

Facility ID: 1318004330 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 B004](#)
[Go to Part II for Emissions Unit B005](#)
[Go to Part II for Emissions Unit B006](#)

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Facility ID: 1318004330 Emissions Unit ID: B004 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B004 - 31.46 mmBtu/hr natural gas/No. 2 fuel oil fired boiler with Low NOx Burner (LNB)	OAC rule 3745-31-05(A)(3) PTI 13-03071 issued on 9/27/07	From burning natural gas 1.50 lbs/hr NOx and 6.57 TPY 2.52 lbs/hr CO and 11.0 TPY 0.33 lb/hr OC and 1.45 TPY 2.76TPY of PE
		From burning No. 2 fuel oil 2.89 lb/hr NOx 15.8 lbs/hr of SO2 1.11 lbs/hr CO
		The requirements of this rule include compliance with the requirements of 3745-17-10(B)(1), and NSPS Subpart Dc.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS Subpart Dc.
	OAC rule 3745-17-10(B)(1) OAC rule 3745-18-06(D)	0.020 lb/MMBtu of PE
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS Subpart Dc.
	40 CFR Part 60 Subpart Dc	Sulfur content of the oil shall not exceed 0.5 weight percent.
	Opacity shall not exceed 20%, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.	
	OAC rule 3745-31-05(C) Synthetic Minor status to avoid Title V	Fuel oil usage restriction see B.3 below.
		From burning No. 2 fuel oil 1.3 TPY NOx* 7.1 TPY SO2* 0.5 TPY CO* 2.76TPY of PE

* as a rolling 12-month summation of emissions

2. **Additional Terms and Conditions**
 - (a) None

B. Operational Restrictions

1. The permittee shall burn only natural gas and/or No.2 fuel oil in this emissions unit.
 2. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:
 - a. a sulfur content that is not greater than 0.5 weight percent sulfur; and
 - b. a heat content that is greater than 140,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.
 3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the No. 2 fuel oil usage, upon issuance of this permit. The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 200,000 gallons of No. 2 fuel oil used, based upon a rolling, 12-month summation of the fuel usage rates.
- C. Monitoring and/or Record Keeping Requirements**
1. For each day during which the permittee burns a fuel other than natural gas and/or No.2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 2. 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 Cleveland Division of Air Quality.
 3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
 4. The permittee shall maintain monthly records of the following information:
 - a. the No. 2 fuel oil usage (in gallons) rate for each month; and
 - b. the rolling, 12-month summation of the No. 2 fuel oil usage rates.
 5. The permittee shall maintain monthly records of the following information:
 - a. the natural gas usage (in cubic feet) rate for each month; and
 - b. the rolling, 12 month summation of natural gas usage rates.
- D. Reporting Requirements**
1. The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas and/or No.2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
 2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses to the Cleveland DAQ for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur content (% by weight) for the oil received during the calendar month; and
 - c. the weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month. These reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
 3. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling, 12-month limitation of the No. 2 fuel oil usage rate. These reports shall be submitted within thirty (30) days after the exceedance occurs.
- E. Testing Requirements**
1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

Emission Limitation -

when burning natural gas
1.50 lbs/hr of NOx and 6.57 TPY

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for NOx (50 lbs NOx/million cubic feet for Low NOx Burner) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr.

The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

2.52 lbs/hr of CO and 11.0 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) by the AP-42 emission factor for CO (84 lbs CO/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at the TPY emission rate.

Emission Limitation -

0.33 lb/hr of OC and 1.45 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for OC (11 lbs OC/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

0.020 lb/MMBtu actual heat input of PE and

2.76 TPY when burning natural gas and No. 2 fuel oil

Applicable Compliance Method -

Natural Gas

Compliance shall be based upon multiplying the maximum hourly natural gas burning capacity of the emissions unit (0.0299mmcu.ft/hr) by the AP-42 emission factor for natural gas (7.6 lb/MMCU.FT)(7/98) and dividing by the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) to arrive at the short term emission rate in lb/MMBtu.

No. 2 Fuel Oil

Compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for PM(2 lb/1000 gal) and dividing by the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) to arrive at the short term emission rate in lb/MMBtu.

The short term emission (0.020 lb PE/mmBtu) rate is multiplied by the maximum hourly heat input capacity of the emissions unit (31.46mmBtu/hr) and the annual operating hours of the emissions unit (8760). This total is divided by 2000 lbs/ton to arrive at the TPY emission rate.

Emission Limitation -

15.8 lbs/hr of SO₂ and 7.1 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for SO₂ (142*S lb/1000 gal). S is equal to the % weight of Sulfur in the fuel to arrive at the short term emission rate in lb/hr. The annual emission rate is determined by multiplying the AP-42 emission factor for SO₂ (142*S lb/1000 gal) by the actual annual gallons of No. 2 fuel oil and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

2.89 lbs/hr of NO_x and 1.3 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222 gal/hr) by the AP-42 emission factor for NO_x (20 lb/1000 gal) and then multiply by (1 - 0.35) to account for the reduction due to the Low NO_x burners to arrive at the short term emission rate in lb/hr.

Multiply the actual annual gallons of No. 2 fuel oil by the AP-42 emission factor for NO_x (20 lb/1000 gal) to determine annual emission rate, and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate. The actual TPY is then multiplied by AP-42 emissions reduction factor of 0.35% to determine reduction in NO_x emissions due to use of low NO_x burner (LNB). The reduction in NO_x is then subtracted from the uncontrolled to arrive at the actual NO_x emissions while using the Low NO_x Burner (LNB).

Emission Limitation -

1.11 lb/hr of CO and 0.5 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222 gal/hr) by the AP-42 emission factor for CO (5 lb/1000 gal) to arrive at the short term emission rate in lb/hr. The actual annual gallons of No. 2 fuel oil is multiplied by the AP-42 emission factor for CO (5 lb/1000 gal) to arrive at the annual emission rate then divided by 2000 lbs/ton to arrive at the tons per year emission rate.

F. Miscellaneous Requirements

1. This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

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Facility ID: 1318004330 Emissions Unit ID: B005 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B005 - 31.46 MMBtu/hr natural gas/No. 2 fuel oil fired boiler	OAC rule 3745-31-05(A)(3) PTI 13-03071 issued on 9/27/07	From burning natural gas 0.33 lb/hr OC and 1.45 TPY 3.00 lbs/hr NOx and 13.1 TPY 2.52 lbs/hr CO and 11.0 TPY 2.76 TPY of PE
		From burning No. 2 fuel oil 15.8 lbs/hr SO2 4.44 lbs/hr NOx 1.11 lbs/hr CO
		The requirements of this rule include compliance with the requirements of 3745-17-10(B)(1), and NSPS Subpart Dc.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS Subpart Dc.
	OAC rule 3745-17-10(B)(1) OAC rule 3745-18-06(D)	0.020 lb/MMBtu of PE
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS Subpart Dc.
	40 CFR Part 60 Subpart Dc	Sulfur content of the oil shall not exceed 0.5 weight percent.
	Opacity shall not exceed 20%, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.	
	Fuel oil usage restriction see B.3 below.	
	From burning No. 2 fuel oil 7.1 TPY SO2* 2 TPY NOx* 0.5TPY CO* 2.76 TPY of PE	

* as a rolling 12-month summation of emissions

2. Additional Terms and Conditions

- (a) None

B. Operational Restrictions

1. The permittee shall burn only natural gas and/or No.2 fuel oil in this emissions unit.
 2. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:
 - a. a sulfur content that is not greater than 0.5 weight percent sulfur; and
 - b. a heat content that is greater than 140,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.
 3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the No. 2 fuel oil usage, upon issuance of this permit. The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 200,000 gallons of No. 2 fuel oil used, based upon a rolling, 12-month summation of the fuel usage rates.
- C. Monitoring and/or Record Keeping Requirements**
1. For each day during which the permittee burns a fuel other than natural gas and/or No.2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 2. 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 Cleveland Division of Air Quality.
 3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
 4. The permittee shall maintain monthly records of the following information:
 - a. the No. 2 fuel oil usage (in gallons) rate for each month; and
 - b. the rolling, 12-month summation of the No. 2 fuel oil usage.
 5. The permittee shall maintain monthly records of the following information:
 - a. the natural gas usage (in cubic feet) rate for each month; and
 - b. the rolling, 12 month summation of natural gas usage rates
- D. Reporting Requirements**
1. The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas and/or No.2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
 2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses to the Cleveland DAQ for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur content (% weight) for the oil received during the calendar month; and
 - c. the weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month. These reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
 3. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling, 12-month limitation of the No. 2 fuel oil usage rate. These reports shall be submitted within 30 days after the exceedance occurs.
- E. Testing Requirements**
1. Compliance with the emission limitations in Section A. 1 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).
Emission Limitation -

0.33 lb/hr of OC and 1.45 TPY when burning natural gas

Applicable Compliance Method -
Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for OC (11 lbs OC/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term

emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

3.00 lbs/hr of NOx and 13.1 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for NOx (100 lbs NOx/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at TPY emission rate.

Emission Limitation -

2.52 lbs/hr of CO and 11.0 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for CO (84 lbs CO/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at TPY emission rate.

Emission Limitation -

0.020 lb/MMBtu actual heat input of PE and

2.76 TPY when burning natural gas and No. 2 fuel oil

Applicable Compliance Method -

Natural Gas

Compliance shall be based upon multiplying the maximum hourly natural gas burning capacity of the emissions unit (0.0299mmcu.ft/hr) by the AP-42 emission factor for natural gas (7.6 lb/MMCU.FT)(7/98) and dividing by the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) to arrive at the short term emission rate in lb/MMBtu.

No. 2 Fuel Oil

Compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for PM(2 lb/1000 gal) and dividing by the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) to arrive at the short term emission rate in lb/MMBtu.

The short term emission rate (0.020 lb PE/mmBtu) is multiplied by the maximum hourly heat input capacity of the emissions unit (31.46mmBtu/hr) and the annual operating hours of the emissions unit (8760). This total is divided by 2000 lbs/ton to arrive at the TPY emission rate.

Emission Limitation -

15.8 lbs/hr of SO₂ and 7.1 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for SO₂ (142*S lb/1000 gal). S is equal to the % weight of Sulfur in the fuel to arrive at the short term emission rate in lb/hr.

The annual emission rate is determined by multiplying the AP-42 emission factor for SO₂ (142*S lb/1000 gal) by the actual annual gallons of # 2 fuel oil and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

4.44 lbs/hr of NOx and 2 TPY when burning No.2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for NOx (20 lb/1000 gal) to arrive at the short term emission rate in lb/hr.

Multiply the actual annual gallons of No. 2 fuel oil by the AP-42 emission factor for NOx (20lbs/1000 gal) to determine annual emission rate, and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

when burning No.2 fuel oil 1.11 lb/hr of CO and 0.5 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222 gal/hr) by the AP-42 emission factor for CO (5 lb/1000 gal) to arrive at the short term emission rate in lb/hr. The actual annual gallons of No. 2 fuel oil is multiplied by the AP-42 emission factor for CO (5 lb/1000 gal) to arrive at the annual emission rate then divided by 2000 lbs/ton to arrive at the tons per year emission rate.

F. Miscellaneous Requirements

1. This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40

CFR Part 60 are also federally enforceable.

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Facility ID: 1318004330 Emissions Unit ID: B006 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B006 - 31.46 MMBtu/hr natural gas/No. 2 fuel oil fired boiler	OAC rule 3745-31-05(A)(3) PTI 13-03071 issued on 9/27/07	From burning natural gas 0.33 lb/hr OC and 1.45 TPY 3.00 lbs/hr NOx and 13.1 TPY 2.52 lbs/hr CO and 11.0 TPY 2.76 TPY of PE
		From burning No. 2 fuel oil 15.8 lbs/hr SO2 4.44 lbs/hr NOx 1.11 lbs/hr CO
		The requirements of this rule include compliance with the requirements of 3745-17-10(B)(1), and NSPS Subpart Dc.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS Subpart Dc.
	OAC rule 3745-17-10(B)(1)	0.020 lb/MMBtu of PE
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS Subpart Dc.
	40 CFR Part 60 Subpart Dc	Sulfur content of the oil shall not exceed 0.5 weight percent.
	Opacity shall not exceed 20%, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.	
	OAC rule 3745-31-05(C) Synthetic Minor status to avoid Title V	Fuel oil usage restriction see B.3 below.
		From burning No. 2 fuel oil 7.1 TPY SO2* 2 TPY NOx* 0.5TPY CO* 2.76 TPY of PE

* as a rolling 12-month summation of emissions

2. Additional Terms and Conditions

- (a) None

B. Operational Restrictions

1. The permittee shall burn only natural gas and/or No.2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received"

basis:

- a. a sulfur content that is not greater than 0.5 weight percent sulfur; and
- b. a heat content that is greater than 140,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

- 3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the No. 2 fuel oil usage, upon issuance of this permit. The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 200,000 gallons of No. 2 fuel oil used, based upon a rolling, 12-month summation of the fuel usage rates.

C. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas and/or No.2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 2. 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 Cleveland Division of Air Quality.
- 3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
- 4. The permittee shall maintain monthly records of the following information:
 - a. the No. 2 fuel oil usage (in gallons) rate for each month; and
 - b. the rolling, 12-month summation of the No. 2 fuel oil usage.
- 5. The permittee shall maintain monthly records of the following information:
 - a. the natural gas usage (in cubic feet) rate for each month; and
 - b. the rolling, 12 month summation of natural gas usage rates

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas and/or No.2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- 2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses to the Cleveland DAQ for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur content (% weight) for the oil received during the calendar month; and
 - c. the weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month. These reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
- 3. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling, 12-month limitation of the No. 2 fuel oil usage rate. These reports shall be submitted within 30 days after the exceedance occurs.

E. Testing Requirements

- 1. Compliance with the emission limitations in Section A. 1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

Emission Limitation -

0.33 lb/hr of OC and 1.45 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for OC (11 lbs OC/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

3.00 lbs/hr of NOx and 13.1 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for NOx (100 lbs NOx/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at TPY emission rate.

Emission Limitation -

2.52 lbs/hr of CO and 11.0 TPY when burning natural gas

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input capacity of the emissions unit (31.46 MMBtu/hr) by the AP-42 emission factor for CO (84 lbs CO/million cubic feet) and dividing by the heat content for natural gas (1 ft³/1050 btu) to arrive at the short term emission rate in lb/hr. The short term emission rate is multiplied by the annual operating hours of the emissions unit (8760) and divided by 2000 lbs/ton to arrive at TPY emission rate.

Emission Limitation -

0.020 lb/MMBtu actual heat input of PE and

2.76 TPY when burning natural gas and No. 2 fuel oil

Applicable Compliance Method -

Natural Gas

Compliance shall be based upon multiplying the maximum hourly natural gas burning capacity of the emissions unit (0.0299mmcu.ft/hr) by the AP-42 emission factor for natural gas (7.6 lb/MMCU.FT)(7/98) and dividing by the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) to arrive at the short term emission rate in lb/MMBtu.

No. 2 Fuel Oil

Compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for PM(2 lb/1000 gal) and dividing by the maximum hourly heat input capacity of the emissions unit (31.46 mmBtu/hr) to arrive at the short term emission rate in lb/MMBtu.

The short term emission rate (0.020 lb PE/mmBtu) is multiplied by the maximum hourly heat input capacity of the emissions unit (31.46mmBtu/hr) and the annual operating hours of the emissions unit (8760). This total is divided by 2000 lbs/ton to arrive at the TPY emission rate.

Emission Limitation -

15.8 lbs/hr of SO₂ and 7.1 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for SO₂ (142*S lb/1000 gal). S is equal to the % weight of Sulfur in the fuel to arrive at the short term emission rate in lb/hr.

The annual emission rate is determined by multiplying the AP-42 emission factor for SO₂ (142*S lb/1000 gal) by the actual annual gallons of # 2 fuel oil and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

4.44 lbs/hr of NOx and 2 TPY when burning No.2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222gal/hr) by the AP-42 emission factor for NOx (20 lb/1000 gal) to arrive at the short term emission rate in lb/hr.

Multiply the actual annual gallons of No. 2 fuel oil by the AP-42 emission factor for NOx (20lb/1000 gal) to determine annual emission rate, and divided by 2000 lbs/ton to arrive at the tons per year (TPY) emission rate.

Emission Limitation -

when burning No.2 fuel oil 1.11 lb/hr of CO and 0.5 TPY when burning No. 2 fuel oil

Applicable Compliance Method -

For the use of No.2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (222 gal/hr) by the AP-42 emission factor for CO (5 lb/1000 gal) to arrive at the short term emission rate in lb/hr. The actual annual gallons of No. 2 fuel oil is multiplied by the AP-42 emission factor for CO (5 lb/1000 gal) to arrive at the annual emission rate then divided by 2000 lbs/ton to arrive at the tons per year emission rate.

F. Miscellaneous Requirements

1. This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.