



State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL
LUCAS COUNTY

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov.
Center

Application No: 04-01232

DATE: 11/30/2000

Perstorp Polyols Inc
Anthony Sloma
600 Matzinger Rd
Toledo, OH 43612

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of \$800 will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA
Toledo Metro Area Coun of Gov

TDES

IN MI



Permit To Install

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

DRAFT PERMIT TO INSTALL 04-01232

Application Number: 04-01232
APS Premise Number: 0448010133
Permit Fee: **To be entered upon final issuance**
Name of Facility: Perstorp Polyols Inc
Person to Contact: Anthony Sloma
Address: 600 Matzinger Rd
Toledo, OH 43612

Location of proposed air contaminant source(s) [emissions unit(s)]:

600 Matzinger Rd
Toledo, Ohio

Description of proposed emissions unit(s):

Modification to existing Pentaerythritol and Sodium formate process to also make Dipentaerythritol.

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

Perstorp Polyols Inc

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PTI Application: 04-01232

Issued: To be entered upon final issuance

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 emission limitations, operational restrictions, and control device operating parameter limitations, 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.

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- 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 the permittee is required to 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"), the permittee shall comply with the requirement to register such a 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

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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

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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.

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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.

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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

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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.

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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**

<u>Pollutant</u>	<u>Tons Per Year (increase)</u>
PE	19.71 (+1.88)
OC	19.65 (0)

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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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P803 - Pentaerythritol, Sodium formate and Dipentaerythritol mfg. plant and associated equipment controlled by a catalytic incinerator & wet scrubber.	3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 40 CFR 63 subpart F and G. 1.25 lbs Organic Compounds (OC)/hr from the incinerator, 5.5 tons OC/yr, 4.5 lbs Particulate Emissions (PE)/hr from the scrubber; and 19.71 tons PE/yr.
Fugitive OC leaks (pumps, valves, etc.)	3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of 40 CFR 63 subpart F and H. See A.I.2.c. 14.15 tons OC/yr.
	3745-17-07(A)(1)	20% opacity, as a 6-minute average from each stack.
	3745-17-11(A)(2)	See A.I.2.a.
	3745-21-07(G)(2), (G)(6)(a)	See A.I.2.a.
	3745-21-09(DD)	See A.I.2.e.
	40 CFR 63 subpart F and G	See A.I.2.b.and A.I.2.d.
	40 CFR 63 subpart F and H	See A.I.2.c.

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2. Additional Terms and Conditions

- 2.a** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b** The permittee shall establish appropriate monitoring, record keeping and reporting consistent with 40 CFR 63 subpart F and G.
- 2.c** The permittee shall establish a leak detection and repair program consistent with 40 CFR 63 subpart F and H.
- 2.d** Reduce emissions of TOC (minus methane and ethane) by 98 weight percent, or to a TOC (minus methane and ethane) concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen, whichever is less stringent.
- 2.e** The permittee shall comply with the VOC leak detection and repair program requirements of OAC rule 3745-21-09(DD) by maintaining compliance with the operational restrictions, monitoring, record keeping and reporting requirements of 40 CFR Part 63, Subpart H for all VOC process equipment leaks.

II. Operational Restrictions

- 1.** The scrubber water flow shall be continuously maintained at a value that is at least 80% of the value established during the most recent emission test that demonstrated compliance while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

- 1.** The permittee shall properly install, operate and maintain equipment to monitor and record the water flow rate while the emissions unit is in operation. The monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 2.** The permittee shall collect and record the following information each day:

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- a. The water flow rate, in gpm, and
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. In order to comply with 40 CFR 63 subpart F and G, the permittee shall install, calibrate, operate and maintain temperature monitors and recorder(s) in accordance with the requirements specified in the regulation.
 4. The permittee shall perform monthly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from both stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions,
 - b. whether the emissions are representative of normal operations,
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions,
 - d. the total duration of any visible emission incident, and
 - e. any corrective actions taken to eliminate the visible emissions.
 5. In order to comply with 40 CFR 63 subpart F and H, the permittee shall develop and implement a leak detection and repair program for equipment in the process unit in accordance with the requirements specified in the regulation.

IV. Reporting Requirements

1. The permittee shall submit semiannual deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate was not maintained at or above the required levels.
2. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible particulate emissions were observed from each stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions.
3. The permittee shall submit semiannual reports which maintain compliance with 40 CFR 63 subpart F, G and H.
4. These semiannual reports shall be submitted to the Toledo Division of Environmental Services

Persto
PTI A

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(TDOES) by January 31 and July 31, and shall cover the records for the preceding semiannual period.

- 5. The permittee shall submit reports pursuant to 40 CFR 63 subpart F, G and H to: Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

V. Testing Requirements

- 1. 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 180 days of startup.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions limitations for PE from the scrubber. The emission testing shall also be conducted to demonstrate emissions of TOC (minus methane and ethane) are reduced by 98 weight percent, or to a TOC (minus methane and ethane) concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen, whichever is less stringent, for the incinerator.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

POLLUTANT

TEST
METH
OD
LOCA
TION

PE	1 or 1A40 CFR Part 60, Appendix A and 60.614 2, 2A, 2C, or 2D40 CFR
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PTI A

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Part
60,
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Alternative U.S. EPA approved test methods
may be
used
with
prior
approval from
the
Ohio
EPA.

- d. The test methods which must be employed to determine TOC in the control device outlet

Persto

PTI A

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Emissions Unit ID: P803

and the concentration of TOC in the inlet when the reduction efficiency of the control device is to be determined are as follows:

POLLUTANT

TEST
METH
OD
LOCA
TION

TOC	1 or 1A40 CFR Part 60, Appendix A and 60.614 2, 2A, 2C, or 2D40 CFR Part 60, Appen dix A and 60.614 340 CFR Part 60, Appen dix A and 60.614 440 CFR Part 60, Appen dix A and 60.614 1840
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Emissions Unit ID: P803
 CFR
 Part
 60,
 Appen
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 and
 60.614

The permittee shall comply with the methods and procedures of 40 CFR Part 63.116(c) which requires Method 18 or any other method or data that has been validated according to the applicable procedures in Method 301 of 40 CFR Part 63, Appendix A.

- e. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity and flows, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration of the potential presence of interfering gases.
- g. 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).

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- h. 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.

- i. 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
permitt
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request
additio
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time
for the
submitt
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the
written
report,
where
warran
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with
prior
approv
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the
approp
riate
Ohio
EPA
District
Office
or local
air
agency

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

a. Emission Limitation:

1.25 lbs OC/hr (process).

Applicable Compliance Method:

Persto

PTI A

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Emissions Unit ID: P803

Compliance shall be demonstrated by emission testing in accordance with the procedures in Method 18 of 40 CFR Part 60, Appendix A for determining TOC (minus methane and ethane)emissions.

b. Emission Limitation:

4.5 lb PE/hour.

Applicable Compliance Method:

Compliance shall be demonstrated by emission testing in accordance with the procedures in Method 5 of 40 CFR Part 60, Appendix A for determining PE emissions.

c. Emission Limitation:

20% opacity as a six-minute average from each stack.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements of Section A.III.5. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC 3745-17-03(B)(1).

d. Emission Limitation:

Reduce emissions of TOC (minus methane and ethane) by 98 weight percent, or to a TOC (minus methane and ethane) concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen, whichever is less stringent.

Applicable Compliance Method:

Compliance shall be demonstrated by emission testing in accordance with the procedures in Method 18 of 40 CFR Part 60, Appendix A for determining TOC emissions (in lbs TOC/hr) for the inlet and outlet of the control system. The % reduction shall be determined by subtracting the outlet emission

Persto

PTI A

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rate from the inlet emission rate and dividing that amount by the inlet emission rate and multiplying by 100%.

e. Emission Limitation:

14.15 tons OC/yr (fugitive).

Applicable Compliance Method:

Compliance shall be demonstrated by using the emission factors from "Control Techniques for Fugitive VOC Emissions from Chemical Process Facilities" EPA/625/R-93/005 March 1994 Table 7-2, or other approved alternate, and the number of pumps, valves, flanges, etc. to calculate the lbs/hr of fugitive OC emissions. The annual fugitive OC emissions (in tons OC/yr) shall be calculated by multiplying lbs/hr emission rate by the annual hours of operation of the equipment and dividing by 2000 lbs/ton.

f. Emission Limitation:

5.5 tons OC/yr(process) and 19.71 tons PE/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the OC and PE emission rates (in lbs OC/hr and lbs PE/hr, respectively) as determined by the last emission test that demonstrated compliance by the annual hours of operation in Section A III.2.c. for this emission unit and divide by 2,000 lbs/ton.

VI. Miscellaneous Requirements

Perstorp Polyols Inc
PTI Application: 04 01222
Issued

Facility ID: 0448010133

Emissions Unit ID: P803

1. The Permittee shall comply with the following regulations:

40 CFR Section 63 Subparts F, G & H
2. It is Perstorp Polyols, Inc. responsibility to review these regulations to ensure compliance and to incorporate any requirements of the regulations into the design of P803. This includes any record keeping and reporting requirements.

**Persto
PTI A**

Emissions Unit ID: P803

Issued: To be entered upon final issuance

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P803 - Pentaerythritol, Sodium formate and Dipentaerythritol mfg. plant. and associated equipment.	None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Persto

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: P803

NEW SOURCE REVIEW FORM B

PTI Number: 04-01232 Facility ID: 0448010133

FACILITY NAME Perstorp Polyols Inc

FACILITY DESCRIPTION Modification to existing Pentaerythritol and Sodium formate process to also make Dipentaerythritol. CITY/TWP Toledo

SIC CODE 2869 SCC CODE 30125020 EMISSIONS UNIT ID P803

EMISSIONS UNIT DESCRIPTION Pentaerythritol, Sodium formate and Dipentaerythritol mfg. plant. and associated equipment.

DATE INSTALLED 03/01

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	N/A	N/A	N/A	N/A	N/A
PM ₁₀	Unclassified	4.5 lbs/hr	19.71	4.5 lbs/hr	19.71
Sulfur Dioxide	Non-Attainment	N/A	N/A	N/A	N/A
Organic Compounds	Attainment	1.25 lbs /hr	5.5 process 14.15 fugitive	1.25 lbs /hr	5.5 process 14.15 fugitive
Nitrogen Oxides	Attainment	N/A	N/A	N/A	N/A
Carbon Monoxide	Attainment	N/A	N/A	N/A	N/A
Lead	Attainment	N/A	N/A	N/A	N/A
Other: Air Toxics	Unclassified				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? **40 CFR 63 subpart F, G and H** PSD? OFFSET POLICY?

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

Enter Determination BAT is thermal incineration of the OC emissions, wet scrubbing of the PE emissions, a leak detection and repair program for fugitive OC emissions and compliance with **40 CFR 63 subpart F, G and H**

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No, it complies with the HON/ MACTOPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? No new equipment**TOXIC AIR CONTAMINANTS**

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

AIR TOXICS MODELING PERFORMED*? _____ YES _____ NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 04-01232

Facility ID: 0448010133

FACILITY NAME Perstorp Polyols Inc

FACILITY DESCRIPTION Modification to existing Pentaerythritol and Sodium formate process to also make Dipentaerythritol. CITY/TWP Toledo

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to airpti@epa.state.oh.us

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input type="checkbox"/>	0000000c.wpd	X	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input type="checkbox"/>

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

This PTI is actually a change to existing emission unit P803. Originally it produced Pentaerythritol (Penta) and Sodium formate (SoF). Now, it will also be making Dipentaerythritol (Dipenta). The Dipenta has always been produced, but was sold as an "impurity" with the Penta. Now, the company wants to separate it out and sell it by itself. The last change to P803 was in PTI 04-1019. The only equipment being added is for the separation, drying and bagging of solid Dipenta. The equipment used to process the raw materials will not be changed and the company expects no increase in organic emissions, only PE. The production of Penta and SoF will be increased slightly (5,000 #/hr to 5,600 #/hr and 2,750 #/hr to 3,100 #/hr respectively). No new pumps, valves, etc. will be added so the fugitive organic emissions remain unchanged from 04-1019. The organic emissions from the process are controlled by a existing catalytic incinerator and the PE emissions are controlled by the existing scrubber. 40 CFR Part 63 Subparts F, G & H are applicable for the process and fugitive organic emissions. The Air Toxic Policy does not apply because this source is subject to the HON.

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or Netting Determination
Permit To Install ENTER PTI NUMBER HERE

A. Source Description

B. Facility Emissions and Attainment Status

C. Source Emissions

NEW SOURCE REVIEW FORM B

PTI Number: 04-01232 Facility ID: 0448010133

FACILITY NAME Perstorp Polyols Inc

FACILITY DESCRIPTION	Modification to existing Pentaerythritol and Sodium formate process to also make Dipentaerythritol.	CITY/TWP	Toledo
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D. Conclusion**PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:**

NONE

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year (increase)</u>
PE	19.71 (+1.88)
OC	19.65 (0)