

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for The East Fairfield Coal Co. located in Mahoning County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification / Description	BAT Determination	Applicable Federal and OAC Rules	Permit Allowable Mass Emissions and/or Control & Usage Requirements
F006	Tertiary Limestone Crushing Operation	Wet screening. Use of water sprays to minimize fugitive dust. Minimize freefall distance.	3745-31-05 3745-17-07(B)(1) 40 CFR Part 60, Subpart OOO	Visible emissions from this source shall not exceed 15 percent opacity; 0.3 Tons per Year PM. * *
B001	1250 HP #2 Diesel Fuel-Powered Generator	Use of #2 Diesel Fuel	3745-31-05 3745-17-11(B) 3745-17-07 3745-18-06(G)	Visible emissions shall not exceed 20 percent opacity as a 6-minute average; 0.75 lb/hr and 1.8 TPY PM; 6.0 lb/hr and 14.4 TPY SO _x ; 38.6 lb/hr and 92.6 TPY NO _x ; 8.0 lb/hr and 19.2 TPY CO; 2.5 lb/hr and 6.0 TPY OC * * *

* The listed rule is less stringent or equivalent to BAT.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	2.1
SOx	14.4
NOx	92.6
CO	19.2
OC	6.0

Additional Terms and Conditions

1. **Source Description**

The emission units covered by this Permit to Install are: a Tertiary Limestone Crusher and a 1250 HP Diesel Generator.

2. **Emission limitations**

1. The NOx emissions from this facility (emissions from diesel generator) shall not exceed 38.6 lbs per hour or 92.6 tons per year.
2. The SOx emissions from this facility (emissions from diesel generator) shall not exceed 20.9 lbs per hour or 50.2 tons per year.
3. The PM emissions from this facility (emissions from diesel generator) shall not exceed 0.75 lbs per hour or 1.8 tons per year.
4. The CO emissions from this facility (emissions from diesel generator) shall not exceed 8.0 lbs per hour or 19.2 tons per year.
5. The OC emissions from this facility (emissions from diesel generator) shall not exceed 2.5 lbs per hour or 6 tons per year.

3. **Annual operating limitations**

The maximum annual operating hours for this emissions unit shall not exceed 4800, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in

the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	600
1-2	1,200
1-3	1,800
1-4	2,400
1-5	3,000
1-6	3,600
1-7	4,200
1-8	4,800
1-9	4,800
1-10	4,800
1-11	4,800
1-12	4,800

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

4. VISIBLE EMISSION LIMITATIONS

- a. Tertiary Crushing and Screening Operations: There shall be no visible particulate emissions greater than 15 percent opacity.
- b. Diesel Generator: Visible emissions shall not exceed 20 percent opacity, as a six minute average.

5. Record keeping and Reporting Requirements

The permittee shall maintain monthly records of the following information:

- (a) The operating hours for each month.
- (b) Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

6. Operational Practice

- a. Limestone crushing and screening operations shall control fugitive dust by using water sprays at all reasonable times, and by minimizing free fall distance of material.

7. Testing Requirements

Compliance with the emission limitation(s) in this permit's terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation

0.75 lb Particulate Matter (PM) per hour and 1.8 tons per year

Applicable Compliance Method

Multiply the particulate emissions factor of 0.062 * pounds of particulate emissions per million BTU(MMBTU) actual heat input by 12.05 MMBTU per hour, the maximum firing rate of the diesel generator (Emission factor * from OAC 3745-17-11(B)(5)). Tons per year shall be calculated multiplying pounds per hour by hours of operation per year and dividing by 2000.

b. Emission Limitation

6.0 lb Sulfur Dioxide(SO_x) per hour and 14.4 tons per year

Applicable Compliance Method

Multiply the SO_x factor of 0.5* lbs per MMBTU emissions per 12.05 MMBTU per hour,

the maximum firing rate of the diesel generator (Emission factor * from OAC 3745-18-06(G)). Tons per year shall be calculated multiplying pounds per hour by hours of operation per year and dividing by 2000.

c. Emission Limitation

2.5 lb Organic Compounds(CO) per hour and 6.0 tons per year

Applicable Compliance Method

Multiply the OC factor of 0.91* grams emissions per HP-hr by 1250 HP, the maximum firing rate of the diesel generator (Emission factor * from manufacturer's data). Tons per year shall be calculated multiplying pounds per hour by hours of operation per year and dividing by 2000.

d. 38.6 lb Nitrogen Oxides(NOx) per hour and 92.6 tons per year

Applicable Compliance Method

Multiply the NOx factor of 14* grams emissions per HP-hr by 1250 HP, the maximum firing rate of the diesel generator (Emission factor * from manufacturer's data). Tons per year shall be calculated multiplying pounds per hour by hours of operation per year and dividing by 2000.

e. 8.0 lb Carbon Monoxide(CO) per hour and 19.2 tons per year

Applicable Compliance Method

Multiply the CO factor of 0.91* grams emissions per HP-hr by 1250 HP, the maximum firing rate of the diesel generator (Emission factor * from manufacturer's data). Tons per year shall be calculated multiplying pounds per hour by hours of operation per year and dividing by 2000.

9. **Federal Enforceability**

The following Terms and Conditions have been incorporated into this permit in order to establish federally enforceable limitations on potential to emit, pursuant to OAC Rule 3745-35-07: 2, 3, and 5.