



South Coast Air Quality Management District

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Via Email and CERTIFIED RETURN RECEIPT to Addressee

September 12, 2024

Kevin Wagner
VP Environmental Health & Safety
Sterigenics US, Inc.
4801-63 E 50th St.
Los Angeles, CA 90058-2709

Sterigenics US, Inc.
4900 Gifford Ave.
Los Angeles, CA 90058-2785

Subject: Conditional Approval of Rule 1402 Revised Risk Reduction Plan for **Sterigenics US, Inc.** (Facility ID No.: **126191 and 126197**)

Dear Mr. Wagner:

South Coast Air Quality Management District (South Coast AQMD) has completed the review of the proposed Risk Reduction Plan (RRP) for Sterigenics US, Inc (Sterigenics-Vernon), located at 4801-63 E 50th St and 4900 Gifford Ave, Los Angeles (Facility ID No. 126191 and 126197). The final RRP was prepared and submitted by Ramboll Americas Engineering Solutions, Inc, Sterigenics-Vernon's consultants, to South Coast AQMD on July 12, 2024, as required pursuant to Rule 1402. **Please note that based on our review of the RRP and information provided by Sterigenics-Vernon and our discussions with Sterigenics-Vernon, we are granting conditional approval of the RRP.**

Background

On June 7, 2022, South Coast AQMD sent you a letter designating Sterigenics-Vernon as a Potentially High Risk Level facility under Rule 1402. As detailed within that letter, the submittal of an Air Toxics Inventory Report (ATIR) within 150 days, and a Health Risk Assessment (HRA) and RRP within 180 days of the date of notification were required under Rule 1402.

The ATIR was received on November 4, 2022, and after a review by South Coast AQMD staff was rejected on December 2, 2022, requiring resubmittal by January 3, 2023. The primary reason for the ATIR rejection was that the methodology used to estimate fugitive emissions did not meet Rule 1402 requirements. Since a revised ATIR was not submitted, South Coast AQMD staff modified the ATIR and approved it as modified pursuant to Rule 1402 (d)(4)(D) on May 26, 2023.

The HRA and RRP were received on December 6, 2022. After a review by staff, the HRA was rejected on June 15, 2023, requiring resubmittal by August 15, 2023. The primary reason for the rejection was that it was not based on the approved ATIR. A revised HRA was submitted on August 15, 2023, and after review, the revised HRA was also found to be deficient because it was not based on the approved ATIR. South Coast AQMD staff modified the HRA and approved it as modified pursuant to Rule 1402 (e)(2)(D), on June 12, 2024.

On June 12, 2024, South Coast AQMD staff also provided you with comments on the submitted RRP and requested a revision and resubmittal of this document. The revised RRP was received on July 12, 2024.

Risk Reduction Plan Conditional Approval

After careful deliberation, South Coast AQMD staff has decided to grant conditional approval of the July 2024 RRP, contingent upon the following:

1. *The single stack (RRM#18b) at each location shall be constructed within one year of issuance of the applicable Permit to Construct, or by **April 18, 2025**, unless an extension has been granted by the Executive Officer.*
2. *The source test results for the PTEs shall be used to reevaluate the health risks posed by the facility within two years of the date of this approval letter, or by **September 12, 2026**.*

In addition, South Coast AQMD has identified items within the RRP that do not comport with our position, which we have clarified below.

1. *South Coast AQMD is providing clarification and corrections to the statement made on page 18 of the submitted RRP which reads, “As discussed in the Modified HRA, over 90% of the calculated cancer risks at maximum impact receptors are due to process ethylene oxide emissions from the scrubbers and the abators.”*
 - a. *The results presented in the modified 2021 HRA show that fugitive emissions of ethylene oxide (EtO) were the main contributor to estimated cancer risks.*
 - b. *The statement shall be corrected to say the following, “As discussed in the Modified HRA, over 90% of the calculated cancer risks at the maximum impact receptors are due to fugitive emissions of ethylene oxide.”*
2. *South Coast AQMD is providing corrections and clarification to the statements made on pages 14 and 18 of the submitted RRP which read, “This measure (#24) is expected to capture 100% of fugitive emissions from the facility,” and, “This measure (#21) eliminates the fugitive emissions that were analyzed in the 2021 health risk assessment. The ethylene oxide usage that was previously assumed to be released as fugitive emissions shall be controlled by newly constructed dry beds.”*
 - a. *Based on the published EPA methodology for estimating fugitive emissions from the commercial sterilization process, ethylene oxide is assumed to be emitted as fugitive emissions in the areas surrounding air pollution control equipment that is not classified as an oxidizer.*
 - b. *Since the scrubbers at this facility are not enclosed in the Permanent Total Enclosures (PTEs), it is expected that fugitive EtO will be emitted to atmosphere. Therefore, not all of the fugitive emissions estimated in the modified HRA will be controlled by dry beds.*
 - c. *The statements shall be corrected to say the following, “This measure (#24) is assumed to capture 100% of fugitive emissions from areas inside the PTE at the facility,” and “This measure (#24) decreases the fugitive emissions that were analyzed in the 2021*

health risk assessment. The ethylene oxide usage that was previously assumed to be released as fugitive emissions from areas inside the buildings shall be controlled by newly constructed dry beds.”

3. South Coast AQMD estimated the post-RRP residual risks to be as follows:

Receptor and Health Effect	Post-RRP Modified HRA
Cancer Risk at the Point of Maximum Impact (PMI) (Note: the location of the PMI is at a location that is not considered a residential nor a worker receptor.)	365.1 chances in-one-million (residential risk assumptions)
	30.4 chances in-one-million (worker risk assumptions)
Cancer Risk at the Maximum Exposed Individual Resident (MEIR)	7.5 chances in-one-million
Cancer Risk at the Maximum Exposed Individual Worker (MEIW)	4.9 chances in-one-million
Cancer Burden	0.01
Chronic Risk at the MEIR	1.18×10^{-3} hazard index
Chronic Risk at the MEIW	9.33×10^{-3} hazard index
8-Hr Chronic Risk at the MEIW	1.48×10^{-4} hazard index
Acute Risk at the PMI	5.20×10^{-4} hazard index

Please be advised, pursuant to South Coast AQMD Rule 1402 (k)(1), if new information becomes known to the Executive Officer after the last submitted risk reduction plan that would substantially impact risks to exposed persons, implementation, or effectiveness of the plan, the Executive Officer may require the plan to be updated and resubmitted. Such examples include discovery of fugitive emissions emitted outside of traditional ventilation stacks or new equipment or processes at the facility.

In addition, pursuant to Rule 1402 (j), Sterigenics - Vernon is required to submit annual progress reports to demonstrate the progress achieved in implementing the risk reductions measures. The first annual progress report is due 12 months from the date of this approval letter. Please notify us once implementation is fully achieved. Implementation of all reduction measures identified in the RRP must be completed within two years of the date of this approval letter or by **September 12, 2026**.

If you have any questions, please feel free to contact me at (909) 396-3754.

Sincerely,



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

SE:VM:FC:VT