



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

Southeast Region

Lakeville Hospital, Lakeville, Massachusetts 02347

Daniel S. Greenbaum
Commissioner

Gilbert T. Joly
Regional Director



August 1, 1989

COPY

Duro Textile Printers, Inc.
206 Globe Mills Avenue
Fall River, Massachusetts 02724

RE: SMAPCD--FALL RIVER--310 CMR 7.18
(17) Reasonably Available Control
Technology (RACT), Duro Textile
Printers, Inc., 206 Globe Mills
Avenue. Source No 224. Action
V-6, Amended Conditional Plan
Approval SM-85-168-IF

ATTENTION: Nicholas T. Santore

Gentlemen:

The Department of Environmental Protection, Division of Air Quality Control (Department) has reviewed comments received as a result of the public hearing held on March 18, 1986, with respect to Duro Textile Printers, Inc.'s (Duro) plan to achieve Reasonably Available Control Technology (RACT) pursuant to Department regulation 310 CMR 7.18(17).

As a result of comments received and review of Department files, the Department proposes to amend your approval by adding the following informational paragraphs and revised approval provisions.

Duro Textile Printers, on source registration forms submitted to the Department, reported volatile organic compounds (VOC) emissions to the ambient air for the 1980 calendar year as 148.5 tons. The VOC was exclusively mineral spirits, used only in inks for the fabric printing operation. The fabric printing operation consisted of roller printers and rotary screen printers. The 1980 calendar year VOC emissions (148.5 tons) were considered to be the "VOC baseline" against which reductions would be measured. As the VOC emissions from the printing operation are currently capped at 39 tons per year, the minimum reduction achieved is 74 percent, although the actual reduction may be much greater.

At the time of the Duro's RACT Plan submittal, Duro's VOC emissions, as reported on Source Registration forms submitted annually to the Department, and as described to Department personnel, consisted only of mineral spirits used in the dilution of print pastes. Since that time, Duro has disclosed that VOC-containing materials are used in the following rotary screen printing-related operations:

- a. Cold Cleaning - Rotary screens are periodically cleaned with VOC-containing solution.
- b. Ink Pastes - Ink pastes themselves contain some VOC as received from the manufacturer.
- c. Paste Diluent/Dispersant - Mineral Spirits are used to dilute and disperse ink pigments.

The "roller" printing lines have been shut down since April 1984, and have subsequently been removed. The operation has been completely replaced by the rotary screen printing operation.

Duro uses mineral spirits with a density of 6.6 pounds per gallon (100% VOC). On a daily basis, Duro must log the usage (pounds) of mineral spirits and other VOC-containing materials used in the fabric printing operations specified herein. VOC emissions (pounds) are calculated by multiplying the gallons of VOC-containing materials used, by their respective VOC contents (pounds/gallon).

For continuity, the entire provision section of the April 30, 1985 Plan Approval is rewritten here.

1. Duro Textile Printers, Inc., shall limit VOC usage and emissions from the fabric printing operations as follows:
 - a. Annual VOC emissions from the rotary screen printing operation, described herein as including inks, diluent/dispersants, and print-related cleaning, shall not exceed 39 tons per year.
 - b. Daily usage and emissions of VOC from all VOC-containing materials shall not, in total, exceed 312 pounds per day (0.156 tons).
 - c. Duro Textile Printers, Inc. shall use inks (print pastes) with a VOC content, as applied to the substrate, at or below 0.5 pounds of VOC per pound of solids. Water and EPA-excluded nonreactive organic materials are excluded from this calculation. Further, use of any new ink must not result in emissions in excess of 0.5 pounds of VOC per pound of solids, as applied to the substrate.
2. Duro Textile Printers shall maintain a VOC formulation (as applied to the substrate) and usage log for VOC-containing materials as exemplified below. Formulation records must include the formulation ID and, on an as applied basis, solids per gallon, VOC/solid ratio, VOC% and pounds VOC per day and year-to-date total VOC emissions. In addition, for each rotary screen printer, a daily record shall be kept of the specific ink(s) applied on that day.

DAILY RECORD

1	2	3	4	5	6	7	8
<u>Item ID</u> <u>& USAGE</u>	<u>Amt. Used</u> <u>GAL</u>	<u>lbs. VOC/GAL</u>	<u>lbs. SLD/GAL</u>	<u>lb. VOC/lb. SLD</u>	<u>VOC%</u>	<u>lb. VOC</u> <u>/day</u>	<u>Y-T-D</u> <u>lbs</u>

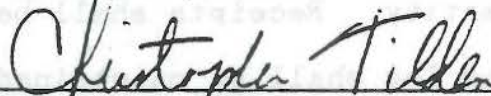
- (1) Date - shall be the date the item is used and emitted.
 - (2) I.D. - shall be the material identification from Table 1 or Table 2.
 - (3) Category - shall be ink, or screen cleaning.
 - (4) Amount - shall be the amount used and emitted (that day).
 - (5) Daily VOC - shall be the VOC in that item used and emitted that day.
 - (6) Y-T-D VOC - shall be a running total of the VOC emitted.
3. VOC emissions, calculated in the above table shall be checked against a second mass balance emission calculation for VOC-containing materials, consisting of, beginning-of-year inventory quantity, plus receipts, minus end-of-year inventory quantity. Receipts shall be updated monthly.
 4. This log shall be maintained on site, readily available to Department and EPA personnel upon request. As such, formulation records must be retained at Duro Textile Printers, Inc. for a period no less than three years.
 5. Duro Textile Printers, Inc. shall submit on a quarterly basis until further notice, data to demonstrate compliance with proviso 1., above. These quarterly reports are due on the fifteenth day of the month following the end of the quarter. A day is defined as the twenty-four hour period from midnight to midnight of the following day.
 6. Duro Textile Printers, Inc., shall maintain the information required above, at Duro Textile Printers, Inc., for a minimum of three years and shall submit to this office on a quarterly basis until further notice, data to demonstrate compliance with provisos 2 and 3 above. These quarterly reports are due on the fifteenth day of the month following the end of the quarter. A day is defined as the twenty-four hour period from midnight to midnight the following day.
 7. Duro Textile Printers, Inc. shall, upon request, obtain and provide to the Department a statement from each VOC-containing material supplier which specifies the gallons of that material purchased within the calendar year.
 8. Duro Textile Printers, Inc. shall be in compliance with 310 CMR 7.18(17) RACT by December 31, 1983 or submit a plan by December 31, 1982 describing how compliance will be achieved by a date no later than December 31, 1986.

9. Duro Textile Printers, Inc., following completion of the EPA/GCA RACT study, shall submit a complete RACT plan by November 7, 1984.
10. Duro Textile Printers, Inc. shall achieve compliance with 310 CMR 7.18(17) RACT by a date no later than December 31, 1986.

This is an amended Conditional Plan Approval. This amended Conditional Plan Approval is effective immediately and supercedes the Conditional Plan Approval as issued April 30, 1985. Violation of this Approval constitutes violation of Department regulations contained in 310 CMR 7.00 et. seq.

Please be advised that the RACT determination under 310 CMR 7.18(17) is a revision to the Massachusetts State Implementation Plan and as such must be submitted for approval to the United States Environmental Protection Agency.

Very truly yours,



Christopher Tilden, P.E.,
Regional Engineer for Waste Prevention

T/VMS/sh

CERTIFIED MAIL NO. P 904 974 283
RETURN RECEIPT REQUESTED

cc: Board of Health
1 Government Center
Fall River, MA 02722

DEP/DAQC
ATTN: Program Implementation



Daniel B. Greenbaum
Commissioner

Gilbert T. Joly
Regional Director

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

Southeast Region

Lakeville Hospital, Lakeville, Massachusetts 02347

**DEQE
NOW IS
THE DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

August 8, 1989

Duro Textile Printers, Inc.
206 Globe Mills Avenue
Fall River, Massachusetts 02724

RE: SMAPCD—FALL RIVER—310 CMR
7.18(17) RACT, SM-85-168-IF
Revision

ATTENTION: Nicholas T. Santore

Gentlemen:

On August 1, 1989, the Department of Environmental Protection, Division of Air Quality Control issued an Amended Conditional Approval of your proposed plan to achieve Reasonably Available Control Technology (RACT) pursuant to Department Regulation 310 CMR 7.18(17).

It has come to the Department's attention that there are additional revisions which need to be addressed.

On page 3, please replace the DAILY RECORD table, with the following and delete the point descriptions, 1-6 as they are not appropriate for this revised table.

DAILY RECORD

1	2	3	4	5	6	7	8
<u>ITEM ID</u> <u>& USAGE</u> <u>CATGY.</u>	<u>AMT. USED</u> <u>GAL</u>	<u>lbs. VOC/GAL</u>	<u>lbs. SLD/GAL</u>	<u>lbs. VOC/lbs. SLD</u>	<u>VOC%</u>	<u>lbs. VOC</u> <u>/DAY</u>	<u>Y-T-D</u> <u>lbs.</u>

Additionally, please add the following provisions 11 & 12 which were omitted from the approval:

- 11. Duro Textile Printers, Inc. shall at the request of the Department, perform testing to determine the compliance status of the facility. EPA test Method 24 shall be used to demonstrate compliance unless an alternative method is approved by the Department and EPA.
- 12. A responsible corporation official for Duro Textile Printers, Inc. must sign and return the enclosed Statement of Agreement within twenty-one (21) days of receipt of this letter.

Should you have any questions with regard to these corrections, please contact the undersigned at the Regional Office or Karen Regas at (617) 292-5624.

Very truly yours,

Vaughan M. Steeves

 Vaughan M. Steeves, Chief
 Air Quality Control Section

S/KR/sh

cc: Board of Health
 1 Government Center
 Fall River, Mass. 02722

DEP/DAQ
 ATTN: Program Implementation Branch