



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
FRANKLIN COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 01-08626

DATE: 7/5/2002

Central Ready Mix of Ohio LLC
Mike Fuchs
Post Office Box 361537
Columbus, OH 43236

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

CDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install
Terms and Conditions

Issue Date: 7/5/2002
Effective Date: 7/5/2002

FINAL PERMIT TO INSTALL 01-08626

Application Number: 01-08626
APS Premise Number: 0125042446
Permit Fee: **\$1000**
Name of Facility: Central Ready Mix of Ohio LLC
Person to Contact: Mike Fuchs
Address: Post Office Box 361537
Columbus, OH 43236

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

Wilson Road
Columbus, Ohio

Description of proposed emissions unit(s):

Concrete batch plant.

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

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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

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14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM (F001)	8.7
PM (F002)	2.9
PM (P901)	19.1
PM (P902)	2.7
PM (Total)	33.4
PM(Stack)	18.9
PM(Fugitive)	14.5

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>
F001 - aggregate storage piles	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 8.7 tons/yr
load-in and load-out of storage piles (see Section A.2.b for identification of storage piles)	OAC rule 3745-31-05(A)(3)	Best 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 below.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	The emissions requirements established pursuant to OAC rule 3745-31-05 is equivalent in stringency or more stringent than the emission limitation established by this rule.
Wind erosion from storage piles (see Section A.2.b for identification of storage piles)	OAC rule 3745-31-05(A)(3)	There shall be no visible PE except for a period of time not to exceed 1-minute during any 60-minute observation period from storage piles. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.d through A.2.f below.

2. Additional Terms and Conditions

- 2.a** The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

Sand piles
#57 Stone piles
Other Stone piles

- 2.b** The permittee shall employ best 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 excavating the topsoil and clay dirt below surface level sufficient 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 best 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 shall commit to maintaining moisture content of the sand, #57 stone, and other stone sufficient 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

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Emissions Unit ID: F001

OAC rule 3745-31-05(A)(3).

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:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
Sand piles	weekly, when operating
#57 Stone pile	weekly, when operating
Other stone pile	weekly, when operating

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:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
Sand piles	weekly, when operating
#57 Stone pile	weekly, when operating
Other stone pile	weekly, when operating

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:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
Sand piles	weekly, when operating
#57 Stone pile	weekly, when operating
Other stone pile	weekly, when operating

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 bases, 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 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.

D. Reporting Requirements

1. In accordance with paragraph A.2. of the General Terms and Conditions, the permittee shall submit semiannual deviation (excursion) reports that identify any of the following occurrences:
 - a. each day during which an inspection 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. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:
 Particulate emissions shall not exceed 8.7 TPY.

Applicable Compliance Method:

Compliance with the particulate limitation may be determined by multiplying the emission factor equation below (AP-42, 13.2.4, 1/95) by the maximum annual production and the percentage of emissions that will be uncontrolled. The resulting emission rate shall be divided by 2,000 pounds/ton.

Storage pile emission factor equation:

$E = k(0.0032)(U/5)^{1.3}/(M/2)^{1.4} = \text{lb particulate/ton}$ (AP-42, 13.2.4, 1/95), where:

E = emission factor

k = particle size multiplier (dimensionless) (0.74)

U = mean wind speed in miles per hour (10 mph) (from application 05/06/2002)

M = material moisture content (2.3%) (from application 05/06/2002)

$$E = (0.74)(0.0032)[(10/5)^{1.3}/(2.3/2)^{1.4}] = 0.05 \text{ lb particulate/ton}$$

Assumptions for Load-in

Load-in throughput: 300,000 tons/yr

Emission factor: 0.05 lb PM/ton

$$PE = (0.05 \text{ lb PM/ton})(300,000 \text{ tons/hr})(1 \text{ ton/ } 2,000 \text{ lb})(50\% \text{ control efficiency}) = 3.8 \text{ ton/yr}$$

Assumptions for Load-out

Load-out throughput: 300,000 tons/yr

Emission factor: 0.05 lb PM/ton

$$PE = (0.05 \text{ lb PM/ton})(300,000 \text{ tons/hr})(1 \text{ ton/ } 2,000 \text{ lb})(50\% \text{ control efficiency}) = 3.8 \text{ ton/yr}$$

Assumptions for wind erosion

Throughput: 1 acre of land covered

Emission factor derived from USEPA's Control of Open Fugitive Dust Sources

s = silt content(%) (4.7) (taken from application 06/06/2002)

p = # of days with 0.01 inch of precipitation/year (260 days)

f = % of time that the unobstructed wind speed exceeds 12 mph at the mean pile height (14) (from application 06/06/2002)

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$$E = 1.7(s/1.5)(365-140/235)(f/15) = \text{lbs PE/day/acre}$$

$$E = (4.7/1.5)(260/235)(14/15) = 5.5 \text{ lbs PE/day/acre}$$

$$\text{At 1 acre: } (5.5 \text{ lbs/PE day/acres})(1 \text{ acre}) = 5.5 \text{ lbs PE/day}$$

$$\text{At 365 days/yr: } (5.5 \text{ lbs/day})(365 \text{ days/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 1.0 \text{ ton/yr}$$

Total annual particulate emission, 8.7 TPY, may be determined by adding the total emission from both the paved and unpaved roadways. Calculations are based on information provided by the facility in the permit to install application received by the Ohio EPA, Central District Office on June 6, 2002.

- b. Emission Limitation:
There shall be no visible particulate emissions except for a period of time not to exceed 1-minute during any 60-minute observation period from either load-in, load-out, or wind erosion of storage piles.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles 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)(c) of OAC rule 3745-17-03.

c. Emission limitation-

Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitations for the storage piles 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.

F. Miscellaneous Requirements

None

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>	
F002 - plant roadways and parking areas	OAC rule 3745-31-05(A)(3)	
Paved roadways and parking areas (see Section A.2.b)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(B)
		OAC rule 3745-17-08(B)
	OAC rule 3745-17-08(B)	
Unpaved roadways and parking areas (see Section A.2.c)	OAC rule 3745-31-05(A)(3)	

Applicable Emissions Limitations/Control Measures

Particulate emissions shall not exceed 2.9 tons/yr.

There shall be no visible particulate emissions except for a period of one minute during any 60-minute observation period from a paved roadway. See section C.1. below.

Best 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 below.

The requirements established pursuant to this rule are less stringent than the control measure requirements established pursuant to OAC rule 3745-31-05(A)(3).

There shall be no visible particulate emissions except for a period of 3 minutes during any 60-minute observation period from and unpaved roadway. See section C.1. below.

Best available control measures shall be sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.e through A.2.j below.

The visible particulate emission limitation specified by this rule, is less stringent than the limitation

established pursuant to OAC rule 3745-31-05(A)(3).

The requirements established pursuant to this rule are less stringent than the control measure requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways and parking areas:

truck routes
loader routes

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways and parking areas:

truck routes
loader routes

- 2.c** The permittee shall employ best 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 watering and sweeping 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 best 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 roadways and parking areas with 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.e** The permittee shall employ best 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 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 best available technology requirements of OAC rule 3745-31-05.

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.
2. The permittee shall comply with storm water control regulations in the application of water dust suppressants. In areas outside of the storm water retention pond drainage catch, the permittee may employ sweeping, vacuum sweeping or alternative control measures.

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:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
-----------------------------------------	-------------------------------------

All

Daily

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
-------------------------------------------	-------------------------------------

All

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 Section C.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.

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Centr:

PTI A

Issued: 7/5/2002

Emissions Unit ID: **F002**

D. Reporting Requirements

1. The permittee shall submit semiannual 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. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
Particulate emissions shall not exceed 2.9 tons per year (TPY).

Applicable Compliance method:

Compliance shall be demonstrated by utilizing the following emission factor equations for unpaved and paved roadways.

Paved Surfaces

$$E = k(sL/2)^{0.65}(W/3)^{1.5} \text{ (AP-42 13.2.1, 9/98)}$$

where:

k = base factor for particle size range (0.082)

sL = silt content of road surface material (12.0 grains/ft²)

W = mean vehicle weight (15 tons)

$$E = (0.082)(12.0/2)^{0.65}(15/3)^{1.5}$$

$$E = 2.9 \text{ lbs/vehicle miles traveled (VMT)}$$

Paved Roadway is 5,975 VMT/yr

$$(2.9 \text{ lbs/VMT})(5,975 \text{ VMT/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 8.66 \text{ tons/yr}$$

$$\text{Watering/Sweeping Application (80\%)} = 1.73 \text{ ton/yr}$$

Unpaved Surfaces

Central Ready Mix of Ohio LLC

PTI Application: 01-08626

Issued

Facility ID: 0125042446

Emissions Unit ID: F002

$$E = [k(s/12)^a(W/3)^b]/[(M/0.2)^{0.4}]*[(365-p)/365] \text{ (AP 42 13.2.2-4, 9/98)}$$

where:

k = empirical constant (10 lb/VMT)

s = surface material silt content (12.0)
 a = empirical constant (0.8)
 W = mean vehicle weight (15 tons)
 b = empirical constant (0.5)
 M = surface material moisture content percentage (10)
 c = empirical constant (0.4)
 p = number of days with at least 0.01 inches of precipitation per year (140)

E = 2.8 lbs/VMT

Unpaved Roadway is 1,600 VMT/yr
 $(2.8 \text{ lbs/VMT})(1,600 \text{ VMT/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 2.2 \text{ tons/year}$
 Watering Application (50%) = 1.12 ton/yr

Total annual particulate emissions, 2.9 TPY, may be determined by adding the total emission from both the paved and unpaved roadways. Calculations are based on information provided by the facility in the permit to install application received by the Ohio EPA, Central District Office on June 6, 2002.

- b. Emission limitation:
 No visible particulate emissions except for 1 minute during any 60-minute period for paved roadways and parking areas.

Applicable Compliance Method:

Compliance with the emission limitation for the paved 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.

- c. Emission Limitation:
 No visible particulate emissions except for 3 minutes during any 60-minute period for unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance with the emission limitation for the 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.

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Centr:

PTI A

Issued: 7/5/2002

Emissions Unit ID: **F002**

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, <u>and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P901 - material handling, weigh hopper loading of cement, sand and aggregate, loading of transit mix truck	OAC rule 3745-31-05(A)(3)
Loading of transit mix truck	
Weigh hopper loading of cement and fly ash.	OAC rule 3745-31-05(A)(3)
Weigh hopper loading of sand and aggregate	OAC rule 3745-31-05(A)(3)

Emissions Unit ID: P901

Applicable Emissions
Limitations/Control Measures

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)

Fugitive PE shall not exceed 3.3 pounds per hour and 1.5 tons per year.

PE from the stack shall not exceed 35.22 pounds per hour and 17.6 tons per year.

The weigh hopper shall be adequately enclosed and vented to the current silo. The enclosure shall be sufficient to eliminate visible emissions of fugitive dust at the point of capture.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.2.c below.

The weigh hopper shall be adequately enclosed and vented to the current silo. The enclosure shall be sufficient to eliminate visible emission of fugitive dust at the point of capture.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.2.c below.

Loading to transit mix truck shall use a charging boot. The charging boot shall be sufficient to eliminate visible emission of fugitive dust at the point of capture.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

OAC rule 3745-17-05(A)(3)

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:

weigh hopper loading of cement and fly ash
weigh hopper loading of sand and aggregate
loading of transit mix truck

2.b The permittee shall employ best available control measures for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to perform the following control measures to ensure compliance:

<u>material handling operation</u>	<u>control measure</u>
weigh hopper loading of cement and fly ash	adequate enclosure
weigh hopper loading of sand and aggregate	adequate enclosure
transfer to truck	charging boot around hopper discharge area and transit mix truck opening

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 adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures or 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

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.
2. The maximum concrete-mix production rate for this emissions unit shall not exceed 300,000 tons per year.

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:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
load into weigh hopper	daily
truck loading	daily

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 indicated 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.

5. The permittee shall maintain daily records of the tons of concrete-mix produced in this emissions unit.

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.
3. The permittee shall submit annual reports that identify the number of tons of concrete mix produced during its calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emissions limitations:
Particulate emissions shall not exceed 38.5 lbs/hr and 19.1 tons/yr from the equipment identified below.

Applicable Compliance Method:

Compliance with the hourly and annual limits may be determined by multiplying the appropriate emission factor for each operation by the maximum hourly and annual production rates. The total particulate emissions may be determined by summing each of the process emission rates.

- i. Sand and aggregate weigh hopper loading:
Emission factor: 0.0051 lbs PM/ton material (AP-42, Table 11.12-2, 10/01)
Maximum hourly production: 250 tons/hr
 $(0.0051 \text{ lbs PM/ton})(250 \text{ tons/hr}) = 1.80 \text{ lbs/hr}$
Maximum annual production: 300,000 tons/yr
 $(0.0051 \text{ lbs PM/ton})(300,000 \text{ ton/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 0.76 \text{ ton/yr}$
- ii. Cement and fly ash weigh hopper loading:
Emission factor: 0.0051 lb PM/ton material (AP-42, Table 11.12-2, 10/01)
Maximum hourly production: 300 ton/hr
 $(0.0051 \text{ lbs PM/ton})(300 \text{ ton/hr}) = 1.50 \text{ lbs/hr}$
Maximum annual production: 300,000 tons/yr
 $(0.0051 \text{ lbs PM/ton})(300,000 \text{ ton/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 0.77 \text{ ton/yr}$
- iii. Loading transit mix trucks
Emission Factor: 0.61 lb PM/ton material (AP-42, Table 11.12-2, 10/01)
Maximum hourly production: 300 ton/hr
85% capture efficiency = 27.45 lbs/hr
95% controlled = 7.77 lbs/hr
35.22 lbs/hr
- $(0.61 \text{ lb PM.ton})(300,000 \text{ tons/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 91.5 \text{ tons/yr}$
85% capture efficiency = 13.72 tons/yr
95% controlled = 3.89 tons/yr
17.61 tons/yr
- iv. Fugitive: 3.3 lbs/hr
1.5 tons/yr
- Stack: 35.2 lbs/hr
17.6 tons/yr

Calculations are based on information provided by the facility in the permit to install application received by the Ohio EPA, Central District Office on June 6, 2002.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, <u>and/or Equipment</u>	Batcher and Auxiliary Silos (Cement and Ash/Slag split silo)	<u>Applicable Rules/Requirements</u>
P902 - material handling, transfer of sand and aggregate to elevated bins, cement unloading to elevated storage silos		OAC rule 3745-31-05
Transfer of sand and aggregate to elevated bins		OAC rule 3745-31-05(A)(3)

Emissions Unit ID: P902

OAC rule 3745-31-05(A)(3)

Applicable Emissions
Limitations/Control Measures

from the outlet, whichever is less stringent.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B).

Fugitive PE shall not exceed 2.70 pounds per hour and 1.35 tons per year.

Visible particulate emissions shall not exceed twenty per cent opacity as a three-minute average.

OAC rule 3745-17-07(B)

PE from the stack shall not exceed 0.45 pounds per hour and 1.35 tons per year.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The visible emissions of fugitive dust shall not exceed 20 percent opacity as a 3-minute average.

The drop height of the front-end bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the conveyor loading area.

The sand and aggregate loaded into the elevated bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from the conveyor and transfer point to bins.

The batcher and three silo fabric filters shall each achieve an outlet emission rate of not greater than 0.02 grain of particulate per dry standard cubic foot of exhaust gases or there shall be no visible emissions

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above mentioned requirements are listed below:

load-in and load-out of storage piles
batcher and auxiliary silos

2.b The permittee shall employ best available control measures for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to perform the following control measures to ensure compliance:

<u>material handling operation</u>	<u>control measure</u>
transfer of sand and aggregate content	wet suppression or sufficient moisture
batcher and auxiliary silos	fabric filter

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 adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures or unnecessary.

2.e 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 3745-31-05(A)(3).

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

2. The maximum concrete-mix production rate for this emissions unit shall not exceed 300,000 tons per year.

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:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
load-in and load-out of storage piles	daily
conveyance of sand and aggregate	daily
Cement unloading operations into silo	once during each unloading event

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 indicated 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.

5. The permittee shall perform daily checks, when the emissions units are in operation and the weather conditions allow, for any visible particulate emissions from the fabric filter serving the weigh hopper for cement and fly ash, silos and all material handling operations. The presence or absence of any visible emissions shall be noted in an operations log. If visible emission are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
6. The permittee shall maintain daily records of the tons of concrete-mix produced in this emissions unit.

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.
3. The permittee shall submit semiannual deviation reports that (a) identify all days during which any visible particulate emissions were observed from the fabric filters and material handling operations and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These report shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit annual reports that identify the number of tons of cement-mix produced during its calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

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

- a. Emission limitations:
Particulate emissions shall not exceed 2.7 lbs/hr and 1.35 tons/yr.

Applicable Compliance Method:

Compliance with the hourly and annual limits may be determined by multiplying the appropriate emission factor for each operation by the maximum hourly and annual production rates. The total particulate emissions may be determined by summing each of the process emission rates.

Sand and aggregate transfer to elevated storage bin:

Emission factor: 0.0090 lbs PM/ton material (AP-42, Table 11.12-2,10/01)

Maximum hourly production: 300 tons/hr

$(0.0090 \text{ lbs PM/ton})(300 \text{ tons/hr}) = 2.70 \text{ lbs/hr}$

Maximum annual production: 300,000 tons/yr

$(0.0090 \text{ lbs PM/ton})(300,000 \text{ tons/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 1.35 \text{ tons/yr}$

- b. Emission limitations:
The baghouse shall achieve an outlet emission rate of not greater than 0.020 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases and no greater than 1.35 tons/yr of PE emissions from the silos.

Applicable Compliance Method:

Cement and slag/fly ash silo loading:

Emission factor: 0.02 g/dscf (per application)

Inlet gas flow: 600 acfm (per application)

Number of baghouses: 3

$3(0.02 \text{ gr/dscf})(600 \text{ acf/min})(60 \text{ min/hr})(1 \text{ lb}/7,000 \text{ gr}) = 0.45 \text{ lb/hr}$

$(0.45 \text{ lb/hr})(8,760 \text{ ton/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 1.35 \text{ tons/yr}$

- c. Fugitive: 2.70 lbs/hr
 1.35 tons/yr
Stack: 0.45 lb/hr
 1.35 tons/yr

Central Ready Mix of Ohio LLC

PTI Application: 01 08626

Issued

Facility ID: 0125042446

Emissions Unit ID: P902

F. Miscellaneous Requirements

None