

Facility ID: 1409000411 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: 1409000411 Emissions Unit ID: P045 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

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>
pilot plant drier system, with wet scrubber	OAC rule 3745-31-05(A)(3) (PTI 14-05167)	0.1 lb of particulate emissions (PE)/hour * 0.1 lb of particulate matter emissions with a diameter of 10 microns or less (PM10)/hour 0.06 ton per year (TPY) of PE 0.06 TPY of PM10 emissions 6.03 lbs of nitrogen oxides (NOx) emissions/hour * 3.62 TPY of NOx emissions See Section A.2 below. * The hourly PE/PM10 and NOx emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly record keeping or reporting is required to demonstrate compliance with these emission limitations.
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). See Section A.2.a below. The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**
 - (a) Visible PE from any stack shall not exceed 20% percent opacity, as a six-minute average, except as specified by rule.

B. Operational Restrictions

1. The maximum annual raw material usage (metal oxides, nitrates and carbonates) shall not exceed 31.8 TPY.
2. The permittee shall operate and maintain the wet scrubber, with a minimum control efficiency of 98%, by weight, for the control of PE/PM10 emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the total amount of all raw materials (metal oxides, nitrates and carbonates) employed, in pounds;
 - b. the total NOx emissions, in pounds [(C.1.a) x (0.11377 lb of NOx/lb of raw material)*]; and
 - c. the total PE/PM10 emissions, in pounds [(C.1.a) x (0.095 lb of PE/PM10 emissions/lb of raw material used)* x (1 - the fractional control efficiency of the wet scrubber (0.98))].

* emission factor as supplied by the permittee

2. The permittee shall maintain annual records of the following information for this emissions unit:
 - a. the total amount, in tons, of all raw materials employed for the calendar year (summation of C.1.a for all raw materials employed each month for the calendar year and divided by 2,000 lbs/ton).
 - b. the total NOx emissions, in tons, for the calendar year (summation of C.1.b for each month of the calendar year and divided by 2,000 lbs/ton); and
 - c. the total PE/PM10 emissions, in tons, for the calendar year (summation of C.1.c for each month of the calendar year and divided by 2,000 lbs/ton).
3. The permittee shall perform weekly 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 abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the weekly check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

D. Reporting Requirements

1. The facility shall submit annual reports to the Hamilton County Department of Environmental Services that specify the amount of raw materials employed in this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year and cover the previous calendar year.
2. The permittee shall notify the Hamilton County Department of Environmental Services, in writing, of all times this emissions unit was in operation and did not employ the wet scrubber. The notification shall be submitted to the Hamilton County Department of Environmental Services within 30 days after the occurrence.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the visible PE limitation, the PE, PM10 and NOx emission limitations and the material usage restriction specified in Sections A.1, A.2 and B.1 shall be determined by the following methods:
Visible PE Limitation: Visible PE from any stack shall not exceed 20% percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method: Compliance with the visible PE limitation shall be determined by the method specified in 40 CFR, Part 60, Appendix A, Test Method 9 pursuant to OAC rule 3745-17-03(B)(1).
PE/PM10 Emission Limitations: 0.1 lb of PE/PM10 emissions/hour; 0.06 TPY of PE/PM10 emissions

Applicable Compliance Method: The hourly PE/PM10 emission limitation is based upon the emissions unit's potential to emit and was established by the following equation:

Hourly PE/PM10 Emissions: [maximum hourly raw material throughput (53 lbs/hour) x (0.095 lb of PE/PM10 emissions/lb of raw material used) x (1 - the fractional control efficiency of the wet scrubber (0.98))] = 0.1 lb/hour of PE/PM10 emissions

Compliance with the annual PE/PM10 emission limitation shall be determined by the record keeping requirements specified in Section C.2.

NOx Emission Limitations: 6.03 lbs of NOx emissions/hour; 3.62 TPY of NOx emissions

Applicable Compliance Method: The hourly NOx emission limitation is based upon the emissions unit's potential to emit and was determined by the following equation:

Hourly NOx Emissions: [maximum hourly raw material throughput (53 lbs/hour) x (0.11377 lb of NOx emissions/lb of raw material used)] = 6.03 lbs/hour of NOx emissions

Compliance with the annual NOx emission limitation shall be determined by the record keeping requirements specified in Section C.2.

Material Usage Restriction: 31.8 TPY of raw materials (metal oxides, nitrates and carbonates)

Applicable Compliance Method: Compliance with the annual raw material usage restriction shall be determined by the record keeping requirements specified in Section C.2.

PE/PM10 Control Efficiency Restriction: minimum PE/PM10 control efficiency of 98%, by weight, for the wet scrubber

Applicable Compliance Method: If required, compliance with the minimum PE/PM10 control efficiency restriction shall be determined by inlet/outlet testing of the wet scrubber using 40 CFR, Part 60, Appendix A, Test Method 5.

F. **Miscellaneous Requirements**

1. None