

GENERAL PERMIT 9.4 TEMPLATE
2007 TO 2011 MODEL YEAR
PORTABLE DIESEL ENGINE (COMPRESSION IGNITION INTERNAL COMBUSTION ENGINE)
LESS THAN 10 LITERS PER CYLINDER AND \geq 75 HP and $<$ 100 HP
STANDARDS: 40 CFR 89.112 TIER 3

C. Emissions Unit Terms and Conditions

Note: The following are the terms and conditions for a General PTIO to be issued to a non-Title V facility

1. [Emissions Unit ID], [Company Equipment ID]

Operations, Property and/or Equipment Description:

2007 to 2011 model year stationary compression ignition (CI) internal combustion engine (ICE); less than 10 liters per cylinder and greater than or equal to 75 HP and less than 100 HP; certified to the 40 CFR 89.112 Tier 3 exhaust emission standards in Table 1

a) 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. b)(1)f., c)(3), d)(4), and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 60, Subpart IIII 40 CFR 60.4204(b) 40 CFR 60.4201(a) Table 1 to 40 CFR 89.112, Tier 3 OAC rule 3745-31-05(A)(3), as effective 11/30/01	The exhaust emissions from this engine shall not exceed: 0.40 gram of particulate matter per kilowatt-hour (0.40 gram PM/kW-hr) 4.7 grams of nitrogen oxides plus nonmethane hydrocarbons per kilowatt-hour (4.7 grams NOx + NMHC/kW-hr) 5.0 grams of carbon monoxide per kilowatt-hour (5.0 grams CO/kW-hr) See terms b)(2)c and d. For the pollutants under 10 tons per rolling 12-month period, PE and SO ₂ , see term b)(2)a.
b.	40 CFR 60.4207(b)	The sulfur content of the diesel fuel burned in

	40 CFR 80.510(b) OAC rule 3745-31-05(A)(3), as effective 11/30/01	this emissions unit shall not exceed 15 ppm per gallon of oil or 0.0015% sulfur by weight. See terms b)(2)a, b(2)(e), and c(2).
c.	40 CFR 89.113 (certified by manufacturer)	20% opacity during the acceleration mode 15% opacity during the lugging mode 50% opacity during the peaks in either the acceleration or lugging modes
d.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except as specified by rule.
e.	OAC rule 3745-31-05(D) OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 4.50 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Nitrogen oxide (NO _x) emissions shall not exceed 40.53 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Carbon monoxide (CO) emissions shall not exceed 56.29 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Volatile organic compound (VOC) emissions shall not exceed 12.38 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Sulfur dioxide (SO ₂) emissions shall not exceed 0.073 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. See term f)(1)h. For the pollutants under 10 tons per rolling 12-month period, PE and SO ₂ , see term b)(2)a.
f.	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established for PE pursuant to 40 CFR Part 60, Subpart IIII.
g.	40 CFR 63 Subpart ZZZZ	The stationary CI reciprocating ICE, located at an area source for hazardous air

	40 CFR 63.6590(c)	pollutants (HAPs), shall demonstrate compliance with 40 CFR 63 Subpart ZZZZ through compliance with Part 60 Subpart IIII. See term b)(2)(f).
h.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	For pollutants above having a potential-to-emit less than 10 tons per rolling 12-month period, BAT does not apply where the source is installed after 8/3/06. See term b)(2)(b).

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standard (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 these emission limitations/control measures no longer apply.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

[OAC rule 3745-31-05(A)(3), as effective 12/01/06]

- c. The stationary compression ignition (CI), internal combustion engine (ICE) is subject to and shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart IIII, the standards of performance for stationary CI, ICE.

[40 CFR 60.4200(a)]

- d. The stationary CI, ICE has been or shall be purchased certified by the manufacturer, for the useful life of the engine(s), to emission standards as stringent as those identified in 40 CFR 60.4201(a) and found in Tier 3 of 40 CFR 89.112, Table 1, for engines greater than or equal to 50 horsepower (37 kilowatt) and less than 100 horsepower (75 kilowatt), and to the opacity standards found in 40 CFR 89.113.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4203], and [40 CFR 60.4211(c)]

- e. The quality of the diesel fuel burned in this engine shall meet the following specifications on an "as received" basis:

- i. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.0015 pound sulfur dioxide/MMBtu actual heat input; and 15 ppm sulfur or 0.0015% sulfur by weight;
- ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and
- iii. a heating value greater than 135,000 Btu/gallon of oil.

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

[40 CFR 60.4207(b)] and [40 CFR 80.510(a) and (b)]

- f. The CI reciprocating ICE (RICE), located at an area source for HAPs, is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ. Compliance with the NESHAP shall be demonstrated for the RICE by meeting the requirements of the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart IIII; and the general provisions of the NSPS, 40 CFR Part 60 Subpart A, that apply to the CI RICE, as identified in Table 8 to Subpart ZZZZ.

[40 CFR 63.6590(c)], [40 CFR 63.6590(a)(2)(iii)], [40 CFR 63.6585], [40 CFR 63.6595(a)(6) or (7)], and [40 CFR 60.4218].

- g. The permittee shall not install the stationary CI ICE after the date identified in 40 CFR 60.4208 of the NSPS, for the model year of certification.

[40 CFR 60.4208]

c) **Operational Restrictions**

- (1) The stationary CI, ICE shall be installed, operated, and maintained according to the manufacturer's specifications, written instructions, and procedures, and/or according to procedures developed by the permittee that have been approved by the engine manufacturer in writing, over the entire life of the engine. The CI ICE must also be installed and operated to meet the applicable requirements from 40 CFR Part 89, Control of Emissions from New and In-use Non-road CI ICE and Part 1068, the General Compliance Provisions for Engine Programs. The permittee shall operate and maintain the stationary CI ICE to achieve the Tier 3 emission standards in Table 1 to 40 CFR 89.112, as required per 40 CFR 60.4204(b).

[40 CFR 60.4206] and [40 CFR 60.4211(a)]

- (2) Diesel fuel burned in the CI, ICE shall not exceed the limit for sulfur as specified by 40 CFR 80.510(b), i.e., the maximum sulfur content of diesel fuel shall not exceed 15 ppm per gallon of oil or 0.0015% sulfur by weight.

[40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

- (3) This facility is limited to no more than 500,000 gallons of diesel fuel oil during any 12-month rolling period where an engine is operated that is not certified to standards that meet the Tier 3 emission standards (40 CFR 89.112 Table 1) based on the rated power (or Tier 2 for engines greater than 750 horse power). If all the engines operating during a given rolling 12-month period are certified to standards that meet the Tier 3 emission standards (or Tier 2 for engines greater than 750 horse power), then this facility is limited to no more than 700,000 gallons of diesel fuel oil per rolling 12-month period.

[OAC rule 3745-31-05(D)]

- (4) The maximum annual diesel fuel oil usage rate from all diesel engines located at this facility shall not exceed 500,000 gallons per rolling 12-month period; or where monthly calculations demonstrate that the facility's total rolling, 12-month NOx emissions are less than 99 tons, based on the fuel usage in each engine and the certified (or worst-case) exhaust standards to which they are permitted, the maximum annual diesel fuel oil usage rate from all diesel engines used at this facility shall not exceed 700,000 gallons per rolling 12-month period.

[OAC rule 3745-31-05(D)]

- (5) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached.

[40 CFR 60.4209(b)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of the diesel oil received and the oil supplier's (or permittee's) analyses for sulfur content, in parts per million per gallon (40 CFR 80.510) or percent by weight. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR 80.580, using the appropriate ASTM methods. These records shall be retained for a minimum of five years and shall be available for inspection by the Director or his/her representative.

For [40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

- (2) The permittee shall maintain the manufacturer's certification, to the applicable Tier 3 emission standards in Table 1 of 40 CFR 89.112, on site or at a central location for all facility ICE and it shall be made available for review upon request. If the manufacturer's certification is not kept on site, the permittee shall maintain a log for the location of each ICE and it shall identify the agency-assigned emissions unit number, the manufacturer's identification number, and the identification number of the certificate. The manufacturer's operations manual and any written instructions or procedures developed by the permittee and approved by the manufacturer shall be maintained at the same location as the ICE.

[40 CFR 60.4211(c)]

- (3) The permittee shall maintain a record of the diesel fuel burned in diesel-fired engines at the facility each month and for each engine type. Two engines are considered separate types if any of the gram/kW-hr emission limits described in section 1.b)(1)a. of their air

permits are different. Records of NOx emission calculations shall be maintained for each diesel engine at the facility and they shall document the NOx emissions to be less than 99 tons each rolling 12-month period at this throughput; or the same demonstration can be made using a worst-case NOx emission factor.

[OAC rule 3745-31-05(A)(3)- to calculate emissions]

- (4) The permittee shall maintain a record of the diesel fuel burned in all diesel fired engines at this facility on a rolling 12-month basis, i.e., at the end of each month, the sum of the gallons of diesel fuel burned in all diesel-fired engines during the month plus the number of gallons burned during the preceding 11 months of operations. During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, where 11 months of fuel usage records are not available, the permittee shall record the cumulative diesel fuel usage for the facility as specified in the following table:

<u>Month(s)</u>	<u>1. Maximum Allowable Cumulative Diesel Usage (gallons)</u>	<u>2. Maximum Allowable Cumulative Diesel Usage (gallons)</u>
1	80,000	116,000
1-2	160,000	232,000
1-3	240,000	348,000
1-4	320,000	464,000
1-5	400,000	580,000
1-6	480,000	696,000
1-7	500,000	700,000
1-8	500,000	700,000
1-9	500,000	700,000
1-10	500,000	700,000
1-11	500,000	700,000
1-12	500,000	700,000

1. Where any engine is operated that is not certified to standards that meet the Tier 3 emissions standards (or Tier 2 if greater than 750 HP)
2. Where all the engines operated are certified to standards that meet the Tier 3 emissions standards (or Tier 2 if greater than 750 HP)

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual diesel fuel usage limitation shall be based upon a rolling, 12-month summation of the fuel usage records.

[OAC rule 3745-31-05(D)]

- (5) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the permittee shall keep records of the date, time, and any corrective action(s) taken in response to the notification from the backpressure monitor, that the high backpressure limit of the engine has been approached or exceeded.

[40 CFR 60.4214(c)]

e) Reporting Requirements.

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

[OAC rule 3745-15-03(B)(2) and (D)]

- (2) The permittee shall identify in the annual permit evaluation report any period of time (date and number of hours) that the quality of oil burned in this emissions unit did not meet the requirements established in 40 CFR 80.510(b), based upon the required fuel records, and the amount of non-compliant fuel burned on each such occasion.

For [40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

- (3) The permittee shall identify in the quarterly deviation report any exceedance of the facility's diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period.

[OAC rule 3745-15-03(B)(1) and (C)] for [OAC rule 3745-31-05(D)]

- (4) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the permittee shall include in the PER any records of the date, time, and any corrective action(s) taken in response to the notification from the monitor that the backpressure has been approached or exceeded.

[for 40 CFR 60.4214(c)]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Opacity Limitation:

20% opacity during the acceleration mode

15% opacity during the lugging mode

50% opacity during the peaks in either the acceleration or lugging modes

Applicable Compliance Method:

The ICE shall be purchased certified to the opacity standards of 40 CFR 89.113.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], and [40 CFR 89.113]

b. Opacity Limitation:

Visible particulate emissions from the exhaust stack serving this emissions unit

shall not exceed 20 %opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

[OAC rule 3745-17-07(A)(1)]

c. Emission Limitations:

0.40 gram PM/kW-hr

4.50 tons PE/year

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 50 and less than 100 horsepower (37 and 75 kilowatts).

Compliance with the ton per rolling 12-month PE emissions limitation shall be determined by the following calculation:

Where:

G_i = Gallons of diesel fuel used per rolling 12-month period for engine type i .

EF_i = the gram/kW-hr emission factor for the engine type i , 0.40 gram PM/kW-hr.

E = Total tons of PE/rolling 12-month period emitted.

$$E = \sum_{i=1}^n G_i \frac{\text{Gallons}}{\text{Rolling } 12 - \text{ months}} \frac{14.59 \text{ kW} - \text{ hr} *}{\text{Gallon}} EF_i \frac{\text{gram}}{\text{kW} - \text{ hr}} \frac{\text{Ton}}{907,185 \text{ gram}}$$

If required, the permittee shall demonstrate compliance with the emission limitations through performance tests conducted in accordance with the provisions in term f)(1)i below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], [40 CFR 60.4212(a) and (c)], and [OAC rule 3745-31-05(D)]

d. Emission Limitations:

4.7 grams NOx + NMHC/kW-hr

40.53 tons NOx/year

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 50 and less than 100 horsepower (37 and 75 kilowatts).

For the purpose of reporting emissions, where the limit is for NOx + NMHC, the NOx and VOC limits shall be calculated using a ratio of 76.0% NOx to 24.0% VOC.**

$$4.7 \text{ grams NOx+NMHC/kW-hr} \times 76.0\% \text{ NOx}^{**} = 3.6 \text{ grams NOx/kW-hr}$$

Compliance with the ton per rolling 12-month NOx emissions limitation shall be determined by the following calculation:

Where:

Gi = Gallons of diesel fuel used per rolling 12-month period for engine type i.

EFi = the gram/kW-hr emission factor for the engine type i, 3.6 grams NOx/kW-hr.

E = Total tons of NOx/rolling 12-month period emitted.

$$E = \sum_{i=1}^n Gi \frac{\text{Gallons}}{\text{Rolling 12 - months}} \frac{14.59 \text{ kW - hr} *}{\text{Gallon}} EFi \frac{\text{gram}}{\text{kW - hr}} \frac{\text{Ton}}{907,185 \text{ gram}}$$

If required, the permittee shall demonstrate compliance with the emission limitations through performance tests conducted in accordance with the provisions in term f)(1)i below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], [40 CFR 60.4212(a) and (c)], and [OAC rule 3745-31-05(D)]

e. Emission Limitations:

5.0 grams CO/kW-hr

56.29 tons CO/year

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 50 and less than 100 horsepower (37 and 75 kilowatts).

Compliance with the ton per rolling 12-month CO emissions limitation shall be determined by the following calculation:

Where:

Gi = Gallons of diesel fuel used per rolling 12-month period for engine type i.

EFi = the gram/kW-hr emission factor for the engine type i, 5.0 grams CO/kW-hr.

E = Total tons of CO/rolling 12-month period emitted.

$$E = \sum_{i=1}^n Gi \frac{\text{Gallons}}{\text{Rolling 12 - months}} \frac{14.59 \text{ kW - hr} *}{\text{Gallon}} EFi \frac{\text{gram}}{\text{kW - hr}} \frac{\text{Ton}}{907,185 \text{ gram}}$$

If required, the permittee shall demonstrate compliance with the emission limitations through performance tests conducted in accordance with the provisions in term f)(1)i below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], [40 CFR 60.4212(a) and (c)], and [OAC rule 3745-31-05(D)]

f. Emission Limitations:

4.7 grams NOx + NMHC/kW-hr

12.38 tons VOC/year

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 50 and less than 100 horsepower (37 and 75 kilowatts).

For the purpose of reporting emissions, where the limit is for NOx + NMHC, the NOx and VOC limits shall be calculated using a ratio of 76.0% NOx to 24.0% VOC.**

$$4.7 \text{ grams NOx+NMHC/kW-hr} \times 24.0\% \text{ NMHC}^{**} = 1.1 \text{ gram VOC/kW-hr}$$

Compliance with the ton per rolling 12-month VOC emissions limitation shall be determined by the following calculation:

Where:

Gi = Gallons of diesel fuel used per rolling 12-month period for engine type i.

EFi = the gram/kW-hr emission factor for the engine type i, 1.1 gram VOC/kW-hr.

E = Total tons of VOC/rolling 12-month period emitted.

$$E = \sum_{i=1}^n Gi \frac{\text{Gallons}}{\text{Rolling 12 - months}} \frac{14.59 \text{ kW - hr} *}{\text{Gallon}} EFi \frac{\text{gram}}{\text{kW - hr}} \frac{\text{Ton}}{907,185 \text{ gram}}$$

If required, the permittee shall demonstrate compliance with the emission limitations through performance tests conducted in accordance with the provisions in term f)(1)i below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], [40 CFR 60.4212(a) and (c)], and

[OAC rule 3745-31-05(D)]

*
$$\frac{1.341 \text{ hp}}{\text{kW}} \frac{137,000 \text{ Btu}}{\text{Gallon}} \frac{\text{hp-hr}}{7000 \text{ Btu}} = \frac{14.59 \text{ kW-hr}}{\text{Gallon}}$$
 this factor should be adjusted for the heating value provided by the supplier of the diesel fuel

**This ratio is based upon the linear relationship of NOx to NMHC from Table 1 of Subpart IIII, Table 1 from 40 CFR 89.112, to Tables 4, 5, and 6 from 40 CFR 1039.102.

g. Sulfur Content Limitations for Diesel Fuel:

Sulfur content 15 ppm per gallon or $\leq 0.0015\%$ by weight sulfur

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements for the sulfur content of each shipment of diesel oil received. If meeting the standards in 40 CFR 80.510(b), this calculates to approximately 0.0015 lb SO₂/MMBtu.

[40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

h. Emission Limitations:

0.073 tons of SO₂/rolling 12-month period for the facility where limited to 700,000 gallons

0.052 tons of SO₂/rolling 12-month period for the facility where limited to 500,000 gallons

Applicable Compliance Method:

Compliance with the ton per rolling 12-month SO₂ emissions limitation shall be determined by the following calculation from AP-42 Table 3.4-1:

Where:

G = Gallons of diesel fuel burned in the engine during each rolling 12-month period.

S = Sulfur content of the fuel used. Since the sulfur content limit for the fuel is 0.0015%, use the value 0.0015 in the formula.

E = Total tons of SO₂/rolling 12-month period emitted.

$$E = G \frac{\text{Gallons}}{\text{Rolling 12 - months}} \frac{137,000 \text{ Btu}}{\text{Gallon}} 1.01 S \frac{\text{lb SO}_2}{\text{mmBtu}} \frac{\text{Ton}}{2000 \text{ lbs}}$$

[OAC rule 3745-31-05(D)]

i. If it is determined by the Ohio EPA that a compliance demonstration is required through performance testing, it shall be conducted using one of the following test methods or procedures:

- i. in accordance with 40 CFR 60.4212, conduct the exhaust emissions testing using the in-use testing procedures found in 40 CFR Part 1039, Subpart F, measuring the emissions of the regulated pollutants as specified in 40 CFR 1065; or
- ii. in accordance with 40 CFR 60.4213, conduct exhaust emissions testing using the test methods identified in Table 7 to Subpart IIII of Part 60.

If demonstrating compliance through the in-use testing procedures in 40 CFR part 1039, Subpart F, exhaust emissions from the stationary CI ICE shall not exceed the "not to exceed" (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, determined from the following equation:

$$\text{NTE requirement for each pollutant} = 1.25 \times \text{STD}$$

Where:

STD = The standard specified for the pollutant in 40 CFR 89.112.

[40 CFR 60.4212(a) and (c)]

g) **Miscellaneous Requirements**

- (1) At the discretion and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency), the permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate notification and exemption requirements have been met. The Director may issue a "Notice of Site Approval" through either of the following scenarios:
 - a. The approval to relocate the portable source shall be acquired in accordance the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1)(p):
 - i. the diesel engine (portable source) is certified to limits that meet the applicable New Source Performance Standard (NSPS) limitations, according to the rated power and model year;
 - ii. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
 - iii. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
 - iv. all of the qualifying criteria for the relocated engine can be and will continue to be met at the new location;
 - v. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;

- vi. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07;
- vii. upon relocation, the permittee maintains records of the diesel fuel burned in the engine according to its rated power and model year, along with any other engines at the facility with the same NSPS limits; and
- viii. the Director has issued a “Notice of Site Approval”, stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director’s “Notice of Site Approval” for the site; **or**

- b. The Director may issue a “Notice of Site Approval” if the portable source meets the requirements of OAC rule 3745-31-05(H), as follows:
 - i. the diesel engine (portable source) is certified to limits that meet the applicable New Source Performance Standard (NSPS) limitations, according to the rated power and model year;
 - ii. the portable source is operating pursuant to a currently effective permit-to-install (PTI), permit-to-install and operate (PTIO), or has been approved for registration status and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
 - iii. the portable source has been issued a PTIO or PTI and the permittee continues to comply with the requirements of the permit, including any applicable best available technology (BAT) determination;
 - iv. all of the qualifying criteria for the relocated engine can be and will continue to be met at the new location;
 - v. the portable source owner has identified and submitted the proposed site to the Ohio EPA;
 - vi. the permitting District Office/local air agency and the District Office/local air agency having jurisdiction over the new site (if different) have determined that the portable source will have an acceptable environmental impact at the proposed site;
 - vii. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site is located;
 - viii. the owner of the proposed site (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site;
 - ix. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation; and

- x. upon relocation, the permittee maintains records of the diesel fuel burned in the engine according to its rated power and model year, along with any other engines at the facility with the same NSPS limits.

The portable source can be relocated upon receipt of the Director's "Notice of Site Approval" for the site. Any site approval issued by the Ohio EPA, pursuant to OAC rule 3745-31-05(H), is subject to expiration and renewal. Pursuant to OAC rule 3745-31-07(C)(3), any site approval for a portable source shall be issued for a period of time determined to be appropriate by the Director and the renewal will be reevaluated and subject to the same requirements above.

[OAC rule 3745-31-03(A)(1)(p)(i)] or [OAC rule 3745-31-03(A)(1)(p)(ii)], [OAC rule 3745-31-05(H)], [OAC rule 3745-31-07(C)(3)], and [ORC 3704.03(G)]

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[OAC rule 3745-31-03(A)(1)(p)(i)], [OAC rule 3745-31-03(A)(1)(p)(ii)], and [OAC rule 3745-31-05(H)]