

Facility ID: 0374010117 Issuance type: Title V Final Permit

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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## Part II - Specific Facility Terms and Conditions

### a State and Federally Enforceable Section

1. None

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### b State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

BOILER 1, Ohio EPA emissions unit B011;  
 BOILER 2, Ohio EPA emissions unit B012;  
 BOILER 3, Ohio EPA emissions unit B013;  
 BOILER 4, Ohio EPA emissions unit B014;  
 BOILER 5, Ohio EPA emissions unit B015;  
 GASOLINE DISPENSING FACILITY, Ohio EPA emissions unit G001;  
 DEPT 3 TURNING, Ohio EPA emissions unit P001;  
 CERAMIC FIRING KILNS, Ohio EPA emissions unit P002;  
 GLAZE KILNS, Ohio EPA emissions unit P003;  
 SEALING KILNS, Ohio EPA emissions unit P004;  
 CLAY MIXING, Ohio EPA emissions unit P005;  
 DEPT 8 TURNING, Ohio EPA emissions unit P055;  
 DEPT 8 SPRAY DRYER, Ohio EPA emissions unit P056;  
 DEPT 23 SPRAY DRYER, Ohio EPA emissions unit P057;  
 CURRENT TREAT FURNACE, Ohio EPA emissions unit P059;  
 SAGGER DRYER, Ohio EPA emissions unit P060;  
 MAINTENANCE PAINTING, Ohio EPA emissions unit P061;  
 INSULATOR TURNING, Ohio EPA emissions unit P062;  
 HARROP KILN, Ohio EPA emissions unit P063;  
 DEPT 10 PRESSES, Ohio EPA emissions unit P064;  
 BICKLEY KILN, Ohio EPA emissions unit P065;  
 K-1 PNEUMATIC UNLOADER, Ohio EPA emissions unit P066;  
 DENISON HOT PRESS, Ohio EPA emissions unit P067;  
 FUNCTIONAL TESTER, Ohio EPA emissions unit P069;  
 TAMPER VACUUM, Ohio EPA emissions unit P071;  
 OFFLINE TURNING, Ohio EPA emissions unit P072;  
 GLAZE SPRAY, Ohio EPA emissions unit R001;  
 DYKEM 5-9 LACQUER SPRAY, Ohio EPA emissions unit R004;  
 PROTOTYPE SPRAY BOOTH, Ohio EPA emissions unit R005;  
 AIRCRAFT PLUG GLAZER, Ohio EPA emissions unit R007;  
 TIP GLAZE, Ohio EPA emissions unit R008;  
 TANK 4, Ohio EPA emissions unit Z006;  
 TANK 5, Ohio EPA emissions unit Z007;  
 TANK 6, Ohio EPA emissions unit Z008;  
 SPINDLE CLEANING, Ohio EPA emissions unit Z009;  
 WASHERS, Ohio EPA emissions unit Z015;  
 SINGLE WIDE KILN No 1, Ohio EPA emissions unit Z022;  
 SINGLE WIDE KILN No 2, Ohio EPA emissions unit Z023;  
 SINGLE WIDE KILN No 3, Ohio EPA emissions unit Z024;  
 KILN #4, Ohio EPA emissions unit Z025;  
 KILN #7, Ohio EPA emissions unit Z026;  
 DOUBLE WIDE KILN, Ohio EPA emissions unit Z027;  
 SEAL KILN No 1, Ohio EPA emissions unit Z029;  
 SEAL KILN No 2, Ohio EPA emissions unit Z030;  
 SEAL KILN No 3, Ohio EPA emissions unit Z031;  
 SEAL KILN No 4, Ohio EPA emissions unit Z032;  
 SEAL KILN No 5, Ohio EPA emissions unit Z033;  
 SEAL KILN No 6, Ohio EPA emissions unit Z034;  
 SEAL KILN No 7, Ohio EPA emissions unit Z035;

SEAL KILN No 8, Ohio EPA emissions unit Z036;  
SEAL KILN No 9, Ohio EPA emissions unit Z037;  
SEAL KILN No 10, Ohio EPA emissions unit Z038;  
SEAL KILN No 11, Ohio EPA emissions unit Z039;  
SEAL KILN No 12, Ohio EPA emissions unit Z040;  
SEAL KILN No 13, Ohio EPA emissions unit Z041; and  
SEAL KILN No 14, Ohio EPA emissions unit Z042.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

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**Part III - Terms and Conditions for Emissions Units**

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Facility ID: 0374010117 Emissions Unit ID: P054 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
'Niro' spray dryer, for ceramic raw material w/ a wet venturi scrubber	OAC rule 3745-17-11(B)(2)	11.5 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)(1-3)	Visible emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

**2. Additional Terms and Conditions**

- (a) None

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**II. Operational Restrictions**

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 3.0 inches of water at all times while the emissions unit is in operation.
2. The scrubber water flow rate shall be continuously maintained at a value of not less than 16 gallons per minute at all times while the emissions unit is in operation.

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**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be 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:

- a. the pressure drop across the scrubber, in inches of water, on a once-per-shift basis;
- b. the scrubber water flow rate, in gallons per minute, on a once-per-shift basis; and
- c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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**IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:

- a. the static pressure drop across the scrubber; and
- b. the scrubber water flow rate.

The deviation reports shall be submitted as specified in General Condition A.1.c of this permit.

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V. **Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
11.5 lbs PE/hr  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above emission limit based upon the results of the emission testing required in section V.2 of this permit.
  - b. Emission Limitation:  
Visible emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method:  
OAC 3745-17-03(B)(1)
2. 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 6 months prior to permit renewal.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): OAC rule 3745-17-03(B)(10). 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 its maximum capacity. 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.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0374010117 Emissions Unit ID: P054 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
'Niro' spray dryer, for ceramic raw material w/ a wet venturi scrubber	None	None

**2. Additional Terms and Conditions**

1. None

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**II. Operational Restrictions**

1. None

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**III. Monitoring and/or Record Keeping Requirements**

1. None

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**IV. Reporting Requirements**

1. None

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**V. Testing Requirements**

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**VI. Miscellaneous Requirements**

1. None

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**Part III - Terms and Conditions for Emissions Units**

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Facility ID: 0374010117 Emissions Unit ID: P073 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Applicable Emissions Limitations/Control**

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Measures</u>
spark plug rating test cell - 600 horsepower maximum output (4.2 mmBtu/hr input)	OAC rule 3745-17-11 (B)(5)(a)	0.31 pound particulate emissions (PE)/mmBtu heat input (see A.I.2.b)
	OAC rule 3745-17-07 (A)(1-3)	Visible emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-02 (A)(2) PTI # 03-10087	See A.I.2.a.

2. **Additional Terms and Conditions**

- a. The combined carbon monoxide (CO) emissions from emissions units P073 and P074 shall not exceed 230 tons/year, based upon a rolling, 12-month summation of the monthly emissions.
- b. The emission limitation specified in this rule citation has been revised based upon a change in the applicable emission factor contained in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors. The revised rule was adopted by the Director of Ohio EPA in December, 1997. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this limitation as a revision to the Ohio SIP for particulate matter.

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II. **Operational Restrictions**

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records and calculations, which list the following information for emissions units P073 and P074 combined:
  - a. The testing operations employed (i.e., either spark plug rating, spark plug performance testing, or O2 sensor performance testing).
  - b. The number of gallons of fuel employed for each testing operation (gasoline for spark plug and O2 sensor performance testing, and benzene for spark plug rating).
  - c. The total monthly emissions of CO, in tons, calculated as follows:
 

CO emissions (tons/month) = the summation of (the number of gallons of fuel consumed/month from i X EFI for CO) for i=1,2,3

where,

i = 1 = spark plug rating;  
 i = 2 = spark plug performance testing;  
 i = 3 = O2 sensor performance testing; and  
 EFI = the emission factor for CO, in lbs/gallon, which shall be derived from the most recent stack test on this emissions unit. The current EFI values for CO based on the most recent stack test are as follows:

Spark Plug	Spark Plug	O2 Sensor
Pollutant Rating	Performance	Performance
CO	13.37	4.54 2.73
  - d. The rolling, 12-month summation of the monthly CO emissions, in tons.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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. the cause of the visible emissions;
  - c. the total duration of any visible emission incident; and
  - d. any corrective actions taken to eliminate the visible emissions.

The daily checks of the visible particulate emissions do not need to be performed in accordance with the procedures specified in U.S. EPA Reference Method 9. However, it is recommended that the observers performing the daily checks be educated on the general provisions for determining the presence of visible particulate emissions and be knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).

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IV. **Reporting Requirements**

1. The permittee shall submit annual reports which specify the total CO emissions from emissions units P073 and P074 combined. The reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
2. The permittee shall submit deviation (excursion) reports which identify any exceedances of the rolling, 12-month emission limit of 230 tons CO per year.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The deviation reports shall be submitted as specified in General Condition A.1.c of this permit.

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V. **Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
0.31 pound particulate emissions (PE) per mmBtu heat input  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above limit by using the emission factor from USEPA's AP-42, Table 3.3-1.  
  
If required, the permittee shall demonstrate compliance with the above emission limit pursuant to OAC rule 3745-17-03(B)(10).
  - b. Emission Limitation:  
Visible emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method:  
Compliance with the visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
  - c. Emission Limitations:  
230 tons/yr CO (for emissions units P073 and P074 combined)  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above limit pursuant to the record keeping requirements in section A.III. of this permit.
2. 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 approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for carbon monoxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 10, 40 CFR Part 60, Appendix A. 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 its maximum capacity. 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.

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VI. **Miscellaneous Requirements**

1. None

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**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
spark plug rating test cell - 600 horsepower maximum output (4.2 mmBtu/hr input)	OAC rule 3745-31-05 PTI # 03-10087	40.2 lbs CO/hr (see B.I.2.a) 1.02 lbs NOx/hr (see B.I.2.a) 1.11 lbs OC/hr (see B.I.2.a) 0.1 lb PE/hr (see B.I.2.a) 0.44 ton PE/yr (see B.I.2.a)
	OAC rule 3745-31-02 PTI # 03-10087	See B.I.2.b and c.

2. **Additional Terms and Conditions**

- a. The emission limitations of 40.2 lbs CO/hr, 1.02 lbs NOx/hr, 1.11 lbs OC/hr, 0.1 lb PE/hr, and 0.44 ton PE/yr reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- b. The NOx emissions from emissions units P073 and P074 combined shall not exceed 22.3 tons/year, based upon a rolling, 12-month summation of the monthly emissions.
- c. The OC emissions from emissions units P073 and P074 combined shall not exceed 12.7 tons/year, based upon a rolling, 12-month summation of the monthly emissions.

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records and calculations, which list the following information for emissions units P073 and P074 combined:
  - a. The total monthly emissions of NOx and OC, in tons, calculated as follows:
 

emissions (tons/month) for Z = the summation of (the number of gallons of fuel consumed/month from i X EFi for Z) for i=1,2,3

where,  
 i = 1 = spark plug rating;  
 i = 2 = spark plug performance testing;  
 i = 3 = O2 sensor performance testing;  
 Z = either NOx or OC; and  
 EFi = the emission factor for Z, in lbs/gallon, which shall be derived from the most recent stack test on this emissions unit. The current EFi values for OC and NOx based on the most recent stack test are as follows:

- . Spark Plug Spark Plug O2 Sensor
  - . Pollutant Rating Performance Performance
    - . NOx 0.34 0.44 0.01
    - . OC 0.37 0.25 0.03

b. The rolling, 12-month summation of the monthly NOx and OC emissions, in tons.

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**IV. Reporting Requirements**

1. The permittee shall submit annual reports which specify the total OC and NOx emissions from emissions units P073 and P074 combined. The reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
2. The permittee shall submit deviation (excursion) reports which identify any exceedances of the rolling, 12-month emission limits of 12.7 tons OC per year and 22.3 tons NOx per year.
3. The deviation reports shall be submitted as specified in General Condition A.1.c of this permit.

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**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section B.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
40.2 lbs CO/hr  
  
Compliance Method:  
The permittee shall use the test results from section A.V.2 of this permit to demonstrate compliance with the allowable emission limitation above.
  - b. Emission Limitation:  
1.02 lbs NOx/hr  
  
Applicable compliance method:  
If required, the permittee shall demonstrate compliance with the above limit pursuant to Method 7, 40 CFR Part 60, Appendix A.
  - c. Emission Limitation:  
1.11 lbs OC/hr  
  
Applicable compliance method:  
If required, the permittee shall demonstrate compliance with the above limit pursuant to Method 25, 40 CFR Part 60, Appendix A.
  - d. Emission Limitations:  
12.7 tons/yr OC (for emissions units P073 and P074 combined)  
22.3 tons/yr NOx (for emissions units P073 and P074 combined)  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above limits pursuant to the record keeping requirements in section B.III of this permit.
  - e. Emission Limitations:  
0.1 lb PE/hr  
0.44 ton PE/yr  
  
Applicable Compliance Method:  
To determine the actual worst-case particulate emissions rate (E), in pounds per hour, the following equation shall be used for this emissions unit:  
  
$$E \text{ (lbs/hr)} = \text{maximum rated heat input (mmBtu per hour)} \times (EF)$$
  
  
EF = emission factor from USEPA's AP-42, Table 3.3-1  
  
If required, the permittee shall demonstrate compliance with the hourly emission limit pursuant to Method 5, 40 CFR 60, Appendix A.  
  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

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VI. **Miscellaneous Requirements**

1. None

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**Part III - Terms and Conditions for Emissions Units**

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Facility ID: 0374010117 Emissions Unit ID: P074 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
two spark plug and O2 sensor performance test cells-2400 horsepower maximum output (16.8 mmBtu/hr input)	OAC rule 3745-17-11 (B)(5)(a)  OAC rule 3745-17-07 (A)(1-3)  OAC rule 3745-31-02 (A)(2) PTI # 03-10087	0.31 pound particulate emissions (PE)/mmBtu heat input (see A.I.2.b)  Visible emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  See A.I.2.a.

**2. Additional Terms and Conditions**

- a. The combined carbon monoxide (CO) emissions from emissions units P073 and P074 shall not exceed 230 tons/year, based upon a rolling, 12-month summation of the monthly emissions.
- b. The emission limitation specified in this rule citation has been revised based upon a change in the applicable emission factor contained in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors. The revised rule was adopted by the Director of Ohio EPA in December, 1997. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this limitation as a revision to the Ohio SIP for particulate matter.

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**II. Operational Restrictions**

1. None

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**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records and calculations, which list the following information for emissions units P073 and P074 combined:
  - a. The testing operations employed (i.e., either spark plug rating, spark plug performance testing, or O2 sensor performance testing).
  - b. The number of gallons of fuel employed for each testing operation (gasoline for spark plug and O2 sensor performance testing, and benzene for spark plug rating).
  - c. The total monthly emissions of CO, in tons, calculated as follows:  
  
CO emissions (tons/month) = the summation of (the number of gallons of fuel consumed/month from i X EFi for CO) for i=1,2,3  
  
where,

i = 1 = spark plug rating;  
 i = 2 = spark plug performance testing;  
 i = 3 = O2 sensor performance testing; and  
 EFi = the emission factor for CO, in lbs/gallon, which shall be derived from the most recent stack test on this emissions unit. The current EFi values for CO based on the most recent stack test are as follows:

. Spark Plug Spark Plug O2 Sensor  
 . Pollutant Rating Performance Performance  
 . CO 13.37 4.54 2.73

d. The rolling, 12-month summation of the monthly CO emissions, in tons.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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. the cause of the visible emissions;  
 c. the total duration of any visible emission incident; and  
 d. any corrective actions taken to eliminate the visible emissions.

The daily checks of the visible particulate emissions do not need to be performed in accordance with the procedures specified in U.S. EPA Reference Method 9. However, it is recommended that the observers performing the daily checks be educated on the general provisions for determining the presence of visible particulate emissions and be knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).

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#### IV. Reporting Requirements

1. The permittee shall submit annual reports which specify the total CO emissions from emissions units P073 and P074 combined. The reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
2. The permittee shall submit deviation (excursion) reports which identify any exceedances of the rolling, 12-month emission limit of 230 tons CO per year.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The deviation reports shall be submitted as specified in General Condition A.1.c of this permit.

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#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
 0.31 pound particulate emissions (PE) per mmBtu heat input  
  
 Applicable Compliance Method:  
 The permittee shall demonstrate compliance with the above limit by using the emission factor from USEPA's AP-42, Table 3.3-1.  
  
 If required, the permittee shall demonstrate compliance with the above emission limit pursuant to OAC rule 3745-17-03(B)(10).
  - b. Emission Limitation:  
 Visible emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
 Applicable Compliance Method:  
 Compliance with the visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
  - c. Emission Limitations:  
 230 tons/yr CO (for emissions units P073 and P074 combined)  
  
 Applicable Compliance Method:  
 The permittee shall demonstrate compliance with the above limit pursuant to the record keeping requirements in section A.III. of this permit.

2. 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 approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for carbon monoxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 10, 40 CFR Part 60, Appendix A. 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 its maximum capacity. 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.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0374010117 Emissions Unit ID: P074 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
two spark plug and O2 sensor performance test cells-2400 horsepower maximum output (16.8 mmBtu/hr input)	OAC rule 3745-31-05 PTI # 03-10087	545 lbs CO/hr (see B.I.2.a) 52.8 lbs NOx/hr (see B.I.2.a) 30 lbs OC/hr (see B.I.2.a) 1.2 lbs PE/hr (see B.I.2.a) 5.26 tons PE/yr (see B.I.2.a)
	OAC rule 3745-31-02 PTI # 03-10087	See B.I.2.b and c.

2. **Additional Terms and Conditions**

- a. The emission limitations of 545 lbs CO/hr, 52.8 lbs NOx/hr, 30 lbs OC/hr, 1.2 lbs PE/hr, and 5.26 ton PE/yr reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- b. The NOx emissions from emissions units P073 and P074 combined shall not exceed 22.3 tons/year, based

upon a rolling, 12-month summation of the monthly emissions.

- c. The OC emissions from emissions units P073 and P074 combined shall not exceed 12.7 tons/year, based upon a rolling, 12-month summation of the monthly emissions.

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**II. Operational Restrictions**

1. None

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**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records and calculations, which list the following information for emissions units P073 and P074 combined:
- a. The total monthly emissions of NOx and OC, in tons, calculated as follows:
- emissions (tons/month) for Z = the summation of (the number of gallons of fuel consumed/month from i X EFi for Z) for i=1,2,3
- where,  
i = 1 = spark plug rating;  
i = 2 = spark plug performance testing;  
i = 3 = O2 sensor performance testing;  
Z = either NOx or OC; and  
EFi = the emission factor for Z, in lbs/gallon, which shall be derived from the most recent stack test on this emissions unit. The current EFi values for OC and NOx based on the most recent stack test are as follows:
- |  |            |            |             |
|--|------------|------------|-------------|
|  | Spark Plug | Spark Plug | O2 Sensor   |
|  | Pollutant  | Rating     | Performance |
|  | NOx        | 0.34       | 0.44        |
|  | OC         | 0.37       | 0.25        |
- b. The rolling, 12-month summation of the monthly NOx and OC emissions, in tons.

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**IV. Reporting Requirements**

1. The permittee shall submit annual reports which specify the total OC and NOx emissions from emissions units P073 and P074 combined. The reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
2. The permittee shall submit deviation (excursion) reports which identify any exceedances of the rolling, 12-month emission limits of 12.7 tons OC per year and 22.3 tons NOx per year.
3. The deviation reports shall be submitted as specified in General Condition A.1.c of this permit.

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**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section B.I. of these terms and conditions shall be determined in accordance with the following method(s):
- a. Emission Limitations:  
1.2 lbs PE/hr  
5.26 tons PE/yr
- Applicable Compliance Method:  
To determine the actual worst-case particulate emissions rate (E), in pounds per hour, the following equation shall be used for this emissions unit:
- $$E \text{ (lbs/hr)} = \text{maximum rated heat input (mmBtu per hour)} \times (EF)$$
- EF = emission factor from USEPA's AP-42, Table 3.3-1
- If required, the permittee shall demonstrate compliance with the hourly emission limit pursuant to Method 5, 40 CFR 60, Appendix A.
- As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- b. Emission Limitation:  
545 lbs CO/hr
- Compliance Method:  
The permittee shall use the test results from section A.V.2 of this permit to demonstrate compliance with the allowable emission limitation above.
- c. Emission Limitation:  
52.8 lbs NOx/hr
- Applicable compliance method:  
If required, the permittee shall demonstrate compliance with the above limit pursuant to Method 7, 40 CFR Part 60, Appendix A.
- d. Emission Limitation:  
30 lbs OC/hr
- Applicable compliance method:  
If required, the permittee shall demonstrate compliance with the above limit pursuant to Method 25, 40 CFR Part 60, Appendix A.
- e. Emission Limitations:  
12.7 tons/yr OC (for emissions units P073 and P074 combined)  
22.3 tons/yr NOx (for emissions units P073 and P074 combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above limits pursuant to the record keeping requirements in section B.III. of this permit.

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VI. **Miscellaneous Requirements**

1. None