

Facility ID: 0679010304 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 P001](#)
- [Go to Part II for Emissions Unit P002](#)
- [Go to Part II for Emissions Unit P003](#)
- [Go to Part II for Emissions Unit P004](#)
- [Go to Part II for Emissions Unit P005](#)
- [Go to Part II for Emissions Unit P006](#)

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

Facility ID: 0679010304 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>
Diesel generator Unit # 1, Caterpillar Model 3516B having nominal heat input of 17.53 mmBtu per hour.	OAC rule 3745-31-05(A)(3) PTI # 06-05729	Sulfur Dioxide (SO2) emissions shall not exceed 0.90 lb/hr nor 1.62 tons per year (TPY). See additional terms and condition 2.b. below.
		Carbon Monoxide (CO) emissions shall not exceed 3.72 lb/hr nor 6.70 TPY.
		VOC emissions shall not exceed 1.06 lb/hr nor 1.85 TPY.
		Nitrogen Oxides (NOx) emissions shall not exceed 47.69 lbs/hr nor 85.75 TPY, as a rolling, 12-month summation.
		Particulate emissions (PE) shall not exceed 1.94 TPY.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5) (b) and 3745-17-07(A).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements	NOx emissions shall not exceed 85.75 TPY for emissions units P001-P006, as a rolling, 12-month summation. See additional terms and condition B.1. below.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
	OAC rule 3745-18-06(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**
 - (a) The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation. The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.05% sulfur by weight.

B. Operational Restrictions

1. The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall maintain records of the following information:
 - a. the diesel fuel usage for each month; and
 - b. the rolling, twelve-month summation of the diesel fuel usage rates.
 2. For each shipment of oil received for burning in this emissions unit, 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 SO₂ emission rate in lb/mmBtu.
 3. 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 Ohio EPA Southeast District Office.
- D. Reporting Requirements**
1. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling twelve month diesel fuel usage limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section A.1.
 2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel with sulfur content higher than the sulfur content limitation specified in Section A.2.b is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
 3. The permittee shall also submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
- E. Testing Requirements**
1. Emission Limitation:
The SO₂ emissions from this unit shall not exceed 0.90 lb/hr nor 1.62 TPY.

Applicable Compliance Method:
Diesel fuel containing less than 0.05 percent sulfur by weight is equivalent to an emission factor of 0.007 lb/gallon.

 $0.007 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 0.898 \text{ lb/hr}$.
 $0.007 \text{ lb/gallon} \times 460,000 \text{ gallons/yr.} = 1.61 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 6.
 2. Emission Limitation:
The CO emissions from this emissions unit shall not exceed 3.72 lb/hr nor 6.70 TPY.

Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.029 lb/gallon.

 $0.029 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 3.72 \text{ lb/hr}$.
 $0.029 \text{ lb/gallon} \times 460,000 \text{ gallon/yr, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 6.67 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 10.
 3. Emission Limitation:
The VOC emissions from this emission unit shall not exceed 1.06 lb/hr nor 1.85 TPY.

Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.008 lb/gallon.

 $0.008 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 1.03 \text{ lb/hr}$.
 $0.008 \text{ lb/gallon times } 460,000 \text{ gallon/yr, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 1.84 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 25.
 4. Emission Limitation:
The NO_x emissions from this emissions unit shall not exceed 47.63 lb/hr nor 85.75 TPY as a 12-month summation. The NO_x emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.

Applicable Compliance Method:
Compliance shall be determined by multiplying an emission factor of 0.371 lb/gallon.

 $0.371 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 47.63 \text{ lb/hr}$.
 $0.371 \text{ lb/gallon} \times 460,000 \text{ gallon/yr, as a rolling, 12-month summation, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 85.33 \text{ tons/yr}$.

The emission factor was supplied by the manufacturer for units using low NO_x burners. If required, the

permittee shall demonstrate compliance with the above emissions limit in accordance with Method 7, 40 CFR Part 60, Appendix A.

5. Emission limitation:
20% opacity of visible PE

Applicable Compliance Method:
If required, 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).
6. Emission limitation:
PE shall not exceed 0.062 lb/mmBtu of actual heat input nor 1.94 TPY

Applicable Compliance Method:
Compliance shall be based upon an emission factors supplied by the manufacturer of 0.006 lb/gallon. This emission unit burns 128.4 gallon per hour.

128.4 gal/hr x 0.006 lb/gal divided by 17.53 mmBtu/hr = 0.044 lb/mmbtu input.
0.006 lb/gallon X 460,000 gallon/yr = 2760 lb/yr divided by 2000 lb/ton = 1.38 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).
7. Operational Restriction:
The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

Applicable Compliance Method:
Compliance shall be determined by the monitoring and record keeping in section C. 1. of this permit.

F. Miscellaneous Requirements

1. None

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

Facility ID: 0679010304 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>
Diesel generator Unit # 2, Caterpillar Model 3516B having nominal heat input of 17.53 mmBtu per hour.	OAC rule 3745-31-05(A)(3) PTI # 06-05729	Sulfur Dioxide (SO2) emissions shall not exceed 0.90 lb/hr nor 1.62 tons per year (TPY). See additional terms and condition 2.b. below. Carbon Monoxide (CO) emissions shall not exceed 3.72 lb/hr nor 6.70 TPY. VOC emissions shall not exceed 1.06 lb/hr nor 1.85 TPY. Nitrogen Oxides (NOx) emissions shall not exceed 47.69 lbs/hr nor 85.75 TPY, as a rolling, 12-month summation. Particulate emissions (PE) shall not exceed 1.94 TPY. The requirements of this rule also include compliance

	with the requirements of OAC rules 3745-17-11(B)(5) (b) and 3745-17-07(A).
OAC rule 3745-31-05(C) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements	NOx emissions shall not exceed 85.75 TPY for emissions units P001-P006, as a rolling, 12-month summation. See additional terms and condition B.1. below.
OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
OAC rule 3745-18-06(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

- (a) The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation. The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.05% sulfur by weight.

B. **Operational Restrictions**

- 1. The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

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

- 1. The permittee shall maintain records of the following information:
 - a. the diesel fuel usage for each month; and
 - b. the rolling, twelve-month summation of the diesel fuel usage rates.
- 2. For each shipment of oil received for burning in this emissions unit, 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 SO2 emission rate in lb/mmBtu.
- 3. 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 Ohio EPA Southeast District Office.

D. **Reporting Requirements**

- 1. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling twelve month diesel fuel usage limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section A.1.
- 2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel with sulfur content higher than the sulfur content limitation specified in Section A.2.b is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- 3. The permittee shall also submit annual reports which specify the total NOx emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. **Testing Requirements**

- 1. Emission Limitation:
The SO2 emissions from this unit shall not exceed 0.90 lb/hr nor 1.62 TPY.

Applicable Compliance Method:
Diesel fuel containing less than 0.05 percent sulfur by weight is equivalent to an emission factor of 0.007 lb/gallon.

 $0.007 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 0.898 \text{ lb/hr}$
 $0.007 \text{ lb/gallon} \times 460,000 \text{ gallons/yr.} = 1.61 \text{ TPY}$

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 6.
- 2. Emission Limitation:
The CO emissions from this emissions unit shall not exceed 3.72 lb/hr nor 6.70 TPY.

Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.029 lb/gallon.

 $0.029 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 3.72 \text{ lb/hr}$
 $0.029 \text{ lb/gallon} \times 460,000 \text{ gallon/yr, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 6.67 \text{ TPY}$

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 10.
- 3. Emission Limitation:

The VOC emissions from this emission unit shall not exceed 1.06 lb/hr nor 1.85 TPY.

Applicable Compliance Method:

Compliance shall be determined by using an emission factor of 0.008 lb/gallon.

$0.008 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 1.03 \text{ lb/hr}$.

$0.008 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 1.84 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 25.

4. **Emission Limitation:**

The NOx emissions from this emissions unit shall not exceed 47.63 lb/hr nor 85.75 TPY as a 12-month summation. The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying an emission factor of 0.371 lb/gallon.

$0.371 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 47.63 \text{ lb/hr}$.

$0.371 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, as a rolling, 12-month summation, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 85.33 tons/yr.

The emission factor was supplied by the manufacturer for units using low NOx burners. If required, the permittee shall demonstrate compliance with the above emissions limit in accordance with Method 7, 40 CFR Part 60, Appendix A.

5. **Emission limitation:**

20% opacity of visible PE

Applicable Compliance Method:

If required, 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).

6. **Emission limitation:**

PE shall not exceed 0.062 lb/mmBtu of actual heat input nor 1.94 TPY

Applicable Compliance Method:

Compliance shall be based upon an emission factors supplied by the manufacturer of 0.006 lb/gallon. This emission unit burns 128.4 gallon per hour.

$128.4 \text{ gal/hr} \times 0.006 \text{ lb/gal} \text{ divided by } 17.53 \text{ mmBtu/hr} = 0.044 \text{ lb/mmbtu input}$.

$0.006 \text{ lb/gallon} \times 460,000 \text{ gallon/yr} = 2760 \text{ lb/yr} \text{ divided by } 2000 \text{ lb/ton} = 1.38 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

7. **Operational Restriction:**

The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

Applicable Compliance Method:

Compliance shall be determined by the monitoring and record keeping in section C. 1. of this permit.

F. **Miscellaneous Requirements**

1. None

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

Facility ID: 0679010304 Emissions Unit ID: P003 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>
Diesel generator Unit # 3, Caterpillar Model 3516B having nominal heat input of 17.53 mmBtu per hour.	OAC rule 3745-31-05(A)(3) PTI # 06-05729	Sulfur Dioxide (SO ₂) emissions shall not exceed 0.90 lb/hr nor 1.62 tons per year (TPY). See additional terms and condition 2.b. below.
		Carbon Monoxide (CO) emissions shall not exceed 3.72 lb/hr nor 6.70 TPY.
		VOC emissions shall not exceed 1.06 lb/hr nor 1.85 TPY.
		Nitrogen Oxides (NO _x) emissions shall not exceed 47.69 lbs/hr nor 85.75 TPY, as a rolling, 12-month summation.
		Particulate emissions (PE) shall not exceed 1.94 TPY.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5) (b) and 3745-17-07(A).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements	NO _x emissions shall not exceed 85.75 TPY for emissions units P001-P006, as a rolling, 12-month summation. See additional terms and condition B.1. below.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
	OAC rule 3745-18-06(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- (a) The NO_x emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation. The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.05% sulfur by weight.

B. Operational Restrictions

- 1. The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the diesel fuel usage for each month; and
 - b. the rolling, twelve-month summation of the diesel fuel usage rates.
- 2. For each shipment of oil received for burning in this emissions unit, 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 SO₂ emission rate in lb/mmBtu.
- 3. 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 Ohio EPA Southeast District Office.

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling twelve month diesel fuel usage limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section A.1.
- 2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel with sulfur content higher than the sulfur content limitation specified in Section A.2.b is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- 3. The permittee shall also submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

- 1. Emission Limitation:
The SO₂ emissions from this unit shall not exceed 0.90 lb/hr nor 1.62 TPY.

Applicable Compliance Method:

Diesel fuel containing less than 0.05 percent sulfur by weight is equivalent to an emission factor of 0.007 lb/gallon.

$0.007 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 0.898 \text{ lb/hr}$.
 $0.007 \text{ lb/gallon} \times 460,000 \text{ gallons/yr.} = 1.61 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 6.

2. Emission Limitation:

The CO emissions from this emissions unit shall not exceed 3.72 lb/hr nor 6.70 TPY.

Applicable Compliance Method:

Compliance shall be determined by using an emission factor of 0.029 lb/gallon.

$0.029 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 3.72 \text{ lb/hr}$.
 $0.029 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 6.67 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 10.

3. Emission Limitation:

The VOC emissions from this emission unit shall not exceed 1.06 lb/hr nor 1.85 TPY.

Applicable Compliance Method:

Compliance shall be determined by using an emission factor of 0.008 lb/gallon.

$0.008 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 1.03 \text{ lb/hr}$.
 $0.008 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 1.84 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 25.

4. Emission Limitation:

The NOx emissions from this emissions unit shall not exceed 47.63 lb/hr nor 85.75 TPY as a 12-month summation. The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying an emission factor of 0.371 lb/gallon.

$0.371 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 47.63 \text{ lb/hr}$.
 $0.371 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, as a rolling, 12-month summation, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 85.33 tons/yr.

The emission factor was supplied by the manufacturer for units using low NOx burners. If required, the permittee shall demonstrate compliance with the above emissions limit in accordance with Method 7, 40 CFR Part 60, Appendix A.

5. Emission limitation:

20% opacity of visible PE

Applicable Compliance Method:

If required, 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).

6. Emission limitation:

PE shall not exceed 0.062 lb/mmBtu of actual heat input nor 1.94 TPY

Applicable Compliance Method:

Compliance shall be based upon an emission factors supplied by the manufacturer of 0.006 lb/gallon. This emission unit burns 128.4 gallon per hour.

$128.4 \text{ gal/hr} \times 0.006 \text{ lb/gal} \text{ divided by } 17.53 \text{ mmBtu/hr} = 0.044 \text{ lb/mmbtu input}$.
 $0.006 \text{ lb/gallon} \times 460,000 \text{ gallon/yr} = 2760 \text{ lb/yr} \text{ divided by } 2000 \text{ lb/ton} = 1.38 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

7. Operational Restriction:

The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

Applicable Compliance Method:

Compliance shall be determined by the monitoring and record keeping in section C. 1. of this permit.

F. Miscellaneous Requirements

1. None

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

Facility ID: 0679010304 Emissions Unit ID: P004 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>
Diesel generator Unit # 4, Caterpillar Model 3516B having nominal heat input of 17.53 mmBtu per hour.	OAC rule 3745-31-05(A)(3) and PTI # 06-05729	Sulfur Dioxide (SO ₂) emissions shall not exceed 0.90 lb/hr nor 1.62 tons per year (TPY). See additional terms and condition 2.b. below. Carbon Monoxide (CO) emissions shall not exceed 3.72 lb/hr nor 6.70 TPY. VOC emissions shall not exceed 1.06 lb/hr nor 1.85 TPY. Nitrogen Oxides (NO _x) emissions shall not exceed 47.69 lbs/hr nor 85.75 TPY, as a rolling, 12-month summation. Particulate emissions (PE) shall not exceed 1.94 TPY. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5) (b) and 3745-17-07(A).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements	NO _x emissions shall not exceed 85.75 TPY for emissions units P001-P006, as a rolling, 12-month summation. See additional terms and condition B.1. below.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
	OAC rule 3745-18-06(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- (a) The NO_x emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation. The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.05% sulfur by weight.

B. Operational Restrictions

1. The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information:
 - a. the diesel fuel usage for each month; and
 - b. the rolling, twelve-month summation of the diesel fuel usage rates.
2. For each shipment of oil received for burning in this emissions unit, 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 SO₂ emission rate in lb/mmBtu.

3. 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 Ohio EPA Southeast District Office.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling twelve month diesel fuel usage limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section A.1.
2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel with sulfur content higher than the sulfur content limitation specified in Section A.2.b is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall also submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. **Emission Limitation:**
The SO₂ emissions from this unit shall not exceed 0.90 lb/hr nor 1.62 TPY.

Applicable Compliance Method:
Diesel fuel containing less than 0.05 percent sulfur by weight is equivalent to an emission factor of 0.007 lb/gallon.

 $0.007 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 0.898 \text{ lb/hr.}$
 $0.007 \text{ lb/gallon} \times 460,000 \text{ gallons/yr.} = 1.61 \text{ TPY.}$

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 6.
2. **Emission Limitation:**
The CO emissions from this emissions unit shall not exceed 3.72 lb/hr nor 6.70 TPY.

Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.029 lb/gallon.

 $0.029 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 3.72 \text{ lb/hr.}$
 $0.029 \text{ lb/gallon} \times 460,000 \text{ gallon/yr.}$ for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 6.67 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 10.
3. **Emission Limitation:**
The VOC emissions from this emission unit shall not exceed 1.06 lb/hr nor 1.85 TPY.

Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.008 lb/gallon.

 $0.008 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 1.03 \text{ lb/hr.}$
 $0.008 \text{ lb/gallon} \times 460,000 \text{ gallon/yr.}$ for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 1.84 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 25.
4. **Emission Limitation:**
The NO_x emissions from this emissions unit shall not exceed 47.63 lb/hr nor 85.75 TPY as a 12-month summation. The NO_x emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.

Applicable Compliance Method:
Compliance shall be determined by multiplying an emission factor of 0.371 lb/gallon.

 $0.371 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 47.63 \text{ lb/hr.}$
 $0.371 \text{ lb/gallon} \times 460,000 \text{ gallon/yr.}$ as a rolling, 12-month summation, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 85.33 tons/yr.

The emission factor was supplied by the manufacturer for units using low NO_x burners. If required, the permittee shall demonstrate compliance with the above emissions limit in accordance with Method 7, 40 CFR Part 60, Appendix A.
5. **Emission limitation:**
20% opacity of visible PE

Applicable Compliance Method:
If required, 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).
6. **Emission limitation:**
PE shall not exceed 0.062 lb/mmBtu of actual heat input nor 1.94 TPY

Applicable Compliance Method:

Compliance shall be based upon an emission factors supplied by the manufacturer of 0.006 lb/gallon. This emission unit burns 128.4 gallon per hour.

128.4 gal/hr x 0.006 lb/gal divided by 17.53 mmBtu/hr = 0.044 lb/mmbtu input.
0.006 lb/gallon X 460,000 gallon/yr = 2760 lb/yr divided by 2000 lb/ton = 1.38 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- 7. Operational Restriction:
The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

Applicable Compliance Method:
Compliance shall be determined by the monitoring and record keeping in section C. 1. of this permit.

F. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0679010304 Emissions Unit ID: P005 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>
Diesel generator Unit # 5, Caterpillar Model 3516B having nominal heat input of 17.53 mmBtu per hour.	OAC rule 3745-31-05(A)(3) PTI # 06-05729	Sulfur Dioxide (SO2) emissions shall not exceed 0.90 lb/hr nor 1.62 tons per year (TPY). See additional terms and condition 2.b. below. Carbon Monoxide (CO) emissions shall not exceed 3.72 lb/hr nor 6.70 TPY. VOC emissions shall not exceed 1.06 lb/hr nor 1.85 TPY. Nitrogen Oxides (NOx) emissions shall not exceed 47.69 lbs/hr nor 85.75 TPY, as a rolling, 12-month summation. Particulate emissions (PE) shall not exceed 1.94 TPY.
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements OAC rule 3745-17-07(A)	NOx emissions shall not exceed 85.75 TPY for emissions units P001-P006, as a rolling, 12-month summation. See additional terms and condition B.1. below. Visible particulate emissions (PE) shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat

OAC rule 3745-18-06(G)

input.

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

2. Additional Terms and Conditions

- (a) The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.
The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.05% sulfur by weight.

B. Operational Restrictions

1. The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information:
- the diesel fuel usage for each month; and
 - the rolling, twelve-month summation of the diesel fuel usage rates.
2. For each shipment of oil received for burning in this emissions unit, 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 SO₂ emission rate in lb/mmBtu.
3. 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 Ohio EPA Southeast District Office.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling twelve month diesel fuel usage limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section A.1.
2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel with sulfur content higher than the sulfur content limitation specified in Section A.2.b is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall also submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Emission Limitation:
The SO₂ emissions from this unit shall not exceed 0.90 lb/hr nor 1.62 TPY.
- Applicable Compliance Method:
Diesel fuel containing less than 0.05 percent sulfur by weight is equivalent to an emission factor of 0.007 lb/gallon.
- $$0.007 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 0.898 \text{ lb/hr.}$$
- $$0.007 \text{ lb/gallon} \times 460,000 \text{ gallons/yr.} = 1.61 \text{ TPY.}$$
- If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 6.
2. Emission Limitation:
The CO emissions from this emissions unit shall not exceed 3.72 lb/hr nor 6.70 TPY.
- Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.029 lb/gallon.
- $$0.029 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 3.72 \text{ lb/hr.}$$
- $$0.029 \text{ lb/gallon} \times 460,000 \text{ gallon/yr, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 6.67 \text{ TPY.}$$
- If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 10.
3. Emission Limitation:
The VOC emissions from this emission unit shall not exceed 1.06 lb/hr nor 1.85 TPY.
- Applicable Compliance Method:
Compliance shall be determined by using an emission factor of 0.008 lb/gallon.
- $$0.008 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 1.03 \text{ lb/hr.}$$
- $$0.008 \text{ lb/gallon times } 460,000 \text{ gallon/yr, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 1.84 \text{ TPY.}$$
- If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 25.

4. Emission Limitation:
 The NOx emissions from this emissions unit shall not exceed 47.63 lb/hr nor 85.75 TPY as a 12-month summation. The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.

 Applicable Compliance Method:
 Compliance shall be determined by multiplying an emission factor of 0.371 lb/gallon.

 $0.371 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 47.63 \text{ lb/hr.}$
 $0.371 \text{ lb/gallon} \times 460,000 \text{ gallon/yr, as a rolling, 12-month summation, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton} = 85.33 \text{ tons/yr.}$

 The emission factor was supplied by the manufacturer for units using low NOx burners. If required, the permittee shall demonstrate compliance with the above emissions limit in accordance with Method 7, 40 CFR Part 60, Appendix A.
5. Emission limitation:
 20% opacity of visible PE

 Applicable Compliance Method:
 If required, 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).
6. Emission limitation:
 PE shall not exceed 0.062 lb/mmBtu of actual heat input nor 1.94 TPY

 Applicable Compliance Method:
 Compliance shall be based upon an emission factors supplied by the manufacturer of 0.006 lb/gallon. This emission unit burns 128.4 gallon per hour.

 $128.4 \text{ gal/hr} \times 0.006 \text{ lb/gal divided by } 17.53 \text{ mmBtu/hr} = 0.044 \text{ lb/mmbtu input.}$
 $0.006 \text{ lb/gallon} \times 460,000 \text{ gallon/yr} = 2760 \text{ lb/yr divided by } 2000 \text{ lb/ton} = 1.38 \text{ TPY.}$

 If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).
7. Operational Restriction:
 The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

 Applicable Compliance Method:
 Compliance shall be determined by the monitoring and record keeping in section C. 1. of this permit.

F. Miscellaneous Requirements

1. None

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

Facility ID: 0679010304 Emissions Unit ID: P006 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>
Diesel generator Unit # 6, Caterpillar Model 3516B having nominal heat input of 17.53 mmBtu per hour.	OAC rule 3745-31-05(A)(3) PTI # 06-05729	Sulfur Dioxide (SO2) emissions shall not exceed 0.90 lb/hr nor 1.62 tons per year (TPY). See additional terms and condition 2.b. below. Carbon Monoxide (CO) emissions shall not exceed

3.72 lb/hr nor 6.70 TPY.

VOC emissions shall not exceed 1.06 lb/hr nor 1.85 TPY.

Nitrogen Oxides (NOx) emissions shall not exceed 47.69 lbs/hr nor 85.75 TPY, as a rolling, 12-month summation.

Particulate emissions (PE) shall not exceed 1.94 TPY.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5) (b) and 3745-17-07(A).

OAC rule 3745-31-05(C)
Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements
OAC rule 3745-17-07(A)

NOx emissions shall not exceed 85.75 TPY for emissions units P001-P006, as a rolling, 12-month summation. See additional terms and condition B.1. below.

Visible particulate emissions (PE) shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

OAC rule 3745-17-11(B)(5)(b)

PE shall not exceed 0.062 lb/mmBtu of actual heat input.

OAC rule 3745-18-06(G)

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

2. Additional Terms and Conditions

- (a) The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation. The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.05% sulfur by weight.

B. Operational Restrictions

- 1. The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the diesel fuel usage for each month; and
 - b. the rolling, twelve-month summation of the diesel fuel usage rates.
- 2. For each shipment of oil received for burning in this emissions unit, 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 SO2 emission rate in lb/mmBtu.
- 3. 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 Ohio EPA Southeast District Office.

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling twelve month diesel fuel usage limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section A.1.
- 2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel with sulfur content higher than the sulfur content limitation specified in Section A.2.b is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- 3. The permittee shall also submit annual reports which specify the total NOx emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

- 1. Emission Limitation:
The SO2 emissions from this unit shall not exceed 0.90 lb/hr nor 1.62 TPY.

Applicable Compliance Method:
Diesel fuel containing less than 0.05 percent sulfur by weight is equivalent to an emission factor of 0.007 lb/gallon.

 $0.007 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 0.898 \text{ lb/hr.}$
 $0.007 \text{ lb/gallon} \times 460,000 \text{ gallons/yr.} = 1.61 \text{ TPY.}$

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 6.
- 2. Emission Limitation:

The CO emissions from this emissions unit shall not exceed 3.72 lb/hr nor 6.70 TPY.

Applicable Compliance Method:

Compliance shall be determined by using an emission factor of 0.029 lb/gallon.

$0.029 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 3.72 \text{ lb/hr}$.

$0.029 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 6.67 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 10.

3. **Emission Limitation:**

The VOC emissions from this emission unit shall not exceed 1.06 lb/hr nor 1.85 TPY.

Applicable Compliance Method:

Compliance shall be determined by using an emission factor of 0.008 lb/gallon.

$0.008 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 1.03 \text{ lb/hr}$.

$0.008 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 1.84 TPY.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A Method 25.

4. **Emission Limitation:**

The NOx emissions from this emissions unit shall not exceed 47.63 lb/hr nor 85.75 TPY as a 12-month summation. The NOx emissions from emission units P001, P002, P003, P004, P005 and P006, combined, shall not exceed 85.75 TPY based on a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying an emission factor of 0.371 lb/gallon.

$0.371 \text{ lb/gallon} \times 128.4 \text{ gallons/hr} = 47.63 \text{ lb/hr}$.

$0.371 \text{ lb/gallon} \times 460,000 \text{ gallon/yr}$, as a rolling, 12-month summation, for this emissions unit or all emissions units combined, divided by 2,000 lb/ton = 85.33 tons/yr.

The emission factor was supplied by the manufacturer for units using low NOx burners. If required, the permittee shall demonstrate compliance with the above emissions limit in accordance with Method 7, 40 CFR Part 60, Appendix A.

5. **Emission limitation:**

20% opacity of visible PE

Applicable Compliance Method:

If required, 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).

6. **Emission limitation:**

PE shall not exceed 0.062 lb/mmBtu of actual heat input nor 1.94 TPY

Applicable Compliance Method:

Compliance shall be based upon an emission factors supplied by the manufacturer of 0.006 lb/gallon. This emission unit burns 128.4 gallon per hour.

$128.4 \text{ gal/hr} \times 0.006 \text{ lb/gal} \text{ divided by } 17.53 \text{ mmBtu/hr} = 0.044 \text{ lb/mmbtu input}$.

$0.006 \text{ lb/gallon} \times 460,000 \text{ gallon/yr} = 2760 \text{ lb/yr} \text{ divided by } 2000 \text{ lb/ton} = 1.38 \text{ TPY}$.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

7. **Operational Restriction:**

The maximum annual diesel fuel usage for any individual emissions unit or P001, P002, P003, P004, P005, and P006, combined, shall not exceed 460,000 gallons per year based upon a rolling, twelve-month summation.

Applicable Compliance Method:

Compliance shall be determined by the monitoring and record keeping in section C. 1. of this permit.

F. **Miscellaneous Requirements**

1. None