State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
MERCER 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: 03-13306

DATE: 2/2/00

Celina Aluminum Precision Technology
J Christian Kogler
7059 Staeger Road
Celina, OH 45822

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

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

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

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

Very truly yours,

Thomas G. Rigo

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

CC: **USEPA** **NWDO**

FINAL PERMIT TO INSTALL 03-13306

Application Number:	03-13306
APS Premise Number:	0354010031
Permit Fee:	**$2000**
Name of Facility:	Celina Aluminum Precision Technology
Person to Contact:	J Christian Kogler
Address:	7059 Staeger Road Celina, OH 45822

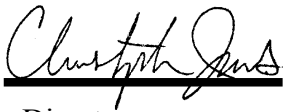
Location of proposed air contaminant source(s) [emissions unit(s)]:
7059 Staeger Road
Celina, **Ohio**

Description of proposed emissions unit(s):
(2) melt furnaces and (5) core mold machines.

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

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

Pollutant	Tons Per Year
PE	0.7
N0x	10.8
CO	0.78
OC	0.04

Emissions Unit ID: **P016**

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Cylinder Head Aluminum Melting Furnace #6	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.33 lb particulate emissions (PE)/hr, 1.45 tons PE/yr 1.54 lbs nitrogen oxide (NOx)/hr, 6.7 tons NOx/yr 0.11 lb carbon oxide (CO)/hr, 0.48 tons CO/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.33 lb PE/hr, 1.45 ton/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.77 ton/hr (1540 lb Al/hr) by the emission factor from AP-42 Table 12.8-2 (revised 1/95) of 4.3 lb/ton and applying scrubber control efficiency of 90%.

      The 1.45 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   b. Emission Limitation: 1.54 lbs NOx/hr, 6.7 tons NOx/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum burner capacity of 2.8 mmbtu/hr by the emission factor from AP-42 Table 1.4-2 (revised 1/95) of 0.55 lb/mmbtu.

      The 6.7 tons NOx/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   c. Emission Limitation: 0.11 lb CO/hr, 0.48 ton CO/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum burner capacity of 2.8 mmbtu/hr by the emission factor from AP-42 Table 1.4-2 (revised 1/95) of 0.04 lb/mmbtu.

      The 0.48 ton CO/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   d. Emission Limitation: 20% opacity as a six-minute average

      Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

Emissions Unit ID: **P016**

None

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Water Passage Aluminum Melting Furnace #1	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.17 lb particulate emissions (PE)/hr, 0.74 tons PE/yr 0.94 lbs nitrogen oxide (NOx)/hr, 4.1 tons NOx/yr 0.07 lb carbon oxide (CO)/hr, 0.30 tons CO/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. <u>Emission Limitation:</u> 0.17 lb PE/hr, 0.74 ton/yr

Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.385 ton/hr (770 lb Al/hr) by the emission factor from AP-42 Table 12.8-2 (revised 1/95) of 4.3 lb/ton and applying a scrubber control efficiency of 90%.

The 0.74 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

b. Emission Limitation: 0.94 lbs NOx/hr, 4.1 tons NOx/yr

Applicable Compliance Method: Compliance shall be determined by multiplying the maximum burner capacity of 1.7 mmbtu/hr by the emission factor from AP-42 Table 1.4-2 (revised 1/95) of 0.55 lb/mmbtu.

The 4.1 tons NOx/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

c. Emission Limitation: 0.07 lb CO/hr, 0.3 ton CO/yr

Applicable Compliance Method: Compliance shall be determined by multiplying the maximum burner capacity of 1.7 mmbtu/hr by the emission factor from AP-42 Table 1.4-2 (revised 1/95) of 0.04 lb/mmbtu.

The 0.07 ton CO/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

d. Emission Limitation: 20% opacity as a six-minute average

Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

None

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Water Passage Core Machine #1	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.009 lb particulate emissions (PE)/hr, 0.04 ton PE/yr 0.002 lb organic compounds (OC)/hr, 0.008 ton OC/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

2. Pursuant to Engineering guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the

materials, or use of new materials, that would result in an increase in emissions of any pollutant that has listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.009 lb PE/hr, 0.04 ton/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the emission factor from AP-42 Table 12.10-3 (revised 1/95) of 2.1 lb/ton and applying a scrubber control efficiency of 90%.

      The 0.04 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   b. Emission Limitation: 0.002 lb OC/hr, 0.008 ton OC/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the manufacturer provided emission factors of 0.0036 lbs formaldehyde/ton and 0.0386 lbs ammonia/ton relevant for Technisand products utilized by the permittee.

      The 0.008 ton OC/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   c. Emission Limitation: 20% opacity as a six-minute average

      Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

None

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Cylinder Head Core Machine #7	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.009 lb particulate emissions (PE)/hr, 0.04 ton PE/yr 0.002 lb organic compounds (OC)/hr, 0.008 ton OC/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

Emissions Unit ID: **P019**

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

2. Pursuant to Engineering guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant

that has listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.009 lb PE/hr, 0.04 ton/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the emission factor from AP-42 Table 12.10-3 (revised 1/95) of 2.1 lb/ton and applying a scrubber control efficiency of 90%.

      The 0.04 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   b. Emission Limitation: 0.002 lb OC/hr, 0.008 ton OC/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the manufacturer provided emission factors of 0.0036 lbs formaldehyde/ton and 0.0386 lbs ammonia/ton relevant for Technisand products utilized by the permittee.

      The 0.008 ton OC/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   c. Emission Limitation: 20% opacity as a six-minute average

      Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

None

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Cylinder Head Core Mold Machine #8	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.009 lb particulate emissions (PE)/hr, 0.04 ton PE/yr 0.002 lb organic compounds (OC)/hr, 0.008 ton OC/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

2. Pursuant to Engineering guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant

that has listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.009 lb PE/hr, 0.04 ton/yr

   Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the emission factor from AP-42 Table 12.10-3 (revised 1/95) of 2.1 lb/ton and applying a scrubber control efficiency of 90%.

   The 0.04 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   b. Emission Limitation: 0.002 lb OC/hr, 0.008 ton OC/yr

   Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the manufacturer provided emission factors of 0.0036 lbs formaldehyde/ton and 0.0386 lbs ammonia/ton relevant for Technisand products utilized by the permittee.

   The 0.008 ton OC/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   c. Emission Limitation: 20% opacity as a six-minute average

   Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

None

Emissions Unit ID: **P021**

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Cylinder Head Core Mold Machine #9	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.009 lb particulate emissions (PE)/hr, 0.04 ton PE/yr 0.002 lb organic compounds (OC)/hr, 0.008 ton OC/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

2. Pursuant to Engineering guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant

that has listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.009 lb PE/hr, 0.04 ton/yr

   Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the emission factor from AP-42 Table 12.10-3 (revised 1/95) of 2.1 lb/ton and applying a scrubber control efficiency of 90%.

   The 0.04 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   b. Emission Limitation: 0.002 lb OC/hr, 0.008 ton OC/yr

   Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the manufacturer provided emission factors of 0.0036 lbs formaldehyde/ton and 0.0386 lbs ammonia/ton relevant for Technisand products utilized by the permittee.

   The 0.008 ton OC/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   c. Emission Limitation: 20% opacity as a six-minute average

   Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

None

Emissions Unit ID: **P022**

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Cylinder Head Core Mold Machine #10	OAC rule 3745-31-05	Use of scrubber for particulate emissions control 0.009 lb particulate emissions (PE)/hr, 0.04 ton PE/yr 0.002 lb organic compounds (OC)/hr, 0.008 ton OC/yr Visible PE shall not exceed 20% opacity as a six-minute average
	OAC rule 3745-17-11(B)	None (see A.2.a)
	OAC rule 3745-17-07(A)	None (see A.2.b)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

B. Operational Restrictions

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

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times 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;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

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

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

2. Pursuant to Engineering guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant

that has listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.009 lb PE/hr, 0.04 ton/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the emission factor from AP-42 Table 12.10-3 (revised 1/95) of 2.1 lb/ton and applying a scrubber control efficiency of 90%.

      The 0.04 ton PE/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   b. Emission Limitation: 0.002 lb OC/hr, 0.008 ton OC/yr

      Applicable Compliance Method: Compliance shall be determined by multiplying the maximum process weight rate of 0.044 ton/hr (88 lb sand/hr) by the manufacturer provided emission factors of 0.0036 lbs formaldehyde/ton and 0.0386 lbs ammonia/ton relevant for Technisand products utilized by the permittee.

      The 0.008 ton OC/yr was determined by multiplying the maximum operation of 8760 hrs/yr and dividing by 2000. Therefore, provided compliance is shown with the lb/hr, compliance will be shown with the ton/yr.

   c. Emission Limitation: 20% opacity as a six-minute average

      Applicable Compliance Method: 40 CFR Part 60, Appendix A, Method 9

F. Miscellaneous Requirements

None