



State of Ohio Environmental Protection Agency

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
GEAUGA COUNTY
Application No: 02-3447**

CERTIFIED MAIL

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

DATE: November 24, 1999

Geauga Concrete Co.
Harold Larned
1 Williams Street PO Box 249
Grand River, OH 44077

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

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

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

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

Very truly yours,

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

cc: USEPA
DAPC, NEDO



FINAL PERMIT TO INSTALL 02-3447

Application Number: 02-3447

APS Premise Number: 0228000229

Permit Fee: **\$2400**

Name of Facility: Geauga Concrete Co.

Person to Contact: Harold Larned

Address: 1 Williams Street PO Box 249
Grand River, OH 44077

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10509 Kinsman Road
Newbury Township, Ohio**

Description of proposed emissions unit(s):
**CONCRETE BATCHING PLANT WITH PAVED/UNPAVED ROADS/PARKING, STORAGE PILES,
MATERIAL HANDLING, & SILO/MIX-TRUCK LOADING SYS.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulates	37.0

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>
Concrete Batch Plant--Paved and Unpaved Roadways and Parking Areas (F001)	OAC rule 3745-31-05(A)(3)	Fugitive particulate emissions from this emissions unit shall not exceed 3.63 TPY.
Batch concrete plant--paved roadways and parking areas (F001) (see Section A.2.a)	OAC rule 3745-17-07 (B)(4)	No visible particulate emissions except for 6 minutes during any 60-minute period.
	OAC rule 3745-17-08 (B), (B)(8), (B)(9)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, A.2.d, and A.2.f through A.2.j)
Batch concrete plant--unpaved roadways and parking areas (F001) (see Section A.2.b)	OAC rule 3745-17-07 (B)(5)	No visible particulate emissions except for 13 minutes during any 60-minute period.
	OAC rule 3745-17-08 (B), (B)(2)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j)

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

- Paved roadways:
- i. Paved apron leading onto Kinsman Road.
 - ii. Paved roadway in front of office extending toward sand/aggregate storage pile area and tile/block storage area.

- Paved parking areas:
- i. Concrete pavement for truck parking adjacent to tile/block area.
 - ii. Paved customer/office parking area.

2.b The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

- Unpaved roadways:
- i. Unpaved (broken concrete & gravel) entrance/exit roadway from office area to paved apron leading to Kinsman Road.
 - ii. Gravel roadway leading to sand/aggregate/crushed stone storage pile and load-hopper area.

Unpaved parking areas: Gravel equipment parking area at rear of silos.

2.c The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.d The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways by watering and/or applying any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas by watering and/or applying any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.f The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- 2.g Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- 2.k The use of used oil as a dust suppressant is prohibited per OAC rule 3745-279-82.

B. Operational Restrictions

- 1. A maximum speed limit of 10 miles per hour for vehicular traffic shall be posted and enforced on the roadways and parking areas of this facility.

C. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:
 - a. All paved roadways and parking areas identified in A.2.a shall be inspected daily.
 - b. All unpaved roadways and parking areas identified in A.2.b shall be inspected daily.
- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- 3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience

indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that \were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. The permittee shall maintain records on a weekly basis which indicate the following:
 - a. the total number of round trips made by concrete mix-truck, cement delivery truck, and sand/aggregate delivery truck during the period (by truck "wheel" class; e.g., 10-wheel, 18-wheel, etc.);
 - b. the total vehicle miles traveled during the period, calculated by multiplying the number of round trips per vehicle by the length of roadway traveled per round trip (in miles); and
 - c. the total tonnage (or yards) of concrete produced during the period.

These records, and any support information recorded pursuant to the requirements of this permit, shall be retained for a period of five (5) years from the date the record was created and shall be made available to Director for examination upon request during normal business hours.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Emissions Limitation: Fugitive particulate emissions shall not exceed 3.63 TPY.

Applicable Compliance Method: Compliance with the annual particulate emissions limitations for this emissions unit shall be determined by using air pollution emissions factors found in U.S. EPA reference AP-42, Fifth Edition, "Compilation of Air Pollution Emission Factors", Section 11.12 (10/86), Section 13.2.1 (10/97), or Section 13.2.2 (9/98), the data required to be recorded above relative to the vehicle miles traveled and/or the total tonnage (or cubic yards) or concrete produced during the year, and the estimated control efficiency of the control strategy employed (50 percent for water spray), to determine the estimated actual annual controlled emissions level.

2. Emissions Limitation: There shall be no visible particulate emissions from paved roadways and parking areas except for six (6) minutes in any 60-minute period; there shall be no visible emissions from unpaved roadways and parking areas except for thirteen (13) minutes in any 60-minute period.

Applicable Compliance Method: Compliance with the visible emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

None.

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

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>
Batch concrete plant--sand and aggregate material storage piles (F002): load-in/load-out and wind erosion of storage piles (see Section A.2.a for identification of storage piles).	OAC rule 3745-31-05(A)(3)	Fugitive particulate emissions from this emissions unit shall not exceed 3.50 TPY
Batch concrete plant--sand and aggregate material storage piles (F002): load-in and load-out of storage piles (see Section A.2.a for identification of storage piles).	OAC rule 3745-17-07 (B)(6) OAC rule 3745-17-08 (B), (B)(6)	No visible particulate emissions except for 13 minutes in any 60-minute period. Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b, A.2.c and A.2.f)
Batch concrete plant--sand and aggregate material storage piles (F002): wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-17-07 (B)(6) OAC rule 3745-17-08 (B), (B)(6)	No visible particulate emissions except for 13 minutes in any 60-minute period. Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d through A.2.f)

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

One sand pile, two limestone piles, and (periodically) one large recycled concrete pile.

- 2.b** The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the load-in and load-out material(s) with water and/or any other suitable dust suppression chemicals to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ reasonably available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat each storage pile with water and/or any other suitable dust suppression chemicals at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

B. Operational Restrictions

None.

C. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

All storage piles on a daily basis.

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

All storage piles on a daily basis.

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

All storage piles on a daily basis.

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

7. The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

8. The permittee shall further maintain, on a monthly basis, records indicating the following information:
 - a. the total tonnage of both sand, limestone, and crushed stone which is loaded into and/or out of all storage piles at this facility; and
 - b. the number of days during which storage piles were in place at this facility.

These records, and any support information recorded pursuant to the requirements of this permit, shall be retained for a period of five (5) years from the date the record was created and shall be made available to Director for examination upon request during normal business hours.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Emissions Limitation: Fugitive particulate emissions shall not exceed 3.50 TPY.

Applicable Compliance Method: Compliance with the annual particulate emissions limitations for this emissions unit shall be determined by using air pollution emissions factors found in U.S. EPA reference AP-42, Fifth Edition, "Compilation of Air Pollution Emission Factors", Section 11.12 (10/86), Section 11.2.3 (5/83), or Section 13.2.4 (1/95), the data required to be recorded above relative to the total tonnage (or cubic yards) or concrete produced during the year, the total tonnage of sand/aggregate loaded into or out of all storage piles during the year, and the number of days storage piles were in place at this facility, and the estimated control efficiency of the control strategy employed (50 percent for water spray), to determine the estimated actual annual controlled emissions level.

2. Emissions Limitation: There shall be no visible particulate emissions from any storage pile except for thirteen (13) minutes in any 60-minute period.

Applicable Compliance Method: Compliance with the visible emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of

Geauga Concrete Co.

PTI Application: **02-3447**

November 24, 1999

Facility ID: **0228000229**

Emissions Unit ID: **F002**

Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

None.

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

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>
Batch concrete plant--material handling operations (F003) including, front-end loaders, dump trucks, & sand/aggregate conveyor systems.	OAC rule 3745-31-05(A)(3)	Fugitive particulate emissions from this emissions unit shall not exceed 2.55 TPY.
Batch concrete plant--material handling operations (F003) including, front-end loaders, dump trucks, & sand/aggregate conveyor systems.	OAC rule 3745-17-07 (B)(1)	Visible particulate emissions from this emissions unit shall not exceed twenty (20) percent opacity as a three-minute average.
	OAC rule 3745-17-08 (B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)

2. Additional Terms and Conditions

- 2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
 - i. Loading of sand/aggregate into feed bin/hopper by front-end loader.
 - ii. Sand/aggregate feed to weigh-hopper by conveyor.
- 2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

- i. For transfer of sand/aggregate to feed bin/hopper, fugitive particulate emissions shall be minimized or eliminated by controlling drop height of front-end loader for less than two (2) feet.
- ii. For transfer of sand/aggregate to weigh-hopper by conveyor, fugitive particulate emissions shall be minimized or eliminated by use of water spray as needed and by enclosure of conveyor transfer point where feed material enters weigh-hopper.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

B. Operational Restrictions

None.

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Transfer of sand/aggregate to feed bin/hopper by front-end loader shall be inspected on a daily basis.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;

- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):
- c. the dates the control measure(s) was (were) implemented; and
- d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

- 1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
- 2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

- 1. Emissions Limitation: Fugitive particulate emissions shall not exceed 2.55 TPY.

Applicable Compliance Method: Compliance with the annual particulate emissions limitations for this emissions unit shall be determined by using air pollution emissions factors found in U.S. EPA reference AP-42, Fifth Edition, "Compilation of Air Pollution Emission Factors", Section 11.12 (10/86), the data required to be recorded above relative to the total tonnage (or cubic yards) or concrete produced during the year at this facility, and the estimated control efficiency of the control strategy employed (50 percent for water spray), to determine the estimated actual annual controlled emissions level.

- 2. Emissions Limitation: Visible particulate emissions from this emissions unit shall not exceed twenty (20) percent opacity as a three-minute average.

Applicable Compliance Method: Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

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Geauga Concrete Co.

PTI Application: **02-3447**

November 24, 1999

Facility ID: **0228000229**

Emissions Unit ID: **F003**

None.

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

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>
Batch concrete plant (F004)--Loading of 2 cement silos, concrete batching weigh-hopper, and mix-trucks loading operations.	OAC rule 3745-31-05	Fugitive particulate emissions from the loading of both cement silos shall not exceed 27.32 TPY.
Batch concrete plant (F004)--cement silo loading operations (2 cement silos).	OAC rule 3745-17-08(B)(3)(b)	Emissions from the outlet of the control equipment serving this emissions unit shall achieve an emissions rate of not more than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet, whichever is less stringent.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from this emissions unit shall not exceed twenty (20) percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see section 2.a.)
Batch concrete plant (F004)--concrete batching operation/loading of weigh-hopper.	OAC rule 3745-17-08(B)(3)(b)	Emissions from the outlet of the control equipment serving this emissions unit shall achieve an emissions rate of not more than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet, whichever is less stringent.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from this emissions unit shall not exceed twenty

Concrete batch plant (F004)--mix-truck loading operations.	OAC rule 3745-17-08(B)	(20) percent opacity as a three-minute average.
	OAC rule 3745-17-07(B)(1)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see section 2.b.)
	OAC rule 3745-17-08(B)	Visible particulate emissions from this emissions unit shall not exceed twenty (20) percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see section 2.c.)

2. Additional Terms and Conditions

2.a The permittee shall employ the following reasonably available control measures for the above-identified cement silo loading operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements:

- i. Cement shall be transferred pneumatically to either of the two (2) cement silos. The pneumatic system shall be adequately enclosed so as to eliminate at all times visible emissions of fugitive dust. Any visible emissions of cement dusts emanating from the delivery vehicle during transfer shall be cause for the immediate halt of the unloading process and the refusal of the cement load until the situation is corrected.
- ii. The cement silo vent shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to minimize at all times visible emissions of fugitive dust at the point of capture.

2.b The permittee shall employ the following reasonably available control measures for the above-identified concrete batching operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements:

- i. The concrete batching weigh hopper shall be adequately enclosed and the enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust.
- ii. The sand/aggregate weigh hopper transfer conveyor discharge to the concrete batching weigh hopper shall be enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust at the point of capture.

2.c The permittee shall employ the following reasonably available control measures for the above-identified mix-truck loading operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements:

- i. The point at which the transit mix truck is loaded shall be adequately enclosed and the drop height of the cement/sand/aggregate mixture into the truck shall be minimized or controlled by either a telescopic or hooded chute (shroud) so as to minimize or eliminate visible emissions of fugitive dust from this operation.

B. Operational Restrictions

1. The permittee shall regularly maintain the baghouse and fabric filter control equipment associated with this emissions unit in accordance with manufacturers recommendations. Maintenance shall include regular repair and/or replacement of filters so as to maximize the particulate collection efficiency of this dust control system.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the amounts of sand, aggregate, and cement processed at this plant so as to be able to determine the actual amount of fugitive dust emissions generated over any annual period. The permittee shall also maintain records of the gross yards (or tonnage) of concrete produced and transported from the facility on a monthly basis for purpose of determining the annual amount of fugitive dusts emitted from this emissions unit. These records shall be kept at the facility and shall be made available for review by Ohio EPA personnel upon request.
2. The permittee shall inspect the baghouse fabric filter control system serving both the cement silo and the batching operation at least once per week for the purpose of determining the need to maintain, repair, and/or replace any of the filters in the system or any portion of the system electrical controls. A broken or severely worn filter, or worn electrical control components, shall be replaced/repared immediately so as to prevent unnecessary emissions of fugitive dust from this emissions unit. Records of inspections, repairs, and maintenance to this emissions control system shall be noted in a facility log.
3. The permittee shall inspect the shroud and chute used to load the sand/aggregate/cement mixture into the concrete mix-trucks on a weekly basis to determine if these devices adequately minimize fugitive dust emissions which arise during the loading of the mix-trucks. If either the shroud or chute is excessively worn, they should be replaced immediately so as to minimize fugitive dust emissions from this emissions unit. The results of this inspection and any maintenance which is performed as a result of this inspection should be noted in a facility log.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

- a. each day or week during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, repair, or maintenance function that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Emissions Limitation: Fugitive particulate emissions shall not exceed 27.32 TPY.

Applicable Compliance Method: Compliance with the annual particulate emissions limitations for this emissions unit shall be determined by applying the air pollution emissions factors found in U.S. EPA reference AP-42, Fifth Edition, "Compilation of Air Pollution Emission Factors", Section 11.12 (10/86; reformatted 1/95), the data required to be recorded above relative to the total tonnage (or cubic yards) or concrete produced during the year at this facility, and the estimated control efficiency of control strategy employed (90 percent for baghouse) to each of the following operations which comprise this emissions unit: the loading of cement to elevated storage silos; the loading of sand, aggregate, and cement to the weigh-hopper; and the loading of concrete mix-trucks. The values thus calculated for each portion of this operation shall be added together to obtain the estimated actual controlled emissions level for the entire emissions unit.

2. Emissions Limitation: Visible particulate emissions from this emissions unit shall not exceed twenty (20) percent opacity as a three-minute average.

Applicable Compliance Method: Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

3. Emissions Limitation: Emissions from the outlet of the control equipment serving this emissions unit (fabric filter/baghouse) shall achieve an emissions rate of not more than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet, whichever is less stringent.

Applicable Compliance Method: Compliance with the particulate emissions limit portion of this permit limitation shall be based on the maximum flow rate of the control device (3000 scfm) times the allowable emissions rate of 0.030 grains/dscf particulate matter [per OAC rule 3745-17-08(B)(3)(b)] and the maximum operating schedule of 8760 hours per year. If required pursuant to OAC 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and in OAC 3745-17-03(B)(7).

Compliance with the "no visible emissions" limit portion of this permit limitation, as stipulated in OAC rule 3745-17-08(B)(3)(b), for both the cement silo loading operation(s) and the concrete batching operations identified above shall be determined in accordance with and Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

F. Miscellaneous Requirements

None.