

Facility ID: 0125040539 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 B001](#)
- [Go to Part II for Emissions Unit B002](#)
- [Go to Part II for Emissions Unit B004](#)
- [Go to Part II for Emissions Unit B006](#)

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

Facility ID: 0125040539 Emissions Unit ID: B001 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>
37.5 mmBtu/hr natural gas and fuel oil-fired boiler for heat generation	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of heat input.
	OAC rule 3745-35-07	Sulfur dioxide emissions shall not exceed 35.74 tons per rolling 13, 4-week periods.
		Nitrogen oxides emissions shall not exceed 19.5 tons per rolling 13, 4-week periods.
		See A.2.a below.
		See B.1 - 4 below.

2. **Additional Terms and Conditions**
  - (a) For purposes of this permit, and to simplify the record keeping for these emission limitations, the emissions of SO2 and NOx that occur on the one remaining day that is needed to comprise a full year [i.e., 13, 4-week periods plus one day = 365 days] are assumed to be negligible.

**B. Operational Restrictions**

1. The quality of oil burned in B001 shall meet, on an as-received basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs of sulfur dioxide/MMBtu actual heat input.
 

Compliance with this specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.
2. The permittee shall only burn natural gas and/or number two fuel oil.
3. The permittee shall only use number two fuel oil with a sulfur content of 0.5 percent or less, by weight, in B001.
4. The annual oil usage shall not exceed 1,007,200 gallons. In order to ensure federal enforceability during the first twelve calendar months of operation after the issuance of this permit to operate, this emissions unit shall not exceed the following oil consumption rates:
 

Maximum Allowable Cumulative Oil Consumption (Gallons):

4-Week Period(s)

1 76,923

- 1-2 153,846
- 1-3 230,769
- 1-4 307,692
- 1-5 384,615
- 1-6 461,538
- 1-7 538,461
- 1-8 615,384
- 1-9 692,307
- 1-10 769,230
- 1-11 846,153
- 1-12 923,076
- 1-13 999,999
- 1-13 and 1 day 1,007,200

After the first thirteen 4-week periods plus one day of operation following the issuance of this permit, compliance with the annual oil consumption limitation shall be based upon a rolling 13, 4-week period plus one day summation of the oil consumption amounts.

No more than 999,999 gallons of oil can be used per rolling thirteen 4-week periods; for the remaining day, no more than 7,201 gallons of oil can be used. No more than 1,007,200 gallons of oil can be used per year.

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

1. Requirements for the Sampling and Analysis of Oil Burned

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Central District Office.

2. For each shipment of oil received for burning in B001, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (pounds SO<sub>2</sub> per million Btu actual heat input) of the fuel oil.

3. The permittee shall maintain 4-week period records of the following information:

- a. the fuel oil consumption rate (in gallons);
- b. the natural gas consumption rate (mmcf);
- c. the average sulfur content for all the oil received during the cumulative 4-week periods or the 13, 4-week periods;
- d. beginning after the first 13, 4-week periods of operation following the issuance of this permit, the rolling 13, 4-week periods and one day summation of the fuel oil consumption rates [where the one day consumption rate = 7,201 gallons]; and
- e. during the first 13, 4-week periods of operation following the issuance of this permit, the cumulative fuel oil consumption rate.

4. The permittee also shall maintain 4-week period records of the following information:

- sulfur dioxide emissions from natural gas consumption (in tons), calculated by multiplying the AP-42 emission factor for natural gas combustion (0.6 lb sulfur dioxide/mmcf or 0.00059 lb/MMBtu) from Table 1.4-2, 7/98 by the natural gas consumption rate in C.3.b, and then dividing by 2000;
- sulfur dioxide emissions from fuel oil consumption (in tons), calculated by multiplying the average sulfur content in C.3.c, by the AP-42 emission factor for distillate oil firing (142 S lb sulfur dioxide/mgal) from Table 1.3-1, 9/98, and by the fuel oil consumption rate in C.3.a, and then dividing by 2000;
- nitrogen oxides emissions from natural gas consumption (in tons), calculated by multiplying the AP-42 emission factor for natural gas combustion (100 pounds nitrogen oxides/mmcf) from Table 1.4-2, 7/98 by the natural gas consumption rate in C.3.b, and then dividing by 2000;
- nitrogen oxides emissions from fuel oil consumption (in tons), calculated by multiplying the AP-42 emission factor for distillate oil firing (20 lbs nitrogen oxides/mgal) from Table 1.3-1, 9/98, and the fuel oil consumption rate in C.3.a, and then dividing by 2000;
- total sulfur dioxide emissions, in tons, calculated by summing C.4.a and C.4.b; and
- total nitrogen oxides emissions, in tons, calculated by summing C.4.c and C.4.d.

5. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the sulfur dioxide emissions for each of the rolling 13, 4-week periods by summing the calculated tons of sulfur dioxide emissions from C.4.e.

6. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the nitrogen oxides emissions for each of the rolling 13, 4-week periods by summing the calculated tons of nitrogen oxides emissions from C.4.f.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the annual fuel oil consumption limitation and, for the first 13, 4-week periods of operation following the issuance of this permit, all exceedances of the allowable cumulative fuel oil consumption rates.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 13, 4-week periods SO<sub>2</sub> and NO<sub>x</sub> emission limitations listed in Section A.I. of these terms and conditions.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit quarterly deviation (excursion) reports that identify all shipments of fuel oil that exceeded the sulfur content limitation of 0.5 percent, by weight, and/or the allowable sulfur dioxide emission limitation of 1.6 lbs of sulfur dioxide/MMBtu of actual heat input.

5. The permittee shall also submit annual reports that specify the total fuel oil consumption and the SO<sub>2</sub> and NO<sub>x</sub> emissions for B001 during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

**Emission Limitation:**

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

**Applicable Compliance Method:**

Compliance shall be determined through visible emissions 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 shall not exceed 0.020 lb/mmBtu actual heat input.

**Applicable Compliance Method:**

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0375 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs filterable particulate matter/mmcf) from Table 1.4-2, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (37.5 mmBtu/hr). For the use of number two oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (267 gals/hr) by the AP-42 emission factor for distillate oil firing (2 lbs oil /m gal) from Table 1.3-1, 9/98, and dividing by the maximum hourly heat input capacity of the emissions unit (37.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**Emission Limitation:**

Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

**Applicable Compliance Method:**

Compliance shall be determined by the record keeping requirements in Section C.2. for each shipment of fuel oil and by using the applicable equation in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**Emission Limitation:** Sulfur dioxide emissions shall not exceed 35.74 tons per rolling 13, 4-week periods.

**Applicable Compliance Method:**

Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.5.

**Emission Limitation:**

Nitrogen oxides emissions shall not 19.5 tons per rolling 13, 4-week periods.

**Applicable Compliance Method:**

Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.6.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

**F. Miscellaneous Requirements**

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.

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

**Facility ID: 0125040539 Emissions Unit ID: B002 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>
37.5 mmBtu/hr natural gas and fuel oil-fired boiler for heat generation	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of heat input.
	OAC rule 3745-35-07	Sulfur dioxide emissions shall not exceed 35.74 tons per rolling 13, 4-week periods.
		Nitrogen oxides emissions shall not exceed 19.5 tons per rolling 13, 4-week periods.
		See A.2.a below.
		See B.1 - 4 below.

**2. Additional Terms and Conditions**

- (a) For purposes of this permit, and to simplify the record keeping for these emission limitations, the emissions of SO<sub>2</sub> and NO<sub>x</sub> that occur on the one remaining day that is needed to comprise a full year [i.e., 13, 4-week periods plus one day = 365 days] are assumed to be negligible.

**B. Operational Restrictions**

1. The quality of oil burned in B002 shall meet, on an as-received basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs of sulfur dioxide/MMBtu actual heat input.  
Compliance with this specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.
2. The permittee shall only burn natural gas and/or number two fuel oil.
3. The permittee shall only use number two fuel oil with a sulfur content of 0.5 percent or less, by weight, in B002.
4. The annual oil usage shall not exceed 1,007,200 gallons. In order to ensure federal enforceability during the first twelve calendar months of operation after the issuance of this permit to operate, this emissions unit shall not exceed the following oil consumption rates:

Maximum Allowable Cumulative Oil Consumption (Gallons):

4-Week Period(s)

- 1 76,923
- 1-2 153,846
- 1-3 230,769
- 1-4 307,692
- 1-5 384,615
- 1-6 461,538
- 1-7 538,461
- 1-8 615,384
- 1-9 692,307
- 1-10 769,230
- 1-11 846,153
- 1-12 923,076
- 1-13 999,999
- 1-13 and 1 day 1,007,200

After the first thirteen 4-week periods plus one day of operation following the issuance of this permit, compliance with the annual oil consumption limitation shall be based upon a rolling 13, 4-week period plus one day summation of the oil consumption amounts.

No more than 999,999 gallons of oil can be used per rolling thirteen 4-week periods; for the remaining day, no more than 7,201 gallons of oil can be used. No more than 1,007,200 gallons of oil can be used per year.

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

1. Requirements for the Sampling and Analysis of Oil Burned  
The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Central District Office.
2. For each shipment of oil received for burning in B002, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (pounds SO<sub>2</sub> per million Btu actual heat input) of the fuel oil.
3. The permittee shall maintain 4-week period records of the following information:

- a. the fuel oil consumption rate (in gallons);
  - b. the natural gas consumption rate (mmcf);
  - c. the average sulfur content for all the oil received during the cumulative 4-week periods or the 13, 4-week periods;
  - d. beginning after the first 13, 4-week periods of operation following the issuance of this permit, the rolling 13, 4-week periods and one day summation of the fuel oil consumption rates [where the one day consumption rate = 7,201 gallons]; and
  - e. during the first 13, 4-week periods of operation following the issuance of this permit, the cumulative fuel oil consumption rate.
4. The permittee also shall maintain 4-week period records of the following information:
    - sulfur dioxide emissions from natural gas consumption (in tons), calculated by multiplying the AP-42 emission factor for natural gas combustion (0.6 lb sulfur dioxide/mmcf or 0.00059 lb/mmBtu) from Table 1.4-2, 7/98 by the natural gas consumption rate in C.3.b, and then dividing by 2000;
    - sulfur dioxide emissions from fuel oil consumption (in tons), calculated by multiplying the average sulfur content in C.3.c, by the AP-42 emission factor for distillate oil firing (142 S lb sulfur dioxide/mgal) from Table 1.3-1, 9/98, and by the fuel oil consumption rate in C.3.a, and then dividing by 2000;
    - nitrogen oxides emissions from natural gas consumption (in tons), calculated by multiplying the AP-42 emission factor for natural gas combustion (100 pounds nitrogen oxides/mmcf) from Table 1.4-2, 7/98 by the natural gas consumption rate in C.3.b, and then dividing by 2000;
    - nitrogen oxides emissions from fuel oil consumption (in tons), calculated by multiplying the AP-42 emission factor for distillate oil firing (20 lbs nitrogen oxides/mgal) from Table 1.3-1, 9/98, and the fuel oil consumption rate in C.3.a, and then dividing by 2000;
    - total sulfur dioxide emissions, in tons, calculated by summing C.4.a and C.4.b; and
    - total nitrogen oxides emissions, in tons, calculated by summing C.4.c and C.4.d.
  5. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the sulfur dioxide emissions for each of the rolling 13, 4-week periods by summing the calculated tons of sulfur dioxide emissions from C.4.e.
  6. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the nitrogen oxides emissions for each of the rolling 13, 4-week periods by summing the calculated tons of nitrogen oxides emissions from C.4.f.
- D. Reporting Requirements**
1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the annual fuel oil consumption limitation and, for the first 13, 4-week periods of operation following the issuance of this permit, all exceedances of the allowable cumulative fuel oil consumption rates.
  2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 13, 4-week periods SO<sub>2</sub> and NO<sub>x</sub> emission limitations listed in Section A.I. of these terms and conditions.
  3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
  4. The permittee shall submit quarterly deviation (excursion) reports that identify all shipments of fuel oil that exceeded the sulfur content limitation of 0.5 percent, by weight, and/or the allowable sulfur dioxide emission limitation of 1.6 lbs of sulfur dioxide/MMBtu of actual heat input.
  5. The permittee shall also submit annual reports that specify the total fuel oil consumption and the SO<sub>2</sub> and NO<sub>x</sub> emissions for B002 during the previous calendar year. These reports shall be submitted by January 31 of each year.
- E. Testing Requirements**
1. Compliance with the emission limitation(s) in Section A of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:  
Compliance shall be determined through visible emissions 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 shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:  
For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0375 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs filterable particulate matter/mmcf) from Table 1.4-2, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (37.5 mmBtu/hr). For the use of number two oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (267 gals/hr) by the AP-42 emission factor for distillate oil firing (2 lbs oil /m gal) from Table 1.3-1, 9/98, and dividing by the maximum hourly heat input capacity of the emissions unit (37.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

Emission Limitation:  
Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

Applicable Compliance Method:  
Compliance shall be determined by the record keeping requirements in Section C.2. for each shipment of fuel oil and by using the applicable equation in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.  
 Emission Limitation: Sulfur dioxide emissions shall not exceed 35.74 tons per rolling 13, 4-week periods.

Applicable Compliance Method:  
 Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.5.

Emission Limitation:  
 Nitrogen oxides emissions shall not 19.5 tons per rolling 13, 4-week periods.

Applicable Compliance Method:  
 Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.6.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

**F. Miscellaneous Requirements**

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.

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

Facility ID: 0125040539 Emissions Unit ID: B004 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>
1.3 mmBtu/hr natural gas and fuel oil-fired boiler for heating fire water tank	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of heat input.
	OAC rule 3745-35-07	Sulfur dioxide emissions shall not exceed 0.36 ton per rolling 13, 4-week periods.
		Nitrogen oxides emissions shall not exceed 0.7 ton per rolling 13, 4-week periods.
		See A.2.a.
		See B.1 - 4 below.
	OAC rule 3745-31-05 (PTI 01-3728)	Sulfur content less than 0.5% by weight.
		See B.3 below.

2. **Additional Terms and Conditions**
  - (a) For purposes of this permit, and to simplify the record keeping for these emission limitations, the emissions of SO2 and NOx that occur on the one remaining day that is needed to comprise a full year [i.e., 13, 4-week periods plus one day = 365 days] are assumed to be negligible.

**B. Operational Restrictions**

1. The quality of oil burned in B004 shall meet, on an as-received basis, a sulfur content which is sufficient to comply

with the allowable sulfur dioxide emission limitation of 1.6 lbs of sulfur dioxide/MMBtu actual heat input.

Compliance with this specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

2. The permittee shall only burn natural gas and/or number two fuel oil.
3. The permittee shall only use number two fuel oil with a sulfur content of 0.5 percent or less, by weight, in B004.
4. The annual oil usage shall not exceed 10,228 gallons. In order to ensure federal enforceability during the first twelve calendar months of operation after the issuance of this permit to operate, this emissions unit shall not exceed the following oil consumption rates:

Maximum Allowable Cumulative Oil Consumption (Gallons):

4-Week Period(s)

1 769  
 1-2 1,538  
 1-3 2,307  
 1-4 3,076  
 1-5 3,845  
 1-6 4,614  
 1-7 5,383  
 1-8 6,152  
 1-9 6,921  
 1-10 7,690  
 1-11 8,459  
 1-12 9,228  
 1-13 9,997  
 1-13 and 1 day 10,288

After the first thirteen 4-week periods plus one day of operation following the issuance of this permit, compliance with the annual oil consumption limitation shall be based upon a rolling 13, 4-week period plus one day summation of the oil consumption amounts.

No more than 9,997 gallons of oil can be used per rolling thirteen 4-week periods; for the remaining day, no more than 291 gallons of oil can be used. No more than 10,288 gallons of oil can be used per year.

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

1. Requirements for the Sampling and Analysis of Oil Burned
 

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Central District Office.
2. For each shipment of oil received for burning in B004, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (pounds SO<sub>2</sub> per million Btu actual heat input) of the fuel oil.
3. The permittee shall maintain 4-week period records of the following information:
  - a. the fuel oil consumption rate (in gallons);
  - b. the natural gas consumption rate (mmcf);
  - c. the average sulfur content for all the oil received during the cumulative 4-week periods or the 13, 4-week periods;
  - d. beginning after the first 13, 4-week periods of operation following the issuance of this permit, the rolling 13, 4-week periods and one day summation of the fuel oil consumption rates [where the one day consumption rate = 291 gallons]; and
  - e. during the first 13, 4-week periods of operation following the issuance of this permit, the cumulative fuel oil consumption rate.
4. The permittee also shall maintain 4-week period records of the following information:
 

sulfur dioxide emissions from natural gas consumption (in tons), calculated by multiplying the AP-42 emission factor for natural gas combustion (0.6 lb sulfur dioxide/mmcf) from Table 1.4-2, 7/98 by the natural gas consumption rate in C.3.b, and then dividing by 2000;

sulfur dioxide emissions from fuel oil consumption (in tons), calculated by multiplying the average sulfur content in C.3.c, by the AP-42 emission factor for distillate oil firing (142 S lb sulfur dioxide/mgal) from Table 1.3-1, 9/98, and by the fuel oil consumption rate in C.3.a, and then dividing by 2000;

nitrogen oxides emissions from natural gas consumption (in tons), calculated by multiplying the AP-42 emission factor for natural gas combustion (100 pounds nitrogen oxides/mmcf) from Table 1.4-2, 7/98 by the natural gas consumption rate in C.3.b, and then dividing by 2000;

nitrogen oxides emissions from fuel oil consumption (in tons), calculated by multiplying the AP-42 emission factor for distillate oil firing (20 lbs nitrogen oxides/mgal) from Table 1.3-1, 9/98, and the fuel oil consumption rate in C.3.a, and then dividing by 2000;

total sulfur dioxide emissions, in tons, calculated by summing C.4.a and C.4.b; and

total nitrogen oxides emissions, in tons, calculated by summing C.4.c and C.4.d.
5. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the sulfur dioxide emissions for each of the rolling 13, 4-week periods by summing the calculated tons of sulfur dioxide emissions from C.4.e.
6. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate

and maintain records of the nitrogen oxides emissions for each of the rolling 13, 4-week periods by summing the calculated tons of nitrogen oxides emissions from C.4.f.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the annual fuel oil consumption limitation and, for the first 13, 4-week periods of operation following the issuance of this permit, all exceedances of the allowable cumulative fuel oil consumption rates.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 13, 4-week periods SO<sub>2</sub> and NO<sub>x</sub> emission limitations listed in Section A.I. of these terms and conditions.
3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all shipments of fuel oil that exceeded the sulfur content limitation of 0.5 percent, by weight, and/or the allowable sulfur dioxide emission limitation of 1.6 lbs of sulfur dioxide/MMBtu of actual heat input.
5. The permittee shall also submit annual reports that specify the total fuel oil consumption and the SO<sub>2</sub> and NO<sub>x</sub> emissions for B004 during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A of these terms and conditions shall be determined in accordance with the following method(s):  
Emission Limitation:  
Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method:  
Compliance shall be determined through visible emissions 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 shall not exceed 0.020 lb/mmBtu actual heat input.  
  
Applicable Compliance Method:  
For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0013 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs filterable particulate matter/mmcft) from Table 1.4-2, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (1.3 mmBtu/hr). For the use of number two oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit by the AP-42 emission factor for distillate oil firing (2 lbs oil /m gal) from Table 1.3-1, 9/98, and dividing by the maximum hourly heat input capacity of the emissions unit (1.3 mmBtu/hr).  
  
If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).  
Emission Limitation:  
Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.  
  
Applicable Compliance Method:  
Compliance shall be determined by the record keeping requirements in Section C.2. for each shipment of fuel oil and by using the applicable equation in OAC rule 3745-18-04(F).  
  
If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.  
Emission Limitation: Sulfur dioxide emissions shall not exceed 0.36 ton per rolling 13, 4-week periods.  
  
Applicable Compliance Method:  
Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.5.  
Emission Limitation:  
Nitrogen oxides emissions shall not 0.7 ton per rolling 13, 4-week periods.  
  
Applicable Compliance Method:  
Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.6.  
  
If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

**F. Miscellaneous Requirements**

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.

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

Facility ID: 0125040539 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>
180 BHP emergency diesel powered fire pump	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	Particulate emissions shall not exceed 0.31 lb/mmBtu actual heat input.
		None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-18-06	Sulfur dioxide emissions shall not exceed 0.05 ton per rolling 13, 4-week periods.
	OAC rule 3745-35-07	Nitrogen oxides emissions shall not exceed 0.7 ton per rolling 13, 4-week periods.
	See A.2.a.	
		Sulfur content less than 0.5% by weight. See B.1.
	OAC rule 3745-31-05 (PTI 01-3728)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07, 3745-17-11, and 3745-18-06.

**2. Additional Terms and Conditions**

- (a) For purposes of this permit, and to simplify the record keeping for these emission limitations, the emissions of SO<sub>2</sub> and NO<sub>x</sub> that occur on the one remaining day that is needed to comprise a full year [i.e., 13, 4-week periods plus one day = 365 days] are assumed to be negligible.

**B. Operational Restrictions**

1. The permittee shall only use number two fuel oil with a sulfur content of 0.5 percent or less, by weight, in B006.
2. The annual oil usage shall not exceed 2,240 gallons. In order to ensure federal enforceability during the first twelve calendar months of operation after the issuance of this permit to operate, this emissions unit shall not exceed the following oil consumption:

Maximum Allowable Cumulative Oil Consumption:

4-week period Oil(gallons)

- 1 169
- 1-2 338
- 1-3 507
- 1-4 676
- 1-5 845
- 1-6 1,014
- 1-7 1,183
- 1-8 1,352
- 1-9 1,521
- 1-10 1,690
- 1-11 1,859
- 1-12 2,028
- 1-13 2,197
- 1-13 and 1 day 2,240

After the first thirteen 4-week periods plus one day of operation following the issuance of this permit, compliance with the annual oil consumption limitations shall be based upon a rolling 13, 4-week period plus one

day summation of the oil consumption amounts.

No more than 2,197 gallons of oil can be used per rolling thirteen 4-week periods; for the remaining day, no more than 43 gallons of oil can be used. No more than 2,240 gallons of oil can be used per year.

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

1. Requirements for the Sampling and Analysis of Oil Burned

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Central District Office.

2. For each shipment of oil received for burning in B006, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (pounds SO<sub>2</sub> per million Btu actual heat input) of the fuel oil.

3. The permittee shall maintain 4-week period records of the following information:

- a. the fuel oil consumption rate (in gallons);
- b. the average sulfur content for all the oil received during the cumulative 4-week periods or the 13, 4-week periods;
- c. beginning after the first 13, 4-week periods of operation following the issuance of this permit, the rolling 13, 4-week periods and one day summation of the fuel oil consumption rates [where the one day consumption rate = 43 gallons]; and
- d. during the first 13, 4-week periods of operation following the issuance of this permit, the cumulative fuel oil consumption rate.

4. The permittee also shall maintain 4-week period records of the following information:

total sulfur dioxide emissions from fuel oil consumption (in tons), calculated by multiplying the average sulfur content in C.3.b, by the AP-42 emission factor for distillate oil firing (142 S lb sulfur dioxide/mgal) from Table 1.3-1, 9/98, and by the fuel oil consumption rate in C.3.a, and then dividing by 2000; and  
total nitrogen oxides emissions from fuel oil consumption (in tons), calculated by multiplying the AP-42 emission factor for distillate oil firing (20 lbs nitrogen oxides/mgal) from Table 1.3-1, 9/98, and the fuel oil consumption rate in C.3.a, and then dividing by 2000.

5. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the sulfur dioxide emissions for each of the rolling 13, 4-week periods by summing the calculated tons of sulfur dioxide emissions from C.4.a.

6. After the first 13, 4-week periods of operation following the issuance of this permit, the permittee shall calculate and maintain records of the nitrogen oxides emissions for each of the rolling 13, 4-week periods by summing the calculated tons of nitrogen oxides emissions from C.4.b.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the annual fuel oil consumption limitation and, for the first 13, 4-week periods of operation following the issuance of this permit, all exceedances of the allowable cumulative fuel oil consumption rates.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 13, 4-week periods SO<sub>2</sub> and NO<sub>x</sub> emission limitations listed in Section A.I. of these terms and conditions.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit quarterly deviation (excursion) reports that identify all shipments of fuel oil that exceeded the sulfur content limitation of 0.5 percent, by weight.

5. The permittee shall also submit annual reports that specify the total fuel oil consumption and the SO<sub>2</sub> and NO<sub>x</sub> emissions for B006 during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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 shall not exceed 0.31 lb/mmBtu actual heat input

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by multiplying the maximum brake horse power of 180 by the AP-42 emission factor for uncontrolled diesel industrial engines (0.0022 lb particulate /hp-hr) from Table 3.3-1, 10/96, and dividing by the maximum hourly heat input capacity of the emissions unit (1.26 mmBtu/hr).

Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.05 ton per rolling 13, 4-week periods.

Applicable Compliance Method:

Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.5.

**Emission Limitation:**

Nitrogen oxides emissions shall not exceed 0.7 ton per rolling 13, 4-week periods.

**Applicable Compliance Method:**

Compliance with this rolling 13, 4-week periods emission rate shall be demonstrated based on the record keeping in term C.6.

**F. Miscellaneous Requirements**

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.