

Facility ID: 1409070726 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1409070726 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Glass Frit Smelter Number 1 fired by natural gas	OAC rule 3745-31-05(A)(3)(b) (PTI 14-05954)	See terms A.2.a and A.2.c.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a 6-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 1.02 lbs/hr.

2. Additional Terms and Conditions

- (a) The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) or particulate matter emissions 10 microns and less in diameter (PM10) from this air contaminant source because the calculated annual emission rate for PE and PM10 is less than ten tons per year, taking into account the federally enforceable rule limit of 1.02 lb of PE per hour under OAC rule 3745-17-11(B).
 The hourly emission limitation outlined in Section A.1 are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.
 The Best Available Technology (BAT) requirements under OAC 3745-31-05(A)(3) do not apply to the sulfur dioxide (SO2), nitrogen oxides (NOx), carbon monoxide (CO) or volatile organic compound (VOC) emissions from this air contaminant source since the potential to emit for these pollutants is less than ten tons per year.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber water flow rate, in gallons per minute, and the scrubber pressure drop, in inches of water, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber water flow rate, in gallons per minute, and the scrubber pressure drop, in inches of water, on a once per day basis.

Whenever the monitored value(s) for the scrubber water flow rate, in gallons per minute, and/or the scrubber pressure drop, in inches of water, deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

2. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value(s) specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, scrubber water flow rate, in gallons per minute, and the scrubber pressure drop, in inches of water, immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records

required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

Acceptable minimum values for the scrubber:

not less than 22 gallons per minute for the scrubber water flow rate

not less than 8 inches of water for the scrubber pressure drop differential

These values are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the scrubber water flow rate and/or the scrubber pressure drop based upon information obtained during the latest PE emission test that demonstrates compliance with the allowable PE rate for this emissions unit. In addition, approved revisions to the scrubber water flow rate and/or the scrubber pressure drop will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the wet scrubber during the operation of the controlled emissions unit(s):
 - a. each period of time when the pressure drop across the scrubber and/or the water flow rate was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop and/or the water flow rate into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

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

Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Emission Limitation:

Particulate Emissions (PE) shall not exceed 1.02 lbs/hr.

Applicable Compliance Method:

The particulate emissions limitation is based on OAC rule 3745-17-11 Table 1 allowable and is calculated as follows: $E = 4.10(P)^{0.67}$, where $P = 0.125$.

If required, emission testing shall be conducted to demonstrate compliance with the particulate emissions limitation. The following test method shall be employed to demonstrate compliance with the particulate emissions limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitations:

Emissions shall be less than 10 TPY of PE, PM10, SO2, NOx, CO and VOC.

The annual emission limitations shall be determined by multiplying the hourly emission rates by the maximum operating hours, 8760 hr/yr, and dividing by 2000 lb/ton. The hourly PE rate shall be calculated based on the Table 1 of OAC rule 3745-17-11 and throughput information provided in the permit to install application 14-05954 submitted on Jun 5, 2007. PM10 emissions shall be assumed to be equivalent to PE.

The maximum annual emissions rates for SO2, NOx, CO and VOC shall be calculated by multiplying the maximum annual fuel usage by the emission factors from "Compilation of Air Pollutant Emission Factors", AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor for natural gas burning and dividing by 2000 pounds per ton.

F. Miscellaneous Requirements

1. The terms and conditions of this permit to operate (PTO) shall supersede the terms and conditions of the PTO for this emissions unit as issued on November 28, 2006.
2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.