State of Ohio Environmental Protection Agency

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

Street Address:
50 West Town Street, Suite 700
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

Application No: 13-04609
Fac ID: 1318558216
DATE: 6/12/2007

Momentive Performance Materials Quartz
Carlie Thompson
22557 West Lunn Road
Cleveland, OH 44101-4924

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **CLAA**

FINAL PERMIT TO INSTALL 13-04609

Application Number:	13-04609
Facility ID:	1318558216
Permit Fee:	**$1200**
Name of Facility:	Momentive Performance Materials Quartz
Person to Contact:	Carlie Thompson
Address:	22557 West Lunn Road Cleveland, OH 44101-4924

Location of proposed air contaminant source(s) [emissions unit(s)]:
22557 West Lunn Road
Strongsville, **Ohio**

Description of proposed emissions unit(s):
Modification of six existing (de minimis) furnaces; following modification, these furnaces will require permits -- P031 - P036.

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

Chris Korleski
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

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 (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. 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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit 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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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 ninety (90) 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/***PM_{10}***	***0.54***

Emissions Unit ID: **P031**

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
P031 - One (1) PBN furnace unit (No. 3 A/B) with dry vacuum pump system connected by ductwork to two packed tower wet scrubbers, known as the HCl scrubber and the HCN scrubber.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six minute average.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9, C.10, C.11 and D.2 below.
	OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	0.02 lb/hr of PE/PM_{10} emissions. 0.09 tons/year of PE/PM_{10} emissions.
	ORC 3704.03(T)(4)	See A.2.a below.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate

emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 lb/hour under OAC rule 3745-17-11(B).

B. Operational Restrictions

1. As specified by the permittee, the MAPCO scrubber installed in November 2001 is referred to in this permit as "the HCl scrubber", and the MAPCO scrubber installed in January 2006 is referred to in this permit as "the HCN scrubber". The permittee shall operate the HCl scrubber for the control of hydrochloric acid and particulate emissions and the HCN scrubber for the control of hydrogen cyanide 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 and record the recirculation scrubber water flow rate, blow down scrubber flow rate and pH for the HCN scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate, the blow down scrubber flow rate and the pH for the HCN scrubber on a daily basis.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate and the blow down scrubber flow rate for the HCl scrubber on a daily basis.

3. Whenever the monitored value for the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber deviates from the range specified below, the permittee shall promptly investigate the cause of the deviations. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

4. In response to each required investigation to determine the cause of a deviation, the

permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH readings for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

5. The acceptable range for the recirculation scrubber water flow rate, blow down scrubber flow rate, and pH for the HCN scrubber and the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications with any modifications deemed necessary by the permittee. .

6. The ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revision to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable HCl, HCN and particulate emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an "administrative modification".

7. In the HCl scrubber, the recirculation sump float switch for make-up scrubber water additions is equipped with an alert system to indicate if the recirculation water level is below three inches of the lowest travel position of the float arm switch. The permittee shall monitor and record days when an alarm sounds on the recirculation sump float switch for make-up water additions.

8. The permit to install for this/these emissions unit(s) P031 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD,

or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV OVER 10 ~ TIMES ~ { 8 OVER X } ~ TIMES ~ { 5 OVER Y } ~ = ~
4 ~ { TLV OVER XY } ~ = ~ MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: HCl
   TLV (mg/m3): 2.2
   Maximum Hourly Emission Rate (lbs/hr): 0.30 (combined total of P031-P036)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 38.43
MAGLC (ug/m3): 52.35

Toxic Contaminant: HCN
TLV (mg/m3): 3.8
Maximum Hourly Emission Rate (lbs/hr): 0.24 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.66
MAGLC (ug/m3): 91.18

The permittee, has demonstrated that emissions of HCl and HCN, from emissions unit(s) P031, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

9. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled emissions rates (identified in C.8.d above), then the permittee shall apply for and obtain

a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

10. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

    a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

    b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

    c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

    d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

11. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and/or the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber was outside of the range of the manufacturer;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the recirculation scrubber water flow rate, the blow down scrubber flow rate and/or the pH into compliance with the acceptable ranges, was determined to be necessary and was not taken;

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

e. the days when the alarm on the recirculation sump float switch for make-up scrubber water additions sounds for the HCl scrubber.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports to the Cleveland DAQ, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

3. The permittee shall notify the Cleveland DAQ in writing of any record showing that the emissions unit was in operation and the HCN scrubber and/or the HCl scrubber were not operating. This notification shall include a copy of such record and shall be sent to the Cleveland DAQ 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 method(s):

a. Emission Limitation:
Visible emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9.

b. Emission Limitation:
0.02 lb/hour of PE/PM_{10} emissions

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance with the emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). The results of the emissions test shall be reported in terms of pounds per hour.

c. Emission Limitation:
0.09 TPY of PE/PM_{10} emissions

Applicable Compliance Method:
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A (except OAC rule 3745-114), B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D.1, D.3, E and F.

Emissions Unit ID: **P032**

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
P032 - One (1) PBN furnace unit (No. 4 A/B) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers, known as the HCl scrubber and the HCN scrubber.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six minute average.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9, C.10, C.11 and D.2 below.
	OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	0.02 lb/hr of PE/PM_{10} emissions. 0.09 tons/year of PE/PM_{10} emissions.
	ORC 3704.03(T)(4)	See A.2.a below.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate

emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 lb/hour under OAC rule 3745-17-11(B).

B. Operational Restrictions

1. As specified by the permittee, the MAPCO scrubber installed in November 2001 is referred to in this permit as "the HCl scrubber", and the MAPCO scrubber installed in January 2006 is referred to in this permit as "the HCN scrubber". The permittee shall operate the HCl scrubber for the control of hydrochloric acid and particulate emissions and the HCN scrubber for the control of hydrogen cyanide 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 and record the recirculation scrubber water flow rate, blow down scrubber flow rate and pH for the HCN scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate, the blow down scrubber flow rate and the pH for the HCN scrubber on a daily basis.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate and the blow down scrubber flow rate for the HCl scrubber on a daily basis.

3. Whenever the monitored value for the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber deviates from the range specified below, the permittee shall promptly investigate the cause of the deviations. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

4. In response to each required investigation to determine the cause of a deviation, the

permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH readings for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

5. The acceptable range for the recirculation scrubber water flow rate, blow down scrubber flow rate, and pH for the HCN scrubber and the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications with any modifications deemed necessary by the permittee. .

6. The ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revision to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable HCl, HCN and particulate emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an "administrative modification".

7. In the HCl scrubber, the recirculation sump float switch for make-up scrubber water additions is equipped with an alert system to indicate if the recirculation water level is below three inches of the lowest travel position of the float arm switch. The permittee shall monitor and record days when an alarm sounds on the recirculation sump float switch for make-up water additions.

8. The permit to install for this/these emissions unit(s) P032 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD,

or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV OVER 10 ~ TIMES ~ { 8 OVER X } ~ TIMES ~ { 5 OVER Y } ~ = ~
4 ~ { TLV OVER XY } ~ = ~ MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: HCl
   TLV (mg/m3): 2.2
   Maximum Hourly Emission Rate (lbs/hr): 0.30 (combined total of P031-P036)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 38.43
MAGLC (ug/m3): 52.35

Toxic Contaminant: HCN
TLV (mg/m3): 3.8
Maximum Hourly Emission Rate (lbs/hr): 0.24 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.66
MAGLC (ug/m3): 91.18

The permittee, has demonstrated that emissions of HCl and HCN, from emissions unit(s) P032, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

9. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled emissions rates (identified in C.8.d above), then the permittee shall apply for and obtain

a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

10. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

    a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

    b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

    c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

    d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

11. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and/or the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber was outside of the range of the manufacturer;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the recirculation scrubber water flow rate, the blow down scrubber flow rate and/or the pH into compliance with the acceptable ranges, was determined to be necessary and was not taken;

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

e. the days when the alarm on the recirculation sump float switch for make-up scrubber water additions sounds for the HCl scrubber.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports to the Cleveland DAQ, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

3. The permittee shall notify the Cleveland DAQ in writing of any record showing that the emissions unit was in operation and the HCN scrubber and/or the HCl scrubber were not operating. This notification shall include a copy of such record and shall be sent to the Cleveland DAQ 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 method(s):

a. Emission Limitation:
Visible emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9.

b. Emission Limitation:
0.02 lb/hour of PE/PM_{10} emissions

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance with the emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). The results of the emissions test shall be reported in terms of pounds per hour.

c. Emission Limitation:
0.09 TPY of PE/PM_{10} emissions

Applicable Compliance Method:
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A (except OAC rule 3745-114), B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D.1, D.3, E and F.

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
P033 - One (1) PBN furnace unit (No. 5 A/B) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers, known as the HCl scrubber and the HCN scrubber.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six minute average.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9, C.10, C.11 and D.2 below.
	OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	0.02 lb/hr of PE/PM_{10} emissions. 0.09 tons/year of PE/PM_{10} emissions.
	ORC 3704.03(T)(4)	See A.2.a below.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate

emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 lb/hour under OAC rule 3745-17-11(B).

B. Operational Restrictions

1. As specified by the permittee, the MAPCO scrubber installed in November 2001 is referred to in this permit as "the HCl scrubber", and the MAPCO scrubber installed in January 2006 is referred to in this permit as "the HCN scrubber". The permittee shall operate the HCl scrubber for the control of hydrochloric acid and particulate emissions and the HCN scrubber for the control of hydrogen cyanide 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 and record the recirculation scrubber water flow rate, blow down scrubber flow rate and pH for the HCN scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate, the blow down scrubber flow rate and the pH for the HCN scrubber on a daily basis.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate and the blow down scrubber flow rate for the HCl scrubber on a daily basis.

3. Whenever the monitored value for the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber deviates from the range specified below, the permittee shall promptly investigate the cause of the deviations. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

4. In response to each required investigation to determine the cause of a deviation, the

permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH readings for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

5. The acceptable range for the recirculation scrubber water flow rate, blow down scrubber flow rate, and pH for the HCN scrubber and the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications with any modifications deemed necessary by the permittee. .

6. The ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revision to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable HCl, HCN and particulate emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an "administrative modification".

7. In the HCl scrubber, the recirculation sump float switch for make-up scrubber water additions is equipped with an alert system to indicate if the recirculation water level is below three inches of the lowest travel position of the float arm switch. The permittee shall monitor and record days when an alarm sounds on the recirculation sump float switch for make-up water additions.

8. The permit to install for this/these emissions unit(s) P033 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD,

or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV OVER 10 ~ TIMES ~ { 8 OVER X } ~ TIMES ~ { 5 OVER Y } ~ = ~
4 ~ { TLV OVER XY } ~ = ~ MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: HCl
   TLV (mg/m3): 2.2
   Maximum Hourly Emission Rate (lbs/hr): 0.30 (combined total of P031-P036)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 38.43
MAGLC (ug/m3): 52.35

Toxic Contaminant: HCN
TLV (mg/m3): 3.8
Maximum Hourly Emission Rate (lbs/hr): 0.24 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.66
MAGLC (ug/m3): 91.18

The permittee, has demonstrated that emissions of HCl and HCN, from emissions unit(s) P033, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

9. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled emissions rates (identified in C.8.d above), then the permittee shall apply for and obtain

a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

10. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

    a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

    b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

    c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

    d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

11. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and/or the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber was outside of the range of the manufacturer;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the recirculation scrubber water flow rate, the blow down scrubber flow rate and/or the pH into compliance with the acceptable ranges, was determined to be necessary and was not taken;

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

e. the days when the alarm on the recirculation sump float switch for make-up scrubber water additions sounds for the HCl scrubber.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports to the Cleveland DAQ, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

3. The permittee shall notify the Cleveland DAQ in writing of any record showing that the emissions unit was in operation and the HCN scrubber and/or the HCl scrubber were not operating. This notification shall include a copy of such record and shall be sent to the Cleveland DAQ 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 method(s):

a. Emission Limitation:
Visible emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9.

b. Emission Limitation:
0.02 lb/hour of PE/PM_{10} emissions

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance with the emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). The results of the emissions test shall be reported in terms of pounds per hour.

c. Emission Limitation:
0.09 TPY of PE/PM_{10} emissions

Applicable Compliance Method:
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A (except OAC rule 3745-114), B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D.1, D.3, E and F.

Emissions Unit ID: **P034**

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
P034 - One (1) PBN furnace unit (No. 12 A/B) with dry vacuum pump system connected by duct work to packed tower wet scrubbers, known as the HCl scrubber and the HCN scrubber.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six minute average.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9, C.10, C.11 and D.2 below.
	OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	0.02 lb/hr of PE/PM_{10} emissions. 0.09 tons/year of PE/PM_{10} emissions.
	ORC 3704.03(T)(4)	See A.2.a below.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate

emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 lb/hour under OAC rule 3745-17-11(B).

B. Operational Restrictions

1. As specified by the permittee, the MAPCO scrubber installed in November 2001 is referred to in this permit as "the HCl scrubber", and the MAPCO scrubber installed in January 2006 is referred to in this permit as "the HCN scrubber". The permittee shall operate the HCl scrubber for the control of hydrochloric acid and particulate emissions and the HCN scrubber for the control of hydrogen cyanide 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 and record the recirculation scrubber water flow rate, blow down scrubber flow rate and pH for the HCN scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate, the blow down scrubber flow rate and the pH for the HCN scrubber on a daily basis.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate and the blow down scrubber flow rate for the HCl scrubber on a daily basis.

3. Whenever the monitored value for the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber deviates from the range specified below, the permittee shall promptly investigate the cause of the deviations. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

4. In response to each required investigation to determine the cause of a deviation, the

permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH readings for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

5. The acceptable range for the recirculation scrubber water flow rate, blow down scrubber flow rate, and pH for the HCN scrubber and the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications with any modifications deemed necessary by the permittee. .

6. The ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revision to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable HCl, HCN and particulate emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an "administrative modification".

7. In the HCl scrubber, the recirculation sump float switch for make-up scrubber water additions is equipped with an alert system to indicate if the recirculation water level is below three inches of the lowest travel position of the float arm switch. The permittee shall monitor and record days when an alarm sounds on the recirculation sump float switch for make-up water additions.

8. The permit to install for this/these emissions unit(s) P034 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD,

or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV OVER 10 ~ TIMES ~ { 8 OVER X } ~ TIMES ~ { 5 OVER Y } ~ = ~
4 ~ { TLV OVER XY } ~ = ~ MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: HCl
   TLV (mg/m3): 2.2
   Maximum Hourly Emission Rate (lbs/hr): 0.30 (combined total of P031-P036)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 38.43
MAGLC (ug/m3): 52.35

Toxic Contaminant: HCN
TLV (mg/m3): 3.8
Maximum Hourly Emission Rate (lbs/hr): 0.24 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.66
MAGLC (ug/m3): 91.18

The permittee, has demonstrated that emissions of HCl and HCN, from emissions unit(s) P034, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

9. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled emissions rates (identified in C.8.d above), then the permittee shall apply for and obtain

a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

10. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

    a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

    b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

    c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

    d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

11. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this

emissions unit:

a. each period of time when the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and/or the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber was outside of the range of the manufacturer;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the recirculation scrubber water flow rate, the blow down scrubber flow rate and/or the pH into compliance with the acceptable ranges, was determined to be necessary and was not taken;

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

e. the days when the alarm on the recirculation sump float switch for make-up scrubber water additions sounds for the HCl scrubber.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports to the Cleveland DAQ, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

3. The permittee shall notify the Cleveland DAQ in writing of any record showing that the emissions unit was in operation and the HCN scrubber and/or the HCl scrubber were not operating. This notification shall include a copy of such record and shall be sent to the Cleveland DAQ 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 method(s):

   a. Emission Limitation:
   Visible emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average

   Applicable Compliance Method:
   If required by Ohio EPA or Cleveland DAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9.

   b. Emission Limitation:
   0.02 lb/hour of PE/PM_{10} emissions

   Applicable Compliance Method:
   If required by Ohio EPA or Cleveland DAQ, compliance with the emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). The results of the emissions test shall be reported in terms of pounds per hour.

   c. Emission Limitation:
   0.09 TPY of PE/PM_{10} emissions

   Applicable Compliance Method:
   The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A (except OAC

rule 3745-114), B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D.1, D.3, E and F.

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
P035 - One (1) PBN furnace unit (No. 13 A/B) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers, known as the HCl scrubber and the HCN scrubber.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six minute average.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9, C.10, C.11 and D.2 below.
	OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	0.02 lb/hr of PE/PM_{10} emissions. 0.09 tons/year of PE/PM_{10} emissions.
	ORC 3704.03(T)(4)	See A.2.a below.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements under OAC rule

3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 lb/hour under OAC rule 3745-17-11(B).

B. Operational Restrictions

1. As specified by the permittee, the MAPCO scrubber installed in November 2001 is referred to in this permit as "the HCl scrubber", and the MAPCO scrubber installed in January 2006 is referred to in this permit as "the HCN scrubber". The permittee shall operate the HCl scrubber for the control of hydrochloric acid and particulate emissions and the HCN scrubber for the control of hydrogen cyanide 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 and record the recirculation scrubber water flow rate, blow down scrubber flow rate and pH for the HCN scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate, the blow down scrubber flow rate and the pH for the HCN scrubber on a daily basis.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate and the blow down scrubber flow rate for the HCl scrubber on a daily basis.

3. Whenever the monitored value for the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber deviates from the range specified below, the permittee shall promptly investigate the cause of the

deviations. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

4. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH readings for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

5. The acceptable range for the recirculation scrubber water flow rate, blow down scrubber flow rate, and pH for the HCN scrubber and the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications ***with any modifications deemed necessary by the permittee.*** .

6. The ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revision to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable HCl, HCN and particulate emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an "administrative modification".

7. In the HCl scrubber, the recirculation sump float switch for make-up scrubber water additions is equipped with an alert system to indicate if the recirculation water level is below three inches of the lowest travel position of the float arm switch. The permittee shall monitor and record days when an alarm sounds on the recirculation sump float switch for make-up water additions.

8. The permit to install for this/these emissions unit(s) P035 was evaluated based on the

actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV OVER 10 ~ TIMES ~ { 8 OVER X } ~ TIMES ~ { 5 OVER Y } ~ = ~
4 ~ { TLV OVER XY } ~ = ~ MAGLC

d. The following summarizes the results of dispersion modeling for the significant

toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: HCl
TLV (mg/m3): 2.2
Maximum Hourly Emission Rate (lbs/hr): 0.30 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 38.43
MAGLC (ug/m3): 52.35

Toxic Contaminant: HCN
TLV (mg/m3): 3.8
Maximum Hourly Emission Rate (lbs/hr): 0.24 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.66
MAGLC (ug/m3): 91.18

The permittee, has demonstrated that emissions of HCl and HCN, from emissions unit(s) P035, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

9. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled emissions rates (identified in C.8.d above), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

10. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

    a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

    b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

    c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

    d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

11. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and/or the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber was outside of the range of the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the recirculation scrubber water flow rate, the blow down scrubber flow rate and/or the pH into compliance with the acceptable ranges, was determined to be necessary and was not taken;

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

   e. the days when the alarm on the recirculation sump float switch for make-up scrubber water additions sounds for the HCl scrubber.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports to the Cleveland DAQ, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

3. The permittee shall notify the Cleveland DAQ in writing of any record showing that the emissions unit was in operation and the HCN scrubber and/or the HCl scrubber were

not operating. This notification shall include a copy of such record and shall be sent to the Cleveland DAQ 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 method(s):

   a. Emission Limitation:
   Visible emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average

   Applicable Compliance Method:
   If required by Ohio EPA or Cleveland DAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9.

   b. Emission Limitation:
   0.02 lb/hour of PE/PM_{10} emissions

   Applicable Compliance Method:
   If required by Ohio EPA or Cleveland DAQ, compliance with the emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). The results of the emissions test shall be reported in terms of pounds per hour.

   c. Emission Limitation:
   0.09 TPY of PE/PM_{10} emissions

   Applicable Compliance Method:
   The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be

assumed provided compliance is maintained with the pounds per hour limitation.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A (except OAC rule 3745-114), B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D.1, D.3, E and F.

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
P036 - One (1) PBN furnace unit (No. 15 A) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers, known as the HCl scrubber and the HCN scrubber.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six minute average.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9, C.10, C.11 and D.2 below.
	OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	0.02 lb/hr of PE/PM_{10} emissions. 0.09 tons/year of PE/PM_{10} emissions.
	ORC 3704.03(T)(4)	See A.2.a below.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air

contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 lb/hour under OAC rule 3745-17-11(B).

B. Operational Restrictions

1. As specified by the permittee, the MAPCO scrubber installed in November 2001 is referred to in this permit as "the HCl scrubber", and the MAPCO scrubber installed in January 2006 is referred to in this permit as "the HCN scrubber". The permittee shall operate the HCl scrubber for the control of hydrochloric acid and particulate emissions and the HCN scrubber for the control of hydrogen cyanide 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 and record the recirculation scrubber water flow rate, blow down scrubber flow rate and pH for the HCN scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate, the blow down scrubber flow rate and the pH for the HCN scrubber on a daily basis.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall record the recirculation scrubber water flow rate and the blow down scrubber flow rate for the HCl scrubber on a daily basis.

3. Whenever the monitored value for the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber deviates from the range specified below, the permittee shall promptly investigate the cause of the deviations. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

4. In response to each required investigation to determine the cause of a deviation, the

permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH readings for the HCN scrubber and the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

5. The acceptable range for the recirculation scrubber water flow rate, blow down scrubber flow rate, and pH for the HCN scrubber and the recirculation scrubber water flow rate and blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications with any modifications deemed necessary by the permittee. .

6. The ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revision to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable HCl, HCN and particulate emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an "administrative modification".

7. In the HCl scrubber, the recirculation sump float switch for make-up scrubber water additions is equipped with an alert system to indicate if the recirculation water level is below three inches of the lowest travel position of the float arm switch. The permittee shall monitor and record days when an alarm sounds on the recirculation sump float switch for make-up water additions.

8. The permit to install for this/these emissions unit(s) P036 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD,

or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV OVER 10 ~ TIMES ~ { 8 OVER X } ~ TIMES ~ { 5 OVER Y } ~ = ~
4 ~ { TLV OVER XY } ~ = ~ MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: HCl
   TLV (mg/m3): 2.2
   Maximum Hourly Emission Rate (lbs/hr): 0.30 (combined total of P031-P036)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 38.43
MAGLC (ug/m3): 52.35

Toxic Contaminant: HCN
TLV (mg/m3): 3.8
Maximum Hourly Emission Rate (lbs/hr): 0.24 (combined total of P031-P036)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.66
MAGLC (ug/m3): 91.18

The permittee, has demonstrated that emissions of HCl and HCN, from emissions unit(s) P036, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

9. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled emissions rates (identified in C.8.d above), then the permittee shall apply for and obtain

a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

10. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

    a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

    b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

    c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

    d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

11. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the recirculation scrubber water flow rate, blow down scrubber flow rate and/or pH for the HCN scrubber and/or the recirculation scrubber water flow rate and/or blow down scrubber flow rate for the HCl scrubber was outside of the range of the manufacturer;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the recirculation scrubber water flow rate, the blow down scrubber flow rate and/or the pH into compliance with the acceptable ranges, was determined to be necessary and was not taken;

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

e. the days when the alarm on the recirculation sump float switch for make-up scrubber water additions sounds for the HCl scrubber.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports to the Cleveland DAQ, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

3. The permittee shall notify the Cleveland DAQ in writing of any record showing that the emissions unit was in operation and the HCN scrubber and/or the HCl scrubber were not operating. This notification shall include a copy of such record and shall be sent to the Cleveland DAQ 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 method(s):

a. Emission Limitation:
Visible emissions from any stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9.

b. Emission Limitation:
0.02 lb/hour of PE/PM_{10} emissions

Applicable Compliance Method:
If required by Ohio EPA or Cleveland DAQ, compliance with the emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). The results of the emissions test shall be reported in terms of pounds per hour.

c. Emission Limitation:
0.09 TPY of PE/PM_{10} emissions

Applicable Compliance Method:
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A (except OAC rule 3745-114), B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D.1, D.3, E and F.