



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
HAMILTON COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05792

Fac ID: 1431070035

DATE: 5/23/2006

Cognis Corporation
Bill Busch
4900 Este Avenue
Cincinnati, OH 452321491

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

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

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

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

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 5/23/2006
Effective Date: 5/23/2006**

FINAL PERMIT TO INSTALL 14-05792

Application Number: 14-05792
Facility ID: 1431070035
Permit Fee: **\$400**
Name of Facility: Cognis Corporation
Person to Contact: Bill Busch
Address: 4900 Este Avenue
Cincinnati, OH 452321491

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4900 Este Avenue
Cincinnati, Ohio**

Description of proposed emissions unit(s):
Two Temporary Gas Fired Boilers.

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 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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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.

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

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 re-issuance, or modification
- 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, 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 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

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

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.

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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.

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

12. 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.

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or 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 (i.e., postmarked) quarterly, 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.

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. 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.

7. 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).

8. Construction Compliance Certification

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. 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., postmarked), 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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	4.3
PM	2.96
SO ₂	0.24
NO _x	39.0
CO	32.8
PM ₁₀	2.96

Cognis Corporation
PTI Application: 14-05792
Issued: 5/23/2006

Facility ID: 1431070035

Cognis Corporation
PTI Application: 11-05702
Issue

Facility ID: 1431070035

Emissions Unit ID: B040

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

Applicable Emissions
Limitations/Control
Measures

The following emissions limitations shall not be exceeded:

0.10 pound nitrogen oxides (NOx) per million British thermal units;

0.0006 pound sulfur dioxide (SO2) per million British thermal units;

0.084 pound carbon monoxide (CO) per million British thermal units;

0.011 pound organic compounds (OC) per million British thermal units; and

0.0076 pound particulate emissions (PE), particulate matter emissions 10 microns or less in diameter (PM10) per million British thermal units.

See terms and conditions A.I.2.c., A.II.1. and A.II.2.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-08(B), OAC rule 3745-23-06(B), OAC rule 3745-31-05(C) and 40 CFR Part 60 Subpart

Dc.

See terms and conditions A.I.2.g. and A.II.3.

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term and condition A.I.2.d.

See term and condition A.I.2.e.

See terms and conditions A.I.2.h, A.III.2 and A.IV.6.

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the visible emissions limitation, the mass emissions limitations, the use of natural gas, the annual fuel usage restriction and the expiration date of this permit to install.

2.b The lb/mmBtu emission limitations outlined in term A.I.1 are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these emission limitations.

2.c The maximum total annual emissions from emissions units B040 and B041, combined, shall not exceed the following rates based upon a rolling, 12-month summation:

2.96 tons per year (TPY) of PE and PM10;

0.24 TPY of sulfur dioxide (SO₂);

32.8 TPY of carbon monoxide (CO); and

4.3 TPY of organic compounds (OC).

2.d The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.e The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.f** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- 2.g** The maximum total annual emissions from emissions units B040 and B041, combined, shall not exceed the following rate based upon a rolling, 12-month summation:
- 39.0 TPY of nitrogen oxides (NO_x).
- 2.h** This emissions unit shall only operate when emissions unit B027 is not in operation, except for the following:
- a. periods of startup or shut down of emissions unit B027; and
 - b. periods of operator training for this emissions unit.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. This permit to install shall expire one year from the issuance date of the final permit to install.
3. The maximum annual natural gas usage rate for emissions units B040 and B041, combined, shall not exceed 780 million cubic feet per year, based upon a rolling, 12-month summation of the combined natural gas usage rate.

To ensure enforceability during the first 12 calendar months of operation following the

Cognis Corporation
PTI Application: 14-05702
Issue

Facility ID: 1431070035

Emissions Unit ID: B040
issuance of this permit, the permittee shall not exceed the maximum natural gas usage levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Natural Gas Usage (Million Cubic Feet)</u>
1	390.0
1-2	390.0
1-3	390.0
1-4	390.0
1-5	390.0
1-6	390.0
1-7	455.0
1-8	520.0
1-9	585.0
1-10	650.0
1-11	715.0
1-12	780.0

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual natural gas usage limitation for emissions units B040 and B041, combined, shall be based upon a rolling 12-month summation of the combined natural gas usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units B040 and B041, combined, in order to monitor compliance with the rolling, 12-month summation limitations:
 - a. the type and amounts of fuel combusted during each calendar month;
 - b. the total emissions, in tons, for PE/PM10, SO₂, NO_x, CO, and OC;
 - c. beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the emissions total, in tons, for PE/PM10, SO₂, NO_x, CO, OC; and
 - d. beginning after the first 12 calendar months of operation following issuance of this permit the rolling, 12-month summation of the natural gas usage rate, in million cubic feet.

Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative natural gas usage rate, in million cubic feet for each month.

2. The permittee shall maintain daily records of the dates and operating times for this emissions unit and whether the operation of this emissions unit was for the purpose of operator training.

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and
 - d. The design heat input capacity of each emissions unit and the identification of

22

Cogn

PTI A

Issued: 5/23/2006

Emissions Unit ID: B040

the fuel to be combusted in each emissions unit (no later than 30 days after the construction date).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Hamilton County Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any fuel burned in this emissions unit other than natural gas. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the following:
 - a. an identification of all exceedances of the rolling, 12-month natural gas usage restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative gas usage amounts; and
 - b. an identification of all exceedances of the rolling, 12-month emissions limitations.
4. The permittee shall submit annual reports which specify the total NO_x emissions from these emissions units for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. Unless otherwise specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
6. The permittee shall submit deviation (excursion) reports that identify all periods of time when this emissions unit and emissions unit B027 were in operation except for periods

Emissions Unit ID: B040

of startup or shut down of emissions unit B027 and periods of operator training for this emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):

Emissions Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

Emissions Limitations:

0.10 lb/mmBtu NO_x, 39.0 TPY
0.0006 lb/mmBtu SO₂, 0.24 TPY SO₂
0.084 lb/mmBtu CO, 32.8 TPY CO
0.011 lb/mmBtu OC, 4.3 TPY OC
0.0076 lb/mmBtu PE*, 2.96 TPY PE*

*It is assumed the PM₁₀ emissions rate is equivalent to the PE emissions rates.

All TPY emissions limitations are based on a rolling 12 month summation of the emissions from B040 and B041, combined.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4 (revised 7/98) emission factor and then dividing by the maximum hourly heat input of the emissions unit (mmBtu/hr). The actual annual emissions rates shall be calculated by using the actual fuel usage, emissions factors and methodologies specified above. The annual emissions from emissions units B040 and B041, combined, shall be summed over the rolling 12 month period to determine compliance with the annual emissions limitations.

2. Compliance with the mass emissions limitations in terms and conditions A.I.2.c. and A.I.2.g. shall be demonstrated by the record keeping in term and condition A.III.1.
3. Compliance with the fuel usage limitations in term and condition A.II.1. shall be demonstrated by the record keeping in term and condition A.III.1.
4. Compliance with the fuel usage limitations in term and condition A.II.3. shall be

demonstrated by the record keeping in term and condition A.III.1.

VI. Miscellaneous Requirements

None

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>
B040 - 96.72 mmBtu/hr natural gas fired temporary boiler #1		

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

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>	
B041 - 96.72 mmBtu/hr natural gas-fired temporary boiler #2	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(C) Synthetic Minor to avoid Major Modification New Source Review
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-10(B)(1)
		OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)
		OAC rule 3745-31-02(A)(2)

Cogn**PTI A****Issued: 5/23/2006**

Emissions Unit ID: B041

Applicable Emissions
Limitations/Control
Measures

The following emissions limitations shall not be exceeded:

0.10 pound nitrogen oxides (NO_x) per million British thermal units

0.0006 pound sulfur dioxide (SO₂) per million British thermal units

0.084 pound carbon monoxide (CO) per million British thermal units

0.011 pound organic compounds (OC) per million British thermal units

0.0076 pound particulate emissions (PE), particulate matter emissions 10 microns or less in diameter (PM₁₀) and particulate matter emissions 2.5 microns or less in diameter (PM_{2.5}) per million British thermal units

See terms and conditions A.I.2.c., A.II.1. and A.II.2.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-08(B), OAC rule 3745-23-06(B), OAC rule 3745-31-05(C) and 40 CFR Part 60 Subpart Dc.

See terms A.I.2.g. and A.II.3.

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term and condition A.I.2.d.

See term and condition A.I.2.e.

See terms and conditions A.I.2.h, A.III.2 and A.IV.6.

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the visible emissions limitation, the mass emissions limitations, the use of natural gas, the annual fuel usage restriction and the expiration date of this permit to install.

2.b The lb/mmBtu emission limitations outlined in term A.I.1 are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these emission limitations.

2.c The maximum total annual emissions from emissions units B040 and B041, combined, shall not exceed the following rates based upon a rolling, 12-month summation:

2.96 tons per year (TPY) of PE and PM10;

0.24 TPY of sulfur dioxide (SO₂);

32.8 TPY of carbon monoxide (CO); and

4.3 TPY of organic compounds (OC).

2.d The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.e The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

Emissions Unit ID: B041

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.f** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- 2.g** The maximum total annual emissions from emissions units B040 and B041, combined, shall not exceed the following rate based upon a rolling, 12-month summation:
- 39.0 TPY of nitrogen oxides (NO_x).
- 2.h** This emissions unit shall only operate when emissions unit B027 is not in operation, except for the following:
- a. periods of startup or shut down of emissions unit B027; and
 - b. periods of operator training for this emissions unit.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. This permit to install shall expire one year from the issuance date of the final permit to install.
3. The maximum annual natural gas usage rate for emissions units B040 and B041, combined, shall not exceed 780 million cubic feet per year, based upon a rolling, 12-month summation of the natural gas usage rate.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Natural Gas Usage (Million Cubic Feet)</u>
1	390.0
1-2	390.0
1-3	390.0
1-4	390.0
1-5	390.0
1-6	390.0
1-7	455.0
1-8	520.0
1-9	585.0
1-10	650.0
1-11	715.0
1-12	780.0

After the first 12 calendar months of operation following the issuance of this permit,

compliance with the annual natural gas usage limitation for emissions units B040 and B041, combined, shall be based upon a rolling 12-month summation of the combined natural gas usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units B040 and B041, combined, in order to monitor compliance with the rolling, 12-month summation limitations:
 - a. the type and amounts of fuel combusted during each calendar month;
 - b. the total emissions, in tons, for PE/PM10, SO₂, NO_x, CO, and OC;
 - c. beginning after the first 12 calendar months of operation following issuance of this permit the rolling, 12-month summation of the emissions total, in tons, for PE/PM10, SO₂, NO_x, CO, and OC; and
 - d. beginning after the first 12 calendar months of operation following issuance of this permit the rolling, 12-month summation of the natural gas usage rate, in million cubic feet.

Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative natural gas usage rate, in million cubic feet for each month.

2. The permittee shall maintain daily records of the dates and operating times for this emissions unit and whether the operation of this emissions unit was for the purpose of operator training.

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

- c. Actual start-up date (within 15 days after such date); and
- d. The design heat input capacity of each emissions unit and the identification of the fuel to be combusted in each emissions unit (no later than 30 days after the construction date).

Emissions Unit ID: B041

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Hamilton County Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any fuel burned in this emissions unit other than natural gas. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the following:
 - a. an identification of all exceedances of the rolling, 12-month natural gas usage restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative gas usage amounts; and
 - b. an identification of all exceedances of the rolling, 12-month emissions limitations.
4. The permittee shall submit annual reports which specify the total NO_x emissions from these emissions units for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. Unless otherwise specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
6. The permittee shall submit deviation (excursion) reports that identify all periods of time when this emissions unit and emissions unit B027 were in operation except for periods of startup or shut down of emissions unit B027 and periods of operator training for this emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 and A.I.2 of these terms and

36

Cogn

PTI A

Issued: 5/23/2006

Emissions Unit ID: B041

conditions shall be determined in accordance with the following method(s):

Emissions Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

Emissions Limitations:

0.10 lb/mmBtu NO_x, 39.0 TPY
0.0006 lb/mmBtu SO₂, 0.24 TPY SO₂
0.084 lb/mmBtu CO, 32.8 TPY CO
0.011 lb/mmBtu OC, 4.3 TPY OC
0.0076 lb/mmBtu PE*, 2.96 TPY PE*

*It is assumed the PM₁₀ emissions rate is equivalent to the PE emissions rates.

All TPY emissions limitations are based on a rolling 12 month summation of the emissions from B040 and B041, combined.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4 (revised 7/98) emission factor and then dividing by the maximum hourly heat input of the emissions unit (mmBtu/hr). The actual annual emissions rates shall be calculated by using the actual fuel usage, emissions factors and methodologies specified above. The annual emissions from emissions units B040 and B041, combined, shall be summed over the rolling 12 month period to determine compliance with the annual emissions limitations.

2. Compliance with the mass emissions limitations in terms and conditions A.I.2.c. and A.I.2.g. shall be demonstrated by the record keeping in term and condition A.III.1.
3. Compliance with the fuel usage limitations in term and condition A.II.1. shall be demonstrated by the record keeping in term and condition A.III.1.
4. Compliance with the fuel usage limitations in term and condition A.II.3. shall be

demonstrated by the record keeping in term and condition A.III.1.

VI. Miscellaneous Requirements

None

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>
B041 - 96.72 mmBtu/hr natural gas fired temporary boiler #2		

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

None

Cognis Corporation
PTI Application: 11-05702
Issue

Facility ID: 1431070035

Emissions Unit ID: B041