

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)
)
Cosmed of Illinois) **FINDING OF VIOLATION**
Waukegan, Illinois)
) **EPA-5-03-IL-05**
)
Proceedings Pursuant to)
the Clean Air Act,)
42 U.S.C. §§ 7401 et seq.)

FINDING OF VIOLATION

The United States Environmental Protection Agency finds that Cosmed of Illinois (Cosmed) is violating Section 112 of the Clean Air Act, 42 U.S.C. § 7412. Specifically, Cosmed is violating the National Emission Standards for Hazardous Air Pollutants (NESHAP), Ethylene Oxide Emissions Standards for Sterilization Facilities at 40 C.F.R. Part 63, Subpart O, as follows:

Regulatory Authority

1. The NESHAP General Provisions at 40 C.F.R. §§ 63.1 through 63.15 (Subpart A) apply to owners or operators who are subject to subsequent Subparts of Part 63.
2. Subpart A, at 40 C.F.R. § 63.6(e)(1)(i) requires owners or operators to, at all times, including periods of startup, shutdown, and malfunction, operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
3. The NESHAP for Ethylene Oxide Sterilization Facilities (Subpart O) at 40 C.F.R. § 63.362 applies to all sterilization or fumigation operations using at least one ton of ethylene oxide, except as specified in paragraphs (b) through (e) of 40 C.F.R. § 63.360.
4. Subpart O, at 40 C.F.R. § 63.362(d), requires each owner or operator of a sterilization source using 10 tons [of ethylene oxide] to reduce ethylene oxide emissions to the

atmosphere from each aeration room vent to a maximum concentration of 1 ppmv (part per million by volume) or by at least 99 percent, whichever is less stringent, from each aeration room vent.

5. Subpart O, at 40 C.F.R. § 63.363(b)(2)(ii) requires the owner or operator of a sterilization source, using acid-water scrubbers to control sterilization chamber vents, to establish a maximum liquor tank level as an operating limit.
6. Subpart O, at 40 C.F.R. § 63.363(f) requires a facility to demonstrate continuous compliance with each operating limit required in § 63.363.

Cosmed's Waukegan, Illinois Facility

7. Cosmed owns and operates an ethylene oxide sterilization facility with process operations located in Waukegan, Illinois.
8. Cosmed's Waukegan facility is subject to the requirements at 40 C.F.R. §§ 63.6(e)(1)(i), 63.362(d), and 63.363(b) and (f). Cosmed notified the Illinois Environmental Protection Agency on April 4, 1995, that sterilization operations at the Waukegan facility started up on May 29, 1994. Cosmed uses at least ten tons of ethylene oxide per year at the Waukegan facility.
9. Cosmed's Waukegan facility includes sterilization chambers vented to ethylene oxide emissions control equipment consisting of a two-stage acid-water scrubber.
10. Cosmed's Waukegan facility includes aeration rooms vented to ethylene oxide emissions control equipment consisting of two acid-water scrubbers.
11. Cosmed conducted performance testing of the two-stage scrubber controlling emissions from the sterilization chamber vents on March 22, 2000.
12. During the March 22, 2000, performance testing, Cosmed established a maximum liquor level of 73.5 inches as an operating limit at the first stage tank of the two-stage scrubber controlling emissions from the sterilization chamber vents.
13. Cosmed notified U.S. EPA on August 21, 2002, that, on May 15, 2002, Cosmed operated the two-stage scrubber controlling

the sterilization chamber vents with a liquor level of 74 inches at the first stage tank.

14. Cosmed conducted performance testing of one of the aeration room scrubbers (Scrubber 2) on September 13, 2002, and submitted the performance test results to U.S. EPA.

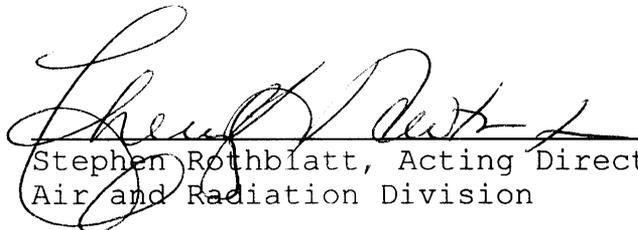
Violations

15. Cosmed was in violation of 40 C.F.R. § 63.363(f) at the two-stage scrubber controlling sterilization chamber vent emissions on May 15, 2001.
16. Cosmed is in violation of 40 C.F.R. § 63.362(d) at aeration room Scrubber 2 for failure to reduce ethylene oxide emissions to the atmosphere from each aeration room vent to a maximum concentration of 1 ppmv (part per million by volume) or by at least 99 percent, whichever is less stringent, from each aeration room vent, based on the following performance test results from the September 13, 2002, test:

| | <u>Scrubber 2 Outlet Concentration</u> | <u>Scrubber 2 Removal Efficiency</u> |
|------------|--|--|
| Test Run 1 | 1.86 ppmv | 98.74 percent |
| Test Run 2 | 2.34 ppmv | 97.83 percent |
| Test Run 3 | 3.06 ppmv | 97.90 percent |
| Average | 2.42 ppmv | 98.16 percent |

17. Cosmed is in violation of 40 C.F.R. § 63.6(e)(1)(i) for failure to operate and maintain aeration room Scrubber 2 in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards. [40 C.F.R. § 63.362(d)].

12/24/02
Date


Stephen Rothblatt, Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Notice of Violation, No. EPA-5-03-IL-04, and a Finding of Violation, No. EPA-5-03-IL-05, by Certified Mail, Return Receipt Requested, to:

Ms. Monica Figueroa
General Manager
Cosmed of Illinois
1160 Northpoint Boulevard
Waukegan, IL 60085

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

David Howe
Vice President of Operations
Cosmed Group, Inc.
8 Industrial Drive
Coventry, Rhode Island 02816

Julie Armitage, Section Manager
Compliance and Systems Management Section
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue
Springfield, Illinois 62702

on the 17th day of January, 2003.


Betty Williams, Secretary
AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0178 3691