OhioEPA
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: 02-13356

CERTIFIED MAIL

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

DATE: May 17, 2000

Nylonge Co.
Dominique Alibeckoff
1301 Lowell Street
Elyria, OH 44035

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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: **USEPA**
DAPC, NEDO
Kathryn Boylan Elyria Health Department
Pauline Laboda Lorain County Neighbors

FINAL PERMIT TO INSTALL 02-13356

Application Number:	02-13356
APS Premise Number:	0247040822
Permit Fee:	**$600.00**
Name of Facility:	Nylonge Co.
Person to Contact:	Dominique Alibeckoff
Address:	1301 Lowell Street Elyria, OH 44035

Location of proposed air contaminant source(s) [emissions unit(s)]:
1301 Lowell Street
Elyria, **Ohio**

Description of proposed emissions unit(s):
XANTHATION REACTOR #4 CELLULOSE SPONGE CLOTH MACHINE #2 WITH THE USE OF A BIOFILTER TO CONTROL CARBON DISULFIDE.

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. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written 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. See B.11 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not

be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 thirty (30) days after commencing operation of the source(s) covered by this permit.

B. State Only Enforceable 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 Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required 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 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. 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.

4. 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.

5. 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.

6. 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 are inadequate 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 prove to be inadequate or cannot meet applicable standards.

7. 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.

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

9. 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.

10. 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.

11. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. 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

Pollutant	Tons Per Year
VOC	10.78
H_2S	1.0

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Xanthation reactor #4	OAC 3745-21-07(G)(2)	exempt, see section A.I.2.a.
	OAC rule 3745-31-05(A)(3)	VOC: 0.2 lb/hr, 0.88 ton/yr, see section A.I.2.b of these terms and conditions.

2. Additional Terms and Conditions

2.a This emissions unit shall not employ organic liquids which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

2.b This emissions unit shall be vented to the Envirogen biofiltration system at all times. If necessary, the permittee shall also use the Xerxes packed bed scrubber in series with the biofiltration system. The air pollution control system(s) shall remove a minimum of 80% of VOC (i.e. carbon disulfide) vented to it. This removal efficiency shall be determined based on the arithmetic average of the preceding fifteen (15) consecutive days' average removal efficiency.

II. Operational Restrictions

1. The pressure drop across the biofilter shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

2. The average gas temperature at the inlet of the biofilter shall not be more than 50 degrees Centigrade.

3. The sulfate concentration of the biofilter's discharge liquor shall be maintained below 5%.

4. The pH of the backup scrubber liquor shall be maintained within a range of 10 to 13.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep the following records on all materials used in this emissions unit:

a. The identification of the chemical compound and its physical state.

b. For any liquid organic materials, whether or not the material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

2. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the biofilter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the biofilter on a daily basis.

3. The permittee shall operate and maintain a continuous temperature monitor which measures the gas temperature at the inlet of the biofilter and when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring device shall be capable of accurately measuring the desired parameter. The temperature monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall record the temperature on a daily basis.

4. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the backup scrubber liquor while the emissions unit is in operation. The pH monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information each day:

   The pH of the backup scrubber liquor on a daily basis (on any day the scrubber is operated).

5. The permittee shall monitor the conductivity of the biofilter's discharge liquor weekly. From this data, the permittee shall determine the sulfate concentration of the discharge liquor.

6. The permittee shall maintain a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

7. The permittee shall determine an average daily removal efficiency for the air pollution control system (i.e. biofilter and backup scrubber) for VOC using a gas chromatograph. This daily average shall be based on a minimum of three sets of samples.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which any photochemically reactive materials were employed.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the biofilter did not comply with the allowable range specified above.

3. The permittee shall submit deviation (excursion) reports which identify all periods of time during

which the average inlet temperature to the biofilter does not comply with the temperature limitation specified above.

4. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

5. The permittee shall submit a deviation (excursion) reports that identify all periods of time during which the sulfate concentration of the biofilter's discharge liquor did not comply with the requirements specified above.

6. In accordance with paragraph 3 of the General Terms and Conditions, the permittee shall submit deviation (excursion) reports which identify any day during which the average VOC removal efficiency was less than 80% and the actual average VOC removal efficiency for each such day.

V. Testing Requirements

1. Emission Limitation:

   0.2 lb/hr VOC

   Applicable Compliance Method:

   Compliance shall be demonstrated by using U.S. EPA reference methods 1-4 and 15, if required by the Ohio EPA.

2. Emission Limitation:

   0.88 ton VOC/yr

   Applicable Compliance Method:

   Compliance shall be demonstrated by the following equation:

   E = UER x (1-RE) x H x 1/2000 (ton/pounds)

   where,

   E = VOC emission rate ton/yr

   UER = maximum uncontrolled emission rate of VOC, estimated by the permittee to be 1.0 lb/hr

   RE = average annual VOC removal efficiency determined from the daily monitoring required in Section B.III.6. of this permit

   H = operating hours of the emissions unit

VI. Miscellaneous Requirements

1. The emissions from this emissions unit are prohibited from causing a nuisance in violation of OAC rule 3745-15-07. If the Director determines that the emissions from this emissions unit are contributing to a nuisance, the permittee, upon notification by Ohio EPA, shall immediately undertake a program to reduce emissions or the impact of the emissions to achieve compliance with OAC rule 3745-15-07.

2. The permittee shall develop a preventive maintenance plan for the biofiltration control system and the backup packed tower scrubber. This plan shall be designed to prevent, detect and correct malfunctions or system failures which could result in emissions exceeding the limits of this permit.

   This plan shall be developed within ninety days of the startup of this emissions unit and shall specify, at a minimum, the following:

   a. A comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of the replacement parts which will be maintained in inventory.

   b. An identification of the operating inlet and outlet variables of the biofiltration system that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction.

   c. A description of corrective procedures that will be taken in the event of a malfunction or failure in order to maintain compliance with the emission limitations of this permit as expeditiously as practical.

   A copy of this plan shall be submitted to the Ohio EPA, NEDO for review and approval.

B. State Only Enforceable Section

I. 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Xanthation reactor #4		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. The emissions from this emissions unit are prohibited from causing a nuisance in violation of OAC rule 3745-15-07. If the Director determines that the emissions from this emissions unit are contributing to a nuisance, the permittee, upon notification by Ohio EPA, shall immediately undertake a program to reduce emissions or the impact of the emissions to achieve compliance with OAC rule 3745-15-07.

2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary

because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]

A. State and Federally Enforceable Section

I. 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
cellulose sponge cloth line #2	OAC rule 3745-21-07(G)(2)	Exempt, see A.I.2.a
	OAC rule 3745-31-05(D)	VOC: 9.9 tons per rolling 12-month period See A.I.2.b
	OAC rule 3745-31-05(A)(3)	VOC: 2.88 lbs/hr H_2S: 0.32 lb/hr, 1.0 tons/yr See A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit shall not employ organic liquids which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

2.b This emissions unit shall be vented to the Envirogen biofiltration system at all times. If necessary, the permittee shall also use the Xerxes packed bed scrubber in series with the biofiltration system. The air pollution control system(s) shall remove a minimum of 80% by weight of VOC (i.e. carbon disulfide) vented to it, and 90% of H_2S at all times. Except as specified in Section A.I.2.c., this removal efficiency shall be determined based on the arithmetic average of the preceding fifteen (15) consecutive days' average removal efficiency.

2.c The control efficiency requirements for VOC shall not apply during the startup of the biofilter control system after a facility shutdown provided that the following conditions are met:

i. during the startup period, the average removal efficiency of VOC shall be at least

50% by weight, based on the arithmetic average of the preceding fifteen (15) consecutive days' average removal efficiency; or

ii. the hourly emission rate of VOC from this emissions unit shall not exceed 7.2 pounds per hour.

2.d The exempt period of time allowed in Section A.I.2.c. shall not exceed 420 hours in any 12-month period.

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6245, based upon a rolling, 12-month summation of the operating hours.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Operating Hours
1	520
1-2	1040
1-3	1560
1-4	2080
1-5	2600
1-6	3120
1-7	3640
1-8	4160
1-9	4680
1-10	5200
1-11	5720
1-12	6245

   After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

2. Notwithstanding the operational limitations in section A.II.1 of these terms and conditions, if the biofiltration system can attain greater than 80% overall reduction in VOC by weight, the permittee can apply in writing to the Ohio EPA to modify this permit to increase annual operating hours on the emissions unit P010 provided that the VOC emission rate is maintained at equal or less than 9.9 tons per year, based on a rolling 12-month summation.

1. The pressure drop across the biofilter shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

2. The average gas temperature at the inlet of the biofilter shall not be more than 50 degrees

Centigrade.

3. The sulfate concentration of the biofilter's discharge liquor shall be maintained below 5%.

4. The pH of the backup scrubber liquor shall be maintained between 10 and 13.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep the following records on all materials used in this emissions unit:

   a. The identification of the chemical compound and its physical state.

   b. For any liquid organic materials, whether or not the material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

2. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month.

   b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

   Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

3. The permittee shall maintain monthly records of the following information:

   a. The VOC emission rate (tons or pounds).

   b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the VOC emission rate (tons).

   Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative VOC emission rate for each calendar month.

4. The permittee shall maintain monthly records of the following information:

   a. The number of hours that the biofilter operated during an exempted period from facility startups.

   b. The number of hours that the biofilter operated during an exempted period from facility startups during the last 12-month period.

5. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the biofilter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the

biofilter on a daily basis.

6. The permittee shall operate and maintain a continuous temperature monitor which measures the gas temperature at the inlet of the biofilter and when the emissions unit is in operation. Units shall be in degrees Centigrade. The monitoring device shall be capable of accurately measuring the desired parameter. The temperature monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall record the temperature on a daily basis.

7. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the backup scrubber liquor while the emissions unit is in operation. The pH monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information each day:

   The pH of the backup scrubber liquor on a daily basis (on any day the scrubber is operated).

8. The permittee shall monitor the conductivity of the biofilter's discharge liquor weekly. From this data, the permittee shall determine the sulfate concentration of the discharge liquor.

9. The permittee shall maintain a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

10. The permittee shall determine an average daily removal efficiency for the air pollution control system (i.e. biofilter and backup scrubber) for VOC and hydrogen sulfide using a gas chromatograph. The daily average shall be based on a minimum of three sets of samples.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which any photochemically reactive materials were employed.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in the General Terms and Conditions of this permit.

3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month VOC emission limitation. These reports are due by the date described in the General Terms and Conditions of this permit.

4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month operating hours limitation for exempted periods from facility startups. These reports are due by the date described in the General Terms and Conditions of this permit.

5. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the biofilter did not comply with the allowable range specified above.

6. The permittee shall submit deviation (excursion) reports which identify all periods of time during which the average inlet temperature to the biofilter does not comply with the temperature limitation specified above.

7. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

8. The permittee shall submit a deviation (excursion) reports that identify all periods of time during which the sulfate concentration of the biofilter's discharge liquor did not comply with the requirements specified above.

9. In accordance with paragraph 3 of the General Terms and Conditions, the permittee shall submit deviation (excursion) reports which identify any day during which the average VOC removal efficiency was less than 80% and the actual average VOC removal efficiency for each such day.

10. In accordance with paragraph 3 of the General Terms and Conditions, the permittee shall submit deviation (excursion) reports which identify any day during which the average H_2S removal efficiency was less than 90% and the actual average H_2S removal efficiency for each such day.

V. Testing Requirements

1. Emission Limitation:

   9.9 tons VOC/rolling 12 month period

   Applicable Compliance Method:

   Compliance with this limit shall be assumed provided that operating hours of this emissions unit do not exceed 6245 hours per rolling 12-month period and the air pollution control system removes at least 80% of the VOC emissions at all times.

   The permittee shall determine monthly its VOC emission rate by the following equation:

   E = UER x (1-RE) x H x 1/2000 (ton/pounds)

   where,

   E = VOC emission rate ton/month

UER = maximum uncontrolled emission rate of VOC, estimated by the permittee to be 14.4 lbs/hr

RE = average monthly VOC removal efficiency determined from the daily monitoring required in Section A.III.10. of this permit

H = operating hours per month of the emissions unit

The permittee shall determine the rolling 12-month VOC emission rate by summing monthly VOC emission rates for each 12-month period.

2. Emission Limitation:

2.88 lbs/hr VOC (i.e. carbon disulfide)

Applicable Compliance Method:

Compliance shall be demonstrated by using U.S. EPA reference methods 1-4 and 15, if required by the Ohio EPA.

3. Emission Limitation:

0.32 lb/hr H_2S

Applicable Compliance Method:

Compliance shall be demonstrated by using U.S. EPA reference methods 1-4 and 15, if required by the Ohio EPA.

4. Emission Limitation:

1.0 tons H_2S/yr

Applicable Compliance Method:

Compliance shall be demonstrated by the following equation:

E = UER x (1-RE) x H x 1/2000 (ton/pounds)

where,

E = H_2S emission rate ton/yr

UER = maximum uncontrolled emission rate of VOC, estimated by the permittee to be 3.2 lbs/hr

RE = annual H_2S removal efficiency determined from the most recent compliance test

H = operating hours of the emissions unit

5. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 90 days after startup of this emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the control efficiency requirement for VOC (i.e. CS_2) and H_2S.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4 and 15. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

1. The permittee shall develop a preventive maintenance plan for the biofiltration control system and the backup packed tower scrubber. This plan shall be designed to prevent,
detect and correct malfunctions or system failures which could result in emissions exceeding the limits of this permit.

   This plan shall be developed within ninety days of the startup of this emissions unit and shall specify, at a minimum, the following:

   a. A comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of the replacement parts which will be maintained in inventory.

   b. An identification of the operating inlet and outlet variables of the biofiltration system that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction.

   c. A description of corrective procedures that will be taken in the event of a malfunction or failure in order to maintain compliance with the emission limitations of this permit as expeditiously as practical.

   A copy of this plan shall be submitted to the Ohio EPA, NEDO for review and approval.

B. State Only Enforceable Section

I. 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
cellulose sponge cloth line #2	~~OAC rule 3745-31-05(A)(3)~~	~~VOC: 2.88 lbs/hr, 9.9 tons/yr~~ ~~H_2S: 0.32 lb/hr, 1.0 tons/yr~~ ~~See A.I.2.b~~

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit P010 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

   a. Pollutant: Carbon Disulfide

      TLV (ug/m3): 31,000

      Maximum Hourly Emission Rate (lbs/hr): 2.88

      Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.35

MAGLC (ug/m3): 738

b. Pollutant: Hydrogen Sulfide

TLV (ug/m3): 14,000

Maximum Hourly Emission Rate (lbs/hr): 0.32

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.82

MAGLC (ug/m3): 333.3

2.. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new 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 previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. The emissions from this emissions unit are prohibited from causing a nuisance in violation of OAC rule 3745-15-07. If the Director determines that the emissions from this emissions unit are contributing to a nuisance, the permittee, upon notification by Ohio EPA, shall immediately undertake a program to reduce emissions or the impact of the emissions to achieve compliance with OAC rule 3745-15-07.