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Facility Name: **Quality Ready Mix - Bluffton**

Application Number: **03-0480**

Date: **November 4, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(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 source(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 Ohio Administrative Code (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

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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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule

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3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION 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 and regulations.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Quality Ready Mix - Bluffton** located in **Allen** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

F001

F002

Ohio
EPA
Source
Number

Source
Identification
Description

P901

200 tons/hr
capacity
concrete
batch plant

P901 cont'd

Ohio
EPA Source Number

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BAT
Determination

Use of 4 baghouses,
use of a water ring,
use of Reasonably
Available Control
Methods (RACM), and
compliance with the
terms and
conditions of this
permit

BAT
Determination

Use of RACM and
compliance with
the terms and
conditions of
this permit

Source
Identification
Number

Use of RACM and
compliance with
the terms and
conditions of
this permit

Material
Storage
Piles

Facilit
y
Roadway
s and
Parking
Areas

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
Applicable Federal & OAC Rules				PE, 20% opacity as 3-minute average sand and aggregate transfer to bins: 10.77 TPY fugitive PE, 20% opacity as a 3-minute average
3745-31-05		Applicable Federal & OAC Rules	cement unloading to 3 storage silos: 0.01 grains/dscf, 0.13 lb Particulate Emissions (PE)/hr, 0.21 TPY PE, 0% opacity, as a 6-minute average from silo baghouses	(See Additional Special Terms and Condition's)
	3745-31-05			(*)
	3745-17-11 (B)		cement hopper: 0.01 grains/dscf, 0.13 lb PE/hr, 0.021 TPY PE, 0% opacity, as a 6-minute average from cement hopper baghouse aggregate hopper: 10.56 TPY fugitive PE, 20% opacity as a 3-minute average transit mix truck loading: 3.70 TPY fugitive	(*)
	3745-17-07 (A)			0.14 TPY fugitive PE, no visible emissions except for a period of time not to exceed 3 minutes during any 60-minute observation period from unpaved roadways; no visible emissions except for a period of time not to exceed 1minute during any 60-minute
	3745-31-05			

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Ohio EPA Source <u>Number</u>	Source Identification <u>Number</u>	BAT <u>Determination</u>	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage <u>Requirements</u>
observa tion period from paved roadway s.	any 60-minute observatio n period.			Permit Allowable Mass Emissions and/or Control/Us age <u>Requireme nts</u>
				3.52 TPY fugitiv e PE, no visible emissio ns except for a period of timenot to exceed 1 minute during

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* The emission limitations based on this applicable rule are less stringent than the limitations established pursuant to OAC Rule 3745-31-05.

SUMMARY
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PE	28.92

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the

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source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402.**

Except as provided by OAC Rule 3745-15-06(A) (3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. APPLICABLE EMISSION LIMITATIONS AND/OR CONTROL REQUIREMENTS

1. Concrete batch plant, emissions unit P901:
 - a. Cement unloading to 3 storage silos:
 - i. Each silo shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient to eliminate visible emissions of fugitive particulate matter at the point of capture.
 - ii. Each fabric filter shall achieve an outlet emission rate of not greater than 0.010 grains of particulate matter emissions per dry standard cubic foot of exhaust gases. This equates to a particulate matter emission limitation from each baghouse outlet of 0.13 pound/hour and 0.21 ton/year. One silo will be loaded at a time. The visible emissions of particulate matter shall not exceed 0 percent opacity, as a six-minute average, from the outlet.
 - b. Weigh hopper loading of cement, sand and aggregate:
 - i. The cement weigh hopper shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient to eliminate

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visible emissions of fugitive particulate matter at the point of capture.

- ii. The fabric filter on the cement bin shall achieve an outlet emission rate of not greater than 0.010 grains of particulate matter emissions per dry standard cubic foot of exhaust gases. This equates to a particulate matter emission limitation from the baghouse outlet of 0.013 pound/hour and 0.021 ton/year. The visible emissions of particulate matter shall not exceed 0 percent opacity, as a six-minute average, from the outlet.
 - iii. Fugitive particulate matter emissions from the aggregate hopper shall be limited to 10.56 tons/year. The visible emissions of fugitive particulate matter shall not exceed 20 percent opacity as a 3-minute average.
- c. Loading of Transit-Mix Truck:
- i. Fugitive particulate matter emissions shall be limited to 3.70 tons/year. The visible emissions of fugitive particulate matter shall not exceed 20 percent opacity as a 3-minute average.
 - ii. A charging boot shall be used around the hopper choke-feed discharge area and transit-mix truck opening. The charging boot shall have a control efficiency sufficient to minimize or eliminate visible emissions of fugitive dust to the extent possible with good engineering design.
- d. Sand and aggregate transfer to elevated bins:
- i. Fugitive particulate matter emissions shall be limited to 10.77 tons/yr. The visible emissions of fugitive particulate matter shall not exceed 20 percent opacity as a 3-minute average.

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- ii. The drop height of the front-end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive particulate matter from the conveyor loading area.
 - iii. The sand and aggregate loaded into the elevated bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive particulate matter from the conveyor and transfer point to bins.
- 2. Roadways and parking areas, emissions unit F001:
 - a. Fugitive particulate matter emissions from the plant's roadways and parking areas shall be limited to 0.14 tons/year.
 - i. Unpaved roadways and parking areas:
 - aa. There shall be no visible fugitive particulate matter emissions from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.
 - ab. The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Water shall be used as the dust suppressant, and the following equipment shall be used for the periodic applications: transit mix-truck and/or hose/sprinkler system. The dust suppressant shall be applied to the unpaved surfaces, at a minimum, 3 times per week. This term and condition shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
 - ac. Any material carried off of the

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permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.

- ad. A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.
- ae. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.
- ii. Paved roadways and parking areas:
 - aa. There shall be no visible fugitive particulate matter emissions from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period.
 - ab. The permittee shall sweep the paved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. The following equipment shall be used to sweep the roadways and parking areas: sweeper. The paved surfaces shall be swept, at a minimum, 3 times per week. The permittee shall not be required to sweep during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
 - ac. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.
 - ad. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.

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3. Sand and aggregate storage piles, emissions unit F002:
 - a. fugitive particulate matter emissions from the plant's material storage piles shall be limited to 3.52 tons/year;
 - b. there shall be no visible emissions of fugitive particulate matter from any material storage pile except for a period of time not to exceed 1 minute during any 60-minute observation period; and,
 - c. partial enclosures/walls shall be maintained around the material storage piles in order to minimize the emissions of fugitive dust from wind erosion of the storage piles.

B. OPERATIONAL RESTRICTIONS

1. The maximum annual operating hours for the concrete batch plant, emissions unit P901, shall not exceed 3300 hours.

C. MONITORING AND/OR RECORDKEEPING REQUIREMENTS

1. The permittee shall maintain monthly records of the operating hours for the concrete batch plant, emissions unit P901.
2. The permittee shall perform daily checks for any visible particulate matter emissions from the fabric filter control systems for the weigh hopper and cement silos, while the weigh hopper and cement silos are in operation. The presence or absence of any visible emissions from each fabric filter control system shall be noted in an operations log. If any visible emissions are observed from either system, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.
3. The permittee shall maintain records which include the following information for the paved roadways and

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parking areas:

- a. the date the paved surfaces were swept; and,
 - b. the portions of the paved surfaces that were swept.
4. The permittee shall maintain records which include the following information for the unpaved roadways and parking areas:
- a. the date dust suppressants were applied to the unpaved surfaces;
 - b. the portions of unpaved surfaces that were treated with dust suppressants; and,
 - c. the application rate of water and any chemical additives (gallons of each per square yard).
5. 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, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

D. REPORTING REQUIREMENTS

1. The permittee shall submit quarterly written reports for emissions unit P901 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,

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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.)

E. TESTING REQUIREMENTS/COMPLIANCE METHOD DETERMINATIONS

1. Compliance with the emission limitations listed in the Air Emission Summary of this PTI for emission unit P901 shall be determined in accordance with the following methods:

- a. Emission Limitation- Cement unloading to elevated silos:

- i. 0.010 grains/dry standard cubic foot (equates to 0.13 lb PE/hr, 0.21 TPY PE at 40 tons/hr and 3300 hrs/yr) from the baghouse
- ii. Visible emissions shall not exceed 0 percent opacity as a six minute average.

Applicable Compliance Method: The 0.010 grains/dry standard cubic foot limit is the manufacturer's guaranteed outlet grain loading concentration. The lbs/hr and tons/yr limits are derived from it utilizing the fabric filter's volume and the emissions unit's maximum operating schedule of 3300 hrs/yr. If required, compliance with the mass emission limitation shall be based on stack testing using the methods and procedures specified in USEPA Method 5. Compliance with the visible emission limitation shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 9.

- b. Emission Limitation: Weigh hopper loading- cement hopper:

- i. 0.010 grains/dry standard cubic foot (equates to 0.013 lb PE/hr, 0.021 TPY PE at 52 tons/hr and 3300 hrs/yr) from the baghouse

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- ii. 0% opacity as a 6-minute average

Applicable Compliance Method: The 0.010 grains/dry standard cubic foot limit is the manufacturer's guaranteed outlet grain loading concentration. The lbs/hr and tons/yr limits are derived from it utilizing the fabric filter's volume and the emissions unit's maximum operating schedule of 3300 hrs/yr. If required, compliance with the mass emission limitation shall be based on stack testing using the methods and procedures specified in USEPA Method 5. Compliance with the visible emission limitation shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 9.

- c. Emission Limitation: Weigh hopper loading- aggregate hopper:

- i. 10.56 TPY fugitive PE

- ii. 20% opacity as a 3-minute average

Applicable Compliance Method: Compliance with the emission limitations can be shown with the AP-42 emission factors, Table 11.12-2 (revised 10/86) to calculate the actual rate of fugitive emissions. Compliance with the visible emission limitation shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 9.

- d. Emission Limitation: Transit mix truck loading:

- i. 3.70 TPY fugitive PE

- ii. 20% opacity as a 3-minute average

Applicable Compliance Method: Compliance with the emission limitations can be shown with the AP-42 emission factors, Table 11.12-2 (revised 10/86) to calculate the actual rate of fugitive emissions. Compliance with the visible emission limitation shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 9.

- e. Emission Limitation: Sand and aggregate transfer to elevated bins:

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- i. 10.77 TPY fugitive PE
- ii. 20% opacity as a 3-minute average

Applicable Compliance Method: Compliance with the emission limitations can be shown with the AP-42 emission factors, Table 11.12-2 (revised 10/86) to calculate the actual rate of fugitive emissions. Compliance shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 9.

- 2. Compliance with the emission limitations listed in the Air Emission Summary of this PTI for emission unit F001 shall be determined in accordance with the following methods:

- a. Emission Limitation- Paved roadways and parking areas: No visible emissions except for a period of time not to exceed 1 minute during any sixty-minute observation period.

Applicable Compliance Method: Compliance shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 22.

- b. Emission Limitation- Unpaved roadways and parking areas: No visible emissions except for a period of time not to exceed 3 minutes during any sixty-minute observation period.

Applicable Compliance Method: Compliance shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 22.

- c. Emission Limitation: 0.14 tons of fugitive particulate matter per year from the roadways and parking areas:

Applicable Compliance Method: Compliance shall be determined by calculating and summing the emissions from the unpaved and paved segments as

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follows:

- i. unpaved roadways and parking areas: The AP-42 emission factors, section 13.2.2 (revised 1/95) shall be employed to calculate the actual rate of fugitive emissions.
 - ii. paved roadways and parking areas: The AP-42 emission factors, section 13.2.1 (revised 1/95) shall be employed to calculate the actual rate of fugitive emissions.
3. Compliance with the emission limitations listed in the Air Emission Summary of this PTI for emission unit F002 shall be determined in accordance with the following methods:
- a. Emission Limitation: 3.52 tons of fugitive particulate matter emissions per year from the storage piles

Applicable Compliance Method: The AP-42 emission factors, section 13.2.4 (revised 1/95) shall be employed to calculate the actual rate of fugitive emissions.
 - b. Emission Limitation: No visible emissions except for a period of time not to exceed 1 minutes during any sixty-minute observation period.

Applicable Compliance Method: Compliance shall be determined by visible emissions evaluations performed using the methods and procedures specified in USEPA Method 22.

Note: No term or condition specifying a method for demonstrating compliance with any emission limitation or other requirement of this permit shall preclude the use by any person of any credible evidence to establish compliance with or a violation of this permit, the Clean Air Act, or any implementing regulations or rules promulgated thereunder.

F. MISCELLANEOUS REQUIREMENTS

None