

## STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



STATE OF CONNECTICUT	)		
AND	CONSENT	ORDER NO.	8268
CYRO INDUSTRIES	,		

## CONSENT ORDER

- A. With the agreement of CYRO Industries ("Respondent") the Commissioner of Environmental Protection ("Commissioner") finds the following:
  - 1. Respondent is a wholly owned subsidiary of Degussa Corporation that produces acrylic polymer materials at South Cherry Street in Wallingford, Connecticut ("facility").
  - 2. The Respondent has operated the facility since November 2005.
  - 3. At the facility, the Respondent operates the following processes:
    - A. Raw Material Storage Tanks/Vessels
    - B. Monomer Preparation
    - C. Polymer Production
    - D. Grafted Rubber Preparation
    - E. Solvent Recovery Operations
    - F. Dye Preparation
    - G. Post Color Operations
    - H. Equipment leaks and fugitive emissions
  - 4. Respondent formerly operated the facility as a joint venture with Cytec Industries. At that time Cytec Industries was responsible for environmental compliance assurance activities at the facility.
  - 5. Cytec Industries acquired the facility in 1994 from American Cyanamid Company.
  - 6. In or around 1986, American Cyanamid operated equipment at the facility that emitted greater than 100 tons of volatile organic compounds.
  - 7. Section 22a-174-20(ee) of the Regulations of Connecticut. State Agencies ("RCSA") required American Cyanamid to implement "Reasonably Available Control Technology" ("RACT") for volatile organic compound ("VOC") emissions. In accordance with Section 22a-174-20(ee) of the RCSA, the Department issued Order #8012, which specified RACT for VOC emissions from American Cyanamid's facility.

- 8. When Cytec Industries acquired the facility, it continued to operate the same emissions units that were subject to the RACT requirements of Order #8012. Similarly, the emissions units that are now operated by the Respondent were subject to the RACT requirements of Order #8012.
- 9. Pursuant to the memorandum entitled "Once-in/Always-in"
  Requirement for Applicability (dated August 23, 1990 and issued by the U.S. Environmental Protection Agency), once emissions from an emission unit exceed the applicability cutoff for a particular VOC regulation (e.g. Section 22a-174-20(ee) of the RCSA) that emission unit is always subject to the control requirements of the regulation.
- 10. The emissions units, which were formerly owned and operated by American Cyanamid, that are currently owned and operated by the Respondent, are subject to RACT for VOC emissions in accordance with Section 22a-174-20(ee) of the RCSA. However, the Respondent is not a party to Consent Order #8012 and is therefore not subject to the requirements of Consent Order #8012.
- 11. On November 18, 1993, Section 22a-174-20(ee) of the RCSA was amended to state that sources subject to RACT in accordance with Section 22a-174-20(ee) shall implement RACT pursuant to Section 22a-174-32 of the RCSA.
- 12. The Respondent must implement RACT for VOC emissions, in accordance with Section 22a-174-32 of the RCSA from those emission units that were formerly owned by American Cyanamid.
- 13. To ensure that the State of Connecticut maintains its progress towards attainment of the National Ambient Air Quality Standards for Ozone, the level of VOC emission control determined as RACT for the Respondent must be at least as stringent as the level of VOC emission control required of American Cyanamid.
- 14. In accordance with Subsection 22a-174-32(d) of the RCSA, the Respondent submitted a VOC RACT Compliance Plan describing its production processes, its emission units, the associated uncontrolled emissions and a proposal to use a VOC capture and recovery device, an activated carbon adsorption unit, to control emissions of VOC.

- B. The Commissioner, acting under Sections 22a-6, 22a-171, 22a-174, 22a-177, and 22a-178 of the Connecticut General Statutes, orders the Respondent as follows:
  - The Respondent shall not place, store, or hold in any stationary storage vessel with a capacity between 100 gallons and 10,000 gallons, any volatile organic compounds with a vapor pressure of 0.40 pounds per square inch or greater under actual storage conditions unless such vessel is either:
    - a. Equipped with a permanent submerged fill pipe with a discharge point eighteen inches or less from the bottom of the storage vessel, or
    - b. Equipped with a pressure/vacuum conservation vent to minimize evaporation of tank contents.
  - 2. The Respondent shall not place, store, or hold in any stationary storage vessel with a capacity equal to or greater than 10,000 gallons, any volatile organic compounds with a vapor pressure of 0.40 pounds per square inch or greater under actual storage conditions unless such vessel is either:
    - a. Equipped with a vapor recovery system that collects all volatile organic compound vapors and gases discharged from the tank and a vapor return or disposal system that is designed to process such vapors so as to reduce their emission to the atmosphere by at least 95% by weight.
    - b. Other equipment capable of achieving emissions reductions equivalent to those required in accordance with Paragraph B.2.a of this Consent Order
  - 3. At all times, the Respondent shall operate and maintain a VOC capture and recovery device or devices, which shall continually achieve, at least, an 85% reduction in uncontrolled emissions from the following processes:
    - a. Monomer Preparation
    - b. Polymer Production
    - c. Grafted Rubber Preparation
    - d. Solvent Recovery Operations
    - e. Dye Preparation
    - f. Post Color Operation

The Respondent shall not allow VOC emissions from the VOC capture and recovery device(s) to exceed 10% of the mass of VOC entering the control system.

4. Leak Detection and Repair (LDAR): Notwithstanding, the provisions of Paragraph 22a-174-20(x)(2) of the RCSA and Subparagraph 22a-174-20(x)(13)(A) of the RCSA, the Respondent shall perform LDAR activities in accordance with either Subsections 22a-174-20(x)(3) - 22a-174-20(x)(13)(F) of the RCSA or applicable LDAR standards set forth in Parts 61 or 63 of Title 40 of the Code of Federal Regulations; whichever is more stringent.

- 5. Operations and Maintenance Plan: Within ninety (90) days after the issuance of this consent order, the Respondent shall submit, for the Commissioner's review and written approval, an Operations and Maintenance Plan for the equipment required in Paragraph B.2 of this consent order and the VOC capture and recovery devices required in Paragraph B.3 of this consent order. Such plan shall include, but not be limited to the following: Operating procedures, parameters to be monitored to indicate compliance with the requirements of Paragraphs B.2 and B.3 of this Consent Order, acceptable ranges of values for the parameters to be monitored, the monitoring frequency, a description of the schedule of adsorption media regeneration or solvent recovery cycles, a schedule of periodic maintenance events, and operator training. The Respondent shall operate and maintain the VOC capture and recovery devices required in Paragraphs B.2 and B.3 in accordance with the approved Operations and Maintenance Plan and Paragraphs B.2 and B.3 of this Consent Order. Prior to implementing any change to the Operations and Maintenance Plan that may increase emissions or reduce the overall control efficiency of the devices required in Paragraphs B.2 and B.3, the Respondent shall submit such changes to the Commissioner and the US EPA, in writing, and obtain written approval from both the Commissioner and the US EPA.
- Emissions Calculation Methodology: Within ninety (90) days 6. after the date of issuance of this Consent Order, the Respondent shall submit a detailed emission calculation document which shall describe the methods used to calculate actual emissions from all the VOC-Emitting processes operated at the facility. The emissions calculation document shall be subject to the review and written approval of the Commissioner. The document shall provide references for any emissions models used, the data inputs for any such model, a listing of emissions factors used, and the sources of any emissions factors used. The Respondent shall calculate and record emissions in accordance with the emissions calculation document approved by the Commissioner and the US EPA. The Respondent shall not alter the method of calculating emissions until the Respondent submits the alteration to the Commissioner and the US EPA, in writing, and obtains the Commissioner's and the US EPA's approval of the alteration in writing.
- 7. Record Keeping and Reporting. The Respondent shall make and keep records of the following:
  - A. All manufacturer's literature, operating manuals, and warranty information pertaining to VOC capture and recovery device(s),
  - B. Material Safety Data Sheets for all raw materials that result in the emission of Volatile Organic Compounds

- C. A log of all maintenance and repair events performed on VOC capture and recovery devices specified in Paragraphs B.2 and B.3, which shall include: a description of the event, the date the event occurred, and a list of parts repaired and or replaced during the event.
- D. In accordance with the frequency specified in the Operations and Maintenance Plan that is approved in accordance with Paragraph B.5 of this Consent Order, the Respondent shall record all control device operating parameters specified in the Operations and Maintenance Plan.
- E. All periods of operations during which the control device operating parameters deviate from the acceptable ranges in the Respondents' approved Operations and Maintenance plan while the processes described in Paragraph A.3 are operating.
- F. Control device operating hours, including date and time. Such records shall also distinguish between periods of solvent adsorption and adsorption media regeneration.
- G. An up-to-date diagram of the facility indicating the emission units that are directly controlled by "the VOC capture and recovery devices specified in Paragraphs B.2 and B.3.
- H. For the purposes of determining actual monthly and annual emissions of VOC from this facility, the monthly quantity of each virgin, VOC-containing raw material and the monthly quantity of each recycled/recovered raw material added to the processes described in Paragraph B.3
- I. The Respondent shall make and keep records of LDAR activities in accordance with the LDAR provisions prescribed in Paragraph B.4 of this order.
- J. On or before the 15<sup>th</sup> day of each month, for each of the processes described in Paragraph B.3 of this consent order, the Respondent shall calculate and record the following:
  - total emissions of VOC discharged during the previous calendar month,
  - ii. the total emissions of VOC discharged during the period of twelve-consecutive months ending with the previous month.

The Respondent shall maintain all records required by this consent order for a period of no less than 5 years from the date of recording and shall make such records available to the Commissioner or the US EPA upon request.

- 8. Emissions testing. The Respondent shall perform stack emissions testing to evaluate the performance of the VOC capture and recovery device(s) required pursuant to Paragraph B.3 of this Consent Order in accordance with Section 22a-174-5 of the RCSA and the following:
  - Within 180 days of the date of issuance of this consent order, the Respondent shall submit an Intent-to-Test (ITT) package consisting of an ITT form (Form AE404) and a test protocol describing the performance of emissions testing to evaluate the performance of the VOC capture and recovery device(s) to ensure compliance with Paragraph B.3. The test protocol shall be consistent with the Bureau's Emission Source Test Guideline specifying the test methodology to be followed and the conditions under which the facility and VOC capture and recovery device(s) will be operated. The protocol shall provide a detailed analysis of the product types and corresponding production rates that result in the maximum hourly VOC emissions from the processes described in Paragraph B.3. Emissions testing shall be performed using products and production rates that correspond to no less than 90% of the maximum hourly VOC emissions from each process. All proposed test methods must comply with appropriate Federal test methods or other methods acceptable to the Commissioner and the US EPA. The ITT package must demonstrate compliance with applicable requirements of the Code of Federal Regulations (CFR) Title 40 Parts 51, 60 and 61. Bureau and the US EPA must approve any proposed test methods that deviate from those specified in these regulations prior to stack testing. All sampling ports shall be installed and located in compliance with 40 CFR Part 60 Appendix A, Method 1. Final plans showing the location of all sampling ports shall be submitted with the ITT package.
  - b. The Respondent shall respond to any inquiry or notice of deficiency from the Commissioner or her agent regarding the ITT package within thirty (30) days of the Respondent's receipt of said notice.
  - c. Not more than ninety (90) days after receiving the approval of the Commissioner or her designee regarding the ITT package, the Respondent shall complete emissions testing in accordance with the approved ITT package. The Respondent shall contact the Bureau of Air Management's Source Monitoring Group to schedule a date and time that would allow the Commissioner or her designee to witness the emissions tests.
  - d. Not more than sixty (60) days after the completion of the emissions tests, the Respondent shall submit a written report providing the results of the emissions tests.

- e. Respondent shall respond to any inquiry or notice of deficiency from the Commissioner or her agent regarding the report within fifteen (15) days of the Respondent's receipt of said notice.
- f. Respondent shall repeat emissions testing, such that no less than two programs of emissions testing are performed during each span of five consecutive calendar years from the date of the initial test performed in accordance with this order. The Respondent shall allow, at least, 730 days between the conduct of each program of emissions tests. At least 120 days prior to the anticipated due date of the test, the Respondent shall submit an ITT package that conforms to the requirements of Subparagraph B.5.a. Regarding the performance of repeat emission testing, the Respondent shall act in accordance with Subparagraphs B.5.b-B.5.e of this consent order with respect to the submission of each ITT Package pursuant to this subparagraph.
- 9. Replacement of the VOC capture and recovery device(s): The Respondent shall notify the Department in writing of plans to replace VOC capture and recovery device(s) not less than 180 days prior to the date planned for the replacement, unless such replacement is due to a catastrophic failure or the control system is destroyed by some act other than negligent operation. The replacement shall not occur unless the Respondent demonstrates, to the Commissioner's satisfaction, that the design of the replacement system should result in emissions reductions that are at least equivalent to the requirements of Paragraphs B.3 of this consent order.
- 10. Emission Control and/or Monitoring System Malfunctions: In the event of a malfunction of the VOC capture and recovery device(s) or any associated parametric monitoring systems, the Respondent shall comply with the provisions of Section 22a-174-7 of the RCSA.
- 11. Full Compliance. Respondent shall not be considered in full compliance with this Consent Order until all actions required by this Consent Order have been completed as approved and to the Commissioner's satisfaction.

- 12. Approvals. Respondent shall use best efforts to submit to the Commissioner all documents required by this Consent Order in a complete and approvable form. If the Commissioner notifies Respondent that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondent shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within 30 days of the Commissioner's notice of deficiencies. In approving any document or other action under this Consent Order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this Consent Order. Nothing in this paragraph shall excuse noncompliance or delay.
- 13. Definitions. As used in this Consent Order, "Commissioner" means the Commissioner or a representative of the Commissioner. The date of "issuance" of this Consent Order is the date the Consent Order is deposited in the U.S. mail or personally delivered, whichever is earlier.
- 14. Dates. The date of submission to the Commissioner of any document required by this Consent Order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this Consent Order, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this Consent Order, the word "day" as used in this Consent Order means calendar day. Any document or action which is required by this Consent Order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday or Connecticut or federal holiday.
- 15. Certification of documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this Consent Order shall be signed by Respondent or, if Respondent is not an individual, by Respondent's chief executive officer or a duly authorized representative of such officer, as those terms are defined in §22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual(s) responsible for actually preparing such document, and Respondent or Respondent's chief executive officer and each such individual shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense

under §53a-157b of the Connecticut General Statutes and any other applicable law."

- 16. Noncompliance. This Consent Order is a final order of the Commissioner with respect to the matters addressed herein, and is nonappealable and immediately enforceable. Failure to comply with this Consent Order may subject Respondent to an injunction and penalties.
- 17. False statements. Any false statement in any information submitted pursuant to this Consent Order is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.
- 18. Notice of transfer; liability of Respondent. Until Respondent has fully complied with this Consent Order, Respondent shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Consent Order or after obtaining a new mailing or location address. Respondent's obligations under this Consent Order shall not be affected by the passage of title to any property to any other person or municipality.
- 19. Commissioner's powers. Nothing in this Consent Order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this Consent Order have not successfully corrected all violations, fully characterized the extent or degree of any pollution, or successfully abated or prevented pollution, the Commissioner may institute any proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution.
- 20. Respondent's obligations under law. Nothing in this Consent Order shall relieve Respondent of other obligations under applicable federal, state and local law.
- 21. No assurance by Commissioner. No provision of this Consent Order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondent pursuant to this Consent Order will result in compliance or abate pollution.
- 22. Access to facility. Any representative of the Department of Environmental Protection and the Environmental Protection Agency may enter the facility without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Consent Order.

23. No effect on rights of other persons. This Consent Order neither creates nor affects any rights of persons or municipalities that are not parties to this Consent Order.

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- 24. Notice to Commissioner of changes. Within 15 days of the date Respondent becomes aware of a change in any information submitted to the Commissioner under this Consent Order, or that any such information was inaccurate or misleading or that any relevant information was omitted, Respondent shall submit the correct or omitted information to the Commissioner.
- 25. Notification of noncompliance. In the event that Respondent becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Consent Order or of any document required hereunder, Respondent shall immediately notify by telephone the individual identified in the next paragraph and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, Respondent shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and Respondent shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondent shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing. Any written approval of noncompliance by the Commissioner pursuant to the terms of this order shall operate solely as a matter of state law.
- 26. Submission of documents. Any document required to be submitted to the Commissioner under this Consent Order shall, unless otherwise specified in this Consent Order or in writing by the Commissioner, be directed to:

Supervisor
Department of Environmental Protection
BUREAU OF AIR MANAGEMENT
Compliance Analysis Coordination Unit
79 Elm Street
Hartford, Connecticut 06106-5127

Respondent consents to the issuance of this Consent Order without further notice. The undersigned certifies that he/she is fully authorized to enter into this Consent Order and to legally bind the Respondent to the terms and conditions of the Consent Order.

CYRO Industries

DV.

- Emellen

(Print Name)

(Print Name)

PLANT MANAGER

(Title)

2-5-07

Date

Issued as a final order of the Commissioner of Environmental Protection.

ina McCarthy

Commissioner

Date

TOWN OF WALLINGFORD LAND RECORD

MAILED CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Certified Document Number: 7005 3110 0001 2315 1468