

Facility ID: 0634000085 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: 0634000085 Emissions Unit ID: F003 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>
F003 - 145 TPH (wet product) Coal Recovery and Cleaning Process	OAC rule 3745-31-05(A)(3) (PTI 06-07659 issued 9/8/05)	Particulate emissions (PE) shall not exceed 0.2 TPY. See section A.2.a.
		<p>Volatile Organic Compounds (VOC) emissions shall not exceed 218 lbs/day, and 40.0 TPY (which includes 30.2 TPY hydrotreated petroleum distillates classified as air toxic material).</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 40 CFR Part 60, Subpart Y. See section A.2.d.</p> <p>The permittee shall not cause to be discharged into the atmosphere, gases which exhibit 20 percent opacity or greater. See section A.2.c.</p> <p>See section A.2.b. See section A.2.b.</p>
	OAC rule 3745-21-07(G)(2) 40 CFR Part 60, Subpart Y	
	OAC rule 3745-17-07(B)(1) OAC rule 3745-17-08(B)	

2. Additional Terms and Conditions

- (a) The 0.2 ton per year PE emission limitation was established for PTI purposes to reflect the emission unit's potential to emit. This emissions unit processes coal slurry which is too wet to generate fugitive dust but because of NSPS applicability is not eligible for the de minimis exemption in OAC rule 3745-15-05. Therefore, it is not necessary to establish monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

This facility is located in Harrison County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

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.

The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records that include the following information for this emissions unit:

- a. the company identification of each VOC-containing material employed and documentation as to whether or not each VOC-containing material employed is a photochemically reactive material as defined in OAC rule 3745-21-05 (C)(5);
- b. the number of gallons of each VOC-containing material employed;
- c. the VOC content of each VOC-containing material employed, in pounds of VOC per gallon of VOC-containing material; and
- d. the total daily VOC emissions, in lbs/day.

2. The permit to install for this emissions unit F003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: hydrotreated petroleum distillates, CAS # 64742-47-8
 TLV (ug/m3): 200,000
 Maximum Hourly Emission Rate (g/s) : 0.87
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,422
 MAGLC (ug/m3): 4,762

3. Physical changes to or changes 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 Toxic 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 applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs, Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices";

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

4. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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

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

b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day a photochemically reactive material was employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the VOC emissions from this emissions unit exceeded 218 lbs/day, and the actual daily VOC emissions for each such day.

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:

PE shall not exceed 0.2 ton per year.

Applicable Compliance Method:

Compliance with the TPY emission limitation shall be demonstrated by the following calculations using emission factors from AP 42, Compilation of Air Pollutant Emission Factors, Chapter 13.2.4, Equation 1 (issued 1/95).

Material transfer: $EF = (k) (0.0032) [(U/5)^{1.3} / (M/2)^{1.4}]$

where:

EF = emission factor (lb. PE / ton coal transferred);
k = particle size multiplier (0.74 dimension less);
U = mean wind speed, miles per hour (10 mph);
M = material moisture content (15%);
Control efficiency = 75%; and
Maximum Annual throughput = 1,270,200 tons (wet).

$$EF = (0.74) (0.0032) [(10/5)^{1.3} / (15/2)^{1.4}] = 3.47 \times 10^{-4}$$

$$PE = EF \times (3 \text{ transfers})(1,270,200 \text{ max tpy})(0.0005 \text{ ton/lb})(1-0.75) = 0.17 \text{ TPY}$$

Emission Limitation:

VOC emissions shall not exceed 218 lbs/day.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the VOC-containing materials.
Emission Limitation:

The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere, gases which exhibit 20 percent opacity or greater.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002, with the modifications found in OAC rule 3745-17-03(B)(4).

F. **Miscellaneous Requirements**

1. None