

1

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as

2

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

4

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

5

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
-------------------------------	-------------------------------------	--------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Dynamic Plastics Inc** located in **Preble** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

K002 Mod	booth No. 2
-------------	-------------

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>
-------------------------------	--	--------------------------

K001 Mod	Fiberglass spray booth No. 1	*
-------------	---------------------------------	---

K002
(Mod)
Cont'd

K003	Fiberglass spray booth No. 3
------	---------------------------------

Fiberglass spray

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
				cleanup;
*		3745-21-07 (G) (2)	Permit Allowable Mass Emissions and/or Control/Usage Requirements	The limits based on this rule are less stringent than the limits established pursuant to 3745-31-02 (A) (2) above.
	Applicable Federal & OAC Rules			
	3745-31-02 (A) (2)		2.27 pounds OC/hour, including cleanup;	4.86 pounds OC/hour, including cleanup;
		3745-31-02 (A) (2)	18.37 pounds OC/day, including cleanup;	38.74 pounds OC/day, including cleanup;
			0.44 TPY OC, including cleanup;	4.63 TPY OC, including cleanup;
	3745-21-07 (G) (2)		The limits based on this rule are less stringent than the limits established pursuant to 3745-31-02 (A) (2) above.	The limits based on this rule are less stringent than the limits established pursuant to 3745-31-05 above.
*		3745-21-07 (G) (2)		
	3745-31-02 (A) (2)		2.27 pounds OC/hour, including cleanup;	
			18.37 pounds OC/day, including cleanup;	
			0.44 TPY OC, including	

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

* BAT is compliance with applicable OAC rules and specified allowable emission rates through coating usage restrictions, recordkeeping, reporting, and compliance with the Air Toxics Policy.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compounds	5.51

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control Agency, 451 West Third Street, Dayton, OH 45422.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Additional Terms and Conditions

1. The 2.27 lbs OC/hr and 4.86 lbs OC/hr limits were established to reflect the potential to emit for these emissions units. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

B. Operational Restrictions

1. The maximum OC contents and coating usage rates for each emissions unit K001 and K002 shall not exceed:

<u>Material Identification</u>	<u>OC Content</u>	<u>gal/month</u>	<u>gal/year</u>
Resin (Styrene - HAP)	4.0	33.3	400
Catalyst (MEKP)		9.3	0.33
			4.0
Cleanup (acetone)		6.6	5
			60

2. The maximum OC contents and coating usage rates for emissions unit K003 shall not exceed:

<u>Material Identification</u>	<u>OC Content</u>	<u>gal/month</u>	<u>gal/year</u>
Resin (Styrene - HAP)	4.0	600	7200
Catalyst (MEKP)		9.3	6.0
			72
Cleanup (acetone)		6.6	10
			120

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each month for each resin, catalyst, and cleanup material employed in each emissions units K001, K002, and K003:
- the company identification for each material employed;

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

- b. the number of gallons of each material employed;
 - c. the organic compound content of each material, in pounds per gallon;
 - d. the total organic compound emissions, in pounds per month(see calculation methodology in section E.1.b);
 - e. the total number of days the emissions units were in operation;
 - f. the average daily OC emission rates for all materials employed, i.e. (d)/(e), for each emissions unit; and,
 - g. the average daily usage rate for each material employed, in gallons per day, i.e. (b)/(e), for each emissions unit.
2. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:

For Emissions Units K001 and K002

- a. An identification of each day during which the organic compound emissions from the resin, catalyst, and cleanup materials exceeded 18.37 pounds per day, and the actual organic compound emission rate for each such day.
- b. An identification of each month during which the monthly resin, catalyst, and cleanup usage rates exceeded the limits specified above, and the actual resin, catalyst, and cleanup usage rates for each such month.

For Emissions Unit K003

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

- c. An identification of each day during which the organic compound emissions from the resin, catalyst, and cleanup materials exceeded 38.74 pounds per day, and the actual organic compound emission rate for each such day.
 - d. An identification of each month during which the monthly resin, catalyst, and cleanup usage rates exceeded the limits specified above, and the actual resin, catalyst, and cleanup usage rates for each such month.
2. These quarterly deviation (excursion) reports shall be submitted in the following manner:
 - a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Regional Air Pollution Control Agency; and,
 - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of a. any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, b. the probable cause of such deviations, and c. any corrective actions or preventative measures which have been or will be taken, shall be submitted to the Regional Air Pollution Control Agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06).
3. The permittee shall notify the Director (the Regional Air Pollution Control Agency) in writing of any monthly record showing the use of

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

noncomplying coatings for emissions units K001, K002, or K003. The notification shall include a copy of such record and shall be sent to the Director (the Regional Air Pollution Control Agency) within 30 days following the end of the calendar month.

4. The permittee shall also submit annual reports which specify the total organic compound emissions from these emissions units for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements and Compliance Method Determinations

1. Compliance with the emission limitation(s) in this permit shall be determined in accordance with the following method(s):

For each Emissions Units K001 and K002

a. Emission Limitation

2.27 lbs/hour organic compounds

Applicable Compliance Method

Compliance shall be determined from the following:

- i. the maximum total organic compound usage rate from the resins, in gallons per hour, shall be multiplied by the maximum organic compound content in pounds per gallon. The product shall then be multiplied by a loss factor of 0.271, as specified in EPA document 600/R-97-018a, Evaluation of Pollution Prevention Techniques to Reduce Styrene Emissions from Open Molding Processes, Volume 1, March 1997;
- ii. the maximum total organic compound usage rate from the catalyst MEKP, in gallons per hour, shall be multiplied by the maximum organic compound content in pounds per gallon;
- iii. the maximum total organic compound usage rate from the

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

cleanup, in gallons per hour, shall be multiplied by the maximum organic compound content in pounds per gallon; and,

- iv. the maximum total hourly organic compound emission rate, including cleanup, shall then be the sum of the results from (i), (ii), and (iii).

b. Emission Limitation

18.37 lbs/day organic compounds

Applicable Compliance Method

Compliance shall be determined from the following:

- i. the total organic compound usage rate from the resins, in gallons per day, average, as required to be recorded in Section C.1., shall be multiplied by the maximum organic compound content in pounds per gallon. The product shall then be multiplied by a loss factor of 0.271, as specified in EPA document 600/R-97-018a, Evaluation of Pollution Prevention Techniques to Reduce Styrene Emissions from Open Molding Processes, Volume 1, March 1997;
- ii. the total organic compound usage rate from the catalyst MEKP, in gallons per day, average, as required to be recorded in Section C.1., shall be multiplied by the maximum organic compound content in pounds per gallon;
- iii. the total organic compound usage rate from the cleanup, in gallons per day, average, as required to be recorded in Section C.1., shall be multiplied by the maximum organic compound content in pounds per gallon; and,
- iv. the total daily organic compound emission rate, including cleanup, shall then be the sum of the results from (i), (ii), and (iii).

c. Emission Limitation

0.44 TPY OC, including cleanup

Applicable Compliance Method

Compliance shall be the summation of the daily organic compound

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

emission rates (pounds) including cleanup, as determined in Section E.1.b., for the calendar year, divided by 2,000 pounds per ton.

For Emissions Unit K003

d. Emission Limitation

4.86 lbs/hour organic compounds

Applicable Compliance Method

Compliance shall be determined from the following:

- i. the maximum total organic compound usage rate from the resins, in gallons per hour, shall be multiplied by the maximum organic compound content in pounds per gallon. The product shall then be multiplied by a loss factor of 0.271, as specified in EPA document 600/R-97-018a, Evaluation of Pollution Prevention Techniques to Reduce Styrene Emissions from Open Molding Processes, Volume 1, March 1997;
- ii. the maximum total organic compound usage rate from the catalyst MEKP, in gallons per hour, shall be multiplied by the maximum organic compound content in pounds per gallon;
- iii. the maximum total organic compound usage rate from the cleanup, in gallons per hour, shall be multiplied by the maximum organic compound content in pounds per gallon; and,
- iv. the maximum total hourly organic compound emission rate, including cleanup, shall then be the sum of the results from (i), (ii), and (iii).

e. Emission Limitation

38.74 lbs/day organic compounds

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

Applicable Compliance Method

Compliance shall be determined from the following:

- i. the total organic compound usage rate from the resins, in gallons per day, average, as required to be recorded in Section C.1., shall be multiplied by the maximum organic compound content in pounds per gallon. The product shall then be multiplied by a loss factor of 0.271, as specified in EPA document 600/R-97-018a, Evaluation of Pollution Prevention Techniques to Reduce Styrene Emissions from Open Molding Processes, Volume 1, March 1997;
- ii. the total organic compound usage rate from the catalyst MEKP, in gallons per day, average, as required to be recorded in Section C.1., shall be multiplied by the maximum organic compound content in pounds per gallon;
- iii. the total organic compound usage rate from the cleanup, in gallons per day, average, as required to be recorded in Section C.1., shall be multiplied by the maximum organic compound content in pounds per gallon; and,
- iv. the total daily organic compound emission rate, including cleanup, shall then be the sum of the results from (i), (ii), and (iii).

f. Emission Limitation

4.63 TPY OC, including cleanup

Applicable Compliance Method

Compliance shall be the summation of the daily organic compound emission rates (pounds) including cleanup, as determined in Section E.1.e., for the calendar year, divided by 2,000 pounds per ton.

2. Formulation data or USEPA Method 24 for coatings shall be used to determine the organic compound contents of the materials employed in this emissions unit.

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the PTI application for these emissions units. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the organic compound emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's Air Toxics Policy and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's Air Toxics Policy was demonstrated for each pollutant based on the SCREEN 3.0 model and a comparison of the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Styrene

TLV (mg/m3): 213

Maximum Hourly Emission Rate (lbs/hr): 2.17

**Predicted 1-hour Maximum Ground Level Concentration (ug/m3):
1195**

MAGLC (ug/m3): 2130

As long as the application of the Air Toxics Policy continues to show compliance with the applicable MAGLC, the permittee may implement any of the following changes with prior notification to and approval from the Regional Air Pollution Control Agency:

- a. any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled American Conference of Governmental Industrial Hygienists (ACGIH), than the lowest TLV value specified in the above table;
- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height);
- c. any change in the composition of the coatings or

Facility Name: **Dynamic Plastics Inc**

Application Number: **08-3852**

Date: **April 7, 1999**

cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of VOC [OAC rule 3745-21-01(B)(6)]; and,

- d any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any Hazardous Air Pollutants as defined in OAC rule 3745-77-01(V).

For any change to the emissions unit or its method of operation that would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a modification as defined in OAC rule 3745-31-01, the permittee shall obtain a permit to install prior to the change.