



State of Ohio Environmental Protection Agency

Original PT 1

Copy

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY
Application No: 04-01297**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 10/29/2002

StoneCo, Inc Maumee Quarry
Susanne Hanf
PO BOX 29A
Maumee, OH 43537

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,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 10/29/2002
Effective Date: 10/29/2002**

FINAL PERMIT TO INSTALL 04-01297

Application Number: 04-01297

APS Premise Number: 0448030006

Permit Fee: **\$800**

Name of Facility: StoneCo, Inc Maumee Quarry

Person to Contact: Susanne Hanf

Address: PO BOX 29A
Maumee, OH 43537

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1360 Ford St.
Maumee, Ohio**

Description of proposed emissions unit(s):
(1) 545 kW Diesel Generator (1) 320 kW Diesel Generator.

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 Record keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping 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 record keeping 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

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>
CO	9.08
NO _x	24.75
PM	1.07
SO ₂	6.00
VOC	1.42 <i>8.72</i>

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>
B001 Generator #4220030, 320 kW (430 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)(a)	0.310 pound of particulate emissions (PE) per mmBtu.
	OAC 3745-18-06(B)	See A.2.a.
	OAC 3745-21-07(B)	1.06 pounds of volatile organic compounds (VOC) per hour.
	OAC 3745-21-08(B)	2.87 pounds of carbon monoxide (CO) per hour.
	OAC 3745-23-06(B)	13.33 pounds of nitrogen oxides (NO _x) per hour.
	OAC rule 3745-31-05(A)(3)	1.44 tons of CO per rolling 12-month period, 6.67 tons of NO _x per rolling 12-month period, 0.47 ton of PE per rolling 12-month period, 0.88 pound of sulfur dioxide (SO ₂) per hour, 0.44 ton of SO ₂ per rolling 12-month period, 0.53 ton of VOC per rolling 12-month period, and see A.2.b.

2. Additional Terms and Conditions

- 2.a** Exemption from SO₂ 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 1,000 hours, based upon a rolling, 12-month summation of the monthly 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	200
1-2	400
1-3	600
1-4	800
1-5	1,000
1-6	1,000
1-7	1,000
1-8	1,000
1-9	1,000
1-10	1,000
1-11	1,000
1-12	1,000

E. Testing Requirements

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

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

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through visible emission readings performed in accordance with Method 9 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC 3745-17-03(B)(1).

b. Emission Limitation: 2.87 pounds CO per hour.

3 Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.00668 lb CO per bhp-hr times the maximum capacity of 430 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

c. Emission Limitation: 1.44 tons CO per rolling, 12-month period.

Applicable Compliance Method: This limitation was established by multiplying the 2.87 pounds per hour emission rate by the hours of operation per rolling 12-month period and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: 13.33 pounds of NO_x per hour.

2 Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.031 lb NO_x per bhp-hr times the maximum capacity of 430 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

e. Emission Limitation: 6.67 tons NO_x per rolling, 12-month period.

Applicable Compliance Method: This limitation was established by multiplying the 13.33 pounds per hour emission rate by the operating hours per rolling 12-month period and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the

hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

- f. Emission Limitation: 0.310 pound PE per mmBtu.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- g. Emission Limitation: 0.47 ton PE per rolling, 12-month period..

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- h. Emission Limitation: 0.88 pound of SO₂ per hour.

de Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.00205 lb SO₂ per bhp-hr times the maximum capacity of 430 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-18-04.

- i. Emission Limitation: 0.44 ton SO₂ per rolling, 12-month period.

Applicable Compliance Method: This limitation was established by multiplying the 0.88 pound per hour emission rate by a maximum operating hours per rolling, 12-month summation and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

- j. Emission Limitation: 1.06 pounds VOC per hour.

de Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.00247 lb VOC per bhp-hr times the maximum capacity of 430 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 25 of 40

CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10.

- k. Emission Limitation: 0.53 ton VOC per rolling, 12-month period.

Applicable Compliance Method: This limitation was established by multiplying the 1.06 pounds per hour emission rate by the operating hours per rolling, 12-month summation, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and hours of operation restriction, compliance shall also be shown with the annual emission limitation.

2. Alternative U.S. EPA approved test methods may be used to demonstrate compliance with the above emissions limitations with prior approval from the Ohio EPA.

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;
 - 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.

4. The following terms and conditions are federally enforceable: II.A.1 through E.2.

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
B002 Generator #4220033, 545 kW (731 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)(b)	0.062 pound of particulate emissions (PE) per mmBtu.
	OAC 3745-18-06(B)	See A.2.a.
	OAC 3745-21-07(B)	0.47 pound of volatile organic compounds (VOC) per hour.
	OAC 3745-21-08(B)	4.02 pounds of carbon monoxide (CO) per hour.
	OAC 3745-23-06(B)	9.5 pounds of nitrogen oxides (NO _x) per hour.
	OAC rule 3745-31-05(A)(3)	8.04 tons of CO per rolling 12-month period, 19.01 tons of NO _x per rolling 12-month period, 0.63 ton of PE per rolling 12-month period, 2.92 pounds of sulfur dioxide (SO ₂) per hour, 5.85 tons of SO ₂ per rolling 12-month period, 0.94 ton of VOC per rolling 12-month

period, and
see A.2.b.

2. Additional Terms and Conditions

2.a Exemption from SO₂ 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 monthly 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
1-7	3,500
1-8	3,800
1-9	3,800
1-10	3,800
1-11	3,800
1-12	3,800

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

C. Monitoring and/or Record keeping 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.
 - c. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the operating hours for each calendar month.

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.
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. Each report shall be submitted within 30 days of the discovery of the deviation.

E. Testing Requirements

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

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

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through visible emission readings performed in accordance with Method 9 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC 3745-17-03(B)(1).

b. Emission Limitation: 4.02 pounds CO per hour.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.0055 lb CO per bhp-hr times the maximum capacity of 731 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

*Large engine
3
45816hr?*

c. Emission Limitation: 7.64 tons CO per rolling, 12-month period.

Applicable Compliance Method: This limitation was established by multiplying the 4.02 pounds per hour emission rate by the hours of operation per year and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

8.04

3.4

3.4-1

d. Emission Limitation: 9.5 pounds of NO_x per hour.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.013 lb NO_x per bhp-hr times the maximum capacity of 731 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

Large engine

*22.7
45816hr?*

e. Emission Limitation: 18.06 tons NO_x per rolling, 12-month period.

19.01

3.4

3.4-1

StoneCo, Inc Maumee Quarry

PTI Application: 04-01297

Issued: 10/29/2002

Facility ID: 0448030006

Emissions Unit ID: B002

Applicable Compliance Method: This limitation was established by multiplying the 9.5 pounds per hour emission rate by the operating hours per rolling 12-month summation

and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

- f. Emission Limitation: 0.062 pound PE per mmBtu.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- g. Emission Limitation: 0.63 ton PE per rolling, 12-month period..

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- h. Emission Limitation: 2.92 pounds of SO₂ per hour.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.0040 lb SO₂ per bhp-hr times the maximum capacity of 731 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-18-04.

- i. Emission Limitation: 5.56 tons SO₂ per rolling, 12-month period.

Applicable Compliance Method: This limitation was established by multiplying the 2.92 pounds per hour emission rate by a maximum operating hours per rolling, 12-month summation and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

- j. Emission Limitation: 0.47 pound VOC per hour.

Applicable Compliance Method: Compliance shall be based upon an emission factor of 0.00247 lb VOC per bhp-hr times the maximum capacity of 731 hp for the engine. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, dated 10/96 Section 3.3, Table 3.3-1. If

Large or

2.05 x 10⁻³

1.50 x 10⁻³ ?

5.85

3.4

3.4-1

3.87??

Small

5.29 x 10⁻³

3.4 3.4-1

required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10.

- 7.23 ??
- k. Emission Limitation: 0.89 ton VOC per rolling, 12-month period. 287

Applicable Compliance Method: This limitation was established by multiplying the 0.47⁻ pound per hour emission rate by the operating hours per rolling, 12-month summation, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation and the hours of operation restriction, compliance shall also be shown with the annual emission limitation.

2. Alternative U.S. EPA approved test methods may be used to demonstrate compliance with the above emissions limitations with prior approval from the Ohio EPA.

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;
 - 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.

4. The following terms and conditions are federally enforceable: II.A.1 through E.2.

NEW SOURCE REVIEW FORM I

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION (1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator CITY/TWP Maumee

SIC CODE 1422 SCC CODE 2-01-001-02 EMISSIONS UNIT ID B001

EMISSIONS UNIT DESCRIPTION 320 kW Diesel Generator (4220030)

DATE INSTALLED 5/1999

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	N/A	0.57	0.28	0.95	0.47
PM ₁₀	Unclassified				
Sulfur Dioxide	Non Attainment	0.53	0.26	0.88	0.44
Organic Compounds	Attainment	0.64	0.32	1.06	0.53
Nitrogen Oxides	Attainment	7.98	3.99	13.33	6.67
Carbon Monoxide	Attainment	1.72	0.86	2.87	1.44
Lead	Attainment				
Other: Air Toxics	Unclassified				

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 X NO

IDENTIFY THE AIR CONTAMINANTS: _____

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION (1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator CITY/TWP Maumee

SIC CODE 1422 SCC CODE 2-01-001-02 EMISSIONS UNIT ID B002

EMISSIONS UNIT DESCRIPTION 545 kW Diesel Generator (4220033)

DATE INSTALLED 11/2000

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	N/A	0.19	0.38	0.31	0.60
PM ₁₀	Unclassified				
Sulfur Dioxide	Non Attainment	1.75	3.51	2.92	5.56
Organic Compounds	Attainment	0.28	0.56	0.47	0.89
Nitrogen Oxides	Attainment	5.7	11.40	9.5	18.06
Carbon Monoxide	Attainment	2.41	4.82	4.02	7.64
Lead	Attainment				
Other: Air Toxic	Unclassified				

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 X NO

IDENTIFY THE AIR CONTAMINANTS:

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit hard copy items to Pam McGraner, AQM&P, DAPC, Central Office, and electronic files to airpti@epa.state.oh.us

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION (1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator CITY/TWP Maumee

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	Additional information File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input type="checkbox"/>

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

NSPS, PSD, CEM, NESHAPs and Emission Offsets do not apply. See additional notes.

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or Netting Determination
 Permit To Install ENTER PTI NUMBER HERE

- A. Source Description
- B. Facility Emissions and Attainment Status
- C. Source Emissions
- D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

Description

This PTI is for two existing diesel fueled portable generators, B001: #4220030 - 320 kW (430 hp) and B002: #4220033 - 545 kW (731 hp), presently located at the Maumee Quarry. B001 was originally installed in 1999, B002 was originally installed in 2000 and this permit will bring these sources into compliance with permitting requirements. .

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 stationary internal combustion engines equal to or less than 600 horsepower to 0.31 lb/mmBtu, and from stationary internal combustion engines greater than 600 horsepower to 0.062 lb/mmBtu actual heat input. OAC 3745-18-06(B) exempts these sources from the sulfur dioxide requirement

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION (1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator CITY/TWP Maumee

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.

For B001 (less than 600 hp) AP-42, Table 3.3-1, dated 10/96 has values of CO - 0.00668 lb/bhp-hr, NOx - 0.031 lb/bhp-hr, PM - 0.0022 lb/bhp-hr (0.31 lb/mmBtu), SO2 - 0.00205 lb/bhp-hr, VOC - 0.00247 lb/bhp-hr. No additional control is required.

For B002 (greater than 600 hp) 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%. 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. 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.

Potential to emit

For an 430 bhp engine - CO: set at a value of 2.87 pounds per hour and 12.58 tons per year (0.00668 lb/bhp-hr, 10/96 AP-42, Section 3.3, Table 3.3-1). NOx: set at a value of 13.33 pounds per hour and 58.39 tons per year (10/96 AP-42, Section 3.3, Table 3.3-1 emission factor of 0.031 lb/bhp-hr). PM: set at value of 0.95 pounds per hour and 4.14 tons per year (0.0022 lb/bhp-hr, 10/96 AP-42, Section 3.3, Table 3.3-1). SO2: set at value of 0.88 pounds per hour and 3.86 tons per year (0.00205 lb/bhp-hr, 10/96 AP-42, Section 3.3, Table 3.3-1). VOC: set at value of 1.06 pounds per hour and 4.65 tons per year (assuming positive crankcase ventilation, 0.0025 lb/bhp-hr, 10/96 AP-42, Section 3.3, Table 3.3-1).

For an 731 bhp engine - CO: set at a value of 4.02 pounds per hour and 17.61 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 9.5 pounds per hour and 41.62 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: set at value of 0.51 pound per hour and 2.24 ton per year (0.062 lb/mmBtu and 7000 Btu/hp-hr, 10/96 AP-42, Section 3.4, Table 3.4-1). SO2: set at value of 2.92 pounds per hour and 12.81 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: set at value of 0.47 pounds per hour and 2.05 tons per year (assuming positive crankcase ventilation, 0.00064 lb/bhp-hr, 10/96 AP-42, Section 3.4, Table 3.4-1).

Permit allowable emissions

Permit allowable emissions will be set at potential to emit levels for 1000 (B001) and 3800(B002) hours per year of operation. Permit allowable emissions become:

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION (1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator CITY/TWP Maumee

B001 - CO: 2.87 pounds per hour and 1.44 tons per year, NOx: 13.33 pounds per hour and 6.67 tons per year, PM: 0.31 lb/mmBtu (0.95 pound per hour) and 0.47 tons per year, SO2: 0.88 pound per hour and 0.44 tons per year, and VOC: 1.06 pounds per hour and 0.53 ton per year. Opacity will be restricted to SIP levels of 20%.

B002 - CO: 4.02 pounds per hour and 7.64 tons per year, NOx: 9.5 pounds per hour and 18.06 tons per year, PM: 0.062 lb/mmBtu (0.31 pound per hour) and 0.60 ton per year, SO2: 2.92 pounds per hour and 5.56 tons per year, and VOC: 0.47 pounds per hour and 0.89 ton per year. Opacity will be restricted to SIP levels of 20%.

Actual emissions

Actual emissions were estimated at 60% of maximum capacities at the allowable hours:

B001 - CO: set at a value of 1.72 pounds per hour and 0.86 tons per year, NOx: 7.98 pounds per hour and 3.99 tons per year, PM: 0.57 pound per hour and 0.28 ton per year, SO2: 0.53 pound per hour and 0.26 ton per year, and VOC: 0.64 pound per hour and 0.28 ton per year.

B002 - CO: set at a value of 2.41 pounds per hour and 4.58 tons per year, NOx: 5.7 pounds per hour and 10.83 tons per year, PM: 0.19 pound per hour and 0.36 ton per year, SO2: 1.75 pounds per hour and 3.33 tons per year, and VOC: 0.28 pound per hour and 0.53 ton per year.

Air Toxics

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

Please complete:

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

Pollutant

Tons Per Year

NEW SOURCE REVIEW FORM B

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION	(1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator	CITY/TWP	Maumee
----------------------	--	----------	--------

CO	9.08
NOx	24.75
PM	1.07
S02	6.00
VOC	1.42

PTI Number: 04-01297

Facility ID: 0448030006

FACILITY NAME StoneCo, Inc Maumee Quarry

FACILITY DESCRIPTION	(1) 545 kW Dielsel Generator (1) 320 kW Diesel Generator	CITY/TWP	Maumee
----------------------	--	----------	--------
