

Facility ID: 1431073463 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: 1431073463 Emissions Unit ID: B001 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>
B001 - 71.2 mmBtu/hr Natural Gas and Landfill Gas Fired Flue Gas Boiler	OAC rule 3745-31-05(A)(3) PTI 14-05789	The following emissions limitations shall not be exceeded:
		0.098 pound nitrogen oxides (NOx) per million British thermal units and 30.57 tons per year.
		0.0147 pound sulfur dioxide (SO2) per million British thermal units and 4.58 tons per year.
		0.0824 pound carbon monoxide (CO) per million British thermal units and 25.68 tons per year.
		0.0054 pound volatile organic compounds (VOC) per million British thermal units and 1.70 tons per year.
		0.0075 pound particulate emissions (PE) and particulate matter emissions 10 microns or less in diameter (PM10) per million British thermal units and 2.32 tons per year.
		See terms and conditions B.1 and B.2.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-08(B), OAC rule 3745-23-06(B) and 40 CFR Part 60 Subpart Dc. Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See term and condition A.2.c.
	OAC rule 3745-23-06(B)	See term and condition A.2.d.
	40 CFR Part 60 Subpart Dc	See term and condition D.1.

**2. Additional Terms and Conditions**

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the visible emissions limitation, the mass emissions limitations, the use of landfill gas and natural gas and low NOx burners. The lb/mmBtu and tons per year emissions limitations outlined in term A.1 are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these emission limitations. The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT)

requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee shall satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On February 15, 2005, OAC rule 3745-23-06 was rescinded; therefore, this rule is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

**B. Operational Restrictions**

1. The permittee shall burn only landfill gas and/or natural gas in this emissions unit.
2. The permittee shall operate and maintain low NOx burners during all periods of operation of this emissions unit.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall record and maintain records of the amount of each fuel combusted in this emissions unit during each day, in mm scf.
2. The permittee shall collect once per month a sample of landfill gas. Each sample shall be analyzed for heat content (Btu/scf).
3. The permittee shall record and maintain records of the type and amount of fuel other than landfill gas or natural gas combusted in this emissions unit during each day.
4. 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 SCREEN3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN3 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: hydrogen chloride

TLV (ug/m3): 2980

Maximum Hourly Emission Rate (lbs/hr): 1.66

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 59.81

MAGLC (ug/m3): 70.95

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 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.

**D. Reporting Requirements**

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
  - a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date); and
  - d. The design heat input capacity of each emissions unit and the identification of the fuel to be combusted in each emissions unit (no later than 30 days after the construction date).

Reports are to be sent to:

Hamilton County Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any fuel burned in this emissions unit other than landfill gas and natural gas. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

**E. Testing Requirements**

1. Compliance with the emissions limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emissions 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:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

Emissions Limitations:

Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 0.098 lb of NO<sub>x</sub>/mmBtu and 30.57 TPY of NO<sub>x</sub>.

Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.0147 lb of SO<sub>2</sub>/mmBtu and 4.58 TPY of SO<sub>2</sub>.

Carbon Monoxide (CO) emissions shall not exceed 0.0824 lb of CO/mmBtu and 25.68 TPY of CO.

Volatile Organic Compound (VOC) emissions shall not exceed 0.0054 lb of VOC/mmBtu and 1.70 TPY of VOC.

Particulate Emissions (PE)\* shall not exceed 0.0075 lb of PE/mmBtu and 2.32 TPY of PE\*.

\*It is assumed the PM<sub>10</sub> emissions rate is equivalent to the PE emissions rates.

Applicable Compliance Method:

Compliance shall 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 (revised 7/98) emissions factors using calculation methods provided in the permit to install application 14-05789 submitted on November 21, 2005, then dividing by the maximum hourly heat input of the emissions unit (mmBtu/hr). The actual annual emissions rates shall be calculated by using the actual fuel usage, emissions factors and methodologies specified above.

2. Compliance with the operation restriction in term and condition B.1 shall be demonstrated by the record keeping requirement in term and condition C.3.

**F. Miscellaneous Requirements**

1. The terms and conditions of permit to install 14-05789 shall supersede the terms and conditions of Permit to Install 14-02410 as issued on February 13, 1992 and Permit to Install 14-02410 as modified on October 12, 2000.