

Synthetic Minor Determination and/or **Netting Determination**
Permit To Install **14-05662**

A. Source Description

Miller Breweries East is a beer brewery and packaging facility located in Trenton, Ohio (Butler County). Existing packaging operations (EU P030) consist of bottle, keg, and can filling lines. The permittee has proposed to add a new 24-ounce can filling line to their packaging operations. Emissions from the new can filling line (EU P033) consist of organic compounds (OCs) in the form of ethanol. The addition of the new can line debottlenecks the existing Cold Services operations (EU P031). The permittee has requested a modification of the Cold Services PTI to adjust the PTE due to the debottlenecking.

B. Facility Emissions and Attainment Status

Miller Breweries is a Title V facility and major stationary source based on OC emissions from existing brewery and packaging operations and SO₂, CO, NO_x, PE emissions from two coal-fired boilers. The facility has PSD and nonattainment NSR permits in place for the coal-fired boilers and existing brewery/packaging operations. The facility wishes to incorporate a 12-month rolling operating limitation on the new can line (EU P033) in order to keep OC emissions for both the new can line and the debottlenecked Cold Services below major modification thresholds. Actual facility-wide OC emissions are 175 TPY. The facility is located in Butler County which is nonattainment for 8-hour and 1-hour ozone, nonattainment for NO_x NSR, and attainment for all other pollutants.

C. Source Emissions

No control equipment exists on the new can filling line EU P033. OC emissions were calculated based on industry-specific emissions factors supplied by the permittee, the maximum capacity of the new can line, and the debottlenecked maximum capacity of Cold Services. The potential OC emissions from P033, in the absence of limitations, are 39.10 TPY OC. The emission limitation and operating restrictions outlined in this permit for P033 will limit OC emissions to 32.8 TPY. The allowable emissions limits for Cold Services have been adjusted to 6.98 TPY based on PTE, for total combined OC emissions (P033 and P031) in this permit of 39.78 TPY OC. The facility will maintain production data and emission records as outlined in the permit to ensure compliance with the emission and operating limits.

D. Conclusion

The facility has proposed a 2,000,000 barrel per year production restriction on P033 and accepted the terms and conditions of this permit which will limit the OC emissions as a Synthetic Minor to avoid major modification nonattainment NSR. The facility will maintain records and be subject to reporting as outlined in the permit to ensure compliance with the Synthetic Minor limitations.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
BUTLER COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 14-05662

Fac ID: 1409000353

DATE: 6/7/2005

Miller Breweries East Inc.
Mark Koch
2525 Wayne Madison Road
Trenton, OH 45067-9760

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, 43266-0149.

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 **\$4500** 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

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

CC: USEPA

HCDES

OH-KY-IN Regional Council of Gov.

KY

IN

**STAFF DRAFT ACTION DETERMINATION
FOR THE APPLICATION OF
MILLER BREWING COMPANY'S
PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
AIR PERMIT TO INSTALL NO. 14-05662 FOR
A NEW 24-OUNCE CAN FILLING (PACKAGING) LINE
TO BE LOCATED IN TRENTON, OHIO**

June 7, 2005

**Ohio Environmental Protection Agency
Division of Air Pollution Control
122 South Front Street
Columbus, Ohio 43215**

Facility Description and Proposed Project

Miller Brewing Company operates a beer brewing and packaging facility located in Butler County, Ohio and is proposing to build and operate a new 24-ounce can filling (packaging) line. The new packaging line will also result in the debottlenecking of a number of sources throughout the brewery. Brewing and cold services will increase their maximum throughput of brewed product and result in an 15 percent increase in volatile organic compound (VOC) emissions over previous levels.

In addition, there will be an increase in particulate matter emissions due to the above mentioned debottlenecking.

Site Description/Air Quality Designations

As mentioned above the Miller Brewing Company is located in Butler County, Ohio. Under Section 107 of the Clean Air Act as of June 24, 1992, this area was classified as attainment for all of the criteria pollutants, i.e., total suspended particulates, particulate matter less than 10 microns, sulfur dioxide, nitrogen oxides, carbon monoxide, and lead. Currently, Butler County, Ohio is classified as non-attainment for both the 1-hour and 8-hour volatile organic compounds (ozone) standards. In addition, Butler County, Ohio has a NO_x waiver for the 1-hour ozone standard.

New Source Review (NSR)/PSD Applicability

The existing Miller Brewing Company was issued a PSD air permit to install on September 19, 1979 for the construction of the brewery based upon the potential emissions from the brewery exceeding 250 tons per year of one of the criteria pollutants versus the 100 tons per year threshold level in an attainment area, because the brewery is not one of the 28 source categories that would trigger that threshold level. In addition, the "Miller Brewing Company" operates two existing 238 mmBTU per hour coal-fired boilers. The existing facility is currently a "major" for both PSD and Non-attainment Review for all operations located at the facility so any physical change or change in the method of operation will need to be evaluated against the significant levels to determine whether or not the change would trigger either one of the above mentioned regulations.

Recently, Ohio Environmental Protection Agency has incorporated into their Ohio Administrative Code (OAC) regulations described as "New Source Review Reform" based upon federal revised rules based upon the same concept.

Therefore, the above mentioned project was evaluated based upon both these federal and OAC "New Source Review Reform" promulgated regulations.

The first step in determining whether a major modification will occur is determining if a significant emission increase will take place. OAC rule 3745-31-01 provides guidance on calculation of emission increases. For new emissions unit, the increase is equal to the potential to emit (PTE) for new equipment. For modified or de-bottlenecked emissions units, the increase is equal to the projected future actual emissions minus the average actual emissions for any consecutive 24-month period within the last ten years.

Based upon the above mentioned first step evaluation, the "Miller Brewing Company" has proposed to accept a production limit of packaged barrels for the new 24-ounce can filling (packaging) line to avoid the significant emission level of forty tons per year that would trigger a "major modification" for ozone. Hence part of this permitting action will involve synthetic minor permitting pursuant to OAC 3745-31-05(C) to document that acceptance of the production restriction. All other emissions units evaluations for the other criteria pollutants for the new 24-ounce can filling (packaging) line did not trigger the significant levels.

A similar analysis for the two existing 238 mmBTU per hour coal-fired boilers, including the associated major modification analysis, was done due to increase emissions associated with providing more steam to the new and existing operations at the facility (in this case, the boilers are being considered to be de-bottlenecked emissions units as noted above). However, there will be no physical change or change in the method of operation of the two existing 238 mmBTU per hour coal-fired boilers to accomplish that. It is anticipated that there will be an actual air emissions increase of Sulfur Dioxides (SO₂) above the 40 tons per year significant level established for that pollutant under both the PSD and OAC rule 3745-31 programs and therefore the project will be subject to PSD review.

A review of EPA guidance documents on PSD applicability indicated that, although the proposed project triggers the need for PSD review, the extent of the requirements to satisfy PSD review is limited because the emissions increases are from an air contaminant source that is being debottlenecked without undergoing a physical change or a change in the method of operation. The current project is analogous to a situation referenced in a July 28, 1983 United States Environmental Protection Agency (USEPA) guidance memo in which a new piece of equipment is installed causes the emissions of a supporting boiler to increase above the significant levels for one or more pollutants, but remains below the maximum designed permit levels. This is the case here also. That is, a new air emissions increase above the significant levels results in PSD review with the exception that Best Available Control Technology (BACT) is not required because the supporting boiler itself does not undergo a physical change or change in method of operation.

The only requirement is that air emissions increase associated with the debottlenecking be evaluated against PSD air dispersion modeling requirements. Therefore, the "Miller Brewing Company" has submitted an update of their submitted 2001 PSD assessment report for SO₂ for a similar debottlenecking scenario that they did in 2001. This new PSD assessment report is an air quality modeling analysis to determine significance, increase consumption and National Ambient Air Quality Standards (NAAQS) for the de-bottlenecking of the two existing 238 mmBTU per hour coal-fired boilers for SO₂ which is described in more detail in the following section.

Ambient Air Quality Monitoring Requirements

The Miller Brewing Company installation is located in an attainment area or attainment/unclassifiable for total suspended particulates, particulate matter less than 10 microns, sulfur dioxide, nitrogen oxides, carbon monoxide, and lead.

U.S. EPA regulations may require a year of ambient air quality data to be obtained as part of the PSD application. An applicant may conduct monitoring on-site, model to demonstrate a "de-minimis" impact, or use existing air quality data to fulfill some of the requirements of a PSD ambient air quality analysis. If monitoring is required, U.S. EPA has set up specific conditions on the acceptability of existing air quality monitors to ensure the monitor is representative of air quality in the area.

In this instance, Miller Brewing Company has relied on ambient air quality modeling performed in conjunction with the 2001 PSD modification that predicts the ambient air quality impact of the source(s) to be more than the monitoring de-minimis concentrations for SO₂. While SO₂ impacts exceeded the monitoring de-Minimis, ambient data within the county were determined to be representative. Therefore, preconstruction monitoring is not required. A summary is below:

<u>Pollutant</u>	<u>Averaging Period</u>	<u>Monitoring Predicted Concentration</u>	<u>Monitoring De-Minimis Concentration</u>
SO ₂	24-hour high	36 ug/m ³	13 ug/m ³

Modeling

Air quality dispersion modeling was conducted as part of the 2001 PSD revision to assess the effect of these sources on ambient air quality standards and PSD increments. The U.S. EPA Industrial Source Complex-Short Term (ISCST3, Version 99155 and 02035) model was used for the initial modeling analysis as well as the determination of the significant impact area due to a lower allowable. In addition, CTSCREEN was employed in the original analysis to evaluate source receptor relationships where the receptors were above stack tip. This portion of the analysis was not constraining and the ISCST3 modeling runs resulted in the peak predicted impacts.

The ISCST3 model is a Gaussian plume model that uses hourly meteorological data to determine maximum 1-hour, 3-hour, 8-hour, 24-hour, and annual concentrations. The current versions of the ISCST3 model incorporate the COMPLEX I algorithms, thus allowing it to calculate impacts in simple, intermediate, and complex terrain. Due to the lack of on-site meteorological data, though, CTSCREEN was employed to evaluate the impacts of the facility on terrain above stack tip.

The USEPA Building Profile Input Program (Version 04112) model was run to identify whether consideration of building wake effects would be required. The building wake effects were evaluated for each proposed point source using the procedures described in EPA's *Guidelines for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations - Revised EPA-1985)*.

The meteorological data used in the ISCST3 dispersion modeling analyses consisted of five years (1987-1991) of hourly surface observations from Cincinnati National Weather Service Station and coincident mixing heights also measured at Dayton. Surface observations consist of hourly measurements of wind direction, wind speed, and temperature, and estimates of ceiling height and cloud cover. The upper air station provides a daily morning and afternoon mixing height value as determined from the twice-daily radiosonde measurements. These surface and upper air data were processed into a format suitable for dispersion modeling by Ohio EPA using the PCRAMMET program

Modeling Results/Increment Analysis

Modeling was performed to determine the worst case impacts for each pollutant during a PSD modification in 2001. Since no relevant modifications to the model or modeled inventory had occurred, this modeling was acceptable in an evaluation of the original PSD emission levels. Impacts above the PSD significance thresholds were predicted for SO₂. Therefore, PSD increment and NAAQS analyses were required.

PSD Increment

The entire allowed emission rate from the Miller Brewing facility consumes PSD increment. Therefore, the entire facility, as well as other PSD facilities were modeled simultaneously to determine increment consumption throughout the significant impact area of the proposed modification.

Peak SO2 annual, 24-hour and 3-hour impacts were 14 ug/m3, 77 ug/m3 and 324 ug/m3, respectively. These impacts are well below the PSD increments of 25 ug/m3, 91 ug/m3 and 512 ug/m3, respectively.

NAAQS

An inventory which included potentially interacting sources was modeled to determine a combined peak impact of SO2 sources. Ambient background values provided by Ohio EPA were added to these totals to account for sources not explicitly included in the modeling.

The peak SO2 impacts are summarized below:

<u>Pollutant</u>	<u>Averaging Period</u>	<u>Predicted Concentration</u>	<u>NAAQS Concentration</u>	<u>Concentration With Background</u>
SO2	3-hour	1015 ug/m3	1300 ug/m3	1158 ug/m3
	24-hour	488 ug/m3	365 ug/m3	551 ug/m3
	Annual	74 ug/m3	80 ug/m3	90 ug/m3

SO2 24-hour and annual predicted concentrations exceeded the NAAQS at two receptors in the vicinity of another facility in Butler County. Miller first demonstrated that the modification did not contribute significantly to the 24-hour exceedances of the SO2 NAAQS. The facility also reduced annual allowed usage to reduce predicted annual SO2 impacts to less than significant impact.

Secondary Impacts

The secondary impact analysis is separated into three general categories, as follows:

- ◆ Growth Impacts;
- ◆ Air quality impacts on soils and vegetation; and,
- ◆ Visibility impairment.

Growth Impacts -

The installation or modification of a major new source will not result in any measurable amount of projected growth. The associated industrial, commercial, or residential source growth in the area as a result will be negligible. The emissions increase resulting from this project will therefore, also be negligible.

Soils and Vegetation -

As part of a comprehensive PSD review, the applicant should assess air pollution impacts on soils and on any vegetation with commercial or recreational value. Predicted ambient air concentrations are below their associated primary and secondary National Ambient Air Quality Standard (NAAQS). The primary NAAQS are set at levels that will protect human health, with the secondary NAAQS have been established to protect property, soils, and vegetation. Since the emissions from the proposed will be in compliance with the PSD Increment levels and do not contribute to NAAQS violations, no adverse effects on soil and vegetation are anticipated.

Visibility Impairment -

The impact of air pollution emissions due to the new or modified major source on visibility in Class I areas, as well as the region surrounding the proposed installation, is required as part of a PSD permit application. The nearest Class I area is Mammoth Cave National Park which is located Edmonson County, KY. This park is more than 280 kilometers away from the Miller Brewing facility. This distance is well out of the range of traditional air quality models for determining the proposed source impact on air quality concentrations at that site.

Conclusions

Based upon analysis of the permit to install application and its supporting documentation provided by Miller Brewing Company, the Ohio EPA staff has determined that the proposed installation will comply with all applicable State and Federal environmental regulations and that the requirements for BACT are satisfied. Therefore, the Ohio EPA staff recommends that a permit to install be issued to the Miller Brewing Company.

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL
SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION REVIEW
FOR THE MILLER BREWING COMPANY

Public Notice is hereby given that the Staff of the Ohio Environmental Protection Agency (EPA) has recommended to the Director that the Ohio EPA issue a draft action of a Permit to Install (PTI) to Miller Brewing Company in Butler County, Ohio. The draft was issued on June 7, 2005.

The two existing 238 mmBTU per hour pulverized coal/number six (6) fuel oil/natural gas-fired boilers are not being physical change or proposing a change in the method of operation. However, the existing boilers will be increasing Sulfur Dioxides (SO₂) emissions over actual baseline emissions that would trigger Prevention of Significant Deterioration (PSD) regulations as promulgated by U.S. EPA (40 CFR 52.21).

The maximum ambient increment allowed by U.S. EPA for PM₁₀ is 30 micrograms/meter³ (µg/m³) on a 24-hour average, and is 17 µg/m³ on an annual average; for NO_x, it is 25 µg/m³ on an annual average; for SO₂, it is 512 µg/m³ on a 3-hour average, 91 µg/m³ on a 24-hour average, and 20 µg/m³ on an annual average. The Ohio EPA requires PSD sources to consume less than the full available increment to protect future growth in the area of the proposed project.

This facility has predicted air dispersion modeling impacts from the modification which are greater than the PSD significant impact increments for SO₂. Therefore, the facility was required to perform additional modeling to demonstrate the proposed modification would not cause or significantly contribute to violations of either the PSD increments or the National Ambient Air Quality Standards for SO₂. Subsequent analyses indicate that the final proposed allowables associated with this modification will not cause or significantly contribute to violations of either the PSD increments or the National Ambient Air Quality Standards for those two pollutants.

A draft action (permit no. 14-05662) was issued on June ,2005. Within 30 days from the date of this notice, any interested party may submit comments or request a public hearing. Comments are to be sent to Bradley Miller, Hamilton County Department of Environmental Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.

Further information concerning this application, which is available for public inspection, may be secured from Hamilton County Department of Environmental Services at the above address during normal business hours. Telephone number: (513) 946-7777.



**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 14-05662

Application Number: 14-05662
Facility ID: 1409000353
Permit Fee: **To be entered upon final issuance**
Name of Facility: Miller Breweries East Inc.
Person to Contact: Mark Koch
Address: 2525 Wayne Madison Road
Trenton, OH 45067-9760

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2525 Wayne Madison Road
Trenton Ohio, Ohio**

Description of proposed emissions unit(s):
Installation of New Can Filling Line and Modification to Existing Cold Services Operation.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Miller Breweries East Inc.

Facility ID: 1409000353

PTI Application: 14-05662

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

Miller Breweries East Inc.

Facility ID: 1409000353

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- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

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6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally

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applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule

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3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

11. 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.

12. 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.

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B. State Only Enforceable 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 of state-only enforceable 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 state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. 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.

4. 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.

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5. 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.

6. 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.

7. Applicability

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

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form

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if applicable) 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. 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>
OC	39.78
VOC	23.0
PE	122.9
PM10	122.9
SO2	2758.0
CO	175.2
NOx	1375.9
HCl	187.6
HF	17.7

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. PSD REQUIREMENTS

The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Environmental Appeals Board of the United States Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

Appeals will be addressed to:
United States Environmental Protection Agency
Environmental Appeals Board
401 M Street, SW (MC-113do)
Washington, DC 20460

2. MACT REQUIREMENTS

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD (NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters), in accordance with 40 CFR Parts 63.7480 through 63.7575 (including the Table(s) and Appendix(ices) referenced in Subpart DDDDD).

Ordinarily, these requirements would be incorporated into Part II of this permit; however, incorporating Subpart DDDDD into Part II of this permit was not practical due to technical incompatibilities and the limitations of the software program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and/or equations into software program format.

The following emissions units in this permit are subject to the aforementioned requirements: emissions units B001 and B002.

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Miller

PTI A

Emissions Unit ID: B001

Issued: To be entered upon final issuance

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Miller
PTI A

Emissions Unit ID: B001

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
B001 - 238 mmBtu/hr pulverized coal/fuel oil/natural gas-fired boiler with baghouse and steam turbine	OAC rule 3745-31-05(A)(3)

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		Applicable Emissions Limitations/Control Measures
<p>OAC rule 3745-18-15(O)(1)</p>	<p>40 CFR Part 63, Subpart DDDDD</p>	<p>Emissions unit B001 shall not exceed the following emission limits:</p> <p>When Burning Coal: 0.031 lb PE-PM10/MMBtu 0.01 grains PE/acf 0.7 lb NO_x/MMBtu 0.62 lb VOC/hr 5.2 lbs CO/hr 1.6 lbs SO₂/MMBtu 21.4 lbs HCl/hr 1.6 lbs HF/hr</p>
<p>OAC rules 3745-31-10 through 20</p>		<p>When Burning No. 6 Oil: 0.125 lb PE-PM10/MMBtu (based on total heat input of 476 MMBtu/hr for B001 & B002 combined) 0.01 grains PE/acf 0.7 lb NO_x/MMBtu 1.2 lbs VOC/hr 8.15 lbs CO/hr 1.6 lbs SO₂/MMBtu</p>
<p>OAC rule 3745-17-07(A)(1)</p>		<p>When Burning No. 2 Oil: 0.020 lb PE-PM10/MMBtu 0.01 grains PE/acf 0.7 lb NO_x/MMBtu 0.38 lb VOC/hr 8.5 lbs CO/hr 1.6 lbs SO₂/MMBtu</p>
<p>OAC rule 3745-17-10(B)(1)</p>		<p>When Burning Natural Gas: 0.020 lb PE-PM10/MMBtu 0.01 grains PE/acf 0.7 lb NO_x/MMBtu</p>
<p>OAC rule 3745-17-10(C)(1)</p>		<p>2.6 lbs VOC/hr</p>

**Miller
PTI A**

Emissions Unit ID: B001

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<p>20.0 lbs CO/hr 1.6 lbs SO2/MMBtu</p>	<p>actual heat input for emissions unit B001</p>
<p>See terms and conditions A.I.2.a, A.I.2.b, and A.II.1.</p>	<p>SO2 emissions shall not exceed 2758.0 TPY* (to meet modeling requirements)</p>
<p>Maximum allowable emissions for emissions unit B001 shall not exceed the following, based on a rolling, 12-month summation: 11.5 TPY VOC (based on natural gas) 87.6 TPY CO (based on natural gas)</p>	<p>NOx emissions shall not exceed 1375.9 TPY* *Combined limits for emissions units B001 and B002, when burning any combination of fuels, based on a rolling, 12-month summation.</p>
<p>Combined limits for emissions units B001 and B002, when burning any combination of fuels, shall not exceed the following, based on a rolling, 12-month summation: 122.9 TPY PE-PM10 187.6 TPY HCl 17.7 TPY HF</p>	<p>Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule. Particulate emissions (PE) shall not exceed 0.020 lbs/MMBtu of actual heat input when burning No. 2 fuel oil or natural gas Particulate emissions (PE) shall not exceed 0.125 lbs/MMBtu when burning No. 6 fuel oil (based on a total heat input of 476 mmBtu/hr)</p>
<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20, OAC rule 3745-18-15(O)(1), OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1), OAC rule 3745-17-10(C)(1), and 40 CFR Part 63, Subpart DDDDD.</p>	<p>See Attachment 1 of this permit</p>
<p>SO2 emissions shall not exceed 1.6 lbs/MMBtu</p>	

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Particulate emissions (PE) shall not exceed 0.031 lb/MMBtu of actual heat input when burning coal and 0.01 grains/actual cubic feet of exhaust gases.
- 2.b** Nitrogen oxide (NO_x) emissions shall not exceed 0.7 lbs/MMBtu of actual heat input. This limit is based on a review by U.S. EPA of the performance test for emissions unit B001, which indicated that the NO_x emissions limit of 0.6 lbs/MMBtu in the Prevention of Significant Deterioration (PSD) permit 5-79-A-28 cannot be attained and maintained.
- 2.c** The SO₂ emission limitation in tons per year was set to comply with the PSD modeling requirements.
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, fuel quality restrictions, operating rate restrictions, use of a fabric filter, recordkeeping, compliance with NAAQS and PSD pollutant impact modeling.
- 2.e** The hourly emission limitation(s) for CO, VOC, HCl, and HF, outlined in term A.I.1. are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

II. Operational Restrictions

- 1. The emissions unit shall utilize the manufacturer's best design for minimizing NO_x emissions. The design shall utilize overfire and side fire air to reduce flame temperature and limit combustion air (ref. PSD 5-79-A-23 FR Vol 44 No. 215 issued Nov. 5, 1979).
- 2. The daily average operating rate for this emissions unit shall not exceed 238 MMBtu/hour and 180,000 pounds of steam per hour.
- 3. The quality of coal burned in this emissions unit shall meet the following specification on an as-burned basis:
 - a. A combination of ash content and heat content sufficient to comply with the particulate emission limitations specified in terms A.I.1. and A.I.2.
- a. A combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs/MMBTU of actual heat input.

Compliance with the above mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or coal supplier for all

Emissions Unit ID: B001

shipments of coal during each calendar month.

4. The quality of the fuel oil(s) burned in this emissions unit shall have a combination of sulfur content and heat content that is sufficient to comply with the allowable SO₂ emission limitation specified in section A.I.1. above.

Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month.

The quality of the oil burned in this emissions unit shall meet the following specifications on an as-received basis:

- a. A combination of ash content and heat content sufficient to comply with the particulate emission limitation of 0.020 lbs/MMBtu when burning No. 2 fuel oil and 0.125 lbs/MMBtu when burning No. 6 fuel oil.
- b. A combination of sulfur content and heat content which is sufficient to comply with the allowable SO₂ emission limitation of 1.6 lbs/MMBtu of actual heat input.

Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month and/or stack gas sampling using methods specified in 40 CFR 60, Section 60.46.

5. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.
6. The combined maximum annual coal usage rate for emissions units B001 and B002 shall not exceed 125,682 tons per year, based upon a rolling, 12-month summation of the coal usage rate. The permittee has existing records to demonstrate compliance with this permit limit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect representative grab samples of the coal burned in this emissions unit from each shipment of coal received for burning. Representative samples may be obtained via composite sampling from the coal handling system. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method

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D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Hamilton County Department of Environmental Services.

The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, heat content, and the average SO₂ emission rate for the month, in lbs/MMBtu of actual heat input.

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as ASTM methods D240, D4294), or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank

Emissions Unit ID: B001

serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).]

3. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on an hourly basis.
4. The permittee shall maintain daily records of the following information:
 - a. the heat input for this emissions unit, in MMBtu/hr
 - b. the hours of operation for this emissions unit; and
 - c. the daily average operating rate, in MMBtu/hr, for this emissions unit.

To determine heat input, the permittee shall properly operate and maintain existing equipment to continuously monitor and record the steam load, in pounds/hour, from this emissions unit.

The permittee shall maintain a written quality assurance/quality control plan for the continuous steam load monitoring system designed to ensure continuous valid and representative readings of steam load, in pounds of steam/hour. The plan shall include a description of preventive maintenance activities. A logbook dedicated to the continuous steam monitoring system must be kept on site and be available for inspection during regular office hours.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

Emissions Unit ID: B001

- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
6. The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The usage rates for each fuel (natural gas, No. 2 fuel oil No. 6 fuel oil, and coal) burned in this emissions unit
 - b. The rolling, 12-month summation of the natural gas, No. 2 fuel oil, No. 6 fuel oil, and coal usage rates.
 - c. The rolling, 12-month summation of the coal usage rate for emissions unit B001 and B002 combined.
7. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the rolling, 12-month summation emissions limitations:
- a. the total emissions, in tons, for VOC and CO when burning any combination of fuels;
 - b. the rolling, 12-monthly summation emissions total, in tons, for VOC and CO when burning any combination of fuels (the total amount of emissions calculated for the current month plus the total amount of emissions for the previous eleven calendar months).
8. The permittee shall maintain monthly records of the following information for emission units B001 and B002, combined, in order to monitor compliance with the rolling, 12-month summation emissions limitations:
- a. the total emissions, in tons, for SO₂, NO_x, PE, PM₁₀, HCl, and HF when burning any combination of fuels;
 - b. the rolling, 12-monthly summation emissions total, in tons, for SO₂, NO_x, PE, PM₁₀, HCl, and HF when burning any combination of fuels (the total amount of emissions calculated for the current month plus the total amount of emissions for the previous eleven calendar months).

IV. Reporting Requirements

1. The permittee shall submit quarterly reports concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:

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- a. the total quantity of coal received (tons);
- b. the average ash content (percent) of the coal received;
- c. the average sulfur content (percent) of the coal received;
- d. the average heat content (Btu/pound) of the coal received; and
- e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/MMBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur content (percent) for the oil received during each calendar month;
 - c. the weighted* average heat content (Btu/gallon) of the oil received during each calendar month; and
 - d. the weighted* average SO₂ emission rate (lbs/MMBtu of actual heat input) of the oil combusted during each calendar month.

*In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

3. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.5.
4. The permittee shall submit quarterly reports that identify all exceedances of the rolling, 12-month

Emissions Unit ID: B001

SO2 emissions limitation and the rolling, 12-month summation of the coal usage rate for emissions unit B001 and B002 combined.

5. The permittee shall also submit annual reports which specify the total PE, PM10, SO2, NOx, CO, VOC, HCl, and HF emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
6. The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the steam load exceeded 180,000 lbs of steam per hour, and
 - b. all periods of time during which the daily average operating rate exceeded 238 MMBtu/hr.
7. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by February 15 and August 15 of each year and shall cover the previous 6-month period.
8. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions limitation: Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average.

 Compliance Method: If required, compliance shall be demonstrated by the methods specified in 40 CFR 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitations:
 PE shall not exceed 0.031 lbs/MMBtu of actual heat input and 0.01 grain per actual cubic foot when burning coal.

 Applicable Compliance Method:
 The permittee shall demonstrate compliance with the above PE limitations based upon the results of emission testing required in Section V.2 of this permit.
 - c. Emission Limitation:
 PE shall not exceed 0.020 lbs/MMBtu of actual heat input when burning either No. 2 fuel

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oil or natural gas

Applicable Compliance Method:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable particulate/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

For the use of no. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable particulate/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

- d. **Emission Limitation:**
PE shall not exceed 0.125 lbs/MMBtu of actual heat input (based on total heat input of 476 MMBtu/hr for B001 and B002 combined) when burning No. 6 fuel oil

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable particulate/1000 gallons, and then dividing by the maximum hourly heat input capacity of the combined emissions units B001 and B002 (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

- e. **Emission Limitation:**
NOx emissions shall not exceed 0.7 lbs/MMBtu of actual heat input when burning coal

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above NOx emission limitation based upon the results of emission testing required in Section V.2 of this permit.

Emissions Unit ID: B001

- f. Emission Limitation:
SO2 emissions shall not exceed 1.6 lbs/MMBtu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above SO2 emission limitation based on the monitoring and record keeping requirements in Section A.III.1 and A.III.2 and the reporting keeping requirements in Section A.IV.1 and A.IV.2 of this permit. The SO2 emission rate shall be calculated pursuant to the equation specified in OAC rule 3745-18-04(F). When multiple fuels are burned, the SO2 emission rate is the sum of SO2 from all fuels burned divided by the sum of the Btu value of all fuels burned.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

- g. Emission Limitation:
0.62 lbs VOC/hr, when burning coal
1.2 lbs VOC/hr, when burning No. 6 oil
0.38 lbs VOC/hr, when burning No. 2 oil
2.6 lbs VOC/hr, when burning natural gas

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and related emission factors found in AP-42, Fifth Edition, Section 1. External Combustion Sources, dated 1998.

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation through emission tests performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

- h. Emission Limitation:
5.2 lbs CO/hr, when burning coal
8.15 lbs CO/hr, when burning No. 6 oil
8.5 lbs CO/hr, when burning No. 2 oil
20.0 lbs CO/hr, when burning natural gas

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and related emission factors found in AP-42, Fifth Edition, Section 1. External Combustion Sources, dated 1998.

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation through emission tests performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

Miller

PTI A

Emissions Unit ID: B001

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- i. Emission Limitation:
21.4 lbs HCl/hr, when burning coal

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and the permittee's emissions data and technical analysis found in the application for PTI 14-05515, submitted November 24, 2003.

If required, the permittee shall demonstrate compliance with the hourly HCl emission limitation through emission tests performed in accordance with Methods 1-4 and 26 of 40 CFR Part 60, Appendix A.

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- j. Emission Limitation:
1.6 lbs HF/hr, when burning coal

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and related emission factors found in AP-42, Fifth Edition, Section 1. External Combustion Sources, Table 1.1-15, dated 1998.

If required, the permittee shall demonstrate compliance with the hourly HF emission limitation through emission tests performed in accordance with Methods 1-4 and 26A of 40 CFR Part 60, Appendix A.

- k. Emission Limitation(s):
VOC emissions shall not exceed 11.5 tons per rolling, 12-month period
CO emissions shall not exceed 87.6 tons per rolling, 12-month period

Applicable Compliance Method: Compliance with the VOC and CO emission limitations specified above shall be determined by the record keeping requirements specified in Section A.III.7.

- l. Emission Limitation(s):
The total emissions from emissions units B001 and B002 combined shall not exceed the following emission limitations:
- i. 2758.0 tons of SO₂ emissions per rolling, 12-month period;
 - ii. 1375.9 tons of NO_x emissions per rolling, 12-month period;
 - iii. 122.9 tons of PE/PM₁₀ emissions per rolling, 12-month period;
 - iv. 187.6 tons of HCl emissions per rolling, 12-month period; and
 - v. 17.7 tons of HF emissions per rolling, 12-month period.

Applicable Compliance Method: Compliance with the SO₂, NO_x, PE, PM₁₀, HCl, and HF emission limitations specified above shall be determined by the record keeping requirements specified in Section A.III.8.

2. If not previously conducted and reported, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within six months after issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate of 0.031 lb/MMBtu, 0.01 grains/acf of exhaust gases,

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and for NOx of 0.7 lb/MMBtu when burning coal.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

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Method 5 of 40 CFR Part 60, Appendix A for particulate, and;
Method 7 of 40 CFR Part 60, Appendix A for NOx.

Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

- d. During the test, the temperature, the pressure drop across the baghouse, and the steam load shall be recorded at least every 15 minutes.
- e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

- 3. Compliance with term A.II.5 shall be demonstrated by the record keeping in term A.III.3.
- 4. Compliance with term A.II.6 shall be demonstrated by the record keeping in term A.III.6.
- 5. Compliance with term A.II.2 shall be demonstrated by the record keeping in term A.III.4.

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Issued: To be entered upon final issuance**VI. Miscellaneous Requirements**

1. The terms and conditions listed in this permit to install for this emissions unit shall supercede the air pollution control requirements for this emissions unit contained in PTI 14-05515 as issued on May 27, 2004. The most recent permit application, emissions determinations, and air toxics modeling data for emissions units B001 and B002, dated November 21, 2003, are maintained with PTI 14-05515 since no changes to applicable emission limitations or control requirements were made in this permit to install.

2. The installation of a new can line, emissions unit P033, contained in this permit to install results in debottlenecking and/or production increases throughout the facility. As a result, the projected SO₂ actual emissions increases from the existing coal-fired boilers, emissions units B001 and B002, submitted in PTI application 14-05662 received on December 8, 2004, triggered the definition of significant increase and significant net emission increase as defined in OAC rule 3745-31-01(III); therefore emissions units B001 and B002 were included in this permit action. The permittee's previously submitted and approved PSD Assessment for the boilers, dated April 3, 2001, was determined to be acceptable for this permit application. The SO₂ emission increases from the boilers do not exceed the existing allowable emissions limits which demonstrate compliance with the PSD requirements, OAC rules 3745-31-10 through 3745-31-20.

B. State Only Enforceable Section

I. 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>
B001 - 238 mmBtu/hr pulverized coal/fuel oil/natural gas-fired boiler with baghouse and steam turbine		See term III.1

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit B001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl (Hydrogen Chloride)
 TLV (ug/m3): 2983.0
 Maximum Hourly Emission Rate (lbs/hr): 42.8 (B001 and B002)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.84
 MAGLC (ug/m3): 71.02

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Pollutant: HF (Hydrogen Fluoride)
TLV (ug/m3): 2455.0
Maximum Hourly Emission Rate (lbs/hr): 3.1 (B001 and B002)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.2
MAGLC (ug/m3): 58.5

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

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) is (are) defined as a modification under other provisions of the modification definition, 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs

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that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
B002 - 238 mmBtu/hr pulverized coal/fuel oil/natural gas-fired boiler with baghouse and steam turbine	OAC rule 3745-31-05(A)(3)

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		Applicable Emissions <u>Limitations/Control Measures</u>
	40 CFR Part 63, Subpart DDDDD	Emissions unit B002 shall not exceed the following emission limits: When Burning Coal: 0.031 lb PE-PM10/MMBtu 0.01 grains PE/acf 0.7 lb NO _x /MMBtu 0.62 lb VOC/hr 5.2 lbs CO/hr 1.6 lbs SO ₂ /MMBtu 21.4 lbs HCl/hr 1.6 lbs HF/hr
OAC rule 3745-18-15(O)(1)		
OAC rules 3745-31-10 through 20		When Burning No. 6 Oil: 0.125 lb PE-PM10/MMBtu (based on total heat input of 476 MMBtu/hr for B001 & B002 combined) 0.01 grains PE/acf 0.7 lb NO _x /MMBtu 1.2 lbs VOC/hr 8.15 lbs CO/hr 1.6 lbs SO ₂ /MMBtu
OAC rule 3745-17-07(A)(1)		When Burning No. 2 Oil: 0.020 lb PE-PM10/MMBtu 0.01 grains PE/acf 0.7 lb NO _x /MMBtu 0.38 lb VOC/hr 8.5 lbs CO/hr 1.6 lbs SO ₂ /MMBtu
OAC rule 3745-17-10(B)(1)		When Burning Natural Gas: 0.020 lb PE-PM10/MMBtu 0.01 grains PE/acf 0.7 lb NO _x /MMBtu 2.6 lbs VOC/hr 20.0 lbs CO/hr
OAC rule 3745-17-10(C)(1)		

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1.6 lbs SO2/MMBtu

emissions unit B002

See terms and conditions
A.I.2.a, A.I.2.b, and A.II.1.

SO2 emissions shall not exceed
2758.0 TPY* (to meet modeling
requirements)

Maximum allowable
emissions for emissions unit
B002 shall not exceed the
following, based on a rolling,
12-month summation:
11.5 TPY VOC (based on
natural gas)
87.6 TPY CO (based on
natural gas)

NOx emissions shall not exceed
1375.9 TPY*

*Combined limits for emissions units
B001 and B002, when burning any
combination of fuels, based on a
rolling, 12-month summation.

Combined limits for
emissions units B001 and
B002, when burning any
combination of fuels, shall
not exceed the following,
based on a rolling, 12-month
summation:
122.9 TPY PE-PM10
187.6 TPY HCl
17.7 TPY HF

Visible particulate emissions from
any stack shall not exceed 20 percent
opacity, as a 6-minute average,
except as specified by rule.

Particulate emissions (PE) shall not
exceed 0.020 lbs/MMBtu of actual
heat input when burning No. 2 fuel
oil or natural gas

Particulate emissions (PE) shall not
exceed 0.125 lbs/MMBtu when
burning No. 6 fuel oil (based on a
total heat input of 476 mmBtu/hr)

The requirements of this rule
also include compliance with
the requirements of OAC
rules 3745-31-10 through
20, OAC rule
3745-18-15(O)(1), OAC
rule 3745-17-07(A)(1), OAC
rule 3745-17-10(B)(1), OAC
rule 3745-17-10(C)(1), and
40 CFR Part 63, Subpart
DDDDD.

See Attachment 1 of this permit

SO2 emissions shall not
exceed 1.6 lbs/MMBtu
actual heat input for

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Particulate emissions (PE) shall not exceed 0.031 lb/MMBtu of actual heat input when burning coal and 0.01 grains/actual cubic feet of exhaust gases.
- 2.b** Nitrogen oxide (NOx) emissions shall not exceed 0.7 lbs/MMBtu of actual heat input. This limit is based on a review by U.S. EPA of the performance test for emissions unit B002, which indicated that the NOx emissions limit of 0.6 lbs/MMBtu in the Prevention of Significant Deterioration (PSD) permit 5-79-A-28 cannot be attained and maintained.
- 2.c** The SO₂ emission limitation in tons per year was set to comply with the PSD modeling requirements.
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, fuel quality restrictions, operating rate restrictions, use of a fabric filter, recordkeeping, compliance with NAAQS and PSD pollutant impact modeling.
- 2.e** The hourly emission limitation(s) for CO, VOC, HCl, and HF, outlined in term A.I.1. are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

II. Operational Restrictions

1. The emissions unit shall utilize the manufacturer's best design for minimizing NOx emissions. The design shall utilize overfire and side fire air to reduce flame temperature and limit combustion air (ref. PSD 5-79-A-23 FR Vol 44 No. 215 issued Nov. 5, 1979).
2. The daily average operating rate for this emissions unit shall not exceed 238 MMBtu/hour and 180,000 pounds of steam per hour.
3. The quality of coal burned in this emissions unit shall meet the following specification on an as-burned basis:
 - a. A combination of ash content and heat content sufficient to comply with the particulate emission limitations specified in terms A.I.1. and A.I.2.

- b. A combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs/MMBTU of actual heat input.

Compliance with the above mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or coal supplier for all shipments of coal during each calendar month.

4. The quality of the fuel oil(s) burned in this emissions unit shall have a combination of sulfur content and heat content that is sufficient to comply with the allowable SO2 emission limitation specified in section A.I.1. above.

Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month.

The quality of the oil burned in this emissions unit shall meet the following specifications on an as-received basis:

- a. A combination of ash content and heat content sufficient to comply with the particulate emission limitation of 0.020 lbs/MMBtu when burning No. 2 fuel oil and 0.125 lbs/MMBtu when burning No. 6 fuel oil.
- b. A combination of sulfur content and heat content which is sufficient to comply with the allowable SO2 emission limitation of 1.6 lbs/MMBtu of actual heat input.

Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month and/or stack gas sampling using methods specified in 40 CFR 60, Section 60.46.

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5. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.
6. The combined maximum annual coal usage rate for emissions units B001 and B002 shall not exceed 125,682 tons per year, based upon a rolling, 12-month summation of the coal usage rate.

The permittee has existing records to demonstrate compliance with this permit limit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect representative grab samples of the coal burned in this emissions unit from each shipment of coal received for burning. Representative samples may be obtained via composite sampling from the coal handling system. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Hamilton County Department of Environmental Services.

The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, heat content, and the average SO₂ emission rate for the month, in lbs/MMBtu of actual heat input.

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate

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ASTM methods (such as ASTM methods D240, D4294), or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance the following:

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).]

3. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on an hourly basis.
4. The permittee shall maintain daily records of the following information:
 - a. the heat input for this emissions unit, in MMBtu/hr
 - b. the hours of operation for this emissions unit; and
 - c. the daily average operating rate, in MMBtu/hr, for this emissions unit.

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To determine heat input, the permittee shall properly operate and maintain existing equipment to continuously monitor and record the steam load, in pounds/hour, from this emissions unit.

The permittee shall maintain a written quality assurance/quality control plan for the continuous steam load monitoring system designed to ensure continuous valid and representative readings of steam load, in pounds of steam/hour. The plan shall include a description of preventive maintenance activities. A logbook dedicated to the continuous steam monitoring system must be kept on site and be available for inspection during regular office hours.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
6. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The usage rates for each fuel (natural gas, No. 2 fuel oil No. 6 fuel oil, and coal) burned in this emissions unit
 - b. The rolling, 12-month summation of the natural gas, No. 2 fuel oil, No. 6 fuel oil, and coal usage rates.
 - c. The rolling, 12-month summation of the coal usage rate for emissions unit B001 and B002 combined.
7. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the rolling, 12-month summation emissions limitations:
 - a. the total emissions, in tons, for VOC and CO when burning any combination of fuels;
 - b. the rolling, 12-monthly summation emissions total, in tons, for VOC and CO when burning any combination of fuels (the total amount of emissions calculated for the current month plus the total amount of emissions for the previous eleven calendar months).
8. The permittee shall maintain monthly records of the following information for emission units B001 and B002, combined, in order to monitor compliance with the rolling, 12-month summation emissions limitations:
 - a. the total emissions, in tons, for SO₂, NO_x, PE, PM₁₀, HCl, and HF when burning any

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- combination of fuels;
- b. the rolling, 12-monthly summation emissions total, in tons, for SO₂, NO_x, PE, PM₁₀, HCl, and HF when burning any combination of fuels (the total amount of emissions calculated for the current month plus the total amount of emissions for the previous eleven calendar months).

IV. Reporting Requirements

1. The permittee shall submit quarterly reports concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal received (tons);
 - b. the average ash content (percent) of the coal received;
 - c. the average sulfur content (percent) of the coal received;
 - d. the average heat content (Btu/pound) of the coal received; and
 - e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/MMBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur content (percent) for the oil received during each calendar month;

- c. the weighted* average heat content (Btu/gallon) of the oil received during each calendar month; and
- d. the weighted* average SO₂ emission rate (lbs/MMBtu of actual heat input) of the oil combusted during each calendar month.

*In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

- 3. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.5.
- 4. The permittee shall submit quarterly reports that identify all exceedances of the rolling, 12-month SO₂ emissions limitation and the rolling, 12-month summation of the coal usage rate for emissions unit B001 and B002 combined.
- 5. The permittee shall also submit annual reports which specify the total PE, PM₁₀, SO₂, NO_x, CO, VOC, HCl, and HF emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
- 6. The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the steam load exceeded 180,000 lbs of steam per hour, and
 - b. all periods of time during which the daily average operating rate exceeded 238 MMBtu/hr.
- 7. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by February 15 and August 15 of each year and shall cover the previous 6-month period.
- 8. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

- 1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

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- a. Emissions limitation: Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average.

Compliance Method: If required, compliance shall be demonstrated by the methods specified in 40 CFR 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- b. Emission Limitations:
PE shall not exceed 0.031 lbs/MMBtu of actual heat input and 0.01 grain per actual cubic foot when burning coal.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above PE limitations based upon the results of emission testing required in Section V.2 of this permit.

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- c. Emission Limitation:
PE shall not exceed 0.020 lbs/MMBtu of actual heat input when burning either No. 2 fuel oil or natural gas

Applicable Compliance Method:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable particulate/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

For the use of no. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable particulate/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

- d. Emission Limitation:
PE shall not exceed 0.125 lbs/MMBtu of actual heat input (based on total heat input of 476 MMBtu/hr for B001 and B002 combined) when burning No. 6 fuel oil

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable particulate/1000 gallons, and then dividing by the maximum hourly heat input capacity of the combined emissions units B001 and B002 (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

- e. Emission Limitation:
NO_x emissions shall not exceed 0.7 lbs/MMBtu of actual heat input when burning coal

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above NO_x emission limitation based

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upon the results of emission testing required in Section V.2 of this permit.

- f. Emission Limitation:
SO₂ emissions shall not exceed 1.6 lbs/MMBtu of actual heat input

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Applicable Compliance Method:

The permittee shall demonstrate compliance with the above SO₂ emission limitation based on the monitoring and record keeping requirements in Section A.III.1 and A.III.2 and the reporting keeping requirements in Section A.IV.1 and A.IV.2 of this permit. The SO₂ emission rate shall be calculated pursuant to the equation specified in OAC rule 3745-18-04(F). When multiple fuels are burned, the SO₂ emission rate is the sum of SO₂ from all fuels burned divided by the sum of the Btu value of all fuels burned.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

- g. Emission Limitation:
0.62 lbs VOC/hr, when burning coal
1.2 lbs VOC/hr, when burning No. 6 oil
0.38 lbs VOC/hr, when burning No. 2 oil
2.6 lbs VOC/hr, when burning natural gas

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and related emission factors found in AP-42, Fifth Edition, Section 1. External Combustion Sources, dated 1998.

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation through emission tests performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

- h. Emission Limitation:
5.2 lbs CO/hr, when burning coal
8.15 lbs CO/hr, when burning No. 6 oil
8.5 lbs CO/hr, when burning No. 2 oil
20.0 lbs CO/hr, when burning natural gas

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and related emission factors found in AP-42, Fifth Edition, Section 1. External Combustion Sources, dated 1998.

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation through emission tests performed in accordance with Methods 1-4 and 10 of 40

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CFR Part 60, Appendix A.

Emissions Unit ID: B002

- i. Emission Limitation:
21.4 lbs HCl/hr, when burning coal

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Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and the permittee's emissions data and technical analysis found in the application for PTI 14-05515, submitted November 24, 2003.

If required, the permittee shall demonstrate compliance with the hourly HCl emission limitation through emission tests performed in accordance with Methods 1-4 and 26 of 40 CFR Part 60, Appendix A.

- j. Emission Limitation:
1.6 lbs HF/hr, when burning coal

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and related emission factors found in AP-42, Fifth Edition, Section 1. External Combustion Sources, Table 1.1-15, dated 1998.

If required, the permittee shall demonstrate compliance with the hourly HF emission limitation through emission tests performed in accordance with Methods 1-4 and 26A of 40 CFR Part 60, Appendix A.

- k. Emission Limitation(s):
VOC emissions shall not exceed 11.5 tons per rolling, 12-month period
CO emissions shall not exceed 87.6 tons per rolling, 12-month period

Applicable Compliance Method: Compliance with the VOC and CO emission limitations specified above shall be determined by the record keeping requirements specified in Section A.III.7.

- l. Emission Limitation(s):
The total emissions from emissions units B001 and B002 combined shall not exceed the following emission limitations:

- i. 2758.0 tons of SO₂ emissions per rolling, 12-month period;
- ii. 1375.9 tons of NO_x emissions per rolling, 12-month period;
- iii. 122.9 tons of PE/PM₁₀ emissions per rolling, 12-month period;
- iv. 187.6 tons of HCl emissions per rolling, 12-month period; and
- v. 17.7 tons of HF emissions per rolling, 12-month period.

Applicable Compliance Method: Compliance with the SO₂, NO_x, PE, PM₁₀, HCl, and HF emission limitations specified above shall be determined by the record keeping

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requirements specified in Section A.III.8.

2. If not previously conducted and reported, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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- a. The emission testing shall be conducted within six months after issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate of 0.031 lb/MMBtu, 0.01 grains/acf of exhaust gases, and for NOx of 0.7 lb/MMBtu when burning coal.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 5 of 40 CFR Part 60, Appendix A for particulate, and;
Method 7 of 40 CFR Part 60, Appendix A for NOx.

Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.
- d. During the test, the temperature, the pressure drop across the baghouse, and the steam load shall be recorded at least every 15 minutes.
- e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where

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warranted, with prior approval from the Hamilton County Department of Environmental Services.

3. Compliance with term A.II.5 shall be demonstrated by the record keeping in term A.III.3.

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4. Compliance with term A.II.6 shall be demonstrated by the record keeping in term A.III.6.
5. Compliance with term A.II.2 shall be demonstrated by the record keeping in term A.III.4.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install for this emissions unit shall supercede the air pollution control requirements for this emissions unit contained in permit to install 14-05515 as issued on May 27, 2004. The most recent permit application, emissions determinations, and air toxics modeling data for emissions units B001 and B002, dated November 21, 2003, are maintained with PTI 14-05515 since no changes to applicable emission limitations or control requirements were made in this permit to install.
2. The installation of a new can line, emissions unit P033, contained in this permit to install results in debottlenecking and/or production increases throughout the facility. As a result, the projected SO₂ actual emissions increases from the existing coal-fired boilers, emissions units B001 and B002, submitted in PTI application 14-05662 received on December 8, 2004, triggered the definition of significant increase and significant net emission increase as defined in OAC rule 3745-31-01(III); therefore emissions units B001 and B002 were included in this permit action. The permittee's previously submitted and approved PSD Assessment for the boilers, dated April 3, 2001, was determined to be acceptable for this permit application. The SO₂ emission increases from the boilers do not exceed the existing allowable emissions limits which demonstrate compliance with the PSD requirements, OAC rules 3745-31-10 through 3745-31-20.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B002 - 238 mmBtu/hr pulverized coal/fuel oil/natural gas-fired boiler with baghouse and steam turbine		See term III.1

2. Additional Terms and Conditions

- None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- The permit to install for this emissions unit B002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl (Hydrogen Chloride)

TLV (ug/m³): 2983.0

Maximum Hourly Emission Rate (lbs/hr): 42.8 (B001 and B002)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 30.84

MAGLC (ug/m³): 71.02

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Pollutant: HF (Hydrogen Fluoride)

TLV (ug/m3): 2455.0

Maximum Hourly Emission Rate (lbs/hr): 3.1 (B001 and B002)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.2

MAGLC (ug/m3): 58.5

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

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) is (are) defined as a modification under other provisions of the modification definition, 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 satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

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- b. documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the 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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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PTI A

Emissions Unit ID: P031

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - Cold Services - Modification	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions shall not exceed 1.59 pounds per hour*
		OC emissions shall not exceed 6.98 tons per year (TPY).
		*The hourly emission limitation outlined above is based on the emission unit's potential to emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Exempt. See term and condition A.I.2.a.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the requirements of this rule because ethanol is not a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).
- 2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations.

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II. Operational Restrictions

Emissions Unit ID: P031

None

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Emissions Unit ID: P031

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the number of barrels produced each month in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit annual reports which specify the annual barrels produced and the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
1.59 pounds per hour OC

Applicable Compliance Method:

The hourly emission limitation specified above is based on the emissions unit's potential to emit, the permittee-supplied emission factors, and the operational parameters as provided in the PTI application 14-05662, submitted December 8, 2004.

- b. Emission Limitation:
6.98 TPY OC

Applicable Compliance Method:

Compliance with the annual OC emissions limitation specified above shall be determined by summing the records required in Section A.III.1. and multiplying this summation by the permittee-supplied cold services emission factor of 1.51 pounds OC/1000 barrels, dividing by 1000 barrels, and dividing again by 2000 pounds/ton.

VI. Miscellaneous Requirements

1. The terms and conditions in this permit to install shall supercede the terms and conditions for emissions unit P031 contained in permit to install #14-04776, issued August 11, 1999.

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Emissions Unit ID: P031

B. State Only Enforceable Section

I. 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 - Cold Services - Modification		See term III.1

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for emissions unit P031 and emissions unit P033 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethanol

TLV (ug/m3): 1,884,000

Maximum Hourly Emission Rate (lbs/hr): 9.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.52

MAGLC (ug/m3): 44,863

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the

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permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) is (are) defined as a modification under other provisions of the modification definition, 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 satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the 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.

IV. Reporting Requirements

None

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V. Testing Requirements

None

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VI. Miscellaneous Requirements

Emissions Unit ID: P031

None

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Emissions Unit ID: P033

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - Can Filling Line C1	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions shall not exceed 8.93 pounds per hour*
		*The hourly emission limitation outlined above is based on the emission unit's potential to emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Major Modification New Source Review	OC emissions shall not exceed 32.8 tons per year (TPY) based on a rolling, 12-month summation.
		See terms and conditions A.II.1.
	OAC rule 3745-21-7(G)(2)	Exempt. See term and condition A.I.2.a.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the requirements of this rule because ethanol is not a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

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- 2.b** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations and operational restrictions.

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 2,000,000 barrels, based upon a rolling, 12-month summation of the number of barrels produced.

To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production rate levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Production Rate (barrels)</u>
1	200,000
1- 2	400,000
1 - 3	600,000
1 - 4	800,000
1 - 5	1,000,000
1 - 6	1,200,000
1 - 7	1,400,000
1 - 8	1,600,000
1 - 9	1,800,000
1 - 10	2,000,000
1 - 11	2,000,000
1 - 12	2,000,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the number of barrels produced.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable operating restriction:
- the barrels produced for each month; and

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- b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the number of barrels produced.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative number of barrels produced for each calendar month.

2. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the rolling, 12-month summation emission limitation:
 - a. the total emissions, in tons, of OC for each month; and
 - b. the updated rolling, 12-month summation emissions total, in tons, of OC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months). For the first twelve months following the issuance of this permit, this shall be a cumulative total of all months since the issuance of the permit.
3. The permittee shall maintain a record of the projected future actual emissions and annual emissions information, submitted with the application for this permit, which demonstrated that this emissions unit does not contribute to a significant OC emissions increase at the facility.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the following:
 - a. an identification of all exceedances of the rolling 12-month production restriction as specified in Section A.II.1.;
 - b. an identification of all exceedances of the rolling 12-month emission limitation for OC as specified in Section A.I.1.

The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

If no deviations occurred during the reporting period, the permittee shall state so in the report.

2. The permittee shall submit annual reports which specify the annual barrels produced and the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Hamilton County Department of Environmental Services in writing if annual emissions result in a significant OC emissions increase and exceed the projected actual OC emissions submitted in PTI application 14-05662, submitted December 8, 2004. This notification shall identify the cause for the significant increase and the estimated OC emissions. This notification shall be submitted to the Hamilton County Department of Environmental

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Services within 60 days after the end of such year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
8.93 pounds per hour OC

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Applicable Compliance Method:

The hourly emission limitation specified above is based on the emissions unit's potential to emit, the permittee-supplied emission factors, and the operational parameters as provided in the PTI application 14-05662, submitted December 8, 2004.

- b. Emission Limitation:
32.8 TPY OC as a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the OC emission limitations specified above shall be determined by the record keeping requirements specified in Section A.III.2.

- c. Operational Restriction:
2,000,000 barrels produced, per rolling, 12-month period

Applicable Compliance Method: Compliance with the rolling 12-month operational restriction specified above shall be determined by the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

1. The installation of this emissions unit, P033, results in debottlenecking and/or production increases throughout the facility. As a result, the projected sulfur dioxide actual emissions increases from the existing coal-fired boilers, emissions units B001 and B002, submitted in PTI application 14-05662 received on December 8, 2004, triggered the definition of significant increase and significant net emission increase as defined in OAC rule 3745-31-01(III), therefore emissions units B001 and B002 have been included in this permit action. The SO₂ emission increases from the boilers do not exceed the existing allowable emissions limits which demonstrate compliance with the PSD requirements, OAC rules 3745-31-10 through 3745-31-20.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P033 - Can Filling Line C1		See term III.1

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- The permit to install for emissions unit P031 and emissions unit P033 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethanol

TLV (ug/m3): 1,884,000

Maximum Hourly Emission Rate (lbs/hr): 9.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.52

MAGLC (ug/m3): 44,863

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be

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satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) is (are) defined as a modification under other provisions of the modification definition, 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 satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the 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.

IV. Reporting Requirements

None

Miller Breweries East Inc.
PTI Application: 14-05662
Issued

Facility ID: 1409000353

Emissions Unit ID: P033

V. Testing Requirements

None

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Miller

PTI A

Issued: To be entered upon final issuance

VI. Miscellaneous Requirements

Emissions Unit ID: P033

None