



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov. Center

**RE: DRAFT PERMIT TO INSTALL  
LUCAS COUNTY  
Application No: 04-01203**

**CERTIFIED MAIL**

**DATE: 5/24/00**

Stoneco Inc.  
Douglas M. Rorhs  
PO BOX 29A  
Maumee, OH 43537

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$200** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA  
IN

TDES  
MI

Toledo Metro Area Coun of Govt



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 04-01203**

Application Number: 04-01203  
APS Premise Number: 0448030014  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Stoneco Inc.  
Person to Contact: Douglas M. Rorhs  
Address: PO BOX 29A  
Maumee, OH 43537

Location of proposed air contaminant source(s) [emissions unit(s)]:

**677 Lime Road  
Woodville, Ohio**

Description of proposed emissions unit(s):

**portable generator, 500 kw, diesel fueled.**

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

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Director

Stoneco Inc.

Facility ID: 0448030014

PTI Application: 04-01203

Issued: To be entered upon final issuance

## 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

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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

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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.

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**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**

<u>Pollutant</u>	<u>Tons Per Year</u>
carbon monoxide	7.4
nitrogen oxides	17
particulate emissions	0.58
sulfur dioxide	5.4
volatile organic compounds	0.86

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Emissions Unit ID: B006

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Portable generator #4220012, 500 kW (670 bhp) diesel fueled internal combustion engine with timing retard and positive crankcase ventilation.	OAC 3745-17-07(A)(1)	20% opacity as a 6-minute average except as provided by rule.
	OAC 3745-17-11(B)(5)	0.062 pound of particulate emissions (PE) per mmBtu of heat input.
	OAC 3745-18-06(B)	See A.2.a.
	OAC 3745-21-07(B)	0.43 pound of volatile organic compounds (VOC) per hour
	OAC 3745-21-08(B)	3.7 pounds of carbon monoxide (CO) per hour.
	OAC 3745-23-06(B)	8.7 pounds of nitrogen oxides (NOx) per hour.
	OAC rule 3745-31-05(A)(3)	7.4 tons of CO per rolling 12-month period, 17 tons of NOx per rolling 12-month period, 0.58 ton of PE per rolling 12-month period, 2.7 pounds of sulfur dioxide (SO <sub>2</sub> ) per hour, 5.4 tons SO <sub>2</sub> per rolling 12-month

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Emissions Unit ID: **B006**

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period,  
0.86 ton of VOC per rolling  
12-month period, and  
see A.2.b.

**2. Additional Terms and Conditions**

- 2.a** Exemption from OAC rule 3745-18-06 requirements: stationary internal combustion engine less than 10 mmBtu per hour.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC 3745-17-07(A)(1), OAC 3745-17-11(B)(5), OAC 3745-21-07(B), OAC 3745-21-08(B) and OAC 3745-23-06(B).

**B. Operational Restrictions**

- 1. The permittee shall use only diesel fuel with a maximum sulfur content of 0.5% by weight for combustion in this emissions unit.
- 2. The permittee shall maintain and operate a positive crankcase ventilation system at all times when the emissions unit is in operation.
- 3. Engine ignition shall be retarded at least 4 degrees from peak power settings at all times when the emissions unit is in operation.
- 4. The maximum annual operating hours for this emissions unit shall not exceed 4,000 hours, 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 specified in the following table:

Month	Maximum Allowable Cumulative Operating Hours
1	500
1-2	1,000
1-3	1,500
1-4	2,000
1-5	2,500
1-6	3,000

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1-7	3,500
1-8	4,000
1-9	4,000
1-10	4,000
1-11	4,000
1-12	4,000

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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 rates.

5. When this portable emission unit is operated at a facility with other NO<sub>x</sub> emission sources, the combined emissions of NO<sub>x</sub> from all emissions units located at that facility, shall not exceed 99 tons as a rolling, 12-month summation.

### C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel with a maximum sulfur content of 0.5% by weight, the permittee shall maintain a record of the type, sulfur content and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain daily records that document any time periods when the positive crankcase ventilation system was not in service when the emissions unit was in operation.
3. The permittee shall maintain daily records that document any time periods when the engine ignition was not retarded at least 4 degrees from peak power settings when the emissions unit was in operation.
4. 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.

5. When this portable emission unit is operated at a facility with other NO<sub>x</sub> emission sources, the permittee shall calculate monthly the combined emissions of NO<sub>x</sub> from all emissions units located at that facility as a rolling, 12-month summation.

### D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day during which a fuel other than diesel fuel with a maximum sulfur content of 0.5% by weight is used in this emissions unit.

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Emissions Unit ID: **B006**

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2. The permittee shall submit deviation (excursion) reports that identify each day during which the positive crankcase ventilation system was not in service when the emissions unit was in operation.
3. The permittee shall submit deviation (excursion) reports that identify each day during which the engine ignition was not retarded at least 4 degrees from peak power settings when the emissions unit was in operation.
4. The permittee shall submit deviation (excursion) reports identifying any monthly record which shows that the summation of the operating hours exceeds the applicable limitation.
5. The permittee shall submit deviation (excursion) reports identifying any monthly record which shows that the summation of the facility-wide NOx emissions exceeds the applicable limitation.
6. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days of the discovery of an exceedance.
7. The permittee shall also submit a written annual report to the Toledo Division of Environmental Services summarizing the rolling, 12-month NOx information calculated in section C.5. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.

**E. Testing Requirements**

Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following methods(s):

1. Emission Limitation: 3.7 pounds per hour and 7.4 tons of carbon monoxide per rolling 12-month period.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.0055 lb CO/bhp-hr. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.4, Table 3.4-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A and the recordkeeping requirements of Section C.4.

2. Emission Limitation: 8.7 pounds per hour and 17 tons of nitrogen oxides per rolling 12-month period.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.013 lb NOx/bhp-hr (assuming ignition timing retard). This emission factor is specified in

**Stoneco Inc.****PTI****Issue****Facility ID: 0448030014**Emissions Unit ID: **B006**

USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.4, Table 3.4-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 7 of 40 CFR Part 60, Appendix A and the recordkeeping requirements of Section C.4.

3. Emission Limitation: 0.062 pound per mmBtu and 0.58 ton particulate emissions per rolling 12-month period.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 5 of 40 CFR Part 60, Appendix A and the recordkeeping requirements of Section C.4.

4. Emission Limitation: 2.7 pounds per hour and 5.4 tons of sulfur dioxide per rolling 12-month period.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.00809S lb/bhp-hr, where S = the weight percent of sulfur in the fuel. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.4, Table 3.4-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A and the recordkeeping requirements of Section C.4.

5. Emission Limitation: 0.43 pounds per hour and 0.86 tons of volatile organic compounds per rolling 12-month period.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.00064 lb/bhp-hr (assuming positive crankcase ventilation). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.4, Table 3.4-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 25 of 40 CFR Part 60, Appendix A and the recordkeeping requirements of Section C.4.

6. Emission Limitation: 20% opacity as a six-minute average.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC 3745-17-03(B)(1).

7. The monthly combined emissions of NO<sub>x</sub> from all emissions units located at the same facility as this emissions unit shall be calculated using stack test data or AP-42 emission factors and

**Stone****PTI**Emissions Unit ID: **B006****Issued: To be entered upon final issuance**

production data or hours of operation, as appropriate, for all stationary combustion sources located at the facility.

**F. Miscellaneous Requirements**

## Notice to Relocate a Portable or Mobile Source

1. Pursuant to Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria are met:
  - a. the portable emissions unit is equipped with the best available control technology for such portable emissions unit;
  - b. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO);
  - c. the applicant has provided proper notice of intent to relocate the portable emissions unit to the Toledo Division of Environmental Services (TDOES) and the appropriate field office having jurisdiction over the new site within a minimum of thirty days prior to the scheduled relocation; and
  - d. in the TDOES's and the appropriate field office's judgement, the proposed site is acceptable under the rule 3745-15-07 of the Administrative Code.
2. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria of OAC rule 3745-31-05(F) are met:
  - a. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
  - b. the portable emissions unit is equipped with best available technology;
  - c. the portable emission unit owner has identified the proposed site to Ohio EPA;
  - d. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;

**Stoneco Inc.**

**PTI Application 04 01202**

**Issue**

**Facility ID: 0448030014**

Emissions Unit ID: **B006**

- e. a public notice, consistent with Chapter 3745-47 of the Administrative Code, is published in the county where the proposed site is located;
  - f. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
  - g. the portable emissions unit owner has provided Ohio EPA with fifteen days written notice of the relocation.
3. Any site approvals issued by the Ohio EPA, pursuant to section F.2. above, shall be valid for no longer than three years and are subject to renewal.

In order for the TDOES and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the owner or operator of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the TDOES (348 S. Erie Street, Toledo, OH 43602) and the appropriate field office having jurisdiction over the new site. Upon receipt of the notice, the TDOES and/or appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01203 Facility ID: 0448030014

FACILITY NAME Stoneco Gencor Plant 1

FACILITY DESCRIPTION portable generator, 500 kw, diesel fueled. CITY/TWP Sidney

SIC CODE 2951 SCC CODE 2-01-001-02 EMISSIONS UNIT ID B006

EMISSIONS UNIT DESCRIPTION Portable generator #4220012, 500 kW (670 bhp) diesel fueled internal combustion engine.

DATE INSTALLED 7/1/80

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	attainment	0.17 lb/hr	0.27	0.062 lb/mmBtu	0.58
PM <sub>10</sub>	unclassifiable				
Sulfur Dioxide	attainment	1.6 lb/hr	2.4	2.7 lb/hr	5.4
Organic Compounds	attainment	0.26 lb/hr	0.39	0.43 lb/hr	0.86
Nitrogen Oxides	unclassifiable	5.2 lb/hr	7.8	8.7 lb/hr	17
Carbon Monoxide	attainment	2.2 lb/hr	3.3	3.7 lb/hr	7.4
Lead	not designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

Compliance with AP-42 emissions factors for stationary internal combustion engine with positive crankcase ventilation, timing retard, and less than 0.5% sulfur content.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

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\*? \_\_\_\_\_ YES \_\_\_\_\_ NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01203 Facility ID: 0448030014

FACILITY NAME Stoneco Gencor Plant 1

FACILITY DESCRIPTION portable generator, 500 kw, diesel fueled. CITY/TWP Sidney

**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:**

**PTI 04-1203  
Stoneco, Inc. 0448030014 B006  
Sample Calculations**

Description

This PTI is for an existing 500 kW (670 hp) diesel fueled portable generator, #4220012, presently located at the Bradford asphalt plant (4755 N. SR 721, Bradford 45308, Miami County). This unit was installed in 1980, and this permit will bring the source into compliance with permitting requirements. BAT will be set at 1980 levels. Stoneco has volunteered to restrict operating hours to 4000 hours per year. Stoneco expressed a concern that the relocation of these sources to a facility with an existing high allowable limitation for NOx emissions might create a total enforceable limitation greater than 100 tpy. They have requested the addition of a facility-wide limitation to avoid Title V applicability when the sources are relocated.

Applicable regulations

OAC 3745-17-07(A)(1) allows a maximum 20% opacity as a 6-minute average from stack discharges. OAC 3745-17-11(B)(5) restricts stack emissions of particulates from a stationary internal combustion engine greater than 600 horsepower to 0.062 lb/mmBtu actual heat input. OAC 3745-18-06(B) exempts this source from the sulfur dioxide requirement of 0.5 pound per mmBtu. OAC 3745-21-07(B) requires BAT for VOC. OAC 3745-21-08(B) requires BAT for CO. OAC 3745-23-06(B) requires BAT for NOx. OAC 3745-31-05(A)(3) requires BAT for all criteria pollutants.

BAT determination

BAT will require compliance with AP-42 emission factors, and compliance with the applicable regulations. AP-42, Table 3.4-1, dated 10/96 has values of CO - 0.0055 lb/bhp-hr, NOx - 0.013 lb/bhp-hr, PM - 0.0007 lb/bhp-hr, SO2 - 0.0040 lb/bhp-hr, VOC - 0.00064 lb/bhp-hr. To meet these levels we anticipate the owner/operator would have to install positive crankcase ventilation, retard timing at least 4 degrees from peak power settings, and burn fuel containing a maximum 0.5% sulfur by weight. Opacity will be restricted to SIP levels of 20%.

Potential to emit

Emissions Unit ID: B006

For an 670 bhp/hr motor - CO: 3.7 pounds per hour and 16 tons per year (0.0055 lb/bhp-hr, 10/96 AP-42, Section 3.4, Table 3.4-1). NOx: set at a value of 8.7 pounds per hour and 38 tons per year (assuming control efficiency for timing retard with a 10/96 AP-42, Section 3.4, Table 3.4-1 emission factor of 0.013 lb/bhp-hr). PM: 0.1 lb/mmBtu, 0.47 pounds per hour and 2.1 tons per year (0.0007 lb/bhp-hr & 0.1 lb/mmBtu, 10/96 AP-42, Section 3.4, Table 3.4-1). SO2: 2.7 pounds per hour and 12 tons per year (assuming a maximum sulfur content in the fuel of 0.5% by weight, 0.0040 lb/bhp-hr, 10/96 AP-42, Section 3.4, Table 3.4-1). VOC: 0.43 pounds per hour and 1.9 tons per year, assuming 0.00064 lb/bhp-hr, 10/96 AP-42, Section 3.4, Table 3.4-1).

Since the AP-42 PM level of 0.0007 lb/bhp-hr is equivalent to 0.1 lb/mmBtu input, the emission factor must be set at 0.00043 lb/hp-hr to comply with the SIP limitation of 0.062 lb/mmBtu (0.29 lb/hr & 1.3 tpy). Testing to demonstrate compliance will be required of any "significant" source. Since PTE at 0.0007 lb/bhp-hr and 8760 hours of operation is 2.1 tons per year, stack testing for compliance is not anticipated.

**Permit allowable emissions**

**Permit allowable emissions will be set at potential to emit levels for 4000 hours per year of operation. Permit allowable emissions become: CO: 3.7 pounds per hour and 7.4 tons per year, NOx: 8.7 pounds per hour and 17 tons per year, PM: 0.29 pounds per hour (0.062 lb/mmBtu) and 0.58 tons per year, SO2: 2.7 pounds per hour and 5.4 tons per year, and VOC: 0.43 pounds per hour and 0.86 tons per year. Opacity will be restricted to SIP levels of 20%.**

**Actual emissions**

**Actual emissions were estimated at 60% of maximum capacity and 3000 hours per year of operation as: CO: set at a value of 2.2 pounds per hour and 3.3 tons per year, NOx: 5.2 pounds per hour and 7.8 tons per year, PM: 0.17 pounds per hour and 0.26 tons per year, SO2: 1.6 pounds per hour and 2.4 tons per year, and VOC: 0.26 pounds per hour and 0.39 tons per year.**

**Air Toxics**

**No listed air toxic exceeds the one ton per year trigger rate.**

**Other Applicable Regulations**

**NSPS, PSD, CEM, NESHAPs and Emission Offsets do not apply.**

Fees

1 fuel burning equipment 0 to 9 mmBtu/hr #2 fuel oil only, installed early = \$200 x 0.5 x 2 = \$200.

**Permit To Install Synthetic Minor Write-Up**

**NONE**

Please fill in the following for this permit:

**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
carbon monoxide	7.4
nitrogen oxides	17
particulate emissions	0.58
sulfur dioxide	5.4
volatile organic compounds	0.86