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Facility Name: **Elano Corporation**

Application Number: **08-3926**

Date: **November 12, 1998**

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.

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Approval of the plans in any case is not to be construed as 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.

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.

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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.

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The air contaminant emissions units listed below comprise the Permit to Install for **Elano Corporation** located in **Greene** 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.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P031	Wax meltout furnace	*	3745-17-09	0.10 lb/100 lbs salvageable material charged;
			3745-31-05	0.26 lb/hour and 0.47 TPY particulate;
				0.33 lb/hour and 0.59 TPY nitrogen oxides (NO _x);
				0.05 lb/hour and 0.09 TPY carbon monoxide (CO);
				1.17 lbs/hour and 2.11 TPY organic compounds (OC);
				5% opacity visible emissions, as a six-minute average;
			3745-17-07(A)	less stringent than opacity limit above

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- * BAT is compliance with applicable OAC rules and specified allowable mass emission rates; 5% opacity visible emission limitation; use of an afterburner with continuous temperature monitoring and recording; annual hours of operation restriction; recordkeeping; reporting.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
particulates	0.47
nitrogen oxides	0.59
carbon monoxide	0.09
organic compounds	2.11

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Regional Air Pollution Control, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

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AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Additional Special Terms and Conditions

1. The 0.26 lb particulate/hour, 0.33 lb Nox/hour, 0.05 lb CO/hour, and 1.17 lbs OC/hour limitations are being developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to establish recordkeeping and/or reporting requirements in order to ensure compliance with these limits.

B. Operational Restrictions

1. The temperature of the afterburner of the wax meltout furnace shall be maintained at 1500 degrees Fahrenheit or greater during each burn off cycle.
2. The maximum annual operating hours for this emissions unit shall not exceed 3600 hours.

C. Monitoring and/or RecordKeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature, in degrees Fahrenheit, of the

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afterburner of the wax meltout furnace during each burn off cycle. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations with any modifications deemed necessary by the permittee. The monitoring and recording devices shall be capable of accurately measuring the desired parameter.

2. The permittee shall maintain a log of all periods of time when the emissions unit is in operation and the afterburner temperature was less than 1500 degrees Fahrenheit.
3. The permittee shall maintain monthly records of the operating hours for this emissions unit.
4. 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 notify the Director (Regional Air Pollution Control) in writing of any record of deviation of the afterburner below 1500 degrees Fahrenheit, as well as the corrective action(s) taken. The notification shall include a copy of such record and shall be submitted to the Director (Regional Air Pollution Control) within 45 days after the deviation occurs.
2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation -
0.10 lb particulate/100 lbs salvageable material charged

Applicable Compliance Method -

If required, compliance with this mass emission limitation shall be determined through stack testing in accordance with OAC rule 3745-17-03(B)(8).

- b. Emission Limitation -
0.26 lb/hour particulate

Applicable Compliance Method -

Compliance shall be determined as the sum of the following: (i) particulate emissions from combustion shall be the maximum hourly LPG usage (23.5 gallons/hour) by the AP-42 emission factor for LPG propane combustion 0.4 lb particulate/1000 gallons of LPG.

(ii) particulate emissions from furnace loading shall be the maximum hourly furnace loading capacity (246 lbs/hour) multiplied by the allowable emission limit of 0.10 lb particulate/100 lbs charged.

(iii) the total hourly particulate emissions shall be the sum of (i) and (ii) above.

- c. Emission Limitation -
0.47 TPY particulate

Applicable Compliance Method -

Compliance shall be determined by multiplying the hourly particulate limit of 0.26 lb/hour by the annual hours of operation, divided by 2,000 pounds per ton.

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- d. Emission Limitation -
0.33 lb/hour nitrogen oxides

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly LPG usage (23.5 gallons/hour) by the AP-42 emission factor for LPG propane combustion 14 lbs nitrogen oxides/1000 gallons of LPG.

- e. Emission Limitation -
0.59 TPY nitrogen oxides

Applicable Compliance Method -
Compliance shall be determined by multiplying the hourly particulate limit of 0.33 lb/hour by the annual hours of operation, divided by 2,000 pounds per ton.

- f. Emission Limitation -
0.05 lb/hour carbon monoxide

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly LPG usage (23.5 gallons/hour) by the AP-42 emission factor for LPG propane combustion 1.9 lb carbon monoxide/1000 gallons of LPG.

- g. Emission Limitation -
0.09 TPY carbon monoxide

Applicable Compliance Method -
Compliance shall be determined by multiplying the hourly particulate limit of 0.05 lb/hour by the annual hours of operation, divided by 2,000 pounds per ton.

- h. Emission Limitation -
1.17 lbs/hour organic compounds

Applicable Compliance Method -
Compliance shall be determined as the sum of the following: (i) organic emissions from combustion shall be the maximum hourly LPG usage (23.5

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gallons/hour) multiplied by the AP-42 emission factor for LPG propane combustion 0.5 lb organic compounds/1000 gallons of LPG.

(ii) organic emissions from the resin shall be the maximum hourly resin loading (25 pounds/hour) multiplied by an afterburner destruction efficiency of 99% (1 - 0.99).

(iii) organic emissions from the wax shall be the maximum hourly wax loading (91 pounds/hour) multiplied by an afterburner destruction efficiency of 99% (1 - 0.99).

(iv) the total hourly organic compound emissions shall be the sum of (i), (ii), and (iii) above.

- i. Emission Limitation -
2.11 TPY organic compounds

Applicable Compliance Method -

Compliance shall be determined by multiplying the hourly organic compound limit of 1.17 lbs/hour by the annual hours of operation, divided by 2,000 pounds per ton.

- j. Emission Limitation -
5% opacity visible emissions, as a six-minute average

Applicable Compliance Method -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.