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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
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9
10 BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

11 **In the Matter of**

12 SOUTH COAST AIR QUALITY
13 MANAGEMENT DISTRICT,

14 Petitioner,

15 v.

16 STERIGENICS US, LLC
[Facility ID Nos. 126197 and 126191]

17 Respondent.
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CASE NO. 6225-1

**PROPOSED FINDINGS AND
DECISION FOR AN ORDER FOR
ABATEMENT (STIPULATED)**

Health & Safety Code § 41700,
District Rule 402

Date: August 9, 2022
Time: 9:00 a.m.
Place: 21865 Copley Drive
Diamond Bar, CA 91765

22 This petition for a Stipulated Order for Abatement was heard on August 9, 2022, pursuant
23 to notice and in accordance with the provisions of the California Health & Safety Code Section
24 40823 and District Rule 812. The following members of the Hearing Board were present: Cynthia
25 Verdugo-Peralta, Chair; Robert Pearman, Vice-Chair; Micah Ali, Mohan Balagopalan, and Allan
26 Bernstein, DPM. The Executive Officer of the South Coast Air Quality Management District
27 (hereinafter referred to as “South Coast AQMD” or “District” or “Petitioner”), was represented by
28 Brian Tomasovic, Principal Deputy District Counsel, and Josephine Lee, Senior Deputy District

1 Counsel. Respondent Sterigenics US, LLC (hereinafter referred to as “Sterigenics” or
2 “Respondent”), headquartered in Illinois, was represented by Maya Lopez Grasse, Esq. of Alston
3 & Bird LLP. The public was given the opportunity to testify. Evidence was received and the
4 matter was submitted.

5 The Hearing Board finds and decides as follows:

6 **FINDINGS OF FACT**

7 1. Petitioner is a body corporate and politic established and existing pursuant to
8 Health and Safety Code §§ 40000, *et seq.* and §§ 40400, *et seq.*, and is the sole and exclusive local
9 agency with the responsibility for comprehensive air pollution control in the South Coast Basin.

10 2. Respondent, Sterigenics US, LLC, operates a medical sterilization business,
11 including two neighboring buildings in the city of Vernon that are located within South Coast
12 AQMD’s jurisdiction and subject to South Coast AQMD’s rules and regulations. The two
13 facilities have the following addresses and facility ID designations: 4900 South Gifford Avenue,
14 Los Angeles, CA 90058, with Facility ID No. 126197 (“49th Street facility”), and 4801-63 East
15 50th Street, Los Angeles, CA 90058, with Facility ID No. 126191 (“50th Street facility”)
16 [collectively the “Vernon Facilities”].

17 3. Respondent’s sterilization operations at portions of the Vernon Facilities involve
18 the use of Ethylene Oxide (“EtO”), which has been identified by the Office of Environmental
19 Health Hazard Assessment (“OEHHA”) as a known human carcinogen by inhalation.

20 4. Respondent’s sterilization operations at the Vernon Facilities result in the release
21 of fugitive EtO emissions.

22 5. **California Health & Safety Code § 41700** provides, in pertinent part, that no
23 person “shall discharge from any source whatsoever such quantities of air contaminants or other
24 materials that cause injury, detriment, nuisance, or annoyance to any considerable number of
25 persons or to the public, or that endanger the comfort, repose, health, or safety of any of those
26 persons or the public, or that cause, or have a natural tendency to cause, injury or damage to
27 business or property.”
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1 6. **District Rule 402** provides as follows: “A person shall not discharge from any
2 source whatsoever such quantities of air contaminants or other material which cause injury,
3 detriment, nuisance, or annoyance to any considerable number of persons or to the public, or
4 which endanger the comfort, repose, health or safety of any such persons or the public, or which
5 cause, or have a natural tendency to cause, injury or damage to business or property. The
6 provisions of this rule shall not apply to odors emanating from agricultural operations necessary
7 for the growing of crops or the raising of fowl or animals.”

8 7. In April 2022, the District initiated ambient air monitoring for EtO by collecting
9 24-hours samples in and around the Vernon Facilities, specifically at a site located downwind of
10 the Vernon Facilities on 49th Street (“49th St. site” or “Site No. 1”). Two more monitors were set
11 up in May 2022, one on Gifford Avenue (“Gifford site”) and one in the nearest residential
12 community on Fruitland Avenue (“Fruitland site”). Presently, the District has set up two air
13 monitoring locations around the Vernon Facilities and one community air monitoring location at
14 the Fruitland site to measure ambient EtO levels.

15 8. Measurements from the District’s monitors may vary according to a facility’s
16 operations and extant environmental conditions, such as prevailing wind direction or rain on the
17 day the measurement is taken. Based upon knowledge and observations of the Vernon Facilities’
18 operations, monitored levels of EtO, prevailing wind directions, and other environmental
19 conditions, District staff believes that the elevated levels of ambient EtO concentrations at or
20 around the Vernon Facilities are due in part to fugitive emissions from Respondent’s operations.

21 9. District staff is required to use health values and methodologies developed by
22 OEHHA when estimating health risks in its air toxics program. Using OEHHA health values and
23 methodology, District staff has determined that EtO concentrations at 3.18 ppb pose a significant
24 cancer risk of 100 in a million as applicable to off-site workers with long-term exposure.

25 10. Between April 22, 2022 and July 25, 2022, the average EtO concentration
26 measured from ambient air monitoring at the 49th St. Site (Site No. 1) was 18.3 ppb. Using
27 OEHHA health values and methodology, District staff estimates the off-site worker cancer risk
28 from the Vernon Facilities to be 575 in a million, assuming these levels have persisted for a 25-

1 year worker exposure. The data collected within the residential community, the nearest being
2 about 600 feet away, shows levels of EtO in the community to be within background levels at the
3 District's regional monitoring sites.

4 11. Based on the monitoring data collected, District staff contends that the Vernon
5 Facilities pose a risk multiple times greater than the significant risk level to those exposed for
6 many years to the EtO concentrations measured recently outside of the Facilities. Therefore, the
7 District contends that emissions believed to be originating from Respondent's Vernon Facilities
8 endanger the health of a considerable number of persons.

9 12. On July 15, 2022, Petitioner filed a Petition for Order for Abatement alleging that
10 Respondent's Vernon Facilities were operating in violation of Health & Safety Code § 41700 and
11 District Rule 402 due to fugitive EtO emissions from operations causing a significant cancer risk
12 to members of the public.

13 13. On July 26, 2022, upon stipulation of the parties, Petitioner filed an Amended
14 Petition for Order for Abatement (Stipulated).

15 14. Respondent does not admit that it is in violation of the District's Rules and does
16 not admit that the Vernon Facilities' operations using EtO pose a risk to anyone working or living
17 in the community. Respondent contends that the site of the District's air monitor at Site No. 1 is
18 located in a private, industrial parking lot, where there are no workers present for 8 hours per day,
19 at the fenceline immediately adjacent to the railway tracks, and that selection of that site as an off-
20 site worker receptor reflects a conservative and protective receptor location at the place of highest
21 potential impact.

22 15. Respondent has taken and continues to implement actions to identify and minimize
23 potential sources of fugitive EtO emissions. Respondent also contends that such actions have
24 already contributed to the reduction of fugitive EtO reflected in the EtO concentrations measured
25 by the District.

26 16. Respondent has committed to modifying the Vernon Facilities to install permanent
27 total enclosures. Until permanent total enclosures are installed and operational, Respondent has
28 committed to interim control measures to minimize fugitive EtO emissions.

1 the alternative, to comply with the following conditions until the permanent total enclosures
2 (“PTEs,” as defined in Condition 23) are installed and operational, and associated fugitive
3 emission controls are constructed¹:

4 **Interim Fugitive Emission Control Measures Until the PTEs are Installed and Operational**

5 1. For process areas with fugitive Ethylene Oxide (EtO) emission sources, Respondent
6 shall:

- 7 a. Install and maintain temporary enclosures, where feasible, using physical
8 barriers such as plastic sheeting (10 mil thickness or greater), plastic strip
9 curtains, accordion doors, etc. These areas include the transfer corridor from
10 chamber room(s) to the aeration room(s) at 49th Street facility; and the
11 warehouse/shipping area(s) at both 49th and 50th Street facilities. The installation
12 of temporary enclosures shall be reevaluated upon commissioning of the dry
13 beds in the 49th Street and 50th Street facilities’ shipping areas, and Sterigenics
14 may propose, subject to the District’s approval, the removal of some or all of
15 these enclosures if it can be demonstrated that their presence reduces the overall
16 effectiveness of the dry beds;
- 17 b. Direct fugitive emissions to control equipment if feasible;
- 18 c. Develop and submit for District approval within ten days of the issuance of
19 this Order, a plan to conduct parameter monitoring for measures 1(a) and
20 1(b), such as via smoke tests, differential pressures, or inward face
21 velocities, at an appropriate frequency. Respondent shall implement the
22 approved plan; and
- 23 d. Maintain records onsite and provide to the District upon request.

24 2. For areas with fugitive EtO emissions, Respondent shall:

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28 ¹ The conditions for the fence-line air monitoring plan in this Order shall continue in force for no less than two consecutive months following commencement of the operation of all Permanent Total Enclosures.

- 1 a. Vent (or otherwise direct air from) areas with fugitive EtO to portable
- 2 capture and control equipment, including additional fans routed to existing
- 3 emission controls, portable Timilon filter systems, and dry bed systems; and
- 4 b. Evaluate other interim measures and technologies and continue to implement
- 5 any feasible control measures.

6 3. Respondent shall immediately commence – and no later than 30 days after the
7 issuance of this Order, complete – sealing of all building draft openings (except as otherwise
8 specified in these conditions) that are not under negative pressure as verified by conducting smoke
9 testing or differential pressure measurements (except as otherwise specified in these conditions and
10 consistent with Condition 1(c)). Plastic sheeting (10 mil thickness or greater), or other materials
11 approved by the District, over openings will be considered as acceptable sealing.

12 4. Respondent shall keep all access doors in process, storage, and shipping areas
13 closed, except while they are in active use.

14 5. Respondent shall install signage on both sides of personnel and vehicle access doors
15 for areas with known fugitive EtO emissions. The signs shall have the following wording: “Caution
16 Ethylene Oxide. Door(s) shall be kept closed when not in use,” or other wording approved by the
17 District. Letters shall be at least 85-point type and shall be visible to personnel using the doors.

18 6. Respondent shall where possible keep truck bay doors closed during loading and
19 unloading, or ensure that truck bay doors remain closed except when personnel are actively
20 involved in truck movement and/or truck loading and unloading.

21 7. On a daily basis, Respondent shall inspect all roll-up door(s) for any damage that
22 may allow for potential fugitive EtO emissions to pass through such door. Respondent shall
23 maintain a log that documents all daily inspections. If damage is observed, Respondent shall
24 immediately make repairs or make arrangements for repairs at the earliest feasible time, record the
25 repairs, and provide records sufficient to demonstrate compliance with this condition to the District
26 upon request. Respondent shall submit a notification (Rule1405notifications@aqmd.gov) if a repair
27 takes more than 3 business days to complete.

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1 8. Respondent shall as soon as possible, but no later than 30 days from the issuance of
2 this Order, develop and submit (Rule1405notifications@aqmd.gov) for District review and
3 approval a building differential pressure monitoring plan. Upon approval, the plan shall be
4 implemented and considered enforceable as a condition of this Order. The plan shall:

5 a. Entail the installation, operation, maintenance of a differential pressure
6 monitoring system for each total enclosure as follows:

7 i. A minimum of one building differential pressure monitoring system
8 shall be installed and maintained at each of the following three walls
9 in each total enclosure having a total ground surface area of 10,000
10 square feet or more:

11 1. The leeward wall;

12 2. The windward wall; and

13 3. An exterior wall that connects the leeward and windward wall
14 at a location defined by the intersection of a perpendicular
15 line between a point on the connecting wall and a point on its
16 furthest opposite exterior wall, and intersecting within plus or
17 minus ten (± 10) meters of the midpoint of a straight line
18 between the two other monitors specified for the leeward wall
19 and windward wall. The midpoint monitor shall not be
20 located on the same wall as either of the other two monitors
21 specified for the leeward wall and windward wall.

22 ii. A minimum of one building differential pressure monitoring system
23 shall be installed and maintained at the leeward wall of each total
24 enclosure that has a total ground surface area of less than 10,000
25 square feet.

26 b. Include provisions for maintenance, recordkeeping, and reporting unless
27 already required by Paragraphs 1(c), 3 or 7.
28

1 9. At least daily, Respondent shall inspect temporary enclosure measures for integrity
2 against breaches. If breaches in temporary enclosures or seals are observed, Respondent shall make
3 immediate repairs or, if such repairs are not able to be immediately made, Respondent shall
4 immediately make arrangements for repairs at the earliest feasible time. For temporary enclosures
5 not already covered by Paragraphs 1(c), 3 or 7, records of inspection and any repairs shall be
6 maintained daily and kept onsite. Respondent shall submit a notification
7 (Rule1405notifications@aqmd.gov) if a repair takes more than 2 business days to complete.

8 10. Respondent shall increase aeration time 24 hours or more where practical in the
9 aeration room(s) to the maximum extent of the allowable ranges, and Respondent shall use its best
10 efforts to ensure sufficient physical space in the aeration room(s) to achieve such increases in
11 aeration time. Respondent shall not be required to aerate materials less than minimum or more than
12 maximum durations established in the approved U.S. FDA sterilization cycles for those materials.
13 Respondent shall provide the District, within 30 days of the issuance of this Order, records that
14 demonstrate the increase over the baselines of aeration times in June 2022, compared to a baseline
15 of January 2022, including percentage measurements. Records that identify the materials
16 undergoing aeration and log the aeration times, and corresponding customer and/or U.S. FDA
17 aeration specifications, along with records of warehouse holding times (between the time the
18 product exits aeration and the time the product is shipped from the facilities), shall be maintained
19 and made available to the District upon request. Respondent shall within 45 days of this Order
20 initiate a report that consolidates the relevant aforementioned data, including aeration times, U.S.
21 FDA and/or customer aeration specifications, and warehouse holding times, and shall provide this
22 report to the District (Rule1405notifications@aqmd.gov) on a monthly basis.

23 a. The Parties may meet and confer regarding evaluation of this data.

24 Respondent acknowledges the District may evaluate records submitted under
25 this condition and may, with a demonstration of good cause, seek
26 modification of this Order to seek to increase aeration times (without
27 requiring Respondent to exceed maximum aeration times as specified in U.S.
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1 FDA and/or customer aeration specifications) or otherwise seek to enhance
2 this condition.

3 11. Respondent shall continue to conduct leak detection pursuant to the procedures in
4 the current version of Rule 1405 at least monthly. Respondent shall maintain its other existing
5 internal leak detection methods and practices, which include leak tests during every sterilization
6 cycle and continuous measurement of EtO concentrations near EtO-containing equipment. The
7 interior gas chromatograph (“GC”) data for the 49th Street and 50th Street facilities will be reviewed
8 to see if there are increased EtO levels near this equipment. If increased levels at or above 1 ppm
9 are detected, Respondent shall further inspect and document equipment for EtO leaks using
10 handheld instruments with an electrochemical detector or other EtO-specific instrumentation with a
11 low detection limit at or below 0.5 ppm. Leak detection procedures must be directed to any
12 equipment or components handling EtO that are under positive pressure (e.g., vacuum pumps,
13 control equipment piping, or storage). Respondent shall also develop a supplemental EtO Leak
14 Detection and Repair (LDAR) program for monthly inspection of the scrubber and oxidizer
15 external piping that is under positive pressure (which, together with the vacuum pumps, control
16 equipment piping, or storage described in the preceding sentence, comprises the “Relevant
17 Equipment”). LDAR data must be recorded in a format approved by the District and provided to
18 District personnel upon request.

19 12. Respondent shall report (Rule1405notifications@aqmd.gov) any EtO leaks greater
20 than or equal to 10 ppm from the Relevant Equipment within two hours of discovery, and the report
21 shall detail the action plan and repair timeline. For any leak greater than or equal to 10 ppm EtO,
22 Respondent shall, within 3 days of discovery of the leak, submit
23 (Rule1405notifications@aqmd.gov) a written report with a root cause analysis and details on
24 corrective actions taken.

25 13. Respondent shall develop and implement a protocol that includes daily inspection of
26 the acid scrubber systems for potential ethylene glycol leaks, and a protocol for repair or removal
27 of components found to be leaking ethylene glycol. Respondent shall keep records of all such
28 inspections and repairs and provide to District personnel upon request.

1 14. Respondent shall immediately repair or take out of service any components with any
2 instrument-detected leaks of EtO (as provided for in Condition 12) or ethylene glycol (as provided
3 for in Condition 13). Leaking components must be repaired before they are returned to service.

4 15. Respondent shall within 30 days submit (Rule1405notifications@aqmd.gov) a
5 report that evaluates the use of interior GC systems as a tool for assessing and implementing other
6 measures to ensure on-site worker safety while reducing exterior EtO emissions, including
7 evaluating the development of a daily GC summary report that calculates and reports periodic
8 average EtO concentrations for review and assessment. The evaluation will include a prioritization
9 of areas to locate ports where possible; an evaluation of relocating ports during construction of the
10 PTE; and a review of the system daily calibration along with periodic testing at various ports with
11 samples of known EtO gas concentration.

12 16. Respondent shall construct and operate the dry beds at the 49th and 50th Street
13 facility as soon as possible after issuance of all applicable government approvals, but in no case
14 later than March 31, 2023 (exclusive of any additional dry bed(s) installed in conjunction with
15 construction of the PTE at the 49th Street facility). Upon full operation of the dry beds, if either
16 facility exceeds an EtO concentration of 1.0 ppm on an 8-hour rolling average in the shipping area
17 outside of the aeration room(s), Respondent shall notify the District
18 (Rule1405notifications@aqmd.gov) within 24 hours. If 8-hour rolling average EtO concentrations
19 persist above 1.0 ppm in the shipping area outside of the aeration room(s) for more than 48 hours,
20 then Respondent shall submit (Rule1405notifications@aqmd.gov) a written report with a root
21 cause analysis within 2 business days. The report shall provide details on the airflow and capture of
22 emissions by the dry beds, as demonstrated by a smoke test, or details on the relevant differential
23 pressure monitor(s) to confirm that sufficient negative pressure exists. Respondent shall provide
24 final notification to the District (Rule1405notifications@aqmd.gov) within 1 business day when the
25 facility sustains 8-hour rolling average EtO concentrations less than 1.0 ppm for 24 hours. The
26 internal GC, or in the event of the GC system's inaccuracy, another reasonable method put forth by
27 Sterigenics, shall be used to monitor EtO concentrations in the shipping area outside of the 49th and
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1 50th Street facilities' aeration room(s). Respondent shall maintain records sufficient to demonstrate
2 compliance with this condition and provide them to the District upon request.

3 17. Within 7 days of full operation of the dry beds in a facility, Respondent shall
4 maintain continuous negative pressure of at least 0.001 inches of water within the facilities'
5 shipping areas until construction of the PTEs is completed. To the extent that significant
6 construction activities may impede compliance with this condition, Respondent shall notify the
7 District (Rule1405notifications@aqmd.gov) 24 hours in advance, or as soon as practicable.
8 Respondent shall install and maintain building pressure differential monitors, and shall log
9 differential pressure readings at least once per shift (shifts are 8 hours), sufficient to demonstrate
10 compliance with this condition. If Respondent does not maintain continuous negative pressure in
11 accordance with this condition, and no prior notice due to significant construction activities has
12 been provided, Respondent shall notify the District (Rule1405notifications@aqmd.gov) within 24
13 hours. Respondent shall maintain records sufficient to demonstrate compliance with this condition
14 and provide them to the District upon request.

15 18. Respondent shall, within 30 days, submit (Rule1405notifications@aqmd.gov) a
16 report that evaluates whether connection of the scrubber exhaust to the Donaldson abator stacks, or
17 other permitted air pollution control equipment, would be a feasible, acceptable, and suitable means
18 to further reduce process EtO emissions.

19 **Post-Aeration Testing**

20 19. Respondent shall, within 45 days, submit a test protocol to the District for review
21 and approval to conduct an enclosure testing program of representative pallets and products²
22 coming out of the aeration room(s) to characterize and quantify residual off-gassing of EtO. The
23 test protocol shall follow guidelines described below in subdivision (a). The source test program
24 shall be initiated within 2 weeks of District approval of the protocol. Respondent shall notify the
25 District of initiation of the enclosure testing program no less than 7 days prior to data and sample
26 collection, and the District shall be allowed to observe the test and collect duplicate samples. A
27 final source test report shall be submitted to the District (Rule1405notifications@aqmd.gov) within

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² "Products" in this condition shall refer to representative products that are not customer products.

1 30 days of completion of the test program. Respondent shall append the District's written
2 comments or evaluation of the final report, if any, to the final report if Respondent distributes the
3 final report to any working groups of the EtO sterilization industry or the U.S. FDA for
4 participation in the development of post-sterilization process evaluations.

- 5 a. The Test Protocol will include an initial method validation evaluation to
6 determine the appropriate size of a pallet enclosure and inlet and exhaust
7 ducts and air flow rate to allow effective capture and laminar flow required
8 for quantitative emissions evaluation. Validation steps in the pilot evaluation
9 will include, at a minimum, release of a known mass and concentration of
10 EtO relevant to residual expected from processing through normal
11 operations, to allow recovery, repeatability and time to equilibrium to be
12 established and calculation of the rate of depletion of the EtO over time. The
13 validation step will not include the use of sterilized material, since the
14 amount of EO in this test must be known and the goal is to validate the
15 chamber parameters and monitoring equipment. Respondent shall notify the
16 District of the initial method validation no less than 7 days prior to the
17 evaluation, and the District shall be allowed to observe. The results of the
18 validation evaluation will be submitted to the District. After demonstration
19 of appropriate test conditions and ability to track degradation rates and
20 approval of the developed methodology by the District, quantitative Pallet
21 Enclosure Testing will be conducted over a 4-week period to test pallets of
22 material processed via different cycles reflective of the range of normal
23 operations. A Temporary Total Enclosure (TTE) will be built for this
24 purpose. The enclosure will be designed to accommodate one (1) or more
25 pallet(s) of materials representative of those processed via the range of
26 sterilization cycles in normal operations and held after leaving the aeration
27 room(s). The enclosure will be equipped with inlet and exhaust ducting and
28 will not require contact with the sterilized products. Respondent shall use

1 representative part(s) and pallet(s) for testing. Inlet air will be supplied from
2 a clean ambient source. The exhaust duct will be connected to a blower and
3 directed to an area under air pollution control. The exhaust duct will be
4 equipped with sample ports to enable measurement of air flow and EtO
5 concentrations. Air flow and concentration will be measured for the selected
6 pallet(s) or part(s) on a continuous or semi-continuous basis as well as
7 quantified at approved timepoints with integrated canister sample results
8 throughout a period representative of the duration that different product
9 batches would be held before shipping. Pallet Enclosure Testing results shall
10 be made available to the District (Rule1405notifications@aqmd.gov) on a
11 rolling 2-week basis following collection.

- 12 b. After Respondent has submitted the testing protocol to the District, District
13 personnel or District-authorized contractors may elect to perform the testing.
14 Respondent shall facilitate such program of testing that will be conducted by
15 District personnel or District-authorized contractors. Specifically,
16 Respondent shall make all reasonable accommodations for the District's
17 program of work to initiate, conduct (for not more than 4 weeks), and
18 conclude an enclosure testing program of representative pallets and products
19 coming out of the aeration room(s) to characterize and quantify any residual
20 off-gassing of EtO pursuant to the test protocol developed by Respondent
21 and approved by the District, or pursuant to a test protocol developed by the
22 District that takes into the account relevant variables (e.g., airflow and time).
23 Respondent shall provide training to District personnel or District-authorized
24 contractors regarding all health and safety requirement applicable in areas in
25 which the study is to be conducted. The testing shall commence upon
26 soonest availability of District personnel. After completion of testing,
27 Respondent shall within 60 days of billing notification pay the District the
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1 costs of materials and testing per applicable fee rates in District Rules 304
2 and 304.1.

3 **Install and Perform Air Monitoring**

4 20. Respondent shall, within 14 days of the issuance of this Order, commence the
5 fence-line air monitoring plan included here as Appendix A.

6 21. Respondent shall install a wind monitoring system and data logging system at a
7 location approved by the District.

8 22. Respondent shall submit (Rule1405notifications@aqmd.gov) all internal EtO
9 monitoring data (e.g., GC data) on a weekly basis, except as otherwise provided in the conditions
10 herein, to the District. All data shall include individual readings and shall be provided in excel
11 format.

12 **Construction Schedules**

13 23. Respondent shall construct and operate PTEs, each with an additional GC system,
14 within twelve months of all applicable permit approvals, unless Respondent seeks an extension of
15 time before the Hearing Board. In any case, PTEs shall be constructed and operational no later than
16 January 15, 2024 for the 50th Street facility, and May 1, 2024 for the 49th Street facility. The PTEs
17 shall be constructed consistent with U.S. EPA Method 204, except as otherwise specified in the
18 permits for PTEs issued by the District. (“PTEs” as used in this Order means the PTEs as described
19 in the immediately preceding sentence.)

20 24. Respondent shall notify the District within 7 days of completion of construction of
21 each of the PTEs. Until satisfaction of this condition, Respondent shall submit
22 (Rule1405notifications@aqmd.gov) a monthly report to the District with status updates in relation
23 to increments of progress for construction of the PTEs.

24 **Curtailment Provisions**

25 25. Within one (1) hour of Respondent discovering or receiving notification that
26 ambient air monitoring results are 31.8 ppb or greater at any Respondent-operated, District-
27 approved ambient air monitoring location as specified in Appendix A, or any District-operated
28 ambient air monitoring location, for two consecutive 24-hour samples, Respondent shall not initiate

1 any new sterilization cycles in the chambers. Operations may resume upon confirmation by the
2 District that subsequent samples at all Respondent-operated, District-approved monitoring
3 locations as specified in Appendix A, or any District-operated ambient air monitoring location, on a
4 single sampling day are less than 31.8 ppb.

5 26. Within one (1) hour of Respondent discovering or receiving notification that
6 ambient air monitoring results are 63.6 ppb or greater at any Respondent-operated, District-
7 approved ambient air monitoring location as specified in Appendix A, or any District-operated
8 ambient air monitoring location, for any single 24-hour sample, Respondent shall not initiate any
9 new sterilization cycles in the chambers. Operations may resume upon confirmation by the District
10 that subsequent samples at all Respondent-operated, District-approved monitoring locations
11 specified in Appendix A, or any District-operated ambient air monitoring location, on a single
12 sampling day are less than 63.6 ppb, unless otherwise required by Condition 25.

13 **Administrative**

14 27. Upon presentation of appropriate credentials, Respondent shall allow District
15 personnel or authorized representatives to enter and inspect the premises, have access to records,
16 and take samples, with the understanding that all records identified or marked “confidential” and/or
17 “trade secret” (or any similar term or phrase) by the Respondent shall be handled as confidential
18 records pursuant to the California Public Records Act. During inspection or sampling, Respondent
19 shall not alter normal business operations or equipment to suppress emissions for the purpose of
20 evading detection or concealing emissions during monitoring or testing.

21 28. The Hearing Board may modify the Order for Abatement without the stipulation of
22 the parties upon a showing of good cause, therefore, and upon making the findings required by
23 Health and Safety Code Section 42451(a) and District Rule 806(a). Any modification of the Order
24 shall be made only at a public hearing held upon 10 days published notice and appropriate written
25 notice to Respondent.

26 29. Petitioner shall notify the Clerk of the Board in writing when final compliance has
27 been achieved.

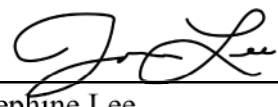
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Maya Lopez Grasse
Counsel for Respondent
Sterigenics US, LLC



Josephine Lee
Senior Deputy District Counsel
South Coast Air Quality Management District

1 **Appendix A**

2 **Fenceline Air Monitoring Plan**

3 Sterigenics shall perform periodic ambient air monitoring to measure concentrations of EtO
4 at locations near the perimeter of the adjoining 49th Street and 50th Street facilities (“Fenceline
5 Locations”). Analysis will be by a standard and generally accepted methodology capable of routinely
6 reporting EtO concentrations of less than 1 part-per-billion by volume (ppbv). The District will be
7 allowed access and be able to conduct technical review of the sampling sites, equipment and methods
8 and also be able to conduct side by side testing upon request

9 ***Sampling Locations***

10 Proposed locations near the perimeter are shown on Figure 1. Respondent shall aim to locate
11 a monitor at, or as close as possible to, the existing District sampling location on 49th Street (M2 in
12 Fig. 1) with the understanding that this location has detected the highest levels of ambient EtO
13 concentrations and continued monitoring at this location would promote continuity of monitoring
14 data. Final siting of station locations shall be informed, to the extent practical, by guidelines in
15 Appendix E of 40 CFR Part 58 regarding obstructions, and subject to final District approval. For
16 sampling locations that require off-site access, Respondent shall make best efforts to secure the
17 sampling site location within 14 days of issuance of Order, or shall notify the District
18 (Rule1405notifications@aqmd.gov) within 2 days of becoming aware that an approved site location
19 cannot be secured. Once sampling locations have been finalized, locations may be moved upon the
20 approval of the District to accommodate traffic, access and safety considerations, or any
21 modifications to equipment at the facilities.

22 ***Sampling Methods***

23 Beginning within 14 days of issuance of the Order, or, if a sampling location requires securing
24 off-site access, then within 14 days of securing such access, samples will be collected at all locations
25 on a minimum of 1-in-6 day cycle following the calendar established by the USEPA Ambient
26 Monitoring Technology Information Center ([https://www.epa.gov/amtic/sampling-schedule-](https://www.epa.gov/amtic/sampling-schedule-calendar)
27 [calendar](https://www.epa.gov/amtic/sampling-schedule-calendar)) and results reported to the District within 14 calendar days of sample collection, except as
28 provided below.

1 Samples reflective of conditions over an entire day and night (“24-hr Samples”) will be
2 collected using standard equipment suitable for collecting ambient air consistently over this duration
3 (e.g., Summa canisters and mass flow controller valves). Sampling duration for individual samples
4 may vary in the field based on canister flow rates and the target time range will be 24 hours +/- 1
5 hour. Samples will be collected from approximate breathing zone height, approximately 4-6 feet
6 from the ground surface.

7 Each sampling canister to be used in a sampling round will be individually tested and certified
8 for EtO analysis by the laboratory before deployment in the field.

9 *Analyses*

10 Laboratory analyses will be conducted by an independent third-party laboratory that has
11 demonstrated capabilities to measure sub-ppbv EtO concentrations using a method such as USEPA
12 TO-15 and is agreed upon with the District.

13 Validated results, records of wind direction and speed obtained at an on-site location during
14 the sampling period, and any annotations regarding sample handling or exceptions to collection
15 methods occurring in the field shall be reported to the District for each round of sampling within 14
16 days after sample collection, unless the laboratory cannot process such samples within a 14-day
17 timeframe (even if expedited processing is requested) due to circumstances beyond the reasonable
18 control of Respondent, in which case Respondent shall notify the District within 2 days of becoming
19 aware that the deadline will be not be met; in such cases, Respondent shall request simultaneous
20 release of the sampling results to the District.

21 *Post-Facility Upgrade Modifications*

22 After the dry bed system has been installed and demonstrated to function, Sterigenics may
23 demonstrate the stability of the resulting conditions and reduce the monitoring frequency while the
24 facility is operating under normal conditions as follows:

- 25 • If 7 consecutive rounds of sampling results following installation of the dry bed system
26 demonstrate that all results from each location are less than 1.6 ppbv (one-half of the
27 District guideline for workers in the areas), the sampling frequency can be reduced to 1-in-
28 12 days.

- 1 • If a result greater than 2 ppbv is reported for any of the 1-in-12 samples, the sampling
2 frequency will revert to 1-in-6 days for at least 7 rounds of sampling and then a return to 1-
3 in-12 day testing may be requested.

4 ***Discontinuation of Monitoring***

5 If the District, in its sole judgment, determines that fenceline monitoring at any or all sites
6 does not yield results that are relevant or useful (either due to the evolution or changes in reliability
7 of the technology, consistency or inconsistency in the data, or any other relevant reasons), the District
8 shall notify Sterigenics that it may cease such monitoring pursuant to this Plan.

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1 Appendix A – Figure 1. Fenceline Air Monitoring Locations (M1, M2, M3, M4).



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CERTIFICATE OF SERVICE

I hereby certify that on August 4, 2022, I emailed the *Proposed Findings and Decision for an Order for Abatement (Stipulated)* in Case No. 6225-1 to the Clerk of the South Coast AQMD Hearing Board with accompanying emailed service on the counsel for Respondent, Ms. Maya Grasse, at Maya.Grasse@alston.com. The Respondent in this case had agreed to accept emailed service of the petition and documents filed to the docket, as acknowledged by email sent on July 15, 2022 to the Clerk.

DATED: August 4, 2022

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

By: 

Josephine Lee
Attorney for Plaintiff