UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
Chicago Specialties, LLC	)	**NOTICE OF VIOLATION**
Chicago, Illinois	)	
	)	**EPA-5-00-IL-24**
	)	
Proceedings Pursuant to	)	
Section 113(a)(1) of the	)	
Clean Air Act, 42 U.S.C.	)	
§ 7413(a)(1)	)	

NOTICE OF VIOLATION

The Administrator of the United States Environmental Protection Agency (U.S. EPA) is issuing this Notice of Violation pursuant to Section 113(a)(1) of the Clean Air Act (Act), 42 U.S.C. § 7413(a)(1). U.S. EPA finds that Chicago Specialties, Limited Liability Corporation (Chicago Specialties), is violating the Illinois State Implementation Plan (SIP), as follows:

Statutory and Regulatory Background

1. On March 23, 1998, U.S. EPA approved 35 Illinois Administrative Code (Ill. Admin. Code) Part 218, Subpart Q which contains rules for controlling volatile organic material (VOM) emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) reactor and distillation units. 63 Fed. Reg. 13784. The requirements of Part 218, Subpart Q, became effective on May 9, 1995. 19 Ill. Reg. 6848.

2. 35 Ill. Admin. Code §§ 218.431-36 applies to the vent streams of reactor or distillation units that are part of a chemical manufacturing process unit that manufactures, as a primary product, one or more of the chemicals listed in Appendix A of 35 Ill. Admin. Code Part 218.

3. The control requirements of 35 Ill. Admin. Code § 218.432 do not apply to: (1) any process vent stream with a total

resource effectiveness (TRE) index value greater than 1.0. However, such process vent stream remains subject to the performance testing requirements contained in 35 Ill. Admin. Code § 218.433 and the reporting and recordkeeping requirements contained in 35 Ill. Admin. Code § 218.435; (2) any reactor or distillation unit that is designed and operated as a batch operation; (3) Any reactor or distillation unit that is part of a polymer manufacturing operation; (4) Any reactor or distillation unit that is part of a chemical manufacturing process unit with a total design capacity of less than 1,100 tons per year for all chemicals produced, as a primary product; (5) any vent stream with a flow rate less than 0.0085 scm/min or a total VOM concentration of less than 500 ppmv, less methane and ethane, as measured by Method 18, or a concentration of VOM of less than 250 ppmv as measured by Method 25A. However, such operations remain subject to the performance testing requirement listed in 35 Ill. Admin. Code § 218.433 and the reporting and recordkeeping requirements in 35 Ill. Admin. Code § 218.435; or (6) any reactor or distillation unit included within an Early Reduction Program, as specified in 40 CFR 63, and published in 57 Fed. Reg. 61970 (December 29, 1992).

4. 35 Ill. Admin. Code § 218.432(b) requires that no owner or operator cause or allow VOM to be emitted through an existing control device unless the control device is operated to achieve 90 percent control of the VOM emissions vented to it or a VOM emission concentration of less than 50 ppmv on a dry basis.

5. 35 Ill. Admin. Code § 218.432(b) states that any existing control device subject to 218.432 is required to achieve 98 percent control of VOM emissions upon the earlier to occur of the date the control device is replaced for any reason, including, but not limited to, normal maintenance, malfunction, accident, and obsolescence, or December 31, 1999. A control device is considered replaced when, among other things, the cost to repair the device or the cost to replace part of the device exceeds 50 percent of the cost of replacing the entire device with a device that complies with the 98 percent emission limitation.

6. 35 Ill. Admin. Code § 218.433 requires that, for the purpose of demonstrating compliance with the TRE index value of greater than 1.0, an engineering assessment must be made to determine process vent stream flow rate, net heating value, and VOM emission rate for the representative operating conditions expected to yield the lowest TRE index value. The source must also calculate the TRE index values pursuant to the equations contained within Appendix G(b)(1) of 35 Ill. Admin. Code Part 218. An owner or operator may, in the alternative, elect to comply with the control requirements specified in 35 Ill. Admin. Code § 218.432 rather than perform the measurements in Appendix G (a).

7. 35 Ill. Admin. Code § 218.434 requires that an owner or operator using a vent system that contains bypass lines capable of diverting a vent stream away from the control device associated with a process vent must either install, calibrate, maintain and operate a flow indicator at the entrance to the bypass line that provides a record of vent stream flow at least once every 15 minutes, or the owner or operator shall secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration.

8. 35 Ill. Admin. Code § 218.435 states, among other things, that the owner or operator of a reactor or distillation unit with a TRE index value of 4.0 or less must maintain records of the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured at least every 15 minutes and averaged over the same time period of the performance testing.

9. 35 Ill. Admin. Code § 218.435(e) states that the owner or operator of a source claiming a vent stream flow rate or vent stream concentration exemption level, as contained in 35 Ill. Admin. Code § 218.431(b)(5), must maintain records to indicate that the stream flow rate is less than 0.0085 scm/min or the vent stream concentration is less than 500 ppmv.

10. 35 Ill. Admin. Code § 218.436 requires that sources subject to 35 Ill. Admin. Code §§ 218.431-35 must comply with their

standards, limitations, and mandates by March 15, 1996.

Chicago Specialties' Facility

11. Chicago Specialties owns and operates a manufacturing facility, located at 735 East 115th Street, Chicago, Illinois, used to make synthetic organic chemicals, including para-cresol. Chicago Specialties emits several organic hazardous air pollutants (HAPs), including but not limited to para-cresol, meta-cresol, ortho-cresol, xylene, and toluene. These organic HAPs are also volatile organic compounds (VOCs).

12. Chicago Specialties' para-cresol manufacturing process manufactures para-cresol as a primary product and has a production design capacity of greater than 1,100 tons per year of para-cresol. Para-cresol is one of the chemicals listed in Appendix A of 35 Ill. Admin. Code Part 218.

13. Chicago Specialties' springing and distillation units in the para-cresol manufacturing process are continuous reactor or distillation units that are subject to the VOM regulations for SOCMI processes in 35 Ill. Admin. Code §§ 218.431-218.436.

14. U.S. EPA issued Chicago Specialties information requests on February 3, 2000, and March 13, 2000. In response to these requests, Chicago Specialties provided information on, among other things, its reactor and distillation units that are part of the para-cresol manufacturing process and the costs associated with repairing and maintaining the afterburner used to control the para-cresol process. According to the information submitted by Chicago Specialties, as of December 28, 1998, the facility had spent approximately $ 184,808 to repair and maintain the afterburner. This is more than half of the cost of a new afterburner.

15. As of December 31, 1998, Chicago Specialties' paracresol afterburner was "replaced" as defined in 35 Ill. Admin. Code § 218.432, since the cost to repair the device or the cost to replace part of the device exceeds 50 percent of the cost of replacing the entire device. Since at least December 31, 1998, Chicago Specialties has been required to control VOM

emissions from its reactor and distillation unit process vents by 98 percent. Prior to December 31, 1998, Chicago Specialties was required to control VOM emissions from its reactor and distillation unit process vents by at least 90 percent.

16. For distillation process vents, V-202, V-205, V-206, and V-900, Chicago Specialties has elected to comply with the control requirements specified in 35 Ill. Admin. Code § 218.432 rather than performing the measurements in Appendix G (a).

Findings of Violation

17. Since at least December 31, 1998, Chicago Specialties has failed to control VOM emissions from distillation process vents V-202, V-205, V-206, V-900 by 98 percent at all times, as required by 35 Ill. Admin. Code § 218.432.

18. Prior to December 31, 1998, Chicago Specialties failed to control VOM emissions from distillation process vents V-202, V-205, V-206, V-900 by 90 percent at all times, as required by 35 Ill. Admin. Code § 218.432.

19. Chicago Specialties has failed to make an engineering assessment to determine process vent stream flow rate, net heating value, and VOM emission rate and to calculate the TRE index values pursuant to the equations contained within Appendix G (b)(1) of this Part for vents V-15B, V-17B, R-102, V-115G, and V-115H in the springing and distillation units, as required by 35 Ill. Admin. Code § 218.433.

20. Chicago Specialites has failed to install, calibrate, maintain and operate a flow indicator at the entrance to the bypass line to the control device or secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration, in violation of 35 Ill. Admin. Code § 218.434.

21. Chicago Specialties has failed to maintain records of the average firebox temperature of the afterburner, measured at least every 15 minutes and averaged over the same time

period of any performance testing, in violation of 35 Ill. Admin. Code § 218.435.

22. Chicago Specialties has failed to maintain records to indicate that the stream flow rate is less than 0.0085 scm/min or the vent stream concentration is less than 500 ppmv for each of the following vents in the springing and distillation units, in violation of 35 Ill. Admin. Code § 218.435(e): V-15B, V-17B, R-102, V-115G, and V-115H.

8/7/00
Date

Bharat Mathur, Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, do hereby certify that a Notice of violation, issued pursuant to the Clean Air Act, was sent by Certified Mail, Return Receipt Requested, to:

Richard Walker, Regulatory Manager
Chicago Specialties, LLC
735 East 115th Street
Chicago, Illinois 60628

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

David Asselmeier, Acting Manager
Compliance and Systems Management Section
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

Harish Narayen, Acting Manager
Region 1
Illinois Environmental Protection Agency

on the 7th day of August, 2000.

Betty Williams

Betty Williams, Secretary
AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 219026 434