



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL
CUYAHOGA COUNTY**

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: 13-03592

DATE: 4/19/00

Advanced Ceramics Corporation
Steve Dorr
PO Box 94924
Cleveland, OH 441014924

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

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

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

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

CC: USEPA

CBAPC



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: 4/19/00

FINAL PERMIT TO INSTALL 13-03592

Application Number: 13-03592
APS Premise Number: 1318558216
Permit Fee: **\$5600**
Name of Facility: Advanced Ceramics Corporation
Person to Contact: Steve Dorr
Address: PO Box 94924
Cleveland, OH 441014924

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

**22557 West Lunn Road
Strongsville, Ohio**

Description of proposed emissions unit(s):

3 Calciners, 3 Dryers, Boron Nitride Heat Treat System, Cosmetic Boron Nitride Powder Firing System and six (6) baghouses for misc processes.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements 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 information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and 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. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

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

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources 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.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

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

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

Advanced Ceramics Corporation
PTI Application: 13-03592
Issued: 4/19/00

Facility ID: 1318558216

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM ₁₀	40.9
Ammonia	4.40

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - 18 in Natural Gas Fired Calciner, equipped with a Venturi Scrubber and baghouse	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07</p> <p>OAC rule 3745-17-11</p>	<p>2.1 lbs/hr particulate emissions, 9.19 TPY</p> <p>0.2 lb/hr Ammonia emissions, 0.87 TPY</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.</p> <p>See B.1. and B.2.</p> <p>20% opacity as a six-minute average, except as provided by rule</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- 1. The permittee shall operate the baghouse for control of particulate emissions while the emissions unit is in operation.
- 2. The permittee shall operate the venturi wet scrubber for control of particulate and ammonia emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The permittee shall properly install, 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 installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall collect and record the following information each day:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The pressure drop across the baghouse on a daily basis.
 - d. The operating times for the capture (collection) system, control device(s), monitoring equipment, and the associated emissions unit.
4. The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m³): 0.375

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 10.87

MAGLC (ug/m³): 414.5

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
6. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber and/or baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
 20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
 Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
 2.1 lbs/hr particulate emissions 9.19 TPY

Applicable Compliance Method(s) -
 See E.2.
 The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

- c. Emission Limitation -
 0.2 lb/hr Ammonia emissions 0.87 TPY

Applicable Compliance Method(s) -
 Compliance shall be based upon use of the following equation:

$$E = UE \times (1 - CE)$$
 where
 E = emission rate in lb/hr
 UE = Uncontrolled emission rate in lb/hr
 CE = % efficiency of the control equipment

UE = 0.7 lb/hr (Based on stack testing conducted 2/1999)

E = 0.75 (control equipment efficiency 75%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

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

The emission testing shall be conducted approximately 3 months after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control (CBAPC).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CBAPC. 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 CBAPC's refusal to accept the results of the emission test(s).

Personnel from the CBAPC 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 CBAPC 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 CBAPC.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - 12 in Natural Gas Fired Calciner, equipped with a Venturi Scrubber and baghouse	OAC rule 3745-31-05(A)(3)	1.2 lb/hr particulate emissions, 5.25 TPY 0.12 lb/hr Ammonia emissions, 0.52 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1. and B.2.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

2. The permittee shall operate a venturi wet scrubber for control of particulate and ammonia emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The permittee shall properly install, 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 installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall collect and record the following information each day:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The pressure drop across the baghouse on a daily basis.
 - d. The operating times for the capture (collection) system, control device(s), monitoring equipment, and the associated emissions unit.
4. The permit to install for this emissions unit P002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia
TLV (mg/m3): 0.375

Advanced Ceramics Corporation

PTI Application: 13-03502

Issued

Facility ID: 1318558216

Emissions Unit ID: P002

Maximum Hourly Emission Rate (lbs/hr): 0.12

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 6.52

MAGLC (ug/m3): 414.5

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

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Advan

PTI A

Issued: 4/19/00

Emissions Unit ID: **P002**

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber and/or baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):
 - a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - b. Emission Limitation -
1.2 lb/hr particulate emissions 5.25 TPY

Applicable Compliance Method(s) -
See E.2.
The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.
 - c. Emission Limitation -
0.12 lb/hr Ammonia emissions 0.52 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
$$E = UE \times (1 - CE)$$
where
E = emission rate in lb/hr
UE = Uncontrolled emission rate in lb/hr
CE = % efficiency of the control equipment

UE = 0.4 lb/hr (Based on stack testing conducted 2/1999)

CE = 0.75 (control equipment efficiency 75%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

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

The emission testing shall be conducted approximately 3 months after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control (CBAPC).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CBAPC. 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 CBAPC's refusal to accept the results of the emission test(s).

Personnel from the CBAPC 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 CBAPC 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 CBAPC.

F. Miscellaneous Requirements

None

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Advan

PTI A

Issued: 4/19/00

Emissions Unit ID: **P002**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - 10 in Natural Gas Fired Calciner, equipped with a Venturi Scrubber and baghouse	OAC rule 3745-31-05(A)(3)	0.9 lb/hr particulate emissions, 3.91 TPY 0.10 lb/hr Ammonia emissions, 0.44 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1. and B.2.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall operate the baghouse for control of particulate emissions while the emissions unit is in operation.

2. The permittee shall operate the venturi wet scrubber for control of particulate and ammonia emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The permittee shall properly install, 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 installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall collect and record the following information each day:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The pressure drop across the baghouse on a daily basis.
 - d. The operating times for the capture (collection) system, control device(s), monitoring equipment, and the associated emissions unit.
4. The permit to install for this emissions unit P003 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia
TLV (mg/m³): 0.375
Maximum Hourly Emission Rate (lbs/hr): 0.10
Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 5.218
MAGLC (ug/m3): 414.5

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

6. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

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Emissions Unit ID: **P003**

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

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber and/or baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.9 lb/hr particulate emissions 3.91 TPY

Applicable Compliance Method(s) -

See E.2.

The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

- c. Emission Limitation -
0.1 lb/hr Ammonia emissions 0.44 TPY

Applicable Compliance Method(s) -

Compliance shall be based upon use of the following equation:

$$E = UE \times (1 - CE)$$

where

E = emission rate in lb/hr

UE = Uncontrolled emission rate in lb/hr

CE = % efficiency of the control equipment

UE = 0.3 lb/hr (Based on stack testing conducted 2/1999)

CE = 0.75 (control equipment efficiency 75%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

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

The emission testing shall be conducted approximately 3 months after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control (CBAPC).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CBAPC. 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 CBAPC's refusal to accept the results of the emission test(s).

Personnel from the CBAPC 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 CBAPC 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 CBAPC.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
P004 - Boron Nitride Heat Treater System, equipped with a Venturi Scrubber	OAC rule 3745-31-05(A)(3)	0.03 lb/hr particulate emissions, 0.13 TPY 0.5 lb/hr Ammonia emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall operate a venturi wet scrubber for control of particulate and ammonia emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 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:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permit to install for this emissions unit P004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia
TLV (mg/m3): 0.375
Maximum Hourly Emission Rate (lbs/hr): 0.5
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 27.4
MAGLC (ug/m3): 414.5
4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.03 lb/hr particulate emissions 0.13 TPY

Applicable Compliance Method(s) -

See E.2.

The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

- c. Emission Limitation -
0.5 lb/hr Ammonia emissions 2.19 TPY

Applicable Compliance Method(s) -

Compliance shall be based upon use of the following equation:

$$E = UE \times (1 - CE)$$

where

E = emission rate in lb/hr

UE = Uncontrolled emission rate in lb/hr

CE = % efficiency of the control equipment

UE = 2.0 lbs/hr (Based on stack testing conducted 2/1999)

CE = 0.75 (control equipment efficiency 75%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

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

The emission testing shall be conducted approximately 3 months after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control (CBAPC).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CBAPC. 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 CBAPC's refusal to accept the results of the emission test(s).

Personnel from the CBAPC 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 CBAPC 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 CBAPC.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Glenro Continuous Dryer #1, equipped with a Venturi Scrubber	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY 0.03 lb/hr Ammonia emissions, 0.13 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall operate a venturi wet scrubber for control of particulate and ammonia emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 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:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permit to install for this emissions unit P005 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m³): 0.375

Maximum Hourly Emission Rate (lbs/hr): 0.03

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 1.609

MAGLC (ug/m³): 414.5

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

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Emissions Unit ID: **P005**

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -

See E.2.

The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

- c. Emission Limitation -
0.03 lb/hr Ammonia emissions 0.13 TPY

Applicable Compliance Method(s) -

Compliance shall be based upon use of the following equation:

$$E = UE \times (1 - CE)$$

where

E = emission rate in lb/hr

UE = Uncontrolled emission rate in lb/hr

CE = % efficiency of the control equipment

UE = 0.1 lb/hr (Based on stack testing conducted 2/1999)

CE = 0.75 (control equipment efficiency 75%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

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

Emissions Unit ID: **P005**

The emission testing shall be conducted approximately 3 months after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control (CBAPC).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CBAPC. 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 CBAPC's refusal to accept the results of the emission test(s).

Personnel from the CBAPC 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 CBAPC 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 CBAPC.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P006 - Glenro Continuous Dryer #2, equipped with a Venturi Scrubber	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY 0.03 lb/hr Ammonia emissions, 0.13 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall operate a venturi wet scrubber for control of particulate and ammonia

emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 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:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permit to install for this emissions unit P006 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia
TLV (mg/m³): 0.375
Maximum Hourly Emission Rate (lbs/hr): 0.03
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1.609
MAGLC (ug/m³): 414.5
4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

Emissions Unit ID: **P006**

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

Emissions Unit ID: **P006**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):
 - a. Emission Limitation -
20% opacity, as a 6-minute average

 Applicable Compliance Method(s) -
 Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

 Applicable Compliance Method(s) -
 See E.2.
 The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.
 - c. Emission Limitation -
0.03 lb/hr Ammonia emissions 0.13 TPY

 Applicable Compliance Method(s) -
 Compliance shall be based upon use of the following equation:

$$E = UE \times (1 - CE)$$
 where
 E = emission rate in lb/hr
 UE = Uncontrolled emission rate in lb/hr
 CE = % efficiency of the control equipment

 UE = 0.1 lb/hr (Based on stack testing conducted 2/1999)
 CE = 0.75 (control equipment efficiency 75%).
 The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

 The emission testing shall be conducted approximately 3 months after permit issuance and within 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P007 - Glenro Continuous Dryer #3, equipped with a Venturi Scrubber	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY 0.03 lb/hr Ammonia emissions, 0.13 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall operate a venturi wet scrubber for control of particulate and ammonia emissions while the emissions unit is in operation.

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Emissions Unit ID: **P007**

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 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:
 - a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The scrubber water flow rate, in gallons per minute, on a daily basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permit to install for this emissions unit P007 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia
TLV (mg/m³): 0.375
Maximum Hourly Emission Rate (lbs/hr): 0.03
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1.609
MAGLC (ug/m³): 414.5

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

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the scrubber was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
 20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
 Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
 0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
 See E.2.

The lb/hr emission rate established from E.2 is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

- c. Emission Limitation -
 0.03 lb/hr Ammonia emissions 0.13 TPY

Applicable Compliance Method(s) -
 Compliance shall be based upon use of the following equation:
 $E = UE \times (1 - CE)$

where

E = emission rate in lb/hr

UE = Uncontrolled emission rate in lb/hr

CE = % efficiency of the control equipment

UE = 0.1 lb/hr (Based on stack testing conducted 2/1999)

CE = 0.75 (control equipment efficiency 75%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

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

The emission testing shall be conducted approximately 3 months after permit issuance and within

6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P008 - Blending and Loading stations, equipped with a baghouse	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

- 2.a None

B. Operational Restrictions

1. The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the baghouse was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
 $E = UE \times (1 - CE)$
where
E = emission rate in lb/hr
UE = Uncontrolled emission rate in lb/hr

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CE = % efficiency of the control equipment

UE = 6.02 lbs/hr (Based on permittee's estimate)
CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
P009- Spencer Coke Recovery process, equipped with a baghouse	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

- None

B. Operational Restrictions

- The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the baghouse was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):
 - a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
$$E = UE \times (1 - CE)$$
where
E = emission rate in lb/hr

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Emissions Unit ID: **P009**

UE = Uncontrolled emission rate in lb/hr

CE = % efficiency of the control equipment

UE = 3.76 lbs/hr (Based on permittee's estimate)
CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P010 -Grey Billet machining operation, equipped with a baghouse	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the baghouse was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
$$E = UE \times (1 - CE)$$
where
E = emission rate in lb/hr
UE = Uncontrolled emission rate in lb/hr
CE = % efficiency of the control equipment

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Emissions Unit ID: **P010**

UE = 2.05 lbs/hr (Based on permittee's estimate)
CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P011 -machining, grinding and cutting operation, equipped with a baghouse	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None.

B. Operational Restrictions

1. The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the baghouse was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:

$$E = UE \times (1 - CE)$$
 where
 E = emission rate in lb/hr
 UE = Uncontrolled emission rate in lb/hr
 CE = % efficiency of the control equipment

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Emissions Unit ID: **P011**

UE = 17.8 lbs/hr (Based on permittee's estimate)
CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
P012 - Coke and Thermax recovery unit, equipped with a baghouse	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the baghouse was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):
 - a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
$$E = UE \times (1 - CE)$$
where
E = emission rate in lb/hr
UE = Uncontrolled emission rate in lb/hr

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Facility ID: 1318558216

Emissions Unit ID: **P012**

CE = % efficiency of the control equipment

UE = 5.82 lbs/hr (Based on permittee's estimate)
CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
P013 - Crush Mill and Screen room, equipped with a dust collector	OAC rule 3745-31-05(A)(3)	0.5 lb/hr particulate emissions, 2.19 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall operate a dust collector for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the dust collector on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the dust collector was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the dust collector was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- b. Emission Limitation -
0.5 lb/hr particulate emissions 2.19 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
$$E = UE \times (1 - CE)$$
where
E = emission rate in lb/hr
UE = Uncontrolled emission rate in lb/hr

Advanced Ceramics Corporation
PTI Application: 13-03592
Issued

Facility ID: 1318558216

Emissions Unit ID: **P013**

CE = % efficiency of the control equipment

UE = 6.84 lbs/hr (Based on permittee's estimate)

CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
P014 - Cosmetic Grade BN powder firing system, equipped with a baghouse	OAC rule 3745-31-05(A)(3)	0.623 lbs/hr particulate emissions, 2.72 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See B.1.
	OAC rule 3745-17-07	20% opacity as a six-minute average, except as provided by rule
	OAC rule 3745-17-11	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. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall operate a baghouse for control of particulate emissions while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain daily records and document any time periods when the baghouse was not in service when this emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Bureau of Air Pollution Control (CBAPC) in writing of any record showing that the baghouse was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the CBAPC within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):
 - a. Emission Limitation -
20% opacity, as a 6-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
 - b. Emission Limitation -
0.623 lb/hr particulate emissions 2.72 TPY

Applicable Compliance Method(s) -
Compliance shall be based upon use of the following equation:
$$E = UE \times (1 - CE)$$
where
E = emission rate in lb/hr
UE = Uncontrolled emission rate in lb/hr

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PTI A

Issued: 4/19/00

Emissions Unit ID: **P014**

CE = % efficiency of the control equipment

Advanced Ceramics Corporation
PTI Application: 13-03592
Issued

Facility ID: 1318558216

Emissions Unit ID: **P014**

UE = 6.02 lbs/hr (Based on permittee's estimate)
CE = 0.99 (control equipment efficiency 99%).

The lb/hr emission rate E is multiplied by the annual operating hours of the emissions unit and divided by 2000 lbs/ton to arrive at the TPY emission rate.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 13-03592 Facility ID: 1318558216

FACILITY NAME Advanced Ceramics Corporation

FACILITY DESCRIPTION 3 Calciners, 3 Dryers, Boron Nitride Heat Treat System, Cosmetic Boron Nitride Powder Firing System and six (6) baghouses for misc processes CITY/TWP Strongsville

SIC CODE 3297 SCC CODE 3-05-008-01 EMISSIONS UNIT ID P001
 EMISSIONS UNIT DESCRIPTION 18 in Natural Gas Fired Calciner, equipped with a Venturi Scrubber and baghouse
 DATE INSTALLED 7/30/1999

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Non Attainment	2.1 lb/hr	9.19	2.1 lb/hr	9.19
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Ammonia	0.2 lb/hr	0.87	0.2 lb/hr	0.87

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

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

Baghouse and wet scrubber for control of PM and Ammonia emissions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL 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*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: Ammonia

NEW SOURCE REVIEW FORM B

PTI Number: 13-03592

Facility ID: 1318558216

FACILITY NAME Advanced Ceramics Corporation

FACILITY DESCRIPTION 3 Calciners. 3 Drivers. Boron Nitride Heat CITY/TWP Strongsville

Emissions Unit ID: **P014**

SIC CODE 3297

SCC CODE 3-05-008-01

EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION 12 in Natural Gas Fired Calciner, equipped with a Venturi Scrubber and baghouse

DATE INSTALLED 7/30/99

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Non Attainment	1.2 lb/hr	5.25	2.1 lb/hr	5.25
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Ammonia	0.12 lb/hr	0.52	0.12 lb/hr	0.52

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

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

Baghouse and wet scrubber for control of PM and Ammonia emissions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: Ammonia

NEW SOURCE REVIEW FORM B

PTI Number: 13-03592

Facility ID: 1318558216

FACILITY NAME Advanced Ceramics CorporationFACILITY DESCRIPTION 3 Calciners. 3 Drivers. Boron Nitride Heat CITY/TWP StrongsvilleEmissions Unit ID: **P014**SIC CODE 3297SCC CODE 3-05-008-01EMISSIONS UNIT ID P003EMISSIONS UNIT DESCRIPTION 10 in Natural Gas Fired Calciner, equipped with a Venturi Scrubber and baghouseDATE INSTALLED 7/30/1999

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Non Attainment	0.9 lb/hr	3.91	0.9 lb/hr	3.91
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Ammonia	0.10 lb/hr	0.44	0.10 lb/hr	0.44

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

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

Baghouse and wet scrubber for control of PM and Ammonia emissionsIS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

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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*? X YES NOIDENTIFY THE AIR CONTAMINANTS: Ammonia

NEW SOURCE REVIEW FORM B

PTI Number: 13-03592

Facility ID: 1318558216

FACILITY NAME Advanced Ceramics Corporation

FACILITY DESCRIPTION 3 Calciners. 3 Drivers. Boron Nitride Heat CITY/TWP Strongsville

Emissions Unit ID: **P014**

SIC CODE 3297

SCC CODE 3-05-008-01

EMISSIONS UNIT ID P005

EMISSIONS UNIT DESCRIPTION Glenro Continuous Dryer #1, equipped with a Venturi Scrubber

DATE INSTALLED 7/30/1999

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀		0.5	2.19	0.5	2.19
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Ammonia	0.03	0.13	0.03	0.13

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

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

wet scrubber for control of PM and Ammonia emissions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

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TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? X YES NOIDENTIFY THE AIR CONTAMINANTS: Ammonia

NEW SOURCE REVIEW FORM B

PTI Number: 13-03592

Facility ID: 1318558216

FACILITY NAME Advanced Ceramics Corporation

FACILITY DESCRIPTION 3 Calciners. 3 Drivers. Boron Nitride Heat CITY/TWP Strongsville

Emissions Unit ID: **P014**

SIC CODE 3297

SCC CODE 3-05-008-01

EMISSIONS UNIT ID P006

EMISSIONS UNIT DESCRIPTION Glenro Continuous Dryer #2, equipped with a Venturi Scrubber

DATE INSTALLED 7/30/1999

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀		0.5	2.19	0.5	2.19
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Ammonia	0.03	0.13	0.03	0.13

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

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

wet scrubber for control of PM and Ammonia emissions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: Ammonia

NEW SC

PTI Num

FACILITY

Emissions Unit ID: **P014**

FACILITY DESCRIPTION 3 Calciners, 3 Dryers, Boron Nitride Heat Treat System, Cosmetic Boron Nitride Powder Firing System and six (6) baghouses for misc processes CITY/TWP Strongsville

SIC CODE 3297 SCC CODE 3-05-008-01 EMISSIONS UNIT ID P008

EMISSIONS UNIT DESCRIPTION blending and loading stations, equipped with a baghouse

DATE INSTALLED 7/30/1999

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀		0.5	2.19	0.5	2.19
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

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

Baghouse for control of particulate emissions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? YES NO

IDENTIFY THE AIR CONTAMINANTS:

9 **NEW SC**

PTI Num

FACILITY

Emissions Unit ID: **P014**

FACILITY DESCRIPTION 3 Calciners, 3 Dryers, Boron Nitride Heat Treat System, Cosmetic Boron Nitride Powder Firing System and six (6) baghouses for misc processes CITY/TWP Strongsville

SIC CODE 3297 SCC CODE 3-05-008-01 EMISSIONS UNIT ID P014

EMISSIONS UNIT DESCRIPTION Cosmetic Grade BN powder firing system, equipped with a baghouse

DATE INSTALLED 7/30/1999

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

Table with 6 columns: Pollutants, Air Quality Description, Actual Emissions Rate (Short Term Rate, Tons Per Year), and PTI Allowable (Short Term Rate, Tons Per Year). Rows include Particulate Matter, PM10, Sulfur Dioxide, Organic Compounds, Nitrogen Oxides, Carbon Monoxide, Lead, and Other: Air Toxics.

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

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

Baghouse for control of particulate emissions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? YES NO

IDENTIFY THE AIR CONTAMINANTS: