

Facility ID: 0351010182 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.

- [Go to Part II for Emissions Unit B005](#)
- [Go to Part II for Emissions Unit B006](#)
- [Go to Part II for Emissions Unit P001](#)
- [Go to Part II for Emissions Unit P002](#)

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

Facility ID: 0351010182 Emissions Unit ID: B005 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>
44 mmBtu/hr natural gas and/or #2 fuel oil fired boiler (boiler #1)	OAC rule 3745-35-07(B)	0.026 lb sulfur dioxide (SO2)/hr and 0.11 TPY SO2, when burning natural gas
		14.29 lbs SO2/hr and 62.55 tons of SO2 per rolling, 12-month period, when burning #2 fuel oil, based on a combined hours of operation restriction for B005 and B006 (See A.2.a.)
	OAC rule 3745-17-07(A)	See B.1. Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-18-06(D)	See A.2.b.

2. Additional Terms and Conditions

- (a) The permittee has requested a federally enforceable limitation of 62.55 tons of SO2 per rolling, 12-month period, based on a combined hours of operation restriction for B005 and B006 (See section B.2.) for purposes of limiting potential to emit to avoid Title V applicability. The emission limitation specified by this rule is less stringent than the emission limitation established by OAC rule 3745-35-07.

B. Operational Restrictions

1. The permittee shall only burn natural gas and/or low sulfur #2 fuel oil, containing less than 0.32% sulfur, by weight, in this emissions unit.
2. The maximum annual hours of operation for emissions units B005 and B006, combined, shall not exceed 8760 hours per year, based upon a rolling 12-month summation of the operating hours while burning #2 fuel oil. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

Months Maximum Allowable Hours of Operation

1	730
1-2	1460
1-3	2190
1-4	2920
1-5	3650
1-6	4380
1-7	5110
1-8	5840
1-9	6570
1-10	7300

1-11 8030

1-12 8760

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

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units B005 and B006 while burning #2 fuel oil:
 - a. the number of hours of operation;
 - b. during the first 12 calendar months of operation, following the issuance of this permit, the cumulative hours of operation;
 - c. beginning the first month after the first 12 calendar months of operation, following the issuance of this permit, the rolling, 12-month number of hours of operation;
 - d. the calculated monthly emission rate for SO₂ using the following equation:

$$\text{SO}_2 \text{ emissions in tons} = (\text{hours of operation}) \times (\text{potential hourly SO}_2 \text{ emissions}) \times (1 \text{ ton}/2000 \text{ lbs}) = (\text{C.1.a.}) \times (14.29 \text{ lbs SO}_2/\text{hr}) \times (1 \text{ ton}/2000 \text{ lbs})$$
 - e. beginning the first month after the 12 calendar months of operation, the rolling, 12-month summation, SO₂ emission rates, in tons.
2. For each day during which the permittee burns a fuel other than natural gas and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall maintain documentation from the oil supplier of the sulfur content, by weight, of all #2 fuel oil received.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances while burning #2 fuel oil:
 - a. the rolling, 12-month hours of operation limitation of 8760 (for emission units B005 and B006 combined);
 - b. the rolling, 12-month SO₂ emissions of 62.55 tons (for emission units B005 and B006 combined); and
 - c. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation (for emission units B005 and B006 combined).

These deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify exceedances of the sulfur content restriction described in condition B.1. These deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
Emission Limitations: 0.026 lb SO₂/hr and 0.11 TPY SO₂, when burning natural gas

 Applicable Compliance Method: Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO₂/mm cu. ft. If required, the permittee shall demonstrate compliance with the hourly allowable emission limitation by testing in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

 The annual SO₂ limitation was developed by multiplying the hourly allowable SO₂ limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.
Emission Limitations: 14.29 lbs SO₂/hr and 62.55 tons of SO₂ per rolling, 12-month period, when burning #2 fuel oil

 Applicable Compliance Method: Compliance with the hourly allowable emission limitation shall be determined by multiplying the emission factor of 142(S) lb SO₂/1000 gal from AP-42, Table 1.3-1 (revised 9/98) by the maximum percentage of sulfur (S), by weight, in the #2 fuel oil, dividing by the heating value of #2 fuel oil (140 mmBtu/1000 gal) and then multiplying by the maximum heat input capacity of the boiler. If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by testing in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

 Compliance with the annual allowable SO₂ emission limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.
Emission Limitation: Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

 Applicable Compliance Method: Compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).
Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method: When firing natural gas, the permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filtrable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

When firing #2 fuel oil, and/or a combination of #2 fuel oil and natural gas, the permittee may determine compliance by multiplying the maximum hourly fuel oil consumption rate (gallons/hr) by the emission factor from AP-42, Table 1.3-1 (revised 9/98) of 2.0 lbs PE (filterable)/1,000 gallons of oil used, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

If required, compliance with the lb/mmBtu PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

F. Miscellaneous Requirements

- 1. None

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

Facility ID: 0351010182 Emissions Unit ID: B006 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>
44 mmBtu/hr natural gas and/or #2 fuel oil fired boiler (boiler #2)	OAC rule 3745-35-07(B)	0.026 lb sulfur dioxide (SO ₂)/hr and 0.11 TPY SO ₂ , when burning natural gas
		14.29 lbs SO ₂ /hr and 62.55 tons of SO ₂ per rolling, 12-month period, when burning #2 fuel oil, based on a combined hours of operation restriction for B005 and B006 (See A.2.a.)
	OAC rule 3745-17-07(A)	See B.1.
	OAC rule 3745-17-10(B)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-18-06(D)	0.020 lb PE/mmBtu of actual heat input
		See A.2.b.

- 2. **Additional Terms and Conditions**
 - (a) The permittee has requested a federally enforceable limitation of 62.55 tons of SO₂ per rolling, 12-month period, based on a combined hours of operation restriction for B005 and B006 (See section B.2.) for purposes of limiting potential to emit to avoid Title V applicability. The emission limitation specified by this rule is less stringent than the emission limitation established by OAC rule 3745-35-07.

B. Operational Restrictions

- 1. The permittee shall only burn natural gas and/or low sulfur #2 fuel oil, containing less than 0.32% sulfur, by weight, in this emissions unit.
- 2. The maximum annual hours of operation for emissions units B005 and B006, combined, shall not exceed 8760 hours per year, based upon a rolling 12-month summation of the operating hours while burning #2 fuel oil. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

Months Maximum Allowable Hours of Operation

1 730

1-2 1460
 1-3 2190
 1-4 2920
 1-5 3650
 1-6 4380
 1-7 5110
 1-8 5840
 1-9 6570
 1-10 7300
 1-11 8030
 1-12 8760

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

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units B005 and B006 while burning #2 fuel oil:
 - a. the number of hours of operation;
 - b. during the first 12 calendar months of operation, the cumulative hours of operation;
 - c. beginning the first month after the first 12 calendar months of operation, following the issuance of this permit, the rolling, 12-month number of hours of operation;
 - d. the calculated monthly emission rate for SO₂ using the following equation:

$$\text{SO}_2 \text{ emissions in tons} = (\text{hours of operation}) \times (\text{potential hourly SO}_2 \text{ emissions}) \times (1 \text{ ton}/2000 \text{ lbs}) = (\text{C.1.a.}) \times (14.29 \text{ lbs SO}_2/\text{hr}) \times (1 \text{ ton}/2000 \text{ lbs})$$
 - e. beginning the first month after the 12 calendar months of operation, the rolling, 12-month SO₂ emission rates, in tons.
2. For each day during which the permittee burns a fuel other than natural gas and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall maintain documentation from the oiler supplier of the sulfur content, by weight, of all #2 fuel oil received.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances while burning #2 fuel oil:
 - a. the rolling, 12-month hours of operation limitation of 8760 (for emission units B005 and B006 combined);
 - b. the rolling, 12-month SO₂ emissions of 62.55 tons (for emission units B005 and B006 combined); and
 - c. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation (for emission units B005 and B006 combined).

These deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify exceedances of the sulfur content restriction described in condition B.1. These deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 Emission Limitations: 0.026 lb SO₂/hr and 0.11 TPY SO₂, when burning natural gas

 Applicable Compliance Method: Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO₂/mm cu. ft. If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by testing in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

 The annual SO₂ limitation was developed by multiplying the hourly allowable PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.
 Emission Limitations: 14.29 lbs SO₂/hr and 62.55 tons of SO₂ per rolling, 12-month period, when burning #2 fuel oil

 Applicable Compliance Method: Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the emission factor of 142(S) lb SO₂/1000 gal from AP-42, Table 1.3-1 (revised 9/98) by the maximum percentage of sulfur (S), by weight, in the #2 fuel oil, dividing by the heating value of #2 fuel oil (140 mmBtu/1000 gal) and then multiplying by the maximum heat input capacity of the boiler. If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by testing in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

Compliance with the annual allowable SO2 emission limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.
 Emission Limitation: Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method: Compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).
 Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method: When firing natural gas, the permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

When firing #2 fuel oil, and/or a combination of #2 fuel oil and natural gas, the permittee may determine compliance by multiplying the maximum hourly fuel oil consumption rate (gallons/hr) by the emission factor from AP-42, Table 1.3-1 (revised 9/98) of 2.0 lbs PE (filterable)/1,000 gallons of oil used, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

If required, compliance with the lb/mmBtu PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

F. Miscellaneous Requirements

1. None

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

Facility ID: 0351010182 Emissions Unit ID: P001 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>
1490 horsepower (21 mmBtu/hr) diesel fuel-fired generator (generator #2)	OAC rule 3745-31-05(A)(3) (PTI #03-13891, issued 3/13/03)	6.79 lbs sulfur dioxide (SO2)/hr
		14.90 lbs nitrogen oxides (NOx)/hr
		1.49 lbs carbon monoxide (CO)/hr, 0.60 ton CO/yr. (See A.2.a.)
		1.0 lb particulate emissions (PE)/hr, 0.40 ton PE/yr (See A.2.a.)
		Visible PE shall not exceed 10 percent opacity, as a 6-minute average, except during start-up and shutdown.
		See A.2.c.
	OAC rule 3745-31-05(C) (PTI #03-13891, issued 3/13/03)	5.96 tons SO2/rolling, 12-month period, based on hours of operation restriction (See A.2.a and B.2)
		2.72 tons NOx/rolling, 12-month period, based on hours of operation restriction (See A.2.a and B.2)
	OAC rule 3745-35-07(B)	0.90 lb volatile organic compounds (VOC)/hr, 0.36 ton VOC/yr. (See A.2.a.)
	OAC rule 3745-17-07(A)	See A.2.b.

- OAC rule 3745-17-11(B)(5)(b) See A.2.b.
- OAC rule 3745-18-06(G) See A.2.b.
- OAC rule 3745-21-07(B) See A.2.b.
- OAC rule 3745-23-06(B) See A.2.e.
- OAC rule 3745-21-08(B) See A.2.d.

2. Additional Terms and Conditions

- (a) The permittee has requested federally enforceable limitations of 5.96 tons of NOx per rolling, 12-month period and 2.72 tons SO2 per rolling 12-month period based on an hours of operation restriction (See section B.2.) for purposes of limiting potential to emit to avoid Title V applicability.

The annual hours of operation restriction also effectively restricts emissions of CO, VOC, and PE. The emission limitation specified by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05(A)(3).

The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05 (C).

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and 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 requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

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. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions 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 has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, 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.

B. Operational Restrictions

- 1. The quality of the diesel/oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.1. above.
- 2. The maximum annual hours of operation for emissions unit P001 shall not exceed 800 hours per year, based upon a rolling, 12-month summation of the operating hours. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

Month Maximum Allowable Hours of Operation

- 1-1 200
- 1-2 255
- 1-3 310
- 1-4 365
- 1-5 420
- 1-6 475
- 1-7 530
- 1-8 585
- 1-9 640
- 1-10 695
- 1-11 750
- 1-12 800

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

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the hours of operation;
 - b. during the first 12 calendar months of operation, the cumulative hours of operation;
 - c. beginning the first month after the first 12 calendar months of operation, the rolling, 12-month number of hours of operation;
 - d. the calculated monthly emission rate for PE using the following equation:

$$\text{PE emissions (in tons)} = (\text{hours of operation}) \times (\text{potential hourly PE emissions}) \times (1 \text{ ton}/2000 \text{ lbs}) = (\text{C.1.a.}) \times (0.30 \text{ lb PE/hr}) \times (1 \text{ ton}/2000 \text{ lbs})$$
 - e. the calculated monthly emission rate for NOx using the following equation:

$$\text{NOx emissions (in tons)} = (\text{hours of operation}) \times (\text{potential hourly NOx emissions}) \times (1 \text{ ton}/2000 \text{ lbs}) = (\text{C.1.a.}) \times (14.90 \text{ lbs NOx/hr}) \times (1 \text{ ton}/2000 \text{ lbs})$$

f. the calculated monthly emission rate for CO using the following equation:

CO emissions (in tons) = (hours of operation) x (potential hourly CO emissions) x (1 ton/2000 lbs) = (C.1.a.) x (1.49 lbs CO/hr) x (1 ton/2000 lbs)

g. the calculated monthly emission rate for SO₂ using the following equation:

SO₂ emissions (in tons) = (hours of operation) x (potential hourly SO₂ emissions) x (1 ton/2000 lbs) = (C.1.a.) x (6.79 lbs SO₂/hr) x (1 ton/2000 lbs)

h. the calculated monthly emission rate for VOC using the following equation:

VOC emissions (in tons) = (hours of operation) x (potential hourly VOC emissions) x (1 ton/2000 lbs) = (C.1.a.) x (0.30 lb VOC/hr) x (1 ton/2000 lbs)

i. beginning the first month after the 12 calendar months of operation, the rolling, 12-month emission rates for NO_x and SO₂, in tons.

2. For each day during which the permittee burns a fuel other than diesel fuel the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall maintain documentation of the sulfur content, by weight, of all fuels received.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances:
 - a. the rolling, 12-month number of hours of operation limitation of 800;
 - b. the rolling, 12-month NO_x and SO₂ emission limitations of 2.72 and 5.96 tons, respectively;
 - c. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation; and
 - d. each day when a fuel other than diesel fuel was burned in this emissions unit.

These quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
Emission Limitations: 3.23 lbs SO₂/hr, 1.29 tons SO₂ per rolling, 12-month period

Applicable Compliance Method: Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying an emission factor of 1.01(S) lb SO₂/mmBtu from AP-42, Table 3.4-1 (revised 10/96), by the maximum percentage of sulfur (S), by weight, in the diesel fuel, the full load fuel usage (73 gal/hr), the density of diesel fuel (7.1 lbs/gal) and heating value of diesel fuel (0.0193 mmBtu/lb). If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by testing in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

Compliance with the tons of SO₂ per rolling 12-month period limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 32.0 lbs NO_x/hr, 12.80 tons NO_x per rolling, 12-month period

Applicable Compliance Method: Compliance with the hourly allowable NO_x emission limitation shall be determined by multiplying an emission factor of 3.2 lbs NO_x/mmBtu from AP-42, Table 3.4-1 (revised 10/96), by the full load fuel usage (73 gal/hr), the density of diesel fuel (7.1 lbs/gal) and heating value of diesel fuel (0.0193 mmBtu/lb). If required, the permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation by testing in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

Compliance with the tons of NO_x per rolling 12-month limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 8.50 lbs CO/hr, 3.40 tons CO/yr

Applicable Compliance Method: Compliance with the hourly allowable CO emission limitation shall be determined by multiplying an emission factor of 0.85 lb CO/mmBtu from AP-42, Table 3.4-1 (revised 10/96), by the full load fuel usage (73 gal/hr), the density of diesel fuel (7.1 lbs/gal) and heating value of diesel fuel (0.0193 mmBtu/lb). If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation by testing in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

Compliance with the tons of CO/yr limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 0.90 lb VOC/hr, 0.36 ton of VOC/yr

Applicable Compliance Method: Compliance with the hourly allowable VOC limitation shall be determined by multiplying an emission factor of 0.09 lb VOC/mmBtu from AP-42, Table 3.4-1 (revised 10/96), by the full load fuel usage (73 gal/hr), the density of diesel fuel (7.1 lbs/gal) and heating value of diesel fuel (0.0193 mmBtu/lb). If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation by testing in accordance with Methods 1-4 and 18, 25, or 25a of 40 CFR Part 60, Appendix A.

Compliance with the tons of VOC/yr limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 1.0 lbs PE/hr, 0.40 ton of PE/yr

Applicable Compliance Method: Compliance with the hourly PE limitation shall be determined by multiplying an emission factor of 0.1 lb PE/mmBtu from AP-42, Table 3.4-1 (revised 10/96), by the full load fuel usage (73

gal/hr), the density of diesel fuel (7.1 lbs/gal) and heating value of diesel fuel (0.0193 mmBtu/lb). If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by testing in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

Compliance with the tons of PE/yr limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.
Emission Limitation: Visible PE shall not exceed 20% opacity as a 6-minute, except as provided by rule.

Applicable Compliance Method: Compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

- 1. None

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

Facility ID: 0351010182 Emissions Unit ID: P002 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>
1490 horsepower diesel fuel-fired generator (generator #1)	OAC rule 3745-31-05(A)(3) (PTI #03-17154)	3.23 lbs sulfur dioxide (SO ₂)/hr
		32.0 lbs nitrogen oxides (NO _x)/hr
		8.50 lbs carbon monoxide (CO)/hr
		0.90 lb volatile organic compounds (VOC)/hr
		0.62 lbs particulate emissions (PE)/hr
		0.573 lb particulate matter less than 10 microns in size (PM ₁₀)/hr
		Visible PE shall not exceed 10% opacity, as a 6-minute average, except during start-up and shutdown.
		See A.2.a.
		1.29 tons SO ₂ /rolling, 12-month period
		12.80 tons NO _x /rolling, 12-month period
		3.40 tons CO/rolling, 12-month period
		0.36 ton VOC/rolling, 12-month period
		0.25 ton PE/rolling, 12-month period
		0.23 ton PM ₁₀ per rolling, 12-month period
	See A.2.b.	
OAC rule 3745-17-07(A)	See A.2.c.	
OAC rule 3745-17-11(B)(5)(b)	See A.2.c.	
OAC rule 3745-18-06(G)	See A.2.d.	

OAC rule 3745-21-07(B) See A.2.c.
 OAC rule 3745-21-08(B) See A.2.e.
 OAC rule 3745-23-06(B) See A.2.f.

2. Additional Terms and Conditions

(a) The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-31-05(C) and OAC rule 3745-17-11(B)(5)(b). This permit establishes the following federally enforceable emission limitations based on an hours of operation restriction (See B.2) for purposes of avoiding Title V applicability.:

- i. 12.80 tons NOx per rolling, 12-month period;
- ii. 1.29 tons SO2 per rolling, 12-month period

The annual hours of operation restriction also effectively restricts emissions of CO, VOC, PE, and PM10.

The emissions limit specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and 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 requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

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. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions 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 has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, 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 hourly emission limitations represent the potential to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

B. Operational Restrictions

1. The permittee shall combust only distillate fuel oil in this emissions unit.

The oil combusted in this emissions unit shall only be distillate oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils"). The sulfur content of the distillate oil shall contain no more than 0.32 weight percent sulfur.

2. The maximum annual hours of operation for emissions unit P002 shall not exceed 800 hours per year, based upon a rolling, 12-month summation of the operating hours. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

Month Maximum Allowable Hours of Operation	
1-1	200
1-2	255
1-3	310
1-4	365
1-5	420
1-6	475
1-7	530
1-8	585
1-9	640
1-10	695
1-11	750
1-12	800

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

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

- a. the hours of operation;
- b. during the first 12 calendar months of operation, the cumulative hours of operation;
- c. beginning the first month after the first 12 calendar months of operation, the rolling, 12-month number of hours of operation;

d. the calculated monthly emission rate for PE using the following equation:

PE emissions (in tons) = (hours of operation) x (potential hourly PE emissions) x (1 ton/2000 lbs) = (C.1.a.) x (0.62 lbs PE/hr) x (1 ton/2000 lbs)

e. the calculated monthly emission rate for PM10 using the following equation:

PE emissions (in tons) = (hours of operation) x (potential hourly PM10 emissions) x (1 ton/2000 lbs) = (C.1.a.) x (0.573 lbs PM10/hr) x (1 ton/2000 lbs)

f. the calculated monthly emission rate for NOx using the following equation:

NOx emissions (in tons) = (hours of operation) x (potential hourly NOx emissions) x (1 ton/2000 lbs) = (C.1.a.) x (12.80 lbs NOx/hr) x (1 ton/2000 lbs)

g. the calculated monthly emission rate for CO using the following equation:

CO emissions (in tons) = (hours of operation) x (potential hourly CO emissions) x (1 ton/2000 lbs) = (C.1.a.) x (8.50 lbs CO/hr) x (1 ton/2000 lbs)

h. the calculated monthly emission rate for SO2 using the following equation:

SO2 emissions (in tons) = (hours of operation) x (potential hourly SO2 emissions) x (1 ton/2000 lbs) = (C.1.a.) x (3.23 lbs SO2/hr) x (1 ton/2000 lbs)

i. the calculated monthly emission rate for VOC using the following equation:

VOC emissions (n tons) = (hours of operation) x (potential hourly VOC emissions) x (1 ton/2000 lbs) = (C.1.a.) x (0.90 lb VOC/hr) x (1 ton/2000 lbs)

j. beginning the first month after the 12 calendar months of operation, the rolling, 12-month emission rates for PE, PM10, NOx, CO, SO2, and VOC, in tons.

2. For each day during which the permittee burns a fuel other than diesel fuel the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall use records of fuel supplier certification to demonstrate compliance with the operational restriction in section B.1. Records of fuel supplier certification shall include the following information:
 - a. the name of the oil supplier; and
 - b. a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in B.1 above.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances:
 - a. the rolling, 12-month hours of operation limitation of 800;
 - b. the rolling, 12-month PE, PM10, NOx, CO, SO2, and VOC emission limitations of 0.25, 0.23 12.80, 3.40, 1.29 and 0.36 tons, respectively;
 - c. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation; and
 - d. the sulfur content restriction described in condition B.1.

These quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than distillate fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
Emission Limitations: 3.23 lbs SO2/hr, 1.29 tons SO2 per rolling, 12-month period

Applicable Compliance Method: The hourly allowable SO2 emission limitation was established by multiplying an emission factor of 1.01 (S) lb SO2/mmBtu from AP-42, Table 3.4-1 (revised 10/96) by the maximum percentage of sulfur (S=0.32), by weight, in the distillate oil by the maximum heat input of the generator (10 mmBtu/hr). Therefore, provided compliance is shown with the maximum sulfur content of 0.32% wt, compliance with the hourly allowable SO2 limitation will be assumed.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation in accordance with the test methods and procedures in Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

Compliance with the tons of SO2 per rolling 12-month period limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.
Emission Limitations: 32.0 lbs NOx/hr, 12.80 tons NOx per rolling, 12-month period

Applicable Compliance Method: The hourly allowable NOx emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by multiplying the maximum fuel input rate of 10

mmBtu/hr and an emission factor of 3.2 lbs/mmBtu [from AP-42, Section 3.4 (10/96)].

If required, the permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation by testing in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A.

Compliance with the tons of NO_x per rolling 12-month period limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 8.50 lbs CO/hr, 3.40 tons CO per rolling, 12-month period

Applicable Compliance Method: The hourly allowable CO emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by multiplying the maximum fuel input rate of 10 mmBtu/hr and an emission factor of 0.85 lbs/mmBtu [from AP-42, Section 3.4 (10/96)].

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

Compliance with the tons of CO per rolling 12-month period limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 0.90 lb VOC/hr, 0.36 ton of CO per rolling, 12-month period

The hourly allowable VOC emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by multiplying the maximum fuel input rate of 10 mmBtu/hr and an emission factor of 0.09 lbs/mmBtu [from AP-42, Section 3.4 (10/96)].

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation by testing in accordance with Methods 1 - 4 and 18, 25 or 25A, as applicable, of 40 CFR Part 60, Appendix A.

Compliance with the tons of VOC per rolling, 12-month period limitation shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitations: 0.062 lb/mmBtu, 0.62 lbs PE/hr, 0.25 ton of PE per rolling 12-month period

Applicable Compliance Method: The lb/mmBtu emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit was determined using AP-42, Chapter 3.4, Table 3.4-1 (revised 10/96).

If required, the permittee shall demonstrate compliance with the lbs/mmBtu and hourly allowable PE limitations by testing in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

Compliance with the ton of PE per rolling, 12-month period shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitation: 0.573 lb PM₁₀/hr and 0.23 ton of PM₁₀ per rolling, 12-month period

Applicable Compliance Method: The hourly PM₁₀ emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by multiplying the maximum fuel input rate of 10 mmBtu/hr and an emission factor of 0.0573 lbs/mmBtu [from AP-42, Section 3.4 (10/96)].

If required, the permittee shall demonstrate compliance with the allowable PM₁₀ limitation by testing in accordance with Methods 201/201A and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

Compliance with the ton of PM₁₀ per rolling, 12-month period shall be demonstrated by the record keeping requirements in section C.1 of this permit.

Emission Limitation: Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average, except during start-up or shutdown

Applicable Compliance Method: If required, the permittee shall demonstrate compliance by testing in accordance with Method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

1. None