State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL** **CERTIFIED MAIL**
**SUMMIT COUNTY**

Street Address: 122 S. Front Street
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address: Lazarus Gov. Center P.O. Box 1049

**Application No: 16-02014**

**DATE: 4/19/00**

FirstEnergy Corp - Burton Substation
Bob Williams
76 South Main St
Akron, OH 44308

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: **USEPA** **ARAQMD**

## FINAL PERMIT TO INSTALL 16-02014

| | |
|---|---|
| Application Number: | 16-02014 |
| APS Premise Number: | 1677011113 |
| Permit Fee: | **$800** |
| Name of Facility: | FirstEnergy Corp - Burton Substation |
| Person to Contact: | Bob Williams |
| Address: | 76 South Main St<br>Akron, OH 44308 |

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1430 Burton St Southeast**
**Warren**, **Ohio**

Description of proposed emissions unit(s):
**Temporary diesel powered electrical generating units - four (4) portable engine/generator sets.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

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.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

## B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

| Pollutant | Tons Per Year |
|---|---|
| PM | 0.69 |
| $SO_2$ | 12.2 |
| CO | 5.22 |
| $NO_x$ | 99.9 |
| VOC | 1.45 |

Emissions Unit ID: **B001**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements |
|---|---|
| B001 - Temporary Portable Diesel Generator Set #1 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3 | OAC rule 3745-31-05(A)(3)<br>OAC rule 3745-17-07(A)<br>OAC rule 3745-17-11(B)(5)(b)<br>OAC rule 3745-18-06(G) |

OAC rule 3745-31-05(D)

Applicable Emissions
Limitations/Control Measures

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

10% opacity as a 6-minute average, except during start-up and shutdown
(stack emissions)

See A.2.a - A.2.e below.

99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.
See A.2.f below.

See A.2.g below.

See A.2.g below.

See A.2.g below.

**2. Additional Terms and Conditions**

**2.a** The permittee shall only burn low sulfur diesel fuel, containing less than 0.05% sulfur by weight, in this emissions unit.

**2.b** The diesel generator shall be equipped with a turbocharger, variable timing, and aftercooler to minimize $NO_x$ emissions.

**2.c** The permittee shall neither locate nor operate more than a total of 4 generators at this facility at any time.

**2.d** The permittee shall only relocate this emissions unit to an approved site as specified in section F.1 below.

**2.e** The permittee shall obtain a new permit to install in the event that the generator is scrapped out and replaced with a new unit.

**2.f** The $NO_x$ emissions from either this emissions unit or the entire facility (B001 - B004) shall not exceed 99.9 tpy based on a rolling 12-month summation.

**2.g** The emissions limit based on this applicable rule is equivalent or less stringent than the limit established pursuant to OAC rule 3745-31-05.

**B. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit or the entire facility shall not exceed 4,742, 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:

| Month(s) | Maximum Allowable Cumulative Operating Hours |
|---|---|
| 1-1 | 3,161 |
| 1-2 | 4,742 |
| 1-3 | 4,742 |
| 1-4 | 4,742 |
| 1-5 | 4,742 |

| | |
|---|---|
| 1-6 | 4,742 |
| 1-7 | 4,742 |
| 1-8 | 4,742 |
| 1-9 | 4,742 |
| 1-10 | 4,742 |
| 1-11 | 4,742 |
| 1-12 | 4,742 |

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.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the operating hours for each day; and

   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.

## D. Reporting Requirements

1. 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. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall also submit annual reports which specify the total number operating hours for both this emissions unit and the entire facility. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

## E. Testing Requirements

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

1.a **Emission Limitation:**

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.08 g/hp-hr.

(0.08 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.29 lb/hr

(0.29 lb/hr)*(1 hr/11.76 MM Btu) = 0.025 lb particulates per MM Btu

(0.29 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 0.69 tpy particulates

If required, the permittee shall demonstrate compliance by testing in accordance with OAC rule 3745-17-03(B)(10) and Method 5, 40 CFR Part 60, Appendix A.

1.b **Emission Limitation:**

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the facility of 1.43 g/hp-hr.

(1.43 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 5.15 lbs/hr

(5.15 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 12.2 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 6, 40 CFR Part 60, Appendix A.

1.c **Emission Limitation:**

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.61 g/hp-hr.

(0.61 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 2.20 lbs/hr

(2.20 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 5.22 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

1.d**Emission Limitation:**

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$
99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 11.7 g/hp-hr.

(11.7 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 42.17 lbs/hr

(42.17 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 99.9 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

1.e**Emission Limitation:**

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.17

g/hp-hr.

(0.17 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.61 lb/hr

(0.61 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 1.45 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

1.f **Emission Limitation:**

10% opacity as a 6-minute average
(stack emissions)

**Applicable Compliance Method:**

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

1.Relocation of the Emissions Unit

Under the terms and conditions of permits to install numbers 16-02001 through 16-02017, the number of identical Portable Diesel Generator Sets approved to be installed at each site is limited. This emissions unit is approved for use in any one of the following sites as long as the number of units site limitation for that new site is met:

Gilchrist - 3275 Gilchrist Road, Mogadore
Pine - Fairlawn Service Center, Akron
West Akron - 345 N. Cleveland-Massillon Road, Akron
Boardman - 6409 Southern Boulevard, Youngstown
Zenith - S.R. 7 at Penelec R/W, Conneaut
Kipling/Euclid - 1422 Babbitt Road , Euclid
Krick/Northfield - 7401 Northfield Road, Walton Hills
Crestwood - 737 Bradley Road, Westlake
Darwin - 780 Canterbury Road, Westlake
Graham/Grovewood - 9200 Clinton Road, Brooklyn
Terex - 5325 Darrow Road, Hudson
Bridge - 2550 Mahoning Avenue, NW, Warren

Burton - 1430 Burton Road, SE, Warren
Elm - 2183 Hoagland-Blackstub Road, Warren
Lincoln/Lloyd - 29454 Lakeland Boulevard, Wickliffe
Marble - 38040 St. Clair Street, Willoughby
Astor - 904 Moore Road, Avon

2. Notice of Relocation of the Emissions Unit to Listed Sites

The applicant shall provide a written notice to Akron Regional Air Quality Management District and the appropriate field office having jurisdiction over the new site within a minimum of thirty days after the relocation to one of the above listed sites.

3. Notice of Relocation of the Emissions Unit to Non Listed Sites

If this permittee wishes to move this emissions unit to a site not listed in term F.1., the permittee must first (1) obtain a new permit to install, (2) comply with the requirements of Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), or (3) comply with the requirements of OAC rule 3745-31-03(A)(1)(p)(ii).

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | OAC rule 3745-17-07(A) |
|---|---|---|
| B002 - Temporary Portable Diesel Generator Set #2 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3 | OAC rule 3745-31-05(A)(3) | OAC rule 3745-17-11(B)(5)(b) |
| | | OAC rule 3745-18-06(G) |
| | OAC rule 3745-31-05(D) | |

Applicable Emissions
Limitations/Control Measures

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

10% opacity as a 6-minute average, except during start-up and shutdown
(stack emissions)

See A.2.a - A.2.e below.

99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.
See A.2.f below.

See A.2.g below.

See A.2.g below.

See A.2.g below.

**2. Additional Terms and Conditions**

**2.a** The permittee shall only burn low sulfur diesel fuel, containing less than 0.05% sulfur by weight, in this emissions unit.

**2.b** The diesel generator shall be equipped with a turbocharger, variable timing, and aftercooler to minimize $NO_x$ emissions.

**2.c** The permittee shall neither locate nor operate more than a total of 4 generators at this facility at any time.

**2.d** The permittee shall only relocate this emissions unit to an approved site as specified in section F.1 below.

**2.e** The permittee shall obtain a new permit to install in the event that the generator is scrapped out and replaced with a new unit.

**2.f** The $NO_x$ emissions from either this emissions unit or the entire facility (B001 - B004) shall not exceed 99.9 tpy based on a rolling 12-month summation.

**2.g** The emissions limit based on this applicable rule is equivalent or less stringent than the limit established pursuant to OAC rule 3745-31-05.

**B. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit or the entire facility shall not exceed 4,742, 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:

| Month(s) | Maximum Allowable Cumulative Operating Hours |
|---|---|
| 1-1 | 3,161 |
| 1-2 | 4,742 |
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| 1-5 | 4,742 |

| | |
|---|---|
| 1-6 | 4,742 |
| 1-7 | 4,742 |
| 1-8 | 4,742 |
| 1-9 | 4,742 |
| 1-10 | 4,742 |
| 1-11 | 4,742 |
| 1-12 | 4,742 |

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.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the operating hours for each day; and

   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.

## D. Reporting Requirements

1. 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. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall also submit annual reports which specify the total number operating hours for both this emissions unit and the entire facility. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

## E. Testing Requirements

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

Emissions Unit ID: **B002**

1.a **Emission Limitation:**

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.08 g/hp-hr.

(0.08 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.29 lb/hr

(0.29 lb/hr)*(1 hr/11.76 MM Btu) = 0.025 lb particulates per MM Btu

(0.29 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 0.69 tpy particulates

If required, the permittee shall demonstrate compliance by testing in accordance with OAC rule 3745-17-03(B)(10) and Method 5, 40 CFR Part 60, Appendix A.

1.b **Emission Limitation:**

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the facility of 1.43 g/hp-hr.

(1.43 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 5.15 lbs/hr

(5.15 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 12.2 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 6, 40 CFR Part 60, Appendix A.

1.c **Emission Limitation:**

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.61 g/hp-hr.

(0.61 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 2.20 lbs/hr

(2.20 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 5.22 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

1.d**Emission Limitation:**

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$
99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 11.7 g/hp-hr.

(11.7 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 42.17 lbs/hr

(42.17 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 99.9 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

1.e**Emission Limitation:**

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.17 g/hp-hr.

(0.17 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.61 lb/hr

(0.61 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 1.45 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

1.f **Emission Limitation:**

10% opacity as a 6-minute average
(stack emissions)

**Applicable Compliance Method:**

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

1.Relocation of the Emissions Unit

Under the terms and conditions of permits to install numbers 16-02001 through 16-02017, the number of identical Portable Diesel Generator Sets approved to be installed at each site is limited. This emissions unit is approved for use in any one of the following sites as long as the number of units site limitation for that new site is met:

Gilchrist - 3275 Gilchrist Road, Mogadore
Pine - Fairlawn Service Center, Akron
West Akron - 345 N. Cleveland-Massillon Road, Akron
Boardman - 6409 Southern Boulevard, Youngstown
Zenith - S.R. 7 at Penelec R/W, Conneaut
Kipling/Euclid - 1422 Babbitt Road , Euclid
Krick/Northfield - 7401 Northfield Road, Walton Hills
Crestwood - 737 Bradley Road, Westlake
Darwin - 780 Canterbury Road, Westlake
Graham/Grovewood - 9200 Clinton Road, Brooklyn
Terex - 5325 Darrow Road, Hudson
Bridge - 2550 Mahoning Avenue, NW, Warren
Burton - 1430 Burton Road, SE, Warren

Elm - 2183 Hoagland-Blackstub Road, Warren
Lincoln/Lloyd - 29454 Lakeland Boulevard, Wickliffe
Marble - 38040 St. Clair Street, Willoughby
Astor - 904 Moore Road, Avon

2. Notice of Relocation of the Emissions Unit to Listed Sites

The applicant shall provide a written notice to Akron Regional Air Quality Management District and the appropriate field office having jurisdiction over the new site within a minimum of thirty days after the relocation to one of the above listed sites.

3. Notice of Relocation of the Emissions Unit to Non Listed Sites

If this permittee wishes to move this emissions unit to a site not listed in term F.1., the permittee must first (1) obtain a new permit to install, (2) comply with the requirements of Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), or (3) comply with the requirements of OAC rule 3745-31-03(A)(1)(p)(ii).

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | OAC rule 3745-17-07(A) |
|---|---|---|
| B003 - Temporary Portable Diesel Generator Set #3 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3 | OAC rule 3745-31-05(A)(3) | OAC rule 3745-17-11(B)(5)(b) |
| | | OAC rule 3745-18-06(G) |
| | OAC rule 3745-31-05(D) | |

Applicable Emissions
Limitations/Control Measures

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

10% opacity as a 6-minute average, except during start-up and shutdown
(stack emissions)

See A.2.a - A.2.e below.

99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.
See A.2.f below.

See A.2.g below.

See A.2.g below.

See A.2.g below.

**2. Additional Terms and Conditions**

**2.a** The permittee shall only burn low sulfur diesel fuel, containing less than 0.05% sulfur by weight, in this emissions unit.

**2.b** The diesel generator shall be equipped with a turbocharger, variable timing, and aftercooler to minimize $NO_x$ emissions.

**2.c** The permittee shall neither locate nor operate more than a total of 4 generators at this facility at any time.

**2.d** The permittee shall only relocate this emissions unit to an approved site as specified in section F.1 below.

**2.e** The permittee shall obtain a new permit to install in the event that the generator is scrapped out and replaced with a new unit.

**2.f** The $NO_x$ emissions from either this emissions unit or the entire facility (B001 - B004) shall not exceed 99.9 tpy based on a rolling 12-month summation.

**2.g** The emissions limit based on this applicable rule is equivalent or less stringent than the limit established pursuant to OAC rule 3745-31-05.

**B. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit or the entire facility shall not exceed 4,742, 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:

| Month(s) | Maximum Allowable Cumulative Operating Hours |
|---|---|
| 1-1 | 3,161 |
| 1-2 | 4,742 |
| 1-3 | 4,742 |
| 1-4 | 4,742 |
| 1-5 | 4,742 |

| | |
|---|---|
| 1-6 | 4,742 |
| 1-7 | 4,742 |
| 1-8 | 4,742 |
| 1-9 | 4,742 |
| 1-10 | 4,742 |
| 1-11 | 4,742 |
| 1-12 | 4,742 |

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.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the operating hours for each day; and

   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.

## D. Reporting Requirements

1. 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. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall also submit annual reports which specify the total number operating hours for both this emissions unit and the entire facility. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

## E. Testing Requirements

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

1.a **Emission Limitation:**

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.08 g/hp-hr.

(0.08 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.29 lb/hr

(0.29 lb/hr)*(1 hr/11.76 MM Btu) = 0.025 lb particulates per MM Btu

(0.29 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 0.69 tpy particulates

If required, the permittee shall demonstrate compliance by testing in accordance with OAC rule 3745-17-03(B)(10) and Method 5, 40 CFR Part 60, Appendix A.

1.b **Emission Limitation:**

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the facility of 1.43 g/hp-hr.

(1.43 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 5.15 lbs/hr

(5.15 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 12.2 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 6, 40 CFR Part 60, Appendix A.

1.c **Emission Limitation:**

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.61 g/hp-hr.

(0.61 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 2.20 lbs/hr

(2.20 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 5.22 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

1.d**Emission Limitation:**

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$
99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 11.7 g/hp-hr.

(11.7 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 42.17 lbs/hr

(42.17 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 99.9 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

1.e**Emission Limitation:**

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.17

g/hp-hr.

(0.17 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.61 lb/hr

(0.61 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 1.45 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

1.f **Emission Limitation:**

10% opacity as a 6-minute average
(stack emissions)

**Applicable Compliance Method:**

OAC rule 3745-17-03(B)(1)

## F. Miscellaneous Requirements

1.Relocation of the Emissions Unit

Under the terms and conditions of permits to install numbers 16-02001 through 16-02017, the number of identical Portable Diesel Generator Sets approved to be installed at each site is limited. This emissions unit is approved for use in any one of the following sites as long as the number of units site limitation for that new site is met:

Gilchrist - 3275 Gilchrist Road, Mogadore
Pine - Fairlawn Service Center, Akron
West Akron - 345 N. Cleveland-Massillon Road, Akron
Boardman - 6409 Southern Boulevard, Youngstown
Zenith - S.R. 7 at Penelec R/W, Conneaut
Kipling/Euclid - 1422 Babbitt Road , Euclid
Krick/Northfield - 7401 Northfield Road, Walton Hills
Crestwood - 737 Bradley Road, Westlake
Darwin - 780 Canterbury Road, Westlake
Graham/Grovewood - 9200 Clinton Road, Brooklyn
Terex - 5325 Darrow Road, Hudson
Bridge - 2550 Mahoning Avenue, NW, Warren
Burton - 1430 Burton Road, SE, Warren

Elm - 2183 Hoagland-Blackstub Road, Warren
Lincoln/Lloyd - 29454 Lakeland Boulevard, Wickliffe
Marble - 38040 St. Clair Street, Willoughby
Astor - 904 Moore Road, Avon

2. Notice of Relocation of the Emissions Unit to Listed Sites

The applicant shall provide a written notice to Akron Regional Air Quality Management District and the appropriate field office having jurisdiction over the new site within a minimum of thirty days after the relocation to one of the above listed sites.

3. Notice of Relocation of the Emissions Unit to Non Listed Sites

If this permittee wishes to move this emissions unit to a site not listed in term F.1., the permittee must first (1) obtain a new permit to install, (2) comply with the requirements of Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), or (3) comply with the requirements of OAC rule 3745-31-03(A)(1)(p)(ii).

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | OAC rule 3745-17-07(A) |
|---|---|---|
| B004 - Temporary Portable Diesel Generator Set #4 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3 | OAC rule 3745-31-05(A)(3) | OAC rule 3745-17-11(B)(5)(b) |
| | | OAC rule 3745-18-06(G) |
| | OAC rule 3745-31-05(D) | |

Applicable Emissions
Limitations/Control Measures

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

10% opacity as a 6-minute average, except during start-up and shutdown
(stack emissions)

See A.2.a - A.2.e below.

99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.
See A.2.f below.

See A.2.g below.

See A.2.g below.

See A.2.g below.

**2. Additional Terms and Conditions**

**2.a** The permittee shall only burn low sulfur diesel fuel, containing less than 0.05% sulfur by weight, in this emissions unit.

**2.b** The diesel generator shall be equipped with a turbocharger, variable timing, and aftercooler to minimize $NO_x$ emissions.

**2.c** The permittee shall neither locate nor operate more than a total of 4 generators at this facility at any time.

**2.d** The permittee shall only relocate this emissions unit to an approved site as specified in section F.1 below.

**2.e** The permittee shall obtain a new permit to install in the event that the generator is scrapped out and replaced with a new unit.

**2.f** The $NO_x$ emissions from either this emissions unit or the entire facility (B001 - B004) shall not exceed 99.9 tpy based on a rolling 12-month summation.

**2.g** The emissions limit based on this applicable rule is equivalent or less stringent than the limit established pursuant to OAC rule 3745-31-05.

**B. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit or the entire facility shall not exceed 4,742, 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:

| Month(s) | Maximum Allowable Cumulative Operating Hours |
|---|---|
| 1-1 | 3,161 |
| 1-2 | 4,742 |
| 1-3 | 4,742 |
| 1-4 | 4,742 |
| 1-5 | 4,742 |
| 1-6 | 4,742 |

| | |
|---|---|
| 1-7 | 4,742 |
| 1-8 | 4,742 |
| 1-9 | 4,742 |
| 1-10 | 4,742 |
| 1-11 | 4,742 |
| 1-12 | 4,742 |

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.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the operating hours for each day; and

   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.

## D. Reporting Requirements

1. 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. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall also submit annual reports which specify the total number operating hours for both this emissions unit and the entire facility. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

## E. Testing Requirements

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

1.a **Emission Limitation:**

0.062 lb particulates per MM Btu actual heat input
0.69 tpy particulates

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.08 g/hp-hr.

(0.08 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.29 lb/hr

(0.29 lb/hr)*(1 hr/11.76 MM Btu) = 0.025 lb particulates per MM Btu

(0.29 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 0.69 tpy particulates

If required, the permittee shall demonstrate compliance by testing in accordance with OAC rule 3745-17-03(B)(10) and Method 5, 40 CFR Part 60, Appendix A.

1.b **Emission Limitation:**

5.15 lbs/hr sulfur dioxide ($SO_2$)
12.2 tpy $SO_2$

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the facility of 1.43 g/hp-hr.

(1.43 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 5.15 lbs/hr

(5.15 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 12.2 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 6, 40 CFR Part 60, Appendix A.

1.c **Emission Limitation:**

2.20 lbs/hr carbon monoxide (CO)
5.22 tpy CO

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.61 g/hp-hr.

(0.61 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 2.20 lbs/hr

(2.20 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 5.22 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

1.d**Emission Limitation:**

42.17 lbs/hr nitrogen oxides ($NO_x$)
99.9 tpy $NO_x$
99.9 tpy $NO_x$ for entire facility (emissions units B001 - B004), as a rolling 12-month summation.

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 11.7 g/hp-hr.

(11.7 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 42.17 lbs/hr

(42.17 lbs/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 99.9 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

1.e**Emission Limitation:**

0.61 lb/hr volatile organic compounds (VOC)
1.45 tpy VOC

**Applicable Compliance Method:**

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.17 g/hp-hr.

(0.17 g/hp-hr)*(1,635 BHP)*(2.2046 lbs/1000 g) = 0.61 lb/hr

(0.61 lb/hr)*(4,742 hrs/yr)*(ton/2000 lbs) = 1.45 tpy

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

1.f **Emission Limitation:**

10% opacity as a 6-minute average
(stack emissions)

**Applicable Compliance Method:**

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

1.Relocation of the Emissions Unit

Under the terms and conditions of permits to install numbers 16-02001 through 16-02017, the number of identical Portable Diesel Generator Sets approved to be installed at each site is limited. This emissions unit is approved for use in any one of the following sites as long as the number of units site limitation for that new site is met:

Gilchrist - 3275 Gilchrist Road, Mogadore
Pine - Fairlawn Service Center, Akron
West Akron - 345 N. Cleveland-Massillon Road, Akron
Boardman - 6409 Southern Boulevard, Youngstown
Zenith - S.R. 7 at Penelec R/W, Conneaut
Kipling/Euclid - 1422 Babbitt Road , Euclid
Krick/Northfield - 7401 Northfield Road, Walton Hills
Crestwood - 737 Bradley Road, Westlake
Darwin - 780 Canterbury Road, Westlake
Graham/Grovewood - 9200 Clinton Road, Brooklyn
Terex - 5325 Darrow Road, Hudson
Bridge - 2550 Mahoning Avenue, NW, Warren
Burton - 1430 Burton Road, SE, Warren

Elm - 2183 Hoagland-Blackstub Road, Warren
Lincoln/Lloyd - 29454 Lakeland Boulevard, Wickliffe
Marble - 38040 St. Clair Street, Willoughby
Astor - 904 Moore Road, Avon

2. Notice of Relocation of the Emissions Unit to Listed Sites

The applicant shall provide a written notice to Akron Regional Air Quality Management District and the appropriate field office having jurisdiction over the new site within a minimum of thirty days after the relocation to one of the above listed sites.

3. Notice of Relocation of the Emissions Unit to Non Listed Sites

If this permittee wishes to move this emissions unit to a site not listed in term F.1., the permittee must first (1) obtain a new permit to install, (2) comply with the requirements of Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), or (3) comply with the requirements of OAC rule 3745-31-03(A)(1)(p)(ii).

**NEW SOURCE REVIEW FORM B**

PTI Number: 16-02014 Facility ID: 1677011113

FACILITY NAME FirstEnergy Corp - Burton Substation

FACILITY DESCRIPTION Temporary diesel powered electrical CITY/TWP Warren

Emissions Unit ID: **B004**

SIC CODE 4911 SCC CODE 2-01-001-01 EMISSIONS UNIT ID B001

EMISSIONS UNIT DESCRIPTION Temporary Portable Diesel Generator Set #1 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3

DATE INSTALLED 4/00

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | | 0.29 lb/hr | 0.1 | 0.062 lb/MM Btu | 0.69 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | 5.15 lbs/hr | 1.6 | 5.15 lbs/hr | 12.2 |
| Organic Compounds | | 0.61 lb/hr | 0.2 | 0.61 lb/hr | 1.45 |
| Nitrogen Oxides | | 42.17 lbs/hr | 13.5 | 42.17 lbs/hr | 99.9 |
| Carbon Monoxide | | 2.20 lbs/hr | 0.7 | 2.20 lbs/hr | 5.22 |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| **low sulfur fuel, turbocharger, aftercoolers** |

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: NOx

14248.wpd

**NEW SOURCE REVIEW FORM B**

PTI Number: 16-02014 Facility ID: 1677011113

FACILITY NAME FirstEnergy Corp - Burton Substation

FACILITY DESCRIPTION Temporary diesel powered electrical CITY/TWP Warren

Emissions Unit ID: **B004**

SIC CODE 4911 SCC CODE 2-01-001-01 EMISSIONS UNIT ID B002

EMISSIONS UNIT DESCRIPTION Temporary Portable Diesel Generator Set #2 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3

DATE INSTALLED 4/00

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | | 0.29 lb/hr | 0.1 | 0.062 lb/MM Btu | 0.69 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | 5.15 lbs/hr | 1.6 | 5.15 lbs/hr | 12.2 |
| Organic Compounds | | 0.61 lb/hr | 0.2 | 0.61 lb/hr | 1.45 |
| Nitrogen Oxides | | 42.17 lbs/hr | 13.5 | 42.17 lbs/hr | 99.9 |
| Carbon Monoxide | | 2.20 lbs/hr | 0.7 | 2.20 lbs/hr | 5.22 |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| **low sulfur fuel, turbocharger, aftercoolers** |

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: NOx

14248.wpd

**NEW SOURCE REVIEW FORM B**

PTI Number: 16-02014 Facility ID: 1677011113

FACILITY NAME FirstEnergy Corp - Burton Substation

FACILITY DESCRIPTION Temporary diesel powered electrical CITY/TWP Warren

Emissions Unit ID: **B004**

SIC CODE 4911 SCC CODE 2-01-001-01 EMISSIONS UNIT ID B003

EMISSIONS UNIT DESCRIPTION Temporary Portable Diesel Generator Set #3 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3

DATE INSTALLED 4/00

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | | 0.29 lb/hr | 0.1 | 0.062 lb/MM Btu | 0.69 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | 5.15 lbs/hr | 1.6 | 5.15 lbs/hr | 12.2 |
| Organic Compounds | | 0.61 lb/hr | 0.2 | 0.61 lb/hr | 1.45 |
| Nitrogen Oxides | | 42.17 lbs/hr | 13.5 | 42.17 lbs/hr | 99.9 |
| Carbon Monoxide | | 2.20 lbs/hr | 0.7 | 2.20 lbs/hr | 5.22 |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| **low sulfur fuel, turbocharger, aftercoolers** |

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: NOx

14248.wpd

45 **NEW SC**

PTI Num

FACILIT

Emissions Unit ID: **B004**

FACILITY DESCRIPTION Temporary diesel powered electrical generating units - four (4) portable engine/generator sets.

CITY/TWP Warren

SIC CODE 4911 SCC CODE 2-01-001-01 EMISSIONS UNIT ID B004

EMISSIONS UNIT DESCRIPTION Temporary Portable Diesel Generator Set #4 (11.76 MM Btu/hr, 1,635 BHP) Cummins Model KTA50-G3

DATE INSTALLED 4/00

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | | 0.29 lb/hr | 0.1 | 0.062 lb/MM Btu | 0.69 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | 5.15 lbs/hr | 1.6 | 5.15 lbs/hr | 12.2 |
| Organic Compounds | | 0.61 lb/hr | 0.2 | 0.61 lb/hr | 1.45 |
| Nitrogen Oxides | | 42.17 lbs/hr | 13.5 | 42.17 lbs/hr | 99.9 |
| Carbon Monoxide | | 2.20 lbs/hr | 0.7 | 2.20 lbs/hr | 5.22 |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| **low sulfur fuel, turbocharger, aftercoolers** |

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: NOx

**NEW SOURCE REVIEW FORM B**

PTI Number: 16-02014 Facility ID: 1677011113

FACILITY NAME FirstEnergy Corp - Burton Substation

FACILITY DESCRIPTION Temporary diesel powered electrical CITY/TWP Warren

Emissions Unit ID: **B004**

**Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):**

**NONE**

**Please provide any additional permit specific notes as you deem necessary:**

**FirstEnergy Corp. has already sent the modeling results to Central Office.**

## Permit To Install Synthetic Minor Write-Up

A. Source Description

FirstEnergy is planning to install four temporary portable generators in Warren, Ohio, Trumbull County. The facility will generate electricity during the summer peaking seasons and will consist of four 11.76 MM Btu/hr diesel-fired electric generators. FirstEnergy wishes to limit the hours of operation to avoid Title V and PSD permitting requirements.

**B. Facility Emissions**

The facility will emit particulates, sulfur dioxide, organic compounds, nitrogen oxides and carbon monoxide. The pollutant that has a major source potential to emit is $NO_x$. The facility has a potential to emit of 739 tpy $NO_x$.

**C. Operating Limitations**

FirstEnergy has agreed to limit their hours of operation to 4,742 hours. This would restrict the facility's emissions to 99.9 tpy $NO_x$ per 12-month period.

**D. Conclusions**

By restricting hours of operation, the terms and conditions of this permit to install will limit the facility's $NO_x$ emissions to less than Title V thresholds and to avoid PSD permitting requirements. Excursion reports will be required each emissions unit to ensure compliance.

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| Pollutant | Tons Per Year |
|---|---|
| PM | 0.69 |
| $SO_2$ | 12.2 |
| CO | 5.22 |
| $NO_x$ | 99.9 |
| VOC | 1.45 |