



State of Ohio Environmental Protection Agency

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CERTIFIED MAIL

RE: DRAFT PERMIT TO INSTALL

CUYAHOGA COUNTY

Application No: 13-04609

Fac ID: 1318558216

Y	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 2/20/2007

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

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1200** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

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



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 13-04609

Application Number: 13-04609
Facility ID: 1318558216
Permit Fee: **To be entered upon final issuance**
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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	14.46

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Facility ID: 1318558216
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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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. 0.551 lb/hour of particulate emissions Air Toxics - see Sections C.8, C.9 and C.10 below. See A.2.a below.
	OAC rule 3745-17-11(B)	
	OAC rule 3745-114-01	
	ORC 3704.03(T)(4)	

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

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blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

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 emissions unit, P031, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 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

Pollutant: 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

9. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
10. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall 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 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:**
0.551 lb/hour of PE emissions

Applicable Compliance Method:

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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), as specified in E.2. of the terms and conditions of this permit. The results of the emissions test shall be reported in terms of pounds per hour.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.
 - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions and visible emissions in the appropriate averaging periods, and to determine the amount of HCl and HCN emissions.
 - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) and the determination of emission rates:
 - iv. for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A;
 - v. for hydrochloric acid (HCl), Method 26A of 40 CFR Part 60, Appendix A;
 - vi. for hydrogen cyanide (HCN) U.S. EPA conditional test method, CTM033, "Draft Method XHCN"; and
 - vii. for opacity, Method 9 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA or Cleveland DAQ.

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

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

Personnel from Cleveland DAQ shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation

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of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A, B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D, E and F.

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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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P032 - One (1) PBN furnace unit (No. 4 A/B) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers	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)	0.551 lb/hour of particulate emissions
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9 and C.10 below.
	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

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blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

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 emissions unit, P032, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 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

Pollutant: 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

9. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
10. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall 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 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:
0.551 lb/hour of PE emissions

Applicable Compliance Method:

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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), as specified in E.2. of the terms and conditions of this permit. The results of the emissions test shall be reported in terms of pounds per hour.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A, B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D, E and F.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P033 - One (1) PBN furnace unit (No. 5 A/B) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers	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)	0.551 lb/hour of particulate emissions
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9 and C.10 below.
	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

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blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

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 emissions unit, P033, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 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

Pollutant: 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

9. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
10. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall 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

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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 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:
0.551 lb/hour of PE emissions

Applicable Compliance Method:

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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), as specified in E.2. of the terms and conditions of this permit. The results of the emissions test shall be reported in terms of pounds per hour.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A, B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D, E and F.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P034 - One (1) PBN furnace unit (No. 12 A/B) with dry vacuum pump system connected by duct work to packed tower wet scrubbers	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)	0.551 lb/hour of particulate emissions
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9 and C.10
	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

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blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

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 emissions unit, P034, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 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

Pollutant: 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

9. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
10. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall 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 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:
0.551 lb/hour of PE emissions

Applicable Compliance Method:

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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), as specified in E.2. of the terms and conditions of this permit. The results of the emissions test shall be reported in terms of pounds per hour.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A, B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D, E and F.

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Emissions Unit ID: P035

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P035 - One (1) PBN furnace unit (No. 13 A/B) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers	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)	0.551 lb/hour of particulate emissions
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9 and C.10.
	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

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blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

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 emissions unit, P035, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 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

Pollutant: 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

9. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
10. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall 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

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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 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:**
0.551 lb/hour of PE emissions

Applicable Compliance Method:

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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), as specified in E.2. of the terms and conditions of this permit. The results of the emissions test shall be reported in terms of pounds per hour.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A, B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D, E and F.

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Emissions Unit ID: P036

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P036 - One (1) PBN furnace unit (No. 15 A) with dry vacuum pump system connected by ductwork to packed tower wet scrubbers	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)	0.551 lb/hour of particulate emissions
	OAC rule 3745-114-01	Air Toxics - see Sections C.8, C.9 and C.10.
	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

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blow down scrubber flow rate for the HCl scrubber shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

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 emissions unit, P036, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 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

Pollutant: 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

9. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
10. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall 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 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:**
0.551 lb/hour of PE emissions

Applicable Compliance Method:

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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), as specified in E.2. of the terms and conditions of this permit. The results of the emissions test shall be reported in terms of pounds per hour.

F. Miscellaneous Requirements

1. The following terms and conditions in Part II are federally enforceable: A, B, C.1, C.2, C.3, C.4, C.5, C.6, C.7, D, E and F.