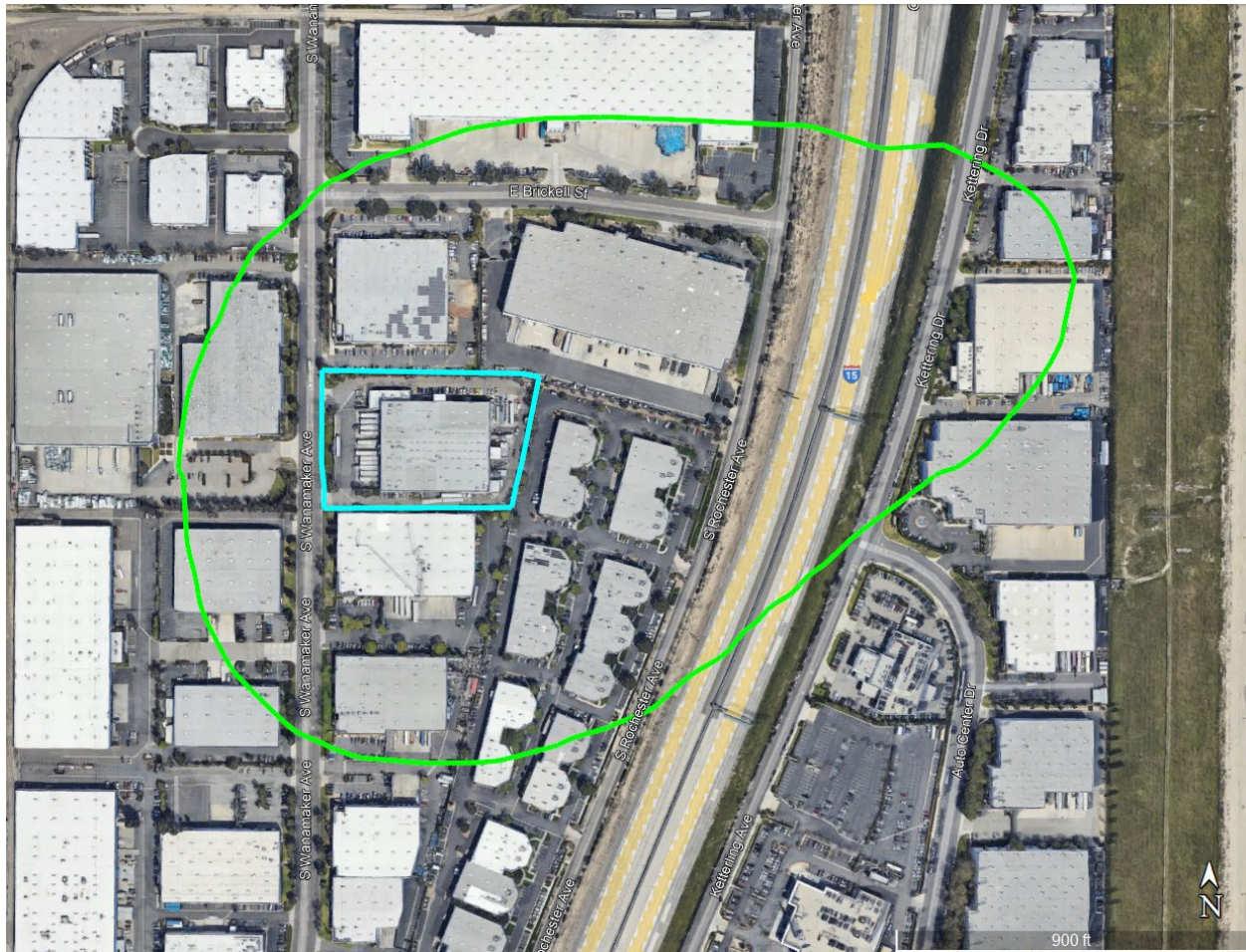
8-Hour Chronic HI: 0.00 Location: 449,244.72 m E, 3,768,680.36 m N toxicological endpoint: Respiratory System
- Substances Accounting for 90% of 8-hour Chronic Hazard Index: Acrolein and Formaldehyde
- Maximum Acute Hazard Index:



PMI: 0.00 Location: 449,244.72 m E, 3,768,755.84 m N toxicological endpoint: Eyes
- Substances Accounting for 90% of Acute Hazard Index: Acrolein, Ammonia and Formaldehyde

C. Public Notification and Risk Reduction

- Public Notification Required? Yes No
 a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI > 1
 0 residents
- Risk Reduction Required? Yes No

ATTACHMENT B
Public Notification Map
(Worker Cancer Risk 10 chances in-one-million)



-  Facility Boundary
-  10 chances in-one-million Cancer Risk