



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

9/30/2016

Certified Mail

Ms. Joann Steed
Caldwell Redi-Mix Company
45997 Marietta Road
Caldwell, OH 43724

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0656065019
Permit Number: P0121082
Permit Type: Initial Installation
County: Monroe

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Caldwell Redi-Mix Company**

Facility ID:	0656065019
Permit Number:	P0121082
Permit Type:	Initial Installation
Issued:	9/30/2016
Effective:	9/30/2016
Expiration:	9/7/2026



Division of Air Pollution Control
Permit-to-Install and Operate
for
Caldwell Redi-Mix Company

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Final Permit-to-Install and Operate
Caldwell Redi-Mix Company
Permit Number: P0121082
Facility ID: 0656065019
Effective Date: 9/30/2016

Authorization

Facility ID: 0656065019
Application Number(s): A0056326
Permit Number: P0121082
Permit Description: Initial installation of 350 TPH truck mix concrete batch plant.
Permit Type: Initial Installation
Permit Fee: \$1,800.00
Issue Date: 9/30/2016
Effective Date: 9/30/2016
Expiration Date: 9/7/2026
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Caldwell Redi-Mix Company
35500 State Route 78
Lewisville, OH 43754

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

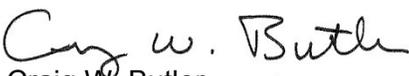
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install and Operate
Caldwell Redi-Mix Company
Permit Number: P0121082
Facility ID: 0656065019
Effective Date: 9/30/2016

Authorization (continued)

Permit Number: P0121082

Permit Description: Initial installation of 350 TPH truck mix concrete batch plant.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P901
Company Equipment ID:	P901
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Caldwell Redi-Mix Company
Permit Number: P0121082
Facility ID: 0656065019
Effective Date: 9/30/2016

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
Caldwell Redi-Mix Company
Permit Number: P0121082
Facility ID: 0656065019
Effective Date: 9/30/2016

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Final Permit-to-Install and Operate
Caldwell Redi-Mix Company
Permit Number: P0121082
Facility ID: 0656065019
Effective Date: 9/30/2016

C. Emissions Unit Terms and Conditions

1. P901, Truck Mix Concrete Batch Plant

Operations, Property and/or Equipment Description:

350 tph, truck mix concrete batch plant

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.
- b) **Applicable Emissions Limitations and/or Control Requirements**
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<i>Transfer of Sand and Aggregate from Hopper to Conveyor, Conveyor to Bin and Bin to Conveyor Plus Sand and Aggregate Hopper Loading</i>		
a.	OAC rule 3745-31-05(A)(3), as effective 6/30/2008	Develop and implement a site-specific work practice plan designed to minimize or eliminate fugitive dust emissions. See b)(2)a. below
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr by taking into account the voluntary restriction from OAC rule 3745-31-05(E).

		See b)(2)b. below.
c.	OAC rule 3745-31-05(E), as effective 6/30/2008	Emissions shall not exceed 1.45 ton PE/yr
Portland Cement Silo		
d.	OAC rule 3745-31-05(A)(3), as effective 6/30/2008	Install a fabric filter designed with a capture efficiency of 100% and a control efficiency of 99% or there shall be no visible particulate emissions from the outlet. See b)(2)a. ,d. and g. below.
e.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr by taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.
f.	OAC rule 3745-31-05(E), as effective 6/30/2008	Emissions shall not exceed 0.110 ton PE/yr
g.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed twenty percent opacity, as a six - minute average. See b)(2)c. below.
h.	OAC rule 3745-17-11(B)	See b)(2)c. below.
Weigh Hopper Loading of Cement and possibly Sand and Aggregate		
i.	OAC rule 3745-31-05(A)(3), as effective 6/30/2008	Install a fabric filter designed with a capture efficiency of 100% and a control efficiency of 99% or there shall be no visible particulate emissions from the outlet. See b)(2)a., e. and g. below
j.	OAC rule 3745-31-05(A)(3)(a)(ii), as	The Best Available Technology (BAT) requirements under OAC rule 3745-31-

	effective 6/30/2008	05(A)(3) do not apply to the PE emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr by taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.
k.	OAC rule 3745-31-05(E), as effective 6/30/2008	Emissions shall not exceed 0.004 ton PE/yr
l.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed twenty percent opacity, as a six - minute average. See b)(2)c. below.
m.	OAC rule 3745-17-11(B)	See b)(2)c. below.
<i>Aggregate, Sand and Cement loading to truck mixer</i>		
n.	OAC rule 3745-31-05(A)(3), as effective 6/30/2008	Install a control device, i.e., a boot, to load aggregate, sand, and cement into a truck's mix drum designed with a capture efficiency of 100% and a control efficiency of 70%. See b)(2)a. and f. below
o.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.
p.	OAC rule 3745-31-05(E), as effective 6/30/2008	Emissions shall not exceed 5.14 ton PE/yr.
q.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed twenty percent opacity, as a six - minute average. See b)(2)c. below.



r.	OAC rule 3745-17-11(B)	e b)(2)c. below.
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(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S.EPA approves the OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. The requirements established pursuant to OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- d. The permittee shall employ the following best available control measures for the above-identified cement silo for the purpose of ensuring compliance with the above-mentioned applicable requirements:
 - i. Cement shall be transferred pneumatically to the cement 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 dust emanating from the delivery vehicle during transfer shall be cause for the immediate halt of the unloading process and the refusal of the cement load until the situation is corrected.
 - ii. Each cement silo vent shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust at the point of capture.
- e. The permittee shall employ the following best available control measures for the above-identified weigh hoppers for the purpose of ensuring compliance with the above-mentioned applicable requirements:
 - i. The weigh hoppers shall be sufficiently enclosed so as to minimize or eliminate at all times visible emissions of fugitive dust.
 - ii. The transfer of cement/sand/aggregate to the concrete batching weigh hoppers shall be enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to minimize or eliminate at all times visible emissions of fugitive dust at the point of capture.
- f. The permittee shall employ the following best available control measures for the above-identified truck mix loading process for the purpose of ensuring compliance with the above-mentioned applicable requirements:

- i. The permittee shall employ the use of a boot, to load aggregate, sand, and cement into a truck's mix drum. The boot shall capture 100% of the aggregate, sand and cement and control the aggregate, sand and cement by 70%.

- g. The permittee shall install and maintain a bag leak detection system, meeting the requirements of 40 CFR 63.7525(i). The permittee shall initiate corrective action within 1 hour of a bag leak detection system alarm and shall complete corrective actions according the SSMP. The fabric filter system shall be operated such that the alarm does not sound more than 5% of the operating time during any 6-month compliance period. The fabric filter bag leak detection system shall be maintained in continuous operation and shall be installed, calibrated, maintained as follows:
 - i. a bag leak detection system shall be installed and operated for each exhaust stack of the fabric filter;
 - ii. each bag leak detection system shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997;
 - iii. the bag leak detection system shall be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less;
 - iv. the bag leak detection system sensor shall provide output of relative or absolute particulate matter loadings;
 - v. the bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor;
 - vi. the bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected; and the alarm must be located where it is easily heard by plant operating personnel;
 - vii. for positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system shall be installed in each baghouse compartment or cell; and
 - viii. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

- c) **Operational Restrictions**
 - (1) The maximum hourly production rate for this truck mix concrete facility shall not exceed 174 cubic yards of concrete (350 tons) per hour.
 - (2) The maximum annual production rate for this truck mix concrete facility shall not exceed 100,000 cubic yards of concrete (201,200 tons) per year.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain annual records of the cubic yards or tons of concrete produced at this facility.
- (2) **Work Practice Plan**

The permittee shall develop and implement a site-specific work practice plan designed to minimize or eliminate fugitive dust when the permittee transfers sand and aggregate from hopper to the conveyor, the conveyor, to the bin and the bin to the conveyor plus hopper loading. This work practice plan shall include, at a minimum, the following elements:

- a. An identification of the operations in which the plan applies including: sand and aggregate transfer each from hopper to the conveyor; the conveyor to the bin; the bin to the conveyor; and hopper loading.
- b. A determination of the frequency that the transfer of sand and aggregate from hopper to the conveyor, the conveyor to the bin, the bin to the conveyor and hopper loading will be inspected to determine if additional control measures are needed. The frequency of inspection can either be common for aforementioned operations or may be identified separately for inspection frequency.
- c. The identification of the record keeping form/record that will be used to track the inspection and treatment of the transfer operations. This form/record should include, at a minimum, the following elements:
 - i. Each operation inspected. Operations shall include sand and aggregate transfer each from hopper to the conveyor, the conveyor to the bin, the bin to the conveyor and hopper loading;
 - ii. Date inspected;
 - iii. Name of employee responsible for inspection;
 - iv. Result of the inspection (needs treated or does not need treated);
 - v. A description of why no treatment was needed;
 - vi. Date treated;
 - vii. Name of employee responsible for treatment; and
 - viii. Method used to treat the transfer operation.
- d. A description of how and where the records shall be maintained.

The permittee shall begin using the Work Practice Plan within 30 days from the date Ohio EPA approved the initial plan. As needs warrant, the permittee can modify the Work Practice Plan. The permittee shall submit a copy of proposed revisions to the Work Practice Plan to the appropriate Ohio EPA, Southeast District office for review and

approval. The permittee can begin using the revised Work Practice Plan once the Ohio EPA, Southeast District office has approved its use.

(3) Work Practice Plan Inspections

Except as otherwise provided in this section, the permittee shall perform inspections of each of the sand and aggregate transfer operations at frequencies described in the Work Practice Plan. The purpose of the inspections is to determine the need for implementing control measures. The inspections shall be performed during representative, normal operations. No inspection shall be necessary if the concrete batch plant is not in operation.

(4) Work Practice Plan Record Keeping

The permittee shall maintain records of the following information:

- a. The records required to be collected under the Work Practice Plan, and
- b. The date and reason any element of the Work Practice Plan was not implemented.

The permittee shall maintain these records in accordance to the Standard Terms and Conditions of Part A of this permit.

e) Reporting Requirements

- (1) Within 30 days from the final issuance of this permit, the permittee shall submit their proposed Work Practice Plan to Ohio EPA, Southeast District Office.
- (2) The permittee shall submit annual deviation reports concerning any failure to implement the Work Practice Plan. These reports shall be submitted as part of the annual Permit Evaluation Report (PER).
- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emissions Limitation:
Emissions shall not exceed 1.45 ton PE/yr



(Transfer of sand and aggregate from hopper to conveyor, conveyor to bin and bin to conveyor plus sand and aggregate hopper loading)

Applicable Compliance Method:

Compliance is demonstrated by the following calculations:

Aggregate feed hopper to conveyor = 92,000 tons/yr max transfer rate
 $92,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.317 \text{ ton/yr}$
 Aggregate conveyor to bin = 92,000 tons/yr max transfer rate
 $92,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.317 \text{ ton/yr}$
 Aggregate bin to conveyor = 92,000 tons/yr max transfer rate
 $92,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.317 \text{ ton/yr}$
 Aggregate feed hopper loading = 92,000 tons/yr max transfer rate
 $92,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.317 \text{ ton/yr}$
 Sand feed hopper to conveyor = 42,000 tons/yr max transfer rate
 $42,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.441 \text{ ton/yr}$
 Sand hopper to conveyor = 42,000 tons/yr max transfer rate
 $42,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.441 \text{ ton/yr}$
 Sand bin to conveyor = 42,000 tons/yr max transfer rate
 $42,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.441 \text{ ton/yr}$
 Sand feed hopper loading = 42,000 tons/yr max transfer rate
 $42,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.441 \text{ ton/yr}$

Aggregate and sand transfer and hopper loading total = $0.317 \text{ ton/yr} + 0.317 \text{ ton/yr} + 0.317 \text{ ton/yr} + 0.317 \text{ ton/yr} + 0.441 \text{ ton/yr} + 0.441 \text{ ton/yr} + 0.441 \text{ ton/yr} + 0.441 \text{ ton/yr} = 1.45 \text{ tons/yr}$

Where:

Maximum annual aggregate usage = 92,000 tons/yr (from permittee's application)

Maximum annual sand usage = 42,000 tons/yr (from permittee's application)

Aggregate emission factor = 0.0069 lb PE/ton (AP-42, 11.12, Table 11.12-2, 6/06)

Sand emission factor = 0.0021 lb PE/ton (AP-42, 11.12, Table 11.12-2, 6/06)

b. Emissions Limitation:

Emissions shall not exceed 0.110 ton PE/yr (Portland cement silo)

Applicable Compliance Method:

Compliance is demonstrated by the following calculation:

$30,000 \text{ tons/yr} \times 0.73 \text{ lb/ton} \times (1-.99) / (\text{ton}/2000\text{lb}) = 0.110 \text{ ton/yr}$

Where:

Maximum cement usage = 30,000 tons/yr (from permittee's application)



Cement emissions factor = 0.73 lb/ton (AP-42, 11.12, Table 11.12-2, 6/06)
Baghouse control efficiency = 99% (from permittee's application)

c. Emissions Limitation:

Emissions shall not exceed 0.004 ton PE/yr
(Weigh hopper)

Applicable Compliance Method:

Compliance is demonstrated by the following calculation:

Maximum weigh hopper loading = Maximum annual cement usage + Maximum annual aggregate usage + Maximum annual sand usage

Maximum weigh hopper loading = 30,000 tons/yr + 92,000 tons/yr + 42,000 tons/yr = 164,000 tons/yr
 $164,000 \text{ tons/yr} \times 0.0048 \text{ lb/ton} \times (1-.99) / (\text{ton}/2000\text{lb}) = 0.004 \text{ ton/yr}$

Where:

Maximum annual aggregate usage = 92,000 tons/yr (from permittee's application)

Maximum annual sand usage = 42,000 tons/yr (from permittee's application)

Maximum annual cement usage = 30,000 tons/yr (from permittee's application)

Maximum Weigh hopper loading emissions factor = 0.0048 lb/ton (AP-42, 11.12, Table 11.12-2, 6/06)

Baghouse control efficiency = 99% (from permittee's application)

d. Emissions Limitation:

Emissions shall not exceed 5.14 ton PE/yr
(Aggregate, sand and cement loading to truck mixer)

Applicable Compliance Method:

Compliance is demonstrated by the following calculation:

Aggregate loading to truck mixer = 92,000 tons/yr
 $92,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} (1-.7) = 0.095 \text{ ton/yr}$
Sand loading to truck mixer = 42,000 tons/yr
 $42,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} (1-.7) = 0.013 \text{ ton/yr}$
Cement loading to truck mixer = 30,000 tons/yr
 $30,000 \text{ tons/yr} \times 1.118 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} \times (1-.7) = 5.03 \text{ ton/yr}$

Aggregate, sand and cement loading to truck mixer total = 0.095 ton/yr + 0.013 ton/yr + 5.03 ton/yr = 5.14 tons/yr

Where:

Maximum annual aggregate usage = 92,000 tons/yr (from permittee's application)

Maximum annual sand usage = 42,000 tons/yr (from permittee's application)

Maximum annual cement usage = 30,000 tons/yr (from permittee's application)
Aggregate emission factor = 0.0069 lb PE/ton (AP-42, 11.12, Table 11.12-2, 6/06)
Sand emission factor = 0.0021 lb PE/ton (AP-42, 11.12, Table 11.12-2, 6/06)
Cement loading emission factor = 1.118 lb/ton (AP-42, 11.12, Table 11.12-2, 6/06)

e. Emissions Limitation:

Visible particulate emissions shall not exceed twenty percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 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, 1997.

f. Emissions Limitation:

Install a fabric filter designed with a capture efficiency of 100% and a control efficiency of 99% or there shall be no visible particulate emissions from the outlet.

Applicable Compliance Method:

Compliance with the capture and control efficiency of the fabric filter shall be demonstrated by the manufacturer's specifications.

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 22 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, 1997.

g. Emissions Limitation:

Install a control device, i.e., a boot, to load aggregate, sand, and cement into a truck's mix drum designed with a capture efficiency of 100% and a control efficiency of 70%.

Applicable Compliance Method:

Compliance with the capture and control efficiency of the boot shall be demonstrated by the manufacturer's specifications.



Final Permit-to-Install and Operate
Caldwell Redi-Mix Company
Permit Number: P0121082
Facility ID: 0656065019
Effective Date: 9/30/2016

g) Miscellaneous Requirements

- (1) The permittee may replace equipment, add additional equipment, or alter existing equipment as long as the change is consistent with applicable Ohio EPA guidance document(s) and does not meet the definition of a modification or a new source as defined in OAC rule 3745-31-01(B).