

1

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

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

2

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

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.

Facility Name: **Alliance Ready Mix Inc**
Application Number: **17-1625**
Date: **February 18, 1999**

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 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.

4

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

5

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

<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>
---	---	------------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Alliance Ready Mix Inc** located in **Columbiana** 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.

F003

F004

Ohio
EPA
Source
Number

Source
Identification
Description

F001 F002

Unpaved/paved
roadways and
parking areas

F002
Cont'd

F003
Cont'd

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

<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>
	handling systems		suppressant to control fugitive dust emissions; use of enclosure or pile covering (walls or natural wind-break) to minimize wind erosion.	
		<u>BAT Determination</u>		
Sand and aggregate storage piles		Use of watering or other dust suppressants to control fugitive dust emissions; no visible emissions except for 13/60 minutes per sixty minute period.		Use of watering and/or enclosure to control dust emissions; visible emissions limited to 20 percent opacity per three minutes average. Also, dust emissions from weigh-hopper loading vented to baghouse dust control system.
	Concrete batching plant and mix-truck loading		Use of water spraying to control moisture content of material and fugitive dust emissions; cement silo emissions to be controlled by fabric filter (baghouse) dust control system.	
Batch concrete plant material		Use of watering or other suitable dust		

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

<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>
05				
Applicable Federal & <u>OAC Rules</u>	3745-17-07 (B)	3745-17-08	3745-17-08	Permit Allowable Mass Emissions and/or <u>Control/Usage Requirements</u>
3745-17-07 (B)				
	3745-17-08	3745-31-05	3745-31-05	No visible emissions from unpaved roadway and parking areas except for 13 minutes per sixty minute period; no visible emissions from paved roads and parking areas except for 6 minutes per sixty minute period.
		3745-17-08		
	3745-31-05			
3745-17-08	3745-17-08 (B) (3)			Use watering or other suitable dust suppressant to control fugitive dust emissions.
(B) (2)				
		3745-17-07		Particulate emissions limited to 1.25 TPY.
3745-31-				No visible emissions from

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

<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>
materia l storage piles except for 13 minutes per sixty minute period.	baghouse outlet shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust vent, whichever is less stringent.	outlet shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust vent, whichever is less stringent.		
Use waterin g or other suitabl e dust suppres sant or control mechani sm to control fugitiv e dust emissio ns.	Use of water spraying to control moisture content of material and limit fugitive dust emissions.	Visible particulate emissions limited to twenty (20) percent opacity as a three minute average.		
Particu late emissio ns limited to 1.90 TPY.	Particulate emissions from this unit limited to 2.69 TPY.	Use of water spraying to control moisture content of material and limit fugitive dust emissions. Established rule limits equivalent to BAT.		
Emissio ns from	Emissions from baghouse			

Facility Name: **Alliance Ready Mix Inc**
 Application Number: **17-1625**
 Date: **February 18, 1999**

SUMMARY
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulates	5.84

CONSTRUCTION STATUS

The **Ohio EPA, Northeast District Office** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: **Batch concrete plant - F001, F002, F003 and F004.**

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

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 source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA, Northeast District Office, 2110 E. Aurora Road, Twinsburg, OH 44087.**

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

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.

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

Introduction

The emissions units at Alliance Ready Mix covered by this PTI consist of unpaved roadways and parking areas (F001), sand and limestone storage piles (F002), material handling systems including a cement silo and associated baghouse filter control system (F003), and a concrete batching plant which including a concrete weigh-hopper and a mix-truck loading operation (F004). This facility is scheduled to be constructed this Spring outside of Alliance, Ohio. The fugitive dusts generated by both the weigh-hopper and the cement silo loading operations will be vented and collected by two baghouse filter dust control systems with design particulate control efficiencies of over 96 percent. This PTI will further require that fugitive dust created by the roadways/parking areas/material storage piles be controlled by watering or use of other suitable dust suppressants.

A. Applicable Emissions Limitations

For F001

Per OAC rule 3745-17-07(B)(4) & (B)(5), there shall be no visible emissions from unpaved roadway & parking areas except for 13 minutes per sixty minute period or from paved roads and parking areas except for 6 minutes per sixty minute period.

11

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

For F002

Per OAC rule 3745-17-07(B)(6), there shall be no visible emissions from material storage piles except for 13 minutes per sixty minute period.

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

For F003

Per OAC rule 3745-17-08(B)(3), emissions from the baghouse/fabric filter outlet shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust vent, whichever is less stringent.

For F004

1. Per OAC rule 3745-17-08(B)(3), emissions from the baghouse/fabric filter outlet shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust vent, whichever is less stringent.
2. Per OAC rule 3745-17-07, visible particulate emissions from this emissions unit is limited to twenty (20) percent opacity as a three minute average.

B. Additional Terms and Conditions

1. Control of Fugitive Dusts from Roadways and Parking Areas (F001)
 - a. The roadways and parking areas associated with this batch concrete plant shall be treated with water or other suitable dust suppressant, or swept and cleaned regularly (paved areas) with appropriate equipment, in order to minimize or eliminate at all times visible emissions of fugitive dusts generated by vehicular traffic. Frequency of application of water and/or dust suppressant, or of sweeping/cleaning, shall be as needed to minimize fugitive dust emissions. This term and condition shall be waived during wet weather conditions when there is sufficient moisture to prevent visible emissions of fugitive dusts.
 - b. Any material carried off of the source owner's property and deposited onto the city streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly in such a manner so as to minimize or prevent

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

further fugitive dust emissions.

- c. Opened bodied vehicles transporting, either onto or from this source, materials which are likely to become airborne shall be covered at all times.
- d. The use of used oil as a dust suppressant is prohibited per OAC rule 3745-279-82.

2. Control of Fugitive Dusts from Sand and Aggregate Material Storage Piles (F002)

- a. All sand and aggregate storage piles associated with this facility shall contain sufficient moisture so as to minimize or eliminate visible emissions caused by wind erosion. If piles become dry and wind eroded dust emissions become a problem, spraying of piles with water or other appropriate dust suppressant, or covering of piles with canvas or other suitable coverings, will be required to control dusts. This condition will be waived during wet weather conditions.
- b. During the unloading onto or removal from the sand and aggregate storage piles, the drop height of the front-end loader or the dump truck shall be minimized in order to minimize or eliminate visible emissions of fugitive dusts.

3. Control of Fugitive Dusts During Material Handling Operations (F003)

- a. Cement shall be transferred pneumatically to the storage silo. 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.
- b. The cement silo vent shall be adequately enclosed and vented to a fabric filter or suitable dust control system. The enclosure shall be sufficient so as to minimize at all times visible emissions of fugitive dust at the point of capture.
- c. The fabric filter, or other suitable dust control system, on the cement silo shall achieve an outlet emission rate of not greater than 0.030 grain of

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

particulate emissions per dry standard cubic foot of exhaust gas or there shall be no visible emissions from the outlet, whichever is less stringent.

- d. Use of water spray shall be employed at conveyor transfer points to control and/or minimize fugitive dust emissions from this emissions unit.

4. Control of Fugitive Dusts During Batch Concrete Plant Operations (F004)

- a. The cement/weigh-hopper shall be adequately enclosed and the enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust.
- b. The aggregate and sand to be loaded into the weigh-hopper and the conveyor shall have a moisture content sufficient so as to minimize or eliminate at all times visible emissions of fugitive dust. Water spraying devices shall be utilized, if necessary, to control visible emissions of fugitive dusts from this emissions unit. The transfer conveyor discharge shall be enclosed and vented to the fabric filter/baghouse dust control along with captured emissions from the weigh-hopper. The enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust at the point of capture.
- c. The mix-truck loading area shall be partially enclosed so as to minimize fugitive dusts created during this operation from drifting beyond the loading area.
- d. A telescopic chute or suitable shroud shall be employed at the point of transfer from the weigh-hopper to the mix-truck to minimize fugitive dust emissions from this operation.

C. Operational Restrictions

1. The dust control system (fabric filter/baghouse dust

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

collection devices) to be installed with this concrete batch plant shall be properly maintained in accordance with manufacturers instructions and shall be operated at all times that the any portion of this concrete batch plant is in operation (i.e., loading of cement silo, loading of weigh hoppers, loading and operation of the concrete batcher/mixer, and/or loading of concrete delivery trucks). Any malfunction of this dust control system, or any shut down of the system for scheduled or unscheduled maintenance, shall be cause to shut down operations of this concrete batch plant operation.

2. A maximum speed limit of ten (10) miles per hour for vehicular traffic shall be posted and enforced on all roadways and parking areas to be associated with this emissions unit.

D. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways, parking areas, and material storage piles in accordance with the following frequencies:
 - a. all roadways and parking areas shall be inspected daily; and,
 - b. all material storage piles shall be inspected daily.

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 operating conditions. No inspection shall be necessary for a roadway, parking area, or 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. 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.

2. 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

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

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 2.d. shall be kept separately for roadways/parking areas and storage piles, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 3. The permittee shall further monitor and maintain monthly records of the following information relative to the operation of this facility:
 - a. the volume and/or weight of sand, limestone, or other aggregate delivered and processed by this concrete batch plant;
 - b. the volume and weight of cement delivered to the storage silo and processed by this source;
 - c. the volume and/or weight of concrete processed by (batch mixed/delivered from) this concrete batch plant; and,
 - d. the total cumulative hours of operation of this batch plant and associated dust control systems.

E. Reporting Requirements

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

17

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

- 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.

Such reports shall be sent to the Northeast District Office within 30 days following the end of the calendar month during which the emission (usage, inspection, etc.) exceedance occurred.

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

F. Testing Requirements

1. Testing Requirements for Cement Silo Loading, Weigh-Hopper Loading, and Mix-truck Loading Emissions (F003 & F004)

a. Emission Limitation

Emissions from exhaust of dust control systems shall be no more than 0.030 grain/dscf.

Applicable Compliance Method

Compliance with the particulate emissions limitation of this permit shall be based on the maximum flow rate of the control device (900 scfm) times the allowable emissions rate of 0.030 grain/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).

b. Emissions Limitation

There shall be no visible emissions from the combined exhausts of the dust control systems.

Applicable Compliance Method

Compliance shall be determined in accordance with U.S. EPA Test Method 22, "Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares", as set forth in Chapter 40, Code of Federal Regulations (CFR), Part 60, "Standards of Performance of New Stationary Sources", Appendix A, "Testing Methods", and in OAC rule 3745-17-03.

c. Emissions Limitation

Visible emissions from the mix-truck loading operations shall not exceed twenty (20) percent opacity as a three-minute average.

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

Applicable Compliance Method

Compliance shall be determined through visible emission observations in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Testing Requirements for Fugitive Emissions from Roadways and Parking Areas Emissions Unit (F001)

a. Emissions

There shall be no visible emissions from any unpaved roadways and/or parking areas associated with this concrete batch plant except for a period of time not to exceed 13 minutes during any sixty-minute observation period.

Applicable Compliance Method

Compliance shall be determined in accordance with U.S. EPA Test Method 22, "Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares", as set forth in Chapter 40, Code of Federal Regulations (CFR), Part 60, "Standards of Performance of New Stationary Sources", Appendix A, "Testing Methods", and in OAC rule 3745-17-03.

3. Testing Requirements for Fugitive Emissions from Material Storage Piles Emissions Unit (F002)

a. Emissions Limitation

There shall be no visible emissions from any material storage piles associated with this concrete batch plant except for a period of time not to exceed 13 minutes during any sixty-minute observation period.

Applicable Compliance Method

Compliance shall be determined in accordance with U.S. EPA Test Method 22, "Visual Determination of Fugitive Emissions from Material Sources and Smoke

20

Facility Name: **Alliance Ready Mix Inc**

Application Number: **17-1625**

Date: **February 18, 1999**

Emissions from Flares", as set forth in Chapter 40, Code of Federal Regulations (CFR), Part 60, "Standards of Performance of New Stationary Sources", Appendix A, "Testing Methods", and in OAC rule 3745-17-03.

G. Miscellaneous Requirements

1. Per the requirements of OAC rule 3745-15-07, this batch concrete plant shall be operated in such a manner as to avoid causing a nuisance.