



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL  
LORAIN COUNTY  
Application No: 02-18895**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 5/6/2004

Noveon, Inc.  
John Uptmor  
550 Moore Rd  
Avon Lake, OH 440120134

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

NEDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 5/6/2004  
Effective Date: 5/6/2004**

**FINAL PERMIT TO INSTALL 02-18895**

Application Number: 02-18895  
APS Premise Number: 0247030004  
Permit Fee: **\$75**  
Name of Facility: Noveon, Inc.  
Person to Contact: John Uptmor  
Address: 550 Moore Rd  
Avon Lake, OH 440120134

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**550 Moore Rd  
Avon Lake, Ohio**

Description of proposed emissions unit(s):  
**Urethane dispersion.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- 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 record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air 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. Records Retention Requirements

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 this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

**9. Construction of New Sources(s)**

The proposed emissions unit(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 cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(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 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 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 the requirements of this permit or cannot meet applicable standards.

**10. 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.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. 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.

**13. Source Operation and Operating Permit Requirements 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, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. 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.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
Organic compounds (OC)	3.5 TPY

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P036 - Polyurethane dispersion operations located in building 461 including raw material storage tanks, prepolymerization tanks, polymerization extension tanks, and product storage tanks	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions shall not exceed 0.8 pound per hour. See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	Organic compound (OC) emissions shall not exceed 3.5 tons per year. See A.2.a and A.2.b below.  The requirements of this rule do not apply as the use of photochemically reactive materials is prohibited. See A.2.c below.
	OAC rule 3745-31-05(D)	See A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The organic compound (OC) emissions limitations of 0.8 pound per hour and 3.5 tons per year were established based upon 26,000,000 dry pounds per year maximum annual production and potential to emit calculations performed by the permittee utilizing "Emission Master" modeling software, TANKS4.0, and previously existing emission factors obtained from emission testing at a Noveon, Inc., facility in Massachusetts with similar water-based polyurethane dispersion operations. Based upon this information, emission factors of 0.00008 pound fugitive OC per pound product and 0.00018 pound non-fugitive OC per pound product were determined by the permittee and used to establish the allowable OC emissions limitations of 0.8 pound per hour and 3.5 tons per year. The emissions for this process are based on the "worst case" or highest emission factor of all polyurethane dispersion products that will be produced.
- 2.b The organic compound (OC) emissions 3.5 tons per year include OC emissions from cleanup materials identified in the permittee's Permit to Install (PTI) application as N-methyl pyrrolidone (NMP). Emissions from cleanup materials were established using TANKS4.0.

Each cleaning of the emissions unit shall be performed in accordance with the procedures and assumptions used in the TANKS4.0 model.

- 2.c** The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA, Northeast District Office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

- 2.d** The permittee requested that this emissions unit be placed on permit to install registration status as defined in OAC rule 3745-31-05(D). Based upon the permit to install application and accompanying information provided by the permittee, this emissions unit is eligible for permit to install registration status. In the event that product formulations are altered which would result in annual potential emissions greater than 5.0 tons per year from this emissions unit, the permittee shall submit a new permit to install application for this emissions unit.

## **B. Operational Restrictions**

1. The permittee shall not exceed 26,000,000 dry pounds production in this emissions unit annually which is the maximum amount of material this emissions unit is capable of producing on an annual basis in accordance with the permittee's Permit to Install (PTI) application.

## **C. Monitoring and/or Record keeping Requirements**

1. The permittee shall keep monthly records which include an identification of each product produced and the amount of each product produced, in pounds, during the month for this emissions unit.
2. The permittee shall keep monthly records which identify the amount of cleanup materials (NMP) employed, in pounds, during the month in this emissions unit.

## **D. Reporting Requirements**

1. Each year, the permittee shall submit an annual report, by April 30, for the preceding calendar year. Each annual report shall specify the annual organic compound emissions and annual production for this emissions unit, in tons and/or pounds.

## **E. Testing Requirements**

1. Compliance with the allowable emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Organic compound (OC) emissions shall not exceed 0.8 pound per hour.

Applicable Compliance Method:

Testing is not required for this emissions unit because the hourly allowable OC emission rate is based upon the maximum amount of material produced annually (26,000,000 dry lbs) in this emissions unit and the maximum number of hours of operation (8760 hrs).

- b. Emission Limitation:

Organic compound (OC) emissions shall not exceed 3.5 tons per year.

Applicable Compliance Method:

Testing is not required for this emissions unit because the annual allowable OC emission rate is based upon the maximum amount of material produced annually (26,000,000 dry lbs) in this emissions unit and the maximum number of hours of operation (8760 hrs).

**F. Miscellaneous Requirements**

None

**NEW SOURCE REVIEW FORM B**

PTI Number: 02-18895

Facility ID: 0247030004

FACILITY NAME Noveon, Inc.

FACILITY DESCRIPTION Urethane dispersion CITY/TWP Avon Lake

SIC CODE 2821 SCC CODE 3-01-132-21 EMISSIONS UNIT ID P036

EMISSIONS UNIT DESCRIPTION Polyurethane dispersion operations located in building 461 including raw material storage tanks, prepolymerization tanks, polymerization extension tanks, and product storage tanks

DATE INSTALLED March 2004

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds		0.8 lb/hr	3.5 tpy	0.8 lb/hr	3.5 tpy
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? \_\_\_\_\_ NESHAP? \_\_\_\_\_ PSD? \_\_\_\_\_ OFFSET POLICY? \_\_\_\_\_

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

**Enter Determination** Hourly and annual OC emission limitations. Prohibition on use of photochemically reactive materials.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ \_\_\_\_\_

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? \_\_\_\_\_ YES x NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_