



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 31 2006

REPLY TO THE ATTENTION OF

(AE-17J)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Richard Matus, HSE Manager
Hexion Specialty Chemicals Inc.
400 East Cottage Place
Carpentersville, Illinois 60110

Re: Notice of Violation and
Finding of Violation
Hexion Specialty Chemicals
Carpentersville, Illinois

Dear Mr. Matus:

The United States Environmental Protection Agency (U.S. EPA) is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Hexion Specialty Chemicals Inc. (Hexion). The NOV/FOV is being issued under Section 113(a)(1) and (a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (a)(3). We find that you are violating the terms of your Title V permit, Construction Permit, and the Illinois State Implementation Plan (SIP) at your Carpentersville, Illinois facility.

We have several enforcement options under Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3). These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action. The options we select may depend on, among other things, the length of time you take to achieve and demonstrate continuous compliance with the rules cited in the NOV/FOV.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you the opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The technical contact in this matter is Joseph Ulfig. You may call him at (312) 353-8205 to request a conference. You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely yours,



Stephen Rothblatt, Director
Air and Radiation Division

Enclosure

cc: Julie Armitage, Manager
Compliance and Systems Management Section
Illinois Environmental Protection Agency

**United States Environmental Protection Agency
Region 5**

IN THE MATTER OF:)	
)	NOTICE OF VIOLATION AND
Hexion Specialty Chemicals Inc.)	FINDING OF VIOLATION
Carpentersville, Illinois)	
)	EPA-5-06-14-IL
)	
Proceedings Pursuant to)	
the Clean Air Act,)	
42 U.S.C. §§ 7401 <u>et seq.</u>)	

NOTICE OF VIOLATION AND FINDING OF VIOLATION

The Administrator of the United States Environmental Protection Agency (U.S. EPA) is issuing this Notice of Violation and Finding of Violation under Section 113(a)(1) and (a)(3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1) and (a)(3). U.S. EPA finds that Hexion Specialty Chemicals Inc. (Hexion) in Carpentersville, Illinois, is violating its Title V Operating Permit, Construction Permit, and the Illinois State Implementation Plan (SIP) rules, as follows:

Regulatory Authority

1. Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of Title V of the CAA, or any rule promulgated, issued or approved under Title V of the CAA.
2. Title V of the Clean Air Act, 42 U.S.C. §§ 7661 et seq., established an operating permit program for major sources of air pollution. Section 502(d) of the Act, 42 U.S.C. § 7661a(d), provides that each state must submit to the Administrator of U.S. EPA a permit program meeting the requirements of Title V.
3. Pursuant to Section 502(b) of the Act, 42 U.S.C. § 7661a(b), the Administrator promulgated regulations, subsequently codified at 40 C.F.R. Part 70, providing for the establishment of Title V permitting programs.
4. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title

V of the CAA, no source subject to Title V may operate except in compliance with a Title V permit.

5. U.S. EPA promulgated interim approval to the Illinois Title V program on March 7, 1995 (60 Fed Reg. 12478), and the program became effective on that date. U.S. EPA granted final approval of the Illinois Title V program effective November 30, 2001 (See 40 C.F.R. Part 70, Appendix A).

6. On September 9, 1994, U.S. EPA approved 35 Illinois Administrative Code (IAC) Part 218, as part of the federally enforceable SIP for Illinois. 59 Fed. Reg. 46562. This Part contains standards and limitations for emissions of organic material and volatile organic material from stationary sources located in the Chicago area, which is comprised of Cook, DuPage, Kane, Lake, McHenry and Will Counties and Aux Sable Township and Goose Lake Township in Grundy County and Oswego Township in Kendall County.

7. 40 C.F.R. § 52.23 states that the failure of a person to comply with any approved regulatory provision of a SIP, or with any permit condition that is issued under an EPA-approved program that is incorporated into a SIP, shall subject that person to an enforcement action under Section 113 of the Act, 42 U.S.C. § 7413.

Hexion's Facility

8. Hexion owns and operates a specialty chemical manufacturing facility at Carpentersville, Illinois, in Kane County.

9. Hexion's specialty chemical manufacturing facility emits volatile organic material (VOM). Some of the VOM species are photochemically reactive.

10. Illinois Environmental Protection Agency (IEPA) issued a Title V permit [Application No.96030139] to the facility on March 3, 2000.

11. IEPA issued a construction permit [Application No. 01060049] to the facility on February 6, 2002, for the construction of a thermal incinerator.

12. Sections 7.5.5, 7.6.5, 7.16.5, 7.17.5, and 7.20.5 of Hexion's Title V permit contain the following control requirements:

- a. The Permittee of a single unit operation with an average flow rate, as determined in accordance with 35 IAC 218.502(b), below the flow rate value calculated by the applicability equations contained in 35 IAC 218.500(e), shall reduce uncontrolled VOM emissions from such single unit operation by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle [35 IAC 218.501(a)].

- b. The Permittee of a single unit operation with an average flow rate, as determined in accordance with 35 IAC 218.502(b)(2), below the flow rate value calculated by the applicability equations contained in 35 IAC 218.500(e), shall reduce uncontrolled VOM emissions from such single unit operation by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle.

14. Section 7.12.5 of Hexion's Title V permit states that the solvent recovery unit's (Unit 12) control requirements are that emission capture and control equipment achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit [35 IAC 218.986(a)].

15. Section 7.16.8(b)(ii) of Hexion's Title V permit states that facilities using a carbon absorber system to comply with 7.16.3(b) shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, the following equipment: a VOM monitoring device used to indicate the concentration level of VOM exiting such device based on a detection principle such as infrared, photoionization, or thermal conductivity, each equipped with a continuous recorder [35 IAC 218.504(e)].

16. Section 7.17.8(d)(ii) of Hexion's Title V permit states that the Permittee using a carbon absorber system to comply with 7.17.3(b) shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, the following equipment: a VOM monitoring device used to indicate the concentration level of VOM exiting such device based on a detection principle such as infra-red, photoionization, or thermal conductivity, each equipped with a continuous recorder [35 IAC 218.504(e)].

17. Condition 3 of Hexion's Construction Permit states that at all times, the Permittee shall to the extent practicable, maintain and operate the thermal oxidizer, in a manner consistent with good air pollution control practice for minimizing emissions.

18. Condition 8 of Hexion's Construction Permit states that if there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

19. 35 IAC 218.501 states that the control requirements for batch operations are the following:

- a) Every owner or operator of a single unit operation with an average flow rate, as determined in accordance with Section 218.502(b) of this Subpart, below the flow rate value calculated by the applicability equations contained in Section 218.500(e) of this Subpart, shall reduce

uncontrolled VOM emissions from such single unit operation by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle.

- b) Every owner or operator of a batch process train with an average flow rate, as determined in accordance with Section 218.502(b)(2) of this Subpart, below the flow rate value calculated by the applicability equations contained in Section 218.500(e) of this Subpart, shall reduce uncontrolled VOM emissions from such batch process train by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle

20. 35 IAC 218.504(e) states that to comply with the monitoring requirements for batch operations, owners or operators using carbon absorbers to comply with this Subpart shall install, calibrate, maintain, and operate, according to the manufacturer's specifications the following equipment:

- 1) An integrating regeneration steam flow monitoring device having an accuracy of ± 10 percent, and a carbon bed temperature monitoring device having an accuracy of ± 1 percent of the temperature being monitored expressed in degrees Celsius, both equipped with a continuous recorder; or
- 2) A VOM monitoring device used to indicate the concentration level of VOM exiting such device based on a detection principle such as infra-red, photoionization, or thermal conductivity, each equipped with a continuous recorder.

21. 35 IAC 218.505(c) states that to comply with the reporting and recordkeeping requirements for batch operations, owners or operators of a batch operation subject to the control requirements of Section 218.501 of this Subpart shall keep records of the following parameters required to be monitored under Section 218.504 of this Subpart:

- 1) If using a thermal or catalytic afterburner to comply with Section 218.501 of this Subpart, records indicating the average combustion chamber temperature of the afterburner (or the average temperature upstream and downstream of the catalyst bed for a catalytic afterburner), measured continuously and averaged over the same time period as the performance test;
- 3) If using any of the following as a control device, the following records:
 - D) As an alternative to subsection (c)(3)(A), (c)(3)(B), or (c)(3)(C) of this Section, at a minimum, records indicating

the concentration level or reading indicated by the VOM monitoring device at the outlet of the scrubber, condenser, or carbon adsorber, measured continuously and averaged over the same time period as the performance test (while the vent stream is routed normally).

22. 35 IAC 218.986(a) requires emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit subject to Subpart TT.

23. Performance testing for the Callidus thermal oxidizer was conducted by Hexion on October 23-24, 2002. Performance testing for the catalytic fume incinerator was conducted on June 2-3, 2004. The temperature at which compliance was demonstrated for the two control devices was 1650°F for the thermal oxidizer, and 800°F for the catalytic fume incinerator.

24. During the July 26, 2005, inspection, U.S. EPA learned that Hexion's carbon adsorber systems are monitored non-continuously, via measurements made by individuals using a photoionization detector (PID).

25. During the July 26, 2005, inspection, U.S. EPA observed in records provided by Hexion that the thermal oxidizer frequently operates at temperatures below 1650°F for appreciable periods of time during each batch operation.

26. During the July 26, 2005, inspection, U.S. EPA observed in records provided by Hexion that the catalytic fume incinerator frequently operates at temperatures below 800°F during each batch operation.

Violations

27. By operating its thermal oxidizer in a manner that frequently produces numerous and lengthy temperature deviations below 1650°F, the temperature Hexion used to demonstrate compliance with the control requirements for its latex product manufacturing area (Unit 16), alkyd resin production area (Unit 17), Hexion is in violation of Section 502(a) of the Act, 42 U.S.C. § 7661a(a), Sections 7.16.5 and 7.17.5 of its Title V Permit, Condition 3 of its Construction Permit [Application No. 01060049], and the State Implementation Plan at 35 IAC 218.501 .

28. By operating the catalytic fume incinerator in a manner that frequently produces numerous and lengthy temperature deviations below 800 °F, the temperature Hexion used to demonstrate compliance with the control requirements for its solvent mix tanks (Unit 5), polyester resin blend mix tanks (Unit 6), solvent recovery unit (Unit 12), and alkyd blend tanks (Unit 20), Hexion is in violation of Section 502(a) of the Act, 42 U.S.C. § 7661a(a), Sections 7.5.5, 7.6.5, 7.12.5, and 7.20.5 of its Title V Permit, , and the State Implementation Plan at 35 IAC 218.501 and 218.986(a).

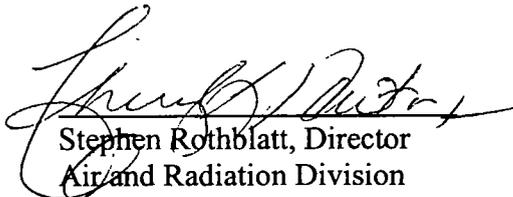
29. By failing to install, calibrate, maintain, and operate a VOM monitoring device equipped with a continuous monitor on its two carbon absorber systems used to comply with the control requirements for its latex product manufacturing area (Unit 16), alkyd resin production area (Unit 17), solvent mix tanks (Unit 5), polyester resin blend mix tanks (Unit 6), solvent recovery unit (Unit 12), and alkyd blend tanks (Unit 20), Hexion is violating Sections 7.16.8(b)(ii) and 7.17.8(d)(ii) of the facility's Title V permit, and the State Implementation Plan at 35 IAC 218.504(e).

30. By failing to report exceedances of the requirements of the facility's Construction Permit with a copy of the relevant records, and a description of the exceedance or violation, and efforts to reduce emissions and future occurrences, Hexion is in violation of Condition 8 of its Construction Permit [Application No. 01060049].

31. By failing to maintain records of the average combustion chamber temperature of the thermal oxidizer (or the average temperature upstream and downstream of the catalyst bed for the catalytic fume incinerator), measured continuously and averaged over the same time period as the performance test, and by failing to report these records in its Title V Semi-Annual Monitoring Reports, Hexion is in violation of 35 IAC 218.505(c)(1).

32. Hexion's violation of its Title V Permit, its Construction Permit, and the SIP constitutes a violation of section 502 of the CAA and 40 C.F.R. § 70.7(b).

3/31/06
Date


Stephen Rothblatt, Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, do hereby certify that a Notice of Violation and Finding of Violation of the Clean Air Act, No. EPA-5-06-14-IL, was sent by Certified Mail, Return Receipt Requested, to:

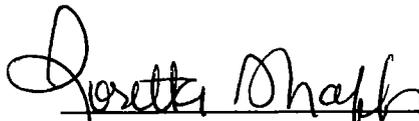
Richard Matus, HSE Manager
Hexion Specialty Chemicals Inc.
400 East Cottage Place
Carpentersville, Illinois 60110

I also certify that I sent copies of the Request for Information by first class mail to:

Julie Armitage, Manager
Compliance and Enforcement Section
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794

Harish Narayan, Acting Regional Manager
Region I
Illinois Environmental Protection Agency
9511 West Harrison Street
Des Plaines, IL 60016

on the 31ST day of March, 2006.



Betty Williams, Secretary
AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7099 3400 0000 9591 9423