



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

**Evonik CYRO LLC
York County
Sanford, Maine
A-393-71-W-A (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #2**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Evonik CYRO LLC (CYRO) located in Sanford, Maine was issued Air Emission License A-393-71-T-R on June 9, 2003 permitting the operation of emission sources associated with their acrylic sheet manufacturing facility. Their license was subsequently amended on March 4, 2004 (A-393-71-U-M).
2. CYRO has requested an amendment to their license in order to address emissions from a new lamination process and emissions from ink jet printers.

B. Application Classification

This amendment will not increase permitted emissions of any pollutant. Therefore, this modification is determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005).

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BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Lamination Process

CYRO has proposed installing equipment which uses methylene chloride to adhere film to their acrylic sheet. Customers have specified the use of methylene chloride for this application. Emissions are estimated to peak at approximately 2.7 ton/year. CYRO has not requested an increase in their facility wide HAP emission limit.

Currently no economically feasible controls exist for this process. CYRO will re-evaluate control options for this equipment annually and submit a report to the Department regarding the availability of controls.

C. Ink Jet Printers

CYRO is planning to install ink jet printers on up to 5 lines in the acrylic sheet hall. These printers will mark the sheets with product specific information. Methyl ethyl ketone (MEK) based ink was chosen due to its performance characteristics and that it has been used successfully at another facility. Maximum potential emissions from this process is calculated to be two pounds per week and 0.26 ton per year. Therefore, this equipment has been determined to be an insignificant activity and is noted for informational purposes only.

D. Annual Emissions

CYRO shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	Single HAP	Total HAP
Boilers #1 & #2	34.5	34.5	-	86.3	5.8	0.3	-	-
Hot Oil Heater	5.6	5.6	-	8.4	1.0	0.1	-	-
Propane Oven	0.2	0.2	-	0.7	0.1	0.1	-	-
Diesels	0.1	0.1	-	3.5	0.8	0.3	-	-
Process & Fugitive	-	-	-	-	-	49.1	9.99	24.9
Total TPY	40.4	40.4	99.9*	98.9	7.7	49.9*	9.99*	24.9*

*CYRO has accepted federally enforceable facility wide limits for SO₂, VOC and HAPS. Emissions from each specific unit may vary.

III. AMBIENT AIR QUALITY ANALYSIS

CYRO previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this renewal.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-393-71-W-A subject to the conditions found in Air Emission License A-393-71-T-R, in amendment A-393-71-U-M, and in the following conditions.

Evonik CYRO LLC
York County
Sanford, Maine
A-393-71-W-A

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Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

The following are New Conditions:

(37) **Lamination Process**

- A. CYRO shall use best management practices to minimize emissions of methylene chloride from the Lamination Process. CYRO shall submit a report to the Department by November 30, 2009 and annually thereafter on the availability of control of methylene chloride emissions from the Lamination Process. [06-096 CMR 115, BACT]
- B. CYRO shall keep monthly records of methylene chloride emissions and provide them to the department upon request. [06-096 CMR 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS *27th* DAY OF *October*, 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *James P. Little*

DAVID P. LITTELY, COMMISSIONER

The term of this license shall be concurrent with A-393-71-T-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/23/08

Date of application acceptance: 9/24/08

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.

