



**STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



In the matter of )  
 )  
 The State of Connecticut and ) Trading Agreement  
 ) and Order No. 8114A  
 ) Modification I  
 Cytec Industries, Inc. )

Whereas, the Commissioner of Environmental Protection ("Commissioner") and Cytec Industries, Inc ("Cytec") having agreed to the terms and conditions set forth in Trading Agreement and Order 8114A issued on April 24, 2003, do now, by mutual agreement, modify said Trading Agreement and Order as follows:

1. Delete the date April 30, 2007, and substitute therefor the date May 1, 2009, in paragraphs A.6., C.1., C.2., C.8., and C.15.
2. Delete paragraph A.3. and substitute the following therefor:

At the facility, Cytec operates equipment that consists of boilers 1 and 3, one hot oil furnace, and one spray dryer, ("units") which are subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies ("Regulations").

3. Delete paragraph A.4. and substitute the following therefor:

Official U.S. Environmental Protection Agency ("EPA") Method 7 stack tests performed on the dates specified in Table 1, resulted in NOx emissions rates as follows:

Table 1 Cytec - NOx Test rates, FLERs and Allowable Rates in Lbs/MMBtu							
Unit Registration (R) or Permit (P) No.	Fuel	Heat Input MMBtu/hr	Emission Test Rate	FLER (credit or debit)	Allowable Limits	Stack Test Date	Next Test Due
Boiler 1 R-108	No. 6 oil	80	0.39	0.39	0.25	2/2/05	2/2/10
	Nat. Gas	80	0.07	0.09	0.20	1/31/05	1/31/10
Boiler 3 R-110	No. 6 oil	89	0.29	0.30	0.25	11/29/06	11/29/11
	Nat. Gas	89	0.17	N/A	0.20	1/31/05	1/31/10
Hot Oil Furnace P-9	No. 2 oil	11	0.08	0.16	0.20	2/1/05	2/1/10
	Nat. Gas	11	0.08	0.11	0.20	5/27/05	5/27/10
Spray Dryer R-173	No. 2 oil	10	0.17	0.17	0.25	2/2/05	2/2/10
	Nat. Gas	10	0.05	0.13	0.19	5/26/05	5/26/10

4. Delete paragraph A.9. including table 2, in its entirety.

5. Delete paragraph C.1.c. and substitute the following therefor:

Cytec shall comply during the operation of the units with the FLERs shown in Table 1 of this Trading Agreement and Order.

6. Delete paragraph C.9. and substitute the following therefor:

Document that sufficient approved DERCs are available for the units no later than the first of each calendar month to assure compliance for, at a minimum, that calendar month. DERCs required shall be adjusted upwards by 100% if DERCs are not in Cytec's possession for use prior to the first day of each month. However, nothing in this Trading Agreement and Order shall affect the Commissioner's authority to institute any proceeding or take any other action to require additional upward adjustment, based on the gravity of any alleged noncompliance or violation of law. Cytec shall permanently retire the quantity of DERCs equivalent to the excess emissions plus a 100% premium within sixty (60) days of Cytec's discovery of the DERC shortfall. Cytec shall certify and report any such DERC retirement to the Commissioner in accordance with paragraph C.20. of this Trading Agreement and Order.

7. Delete paragraph C.2.ii. and substitute the following therefor:

Total Monthly Averaging Debits ("MADs") generated from boilers 1 and 3 when burning No. 6 oil with emission rates in excess of allowable limits in the Averaging Set shall be the sum of the MADs during that month calculated for each unit in the Averaging Set as follows:

$$\text{MADs (tons)} = [\text{heat input in MMBtu} \times ((0.85 \times \text{allowable limit in lbs/MMBtu}) - \text{Debit FLER in lbs/MMBtu})] \div 2000 \text{ lbs/ton.}$$

8. Delete paragraph C.3.a. and substitute the following therefor:

For the hot oil furnace and spray dryer heat inputs, Cytec shall multiply the rated capacity in MMBtu/hour by the hours of operation. For boilers 1, and 3, Cytec shall calculate the total monthly heat input by allocating the overall fuel use by the individual steam production from each boiler.

9. Delete paragraph C.5. and substitute the following therefor:

Cytec shall make and keep records of: hours of operation for the hot oil furnace and spray dryer; heat input for boilers 1 and 3; and NOx emissions for each unit in the averaging set on a monthly basis in accordance with paragraph C.2., and will maintain records of the averaging credits and debits generated for emission averaging purposes on a monthly basis including fuel type; excess NOx emissions; the number of DERCS in its possession, created, purchased and used (by serial number if assigned) each month in accordance with the appropriate emission rates and limits in this Trading Agreement and Order; the number of DERCS used during the ozone season and non-ozone season (the remainder of the year); as well as documentation attesting to the fact that approved DERCS used during the ozone season were generated during the ozone season. Generator certification of this fact shall be sufficient. Cytec shall maintain and submit such records to the Commissioner in accordance with Section 22a-174-22 of the Regulations.

10. Delete paragraph C.11. and substitute the following therefor:

FLER Exceedance. Noncompliance with an established FLER shall subject Cytec to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCS shall be equal to the FLER exceedance in lbs/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Commissioner witnessed emission test through the date the FLER compliance is achieved as approved by the Commissioner shall be used. However, nothing in this Trading Agreement and Order shall affect the Commissioner's authority to institute any proceeding or take any other action to require additional upward adjustment, based on the gravity of any alleged noncompliance or violation of law. Cytec shall permanently retire DERCS calculated in accordance with the above plus a 100% premium within sixty (60) days of ALC's discovery of the FLER exceedance. Cytec shall report any FLER exceedance to the Commissioner in accordance with paragraph C.31. of this Trading Agreement and Order.

11. Delete paragraph C.14. and substitute the following therefor:

Extension. No later than May 1, 2009, with respect to the units, Cytec shall comply with the requirements of Sections 22a-174-22(d)(1) and 22a-174-22(d)(2)(A) of the Regulations and amendments thereto. There is no assurance that after full program review of this and other Trading Agreements and Orders that the Commissioner will grant a written extension of this Trading Agreement and Order.

12. Delete the date September 1, 2006, and substitute therefor the date September 1, 2008 in paragraph C.15.
13. Delete the word "individual" and substitute therefor the word "section" in paragraph C.31.
14. Delete the name "Mr. Roland L. Severance Jr., PE" in paragraph C.32.

All other terms and conditions of Trading Agreement and Order No. 8114A issued by the Commissioner acting under Chapter 446c, Sections 22a-6, 22a-171, 22a-174, 22a-176, and 22a-177 of the Connecticut General Statutes shall remain in effect.

Cytec hereby consents to the entry of this modification to the Trading Agreement and Order without further notice.

Cytec Industries, Inc.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



LARRY STAUFFER

DIRECTOR MANUFACTURING

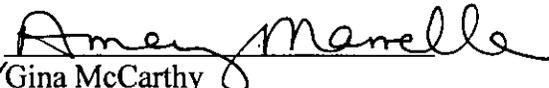
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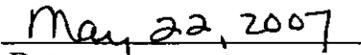
Cytec Industries, Inc.

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Trading Agreement  
and Order No. 8114A  
Modification 1

Issued as a modification of an Order of the Commissioner of Environmental Protection

  
f/Gina McCarthy  
Commissioner

  
Date

CITY OF WALLINGFORD LAND RECORDS  
MAILED CERTIFIED MAIL,  
RETURN RECEIPT REQUESTED

Certified Document No.

**CONFIDENTIAL: ENFORCEMENT STRATEGY**

This document contains tentative conclusions and recommendations and does not create any defenses or rights, substantive or procedural.

**To:** Robert Girard, Assistant Director of Engineering and Enforcement

**From:** Michael LaFleur, APCE III

**Subj:** Proposed Trading Agreement and Order No. 8114A Mod 1

**Date:** 5/14/07

**Source:** Cytec Industries, Inc.

**Nature of Problem or Violation:** Trading Agreement and Order 8114A expires on May 1, 2007. The order needs to be extended until May 1, 2009 as the facility is still using NOx Trading as a compliance option. Boiler #3 is rated at 70,000 lbs of steam/hr. On May 25, 2005 the boiler was tested for NOx and operated at 53,655 lbs steam/hr, roughly 76% of the boiler's maximum rated capacity (MRC). It was retested on 11/29/06 and was able to achieve over 90% of MRC (63,067 lbs steam/hr). The earlier draft, signed by management and sent out to Cytec, included a capping provision because it was erroneously concluded that the company did not achieve 90 % MRC during the 2<sup>nd</sup> test. The units of heat input in MMBtu/hr were inadvertently replaced with steam flow (lbs/hr), which resulted in the confusion. Therefore, the capping provision has been removed. Included in this package is an e-mail from Cytec indicating the correct MRC in lbs/hr and a copy of the results of the 2<sup>nd</sup> test. A NOV will be drafted with no response required; for failing to achieve 90% during the first test.

**Date of Discovery:** NA

**Action Proposed:** Extend Order to May 1, 2009.

**Justification for Proposed Action:** Section 22a-174-22 of the Regulations of Connecticut State Agencies (RCSA) allows a source to use NOx DERCs for purposes of compliance with section 22a-174-22 of the RSCA.

**Relief Sought:** N/A

**Consultation with Water and Waste Bureaus:** On 1/30/07, Email messages were sent to representatives of the Waste and Water Bureaus to facilitate a compliance check. On 1/31/07 Tom Burke replied stating that WEED had issued NOV WSWDH06085 to Cytec on 10/19/06 for discrepancies in their financial assurance documentation. The NOV was closed on 12/7/06 and should be of no consequence to this action. On 2/2/07 Marla Butts of the IWRD stated that they had no issues with Cytec. Will Oros of Water Permitting and Enforcement sent a reply on 3/8/07 stating that he did not have any outstanding issues with Cytec.

**Anticipated Controversy:** None