



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
FAIRFIELD COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

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

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Lazarus Gov. Center  
P.O. Box 1049

**Application No: 01-08574**

**DATE:** 7/23/2002

Buckeye Ready Mix Plant 5  
William Feltz  
P O Box 398  
Columbus, OH 432160398

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

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

Very truly yours,

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

CC: USEPA

CDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 7/23/2002  
Effective Date: 7/23/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 01-08574

Application Number: 01-08574  
APS Premise Number: 0123010026  
Permit Fee: **\$0**  
Name of Facility: Buckeye Ready Mix Plant 5  
Person to Contact: William Feltz  
Address: P O Box 398  
Columbus, OH 432160398

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1750 Logan Lancaster Rd  
Lancaster, Ohio**

Description of proposed emissions unit(s):  
**Corrected copy modification of PTI 0108574.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency  


Director

**Buckeye Ready Mix Plant 5**  
**PTI Application: 01-08574**  
**Modification Issued: 7/23/2002**

**Facility ID: 0123010026**

## **Part I - GENERAL TERMS AND CONDITIONS**

### **A. Permit to Install General Terms and Conditions**

#### **1. Compliance Requirements**

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

#### **2. Reporting Requirements Related to Monitoring and Record keeping Requirements**

The permittee shall submit required reports in the following manner:

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

#### **3. Records Retention Requirements**

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

#### **4. Inspections and Information Requests**

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

**Buckeye Ready Mix Plant 5**  
**PTI Application: 01-08574**  
**Modification Issued: 7/23/2002**

**Facility ID: 0123010026**

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

**9. Construction of New Sources(s)**

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

**Buckeye Ready Mix Plant 5**  
**PTI Application: 01-08574**  
**Modification Issued: 7/23/2002**

**Facility ID: 0123010026**

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

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or

**Buckeye Ready Mix Plant 5**  
**PTI Application: 01-08574**  
**Modification Issued: 7/23/2002**

**Facility ID: 0123010026**

modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

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

#### **14. Construction Compliance Certification**

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

#### **15. Fees**

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

#### **B. Permit to Install Summary of Allowable Emissions**

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	35.3

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Paved and unpaved roadways and parking	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 9.3 tons/yr.
Paved roadways and parking areas (see Section A.2.b)	OAC rule 3745-31-05(A)(3)	No visible particulate emissions except for one minute during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d, and A.2.f through A.2.j)
Unpaved roadways and parking areas (see Section A.2.c)	OAC rule 3745-17-07(B) OAC rule 3745-17-08(A)	None (refer to section A.2.a of the terms and conditions of this permit).
Unpaved roadways and parking areas (see Section A.2.c)	OAC rule 3745-31-05(A)(3)	No visible particulate emissions except for 3 minutes during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j)
	OAC rule 3745-17-07(B) OAC rule 3745-17-08(A)	None (refer to section A.2.a of the terms and conditions of this permit).

**2. Additional Terms and Conditions**

- 2.a Fairfield County is not included in "Appendix A" of rule OAC rule 3745-17-08.

Therefore, the requirements established in OAC rules 3745-17-08(A) and 3746-17-07(B) shall not apply to any fugitive dust source which is located in Fairfield county. "Fugitive dust source" is defined in OAC rule 3745-17-01(B)(7).

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

paved roadways and parking areas:

driveway  
automobile parking area  
mixer truck parking area  
all other paved roadway and parking areas

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

unpaved roadways and parking areas:

mixer truck wash down area  
gravel surface area  
all other unpaved roadway and parking areas

- 2.d** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall treat the paved roadways and parking areas by reduced speed and sweeping (or equivalent) at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.e** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with calcium chloride and watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.f** The needed frequencies of implementation of the control measures shall be determined by

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

- 2.g Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05(A)(3).

## B. Operational Restrictions

None

## C. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas

minimum inspection frequency

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

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. The dates the control measures were implemented; and
  - d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

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

**D. Reporting Requirements**

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

cover or precipitation; and

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

#### E. Testing Requirements

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

- a. Emission Limitation:  
Particulate emissions shall not exceed 1.5 tons per year.

Applicable Compliance method:

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

##### Paved Surfaces

$$E = k(sL/2)^{0.65}(W/3)^{1.5} \text{ (AP 42 13.2.1, 10/97)}$$

where:

k = base factor for particle size range (0.082)

sL = road surface silt loading (3 g/m<sup>2</sup>)

W = mean vehicle weight (25 tons)

$$E = 2.57 \text{ lbs/vehicle miles traveled (VMT)}$$

$$(2.57 \text{ lbs/VMT})(28,000 \text{ VMT/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 35.98 \text{ tons/yr}$$

$$\text{Sweeping Application (80\%)} = 7.2 \text{ tons/yr}$$

##### Unpaved Surfaces

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

$$E = [10(10/12)^8(25/3)^5]/[(10/0.2)^{0.4}] * [(365-140)/365]$$

where:

k = empirical constant (10 lb/VMT)

s = surface material silt content (10)

a = empirical constant (0.8)

W = mean vehicle weight (25 tons)

b = empirical constant (0.5)

M = surface material moisture content percentage (10%)

c = empirical constant (0.4)

p = number of days with at least 0.01 inches of precipitation per year (140)

$E = 8.46 \text{ lbs/VMT}$

$(8.46 \text{ lbs/VMT})(25,000 \text{ VMT/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 105.75 \text{ tons/year}$

Chemical Application (90%) = 10.58 tons/yr

Watering Application (80%) = 2.11 tons/yr

Total annual particulate emissions, 9.3 TPY, may be determined by adding the total emission from both the paved and unpaved roadways. Calculations are based on information provided by the facility in the permit to install application received by the Ohio EPA, Central District Office on March 18, 2002.

b. Emission limitation:

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

Applicable Compliance Method:

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

c. Emission Limitation:

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

Applicable Compliance Method:

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

13

**Bucke**

**PTI A**

**Modification Issued: 7/23/2002**

Emissions Unit ID: **F001**

**F. Miscellaneous Requirements**

None

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Load-in and load-out of storage piles (see Section A.2.b for identification of storage piles)	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions shall not exceed 0.6 ton/yr.</p> <p>No visible emissions except for one minute in any hour.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, A.2.d and A.2.g)</p>
	<p>OAC rule 3745-17-08(A)</p> <p>OAC rule 3745-17-07(B)</p>	<p>None (refer to section A.2.a of the terms and conditions of this permit).</p>
Wind erosion from storage piles (see Section A.2.b for identification of storage piles)	OAC rule 3745-31-05(A)(3)	<p>No visible emissions except for one minute in any hour.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.g).</p>
	<p>OAC rule 3745-17-08(A)</p> <p>OAC rule 3745-17-07(B)</p>	<p>None (refer to section A.2.a of the terms and conditions of this permit).</p>

**2. Additional Terms and Conditions**

Emissions Unit ID: **F002**

- 2.a** Fairfield County is not included in "Appendix A" of OAC rule 3745-17-08. Therefore, the requirements established in OAC rules 3745-17-08(A) and 3745-17-07(B) shall not apply to any fugitive dust source which is located in Fairfield county. "Fugitive dust source" is defined in OAC rule 3745-17-01(B)(7).
- 2.b** The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05(A)(3) are listed below:
- All sand and aggregate piles
- 2.c** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintaining the moisture content of the sand and gravel sufficient to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.e** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.g** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

16

**Bucke**

**PTI A**

**Modification Issued: 7/23/2002**

Emissions Unit ID: **F002**

**B. Operational Restrictions**

None

**C. Monitoring and/or Record keeping Requirements**

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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All sand and gravel piles	Daily
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2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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All sand and gravel piles	Daily
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3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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All sand and gravel piles	Daily
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4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with

the above-mentioned applicable requirements.

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

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

#### **D. Reporting Requirements**

1. In accordance with paragraph A.2. of the General Terms and Conditions, the permittee shall submit semiannual deviation (excursion) reports that identify any of the following occurrences:
  - a. Each day during which an inspection was not performed 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.

#### **E. Testing Requirements**

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

**Bucke****PTI A****Modification Issued: 7/23/2002**Emissions Unit ID: **F002**

- a. Emission Limitation:  
Particulate emissions shall not exceed 0.6 TPY.

Applicable Compliance Method:

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

Storage pile emission factor equation:

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

E = emission factor

k = particle size multiplier (0.74)

U = mean wind speed in miles per hour (10 mph, NOAA Columbus International Airport)

M = material moisture content (2%)

$E = (0.74)(0.0032)[(10/5)^{1.3}/(2/2)^{1.4}] = 0.0058 \text{ lb particulate/ton}$

$(0.0058 \text{ lb/ton})(200,000 \text{ tons/yr})/(2,000 \text{ lbs/ton}) = 0.58 \text{ ton particulate/year}$

- b. Emission Limitation:  
No visible emissions except for one minute in any hour from either load-in, load-out, or wind erosion.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods: in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

## **F. Miscellaneous Requirements**

None

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	aggregate
P002 - Concrete batch plant	
Transfer of sand and aggregate to elevated bins	
	Weigh hopper loading of cement and fly ash.
Batcher and Auxiliary Silos (Cement and Fly Ash Silos)	Weigh hopper loading of sand and

<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 5.8 lbs/hr and 25.4 ton/yr from the equipment identified below.
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A).
OAC rule 3745-31-05(A)(3)	The visible emissions of fugitive dust shall not exceed 20 percent opacity as a 3-minute average.
OAC rule 3745-31-05(A)(3)	The drop height of the front-end bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the conveyor loading area.
OAC rule 3745-31-05(A)(3)	The sand and aggregate loaded into the elevated bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from the conveyor and transfer point to bins.
OAC rule 3745-31-05(A)(3)	The batcher and three silo fabric filters shall each achieve an outlet emission rate of not greater than 0.02 grain of particulate per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet, whichever is less stringent.
OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed twenty percent opacity, as a 6-minute average.

**Bucke****PTI A****Modification Issued: 7/23/2002**Emissions Unit ID: **P002**

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

No visible particulate emissions greater than 0.02 grain of particulate per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet, whichever is less stringent. See A.2 below.

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

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

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

## **2. Additional Terms and Conditions**

**2.a** The 5.58 lbs/hr particulate limitation was established to reflect the potential to emit for this emissions unit. Therefore it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

**2.b** The material handling operations that are covered by this permit and subject to the

above-mentioned requirements are listed below:

Transfer of sand and aggregate, batcher and auxiliary silos, weigh hopper loading of cement and fly ash, and weigh hopper loading of sand and aggregate

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

<u>material handling operation</u>	<u>control measure</u>
transfer of sand and aggregate content	wet suppression or sufficient moisture
batcher and auxiliary silos	fabric filters
weigh hopper loading of cement and fly ash	fabric filter
weigh hopper loading of sand and aggregate	building enclosure and wet suppression

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

- 2.d** For each material handling operation that is adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures are unnecessary.
- 2.e** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

## **B. Operational Restrictions**

**Buckeye Ready Mix Plant 5**  
**PTI Application: 01 09574**  
**Modif**

**Facility ID: 0123010026**

Emissions Unit ID: **P002**

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

**C. Monitoring and/or Record keeping Requirements**

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

**D. Reporting Requirements**

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

**E. Testing Requirements**

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

- a. Emission Limitations:  
Particulate emissions shall not exceed 5.8 lbs/hr and 25.4 tons/yr from the equipment identified below.

**Applicable Compliance Method:**

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

- i. Sand and aggregate transfer to elevated storage bin:

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

Maximum hourly production: 400 tons/hr  
 $(0.0090 \text{ lb PM/ton})(400 \text{ tons/hr}) = 3.60 \text{ lbs/hr}$

Maximum annual production:

$(0.0090 \text{ lb PM/ton})(400 \text{ tons/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 15.77 \text{ tons/yr}$

- ii. Sand and aggregate weigh hopper loading:  
 Emission factor: 0.0051 lb PM/ton material (AP-42, Table 11.12-2, 10/01)  
 Maximum hourly production: 350 tons/hr  
 $(0.0051 \text{ lb PM/ton})(350 \text{ tons/hr})(40\% \text{ control efficiency}) = 1.07 \text{ lbs/hr}$   
 Maximum annual production:  
 $(0.0051 \text{ lb PM/ton})(350 \text{ tons/hr})(8760 \text{ hr/yr})(1/2,000 \text{ lbs})(40\% \text{ control efficiency})$   
 $= 2.81 \text{ tons/yr}$
- iii. Cement and fly ash weigh hopper loading:  
 Emission factor: 0.02 g/dscf (per application)  
 Inlet gas flow: 70 acfm (per application)  
 $(0.02 \text{ g/dscf})(70 \text{ acf/min})(60 \text{ min/hr})(1 \text{ lb}/7,000 \text{ gr}) = 0.01 \text{ lb/hr}$   
 $(0.012 \text{ lb/hr})(8,760 \text{ hr/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 0.05 \text{ ton}$
- iv. Cement and fly ash silo loading:  
 Emission factor: 0.02 g/dscf (per application)  
 Inlet gas flow: 900 acfm (per application)  
 Number of silos: 3  
 $3(0.02 \text{ gr/dscf})(900 \text{ acf/min})(60 \text{ min/hr})(1 \text{ lb}/7,000 \text{ gr}) = 0.46 \text{ lb/hr}$   
 $(0.46 \text{ lb/hr})(8,760 \text{ ton/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 2.01 \text{ tons/yr}$
- v. Loading transit mix trucks  
 Emission Factor: 0.02 g/dscf (per application)  
 Inlet gas flow: 6500 acfm (per application)  
 $(0.02 \text{ gr/dscr})(6500 \text{ acf/min})(60 \text{ min/hr})(1 \text{ lb}/7,000 \text{ gr}) = 1.11 \text{ lbs/hr}$   
 $(1.1 \text{ lbs/hr})(8,760 \text{ ton/yr})(1 \text{ ton}/2,000 \text{ lbs}) = 4.80 \text{ tons/yr}$

Calculations are based on information provided by the facility in the permit to install application received by the Ohio EPA, Central District Office on March 18, 2002.

## F. Miscellaneous Requirements

None