



State of Ohio Environmental Protection Agency

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**CERTIFIED MAIL**

**RE: FINAL PERMIT TO INSTALL MODIFICATION**

**HENRY COUNTY**

**Application No: 03-17082**

**Fac ID: 0335980008**

**DATE: 10/23/2007**

Gerken Materials, Inc,  
Jim Scheub  
PO Box 607 9-051 US Route 24  
Napoleon, OH 43545

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
Subpart I	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

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 of the Director is final 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 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  
309 South Fourth Street, Room 222  
Columbus, OH 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

NWDO



## FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-17082

Application Number: 03-17082

Facility ID: 0335980008

Permit Fee: \$0

Name of Facility: Gerken Materials, Inc,

Person to Contact: Jim Scheub

Address: PO Box 607 9-051 US Route 24  
Napoleon, OH 43545

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

**9-051 US Route 24  
Napoleon, Ohio**

Description of proposed emissions unit(s):

**250 TPH asphalt plant with roadways/storage piles(admin. mod.to PTI 03-17082 issued on 4/24/07 to allow for increase production, alternative fuel usage and reflect accurate CO allowable.**

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

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Chris Korleski  
Director

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

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

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

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

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

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

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

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

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions

may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio 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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this

permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(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>
(stack emissions)	
PE	5.36
SO <sub>2</sub>	9.42
CO	24.37
NO <sub>x</sub>	8.93
OC	13.00
(fugitive emissions)	
PE	4.67
PM-10	1.38
OC	2.66
CO	0.40

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

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

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

**Operations, Property, and/or Equipment - (F001) - Modification to plant roadways and parking areas. Modification due to increase traffic due to increased production**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	2.60 tons fugitive particulate emissions (PE) per year from paved/unpaved roadways and parking areas.  2.48 tons fugitive PM-10 emissions per year from paved/unpaved roadways and parking areas.  Visible particulate emissions shall not exceed 3 minutes in any 60 minute observation period on any unpaved roadway or unpaved track surface.  Visible particulate emissions shall not exceed 1 minute in any 60 minute observation period on any paved roadway or paved track surface.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.c through A.2.i)
OAC 3745-17-07(B)	None (See A.2.h)
OAC 3745-17-08(B)	None (See A.2.i)

**2. Additional Terms and Conditions**

- 2.a** The unpaved surfaces that are subject to the terms and conditions of this permit are listed below:

unpaved surface:  
 0.40 mile paved track segment

- 2.b** The permittee shall employ best available control measures on all unpaved roadways and parking surfaces 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 water, at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.
- 2.c** 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 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.d** Any unpaved roadway or unpaved parking areas, 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 unpaved parking area that takes the characteristics of a paved roadway or paved parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and unpaved parking areas. Any unpaved roadway or unpaved parking area that is paved shall be subject to the visible emission limitation for paved roadways and paved parking area.
- 2.e** 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.f** 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.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 best available technology requirements of OAC rule 3745-31-05(A)(3).
- 2.h** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

- 2.i The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).

**B. Operational Restrictions**

None.

**C. Monitoring and/or Recordkeeping Requirements**

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

<u>unpaved roadways and unpaved parking areas</u>	<u>minimum inspection frequency</u>
All	once per day of operation

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.

**D. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, 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 emissions limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emissions Limitation:  
 2.60 tons fugitive PE/yr  
 (all roadways and parking areas)

Applicable Compliance Method:

The emission limitation was developed by applying a 95% control efficiency for use of best available control measures to a maximum uncontrolled emission rate. The maximum uncontrolled emission rate was developed by multiplying the AP-42 emission factors for unpaved roadways [section 13.2.2 (12/03)], the maximum vehicle miles traveled (VMT), dividing by 2000 lbs/ton. These emissions factors and vehicle miles traveled are as follows:

Road Segment	Emissions Factor (lbs/VMT)	Vehicle miles traveled per year (VMT/yr)	Annual PE Emissions (tons PE/yr)
Unpaved roadway and unpaved parking areas	6.62	8,108	1.34

Therefore, provided compliance is shown with the requirements of the permit to apply best available control measures, compliance with the annual limitation will be assumed.

- b. Emissions Limitation:  
 1.08 tons fugitive PM-10/yr  
 (all roadways and parking areas)

Applicable Compliance Method:

The emission limitation was developed by applying a 95% control efficiency for use of best available control measures to a maximum uncontrolled emission rate. The maximum uncontrolled emission rate was developed by multiplying the AP-42 emission factors for unpaved roadways [section 13.2.2 (12/03)], by the maximum vehicle miles traveled (VMT), and dividing by 2000 lbs/ton. These emissions factors and vehicle miles traveled are as follows:

Road Segment	Emissions Factor (lbs/VMT)	Vehicle miles traveled per year (VMT/yr)	Annual PE Emissions (tons PE/yr)
Unpaved roadway and unpaved parking areas	5.37	8,108	1.08

Therefore, provided compliance is shown with the requirements of the permit to apply best available control measures, compliance with the annual limitation will be assumed.

- c. Emissions Limitation:  
 Visible particulate emissions shall not exceed 3 minutes in any 60 minute observation period on any unpaved roadway or unpaved parking area.

Applicable Compliance Method:

If required, compliance with the visible emission limitation listed 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, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) 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.

**Operations, Property, and/or Equipment - (F002) - Modification to aggregate storage piles. Modification due to increase annual throughput.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05 (A)(3)	0.88 Tons fugitive PE/yr  0.30 Tons fugitive PM-10/yr  no visible emissions except for a one minute during any 60-minute period.  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.b., A.2.c., & A.2.f.)  no visible emissions except for a one minute during any 60-minute period.  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.d. through A.2.f.)
OAC rule 3745-17-07 (B)	A.2.g.
OAC rule 3745-17-08 (B)	A.2.g.

**2. Additional Terms and Conditions**

- 2.a The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:
  - i. Aggregate Material Products storage pile
- 2.b The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for purposes of ensuring

compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the load-in and load-out materials with water and/or any other suitable dust suppression chemicals to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the propose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat each storage pile with water and/or any other suitable dust suppression chemicals 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 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 if the precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.g** The storage piles are associated with the portable asphalt plant P901 permitted under facility ID 0335010038. The emission limitation of 0.88 TPY fugitive PE and 0.30 TPY fugitive PM-10 represents the maximum emissions which will be emitted from the storage piles for any proposed site for relocation of the portable asphalt plant.

The storage piles are associated with a portable source and are applicable to the requirements of OAC rule 3745-17-07 (B) and 3745-17-08 (B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. The emission

limitations and control requirements established by OAC rule 3745-17-08 (B) and OAC rule 3745-17-08 (B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05 (A) (3).

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
All	Once during each day of operation

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

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
All	Once during each day of operation

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>
All	Once during each day of operation

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.
  - 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 required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the storage 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. The permittee shall submit deviation reports, in accordance with the reporting requirements of the General Terms and Conditions of this permit, 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.
  - 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 limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation: 0.88 tons fugitive PE/yr

Applicable Compliance Method: The emission limitation was established by combining the emissions from load-in and load-out operations and from wind erosion from each storage pile as listed in the permittee's application and applying a 50% control efficiency for use of best available control measures. Load-in and load-out operation emissions are based on a maximum load-in and load-out rate of 305,000 tons per year of product. Wind erosion emissions are based on a maximum storage pile surface area of 1.25 acres as listed in the permit application:

The emission rate was determined as follows:

- i. Load-in - emissions associated with load-in operations were established by multiplying the maximum load-in rate of 305,000 tons of product per year by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [0.005 lb PE/ton product], applying a 50% control efficiency and dividing by 2000 lbs/ton. (0.38 tons fugitive PE/yr.)
- ii. Load-out - emissions associated with load-out operations were established by multiplying the maximum load-out rate of 400,000 tons of product per year by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [0.005 lb PE/ton product], applying a 50 % control efficiency and dividing by 2000 lbs/ton. (0.38 tons fugitive PE/yr.)
- iii. Wind erosion - emissions were established by multiplying a maximum combined storage pile surface area of 1.25 acres for product, the appropriate emission factor from USEPA's Control of Open Fugitive Dust Sources (9/88) [1.12 lbs PE/day/acre of product], a maximum operating schedule of 365 days per year and dividing by 2000 and applying a 50% control efficiency. (0.12 ton PE/yr)

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be assumed.

- b. Emission Limitation: 0.30 tons fugitive PM-10/yr

Applicable Compliance Method: The emission limitation was established by combining the emissions from load-in and load-out operations and from wind erosion from each storage pile as listed in the permittee's application and applying a 50% control efficiency for use of best available control measures. Load-in and load-out operation emissions are based on a maximum load-in and load-out rate of 305,000 tons per year of product. Wind erosion emissions are based on a maximum storage pile surface area of 1.25 acres as listed in the permit application:

The emission rate was determined as follows:

- i. Load-in - emissions associated with load-in operations were established by multiplying the maximum load-in rate of 305,000 tons of product per year by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [0.002 lb PM10/ton product], applying a 50% control efficiency and dividing by 2000 lbs/ton. (0.015 tons fugitive PM10/yr.)
- ii. Load-out - emissions associated with load-out operations were established by multiplying the maximum load-out rate of 305,000 tons of product per year by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [0.002 lb PM10/ton product], applying a 50 % control efficiency and dividing by 2000 lbs/ton. (0.015 tons fugitive PM10/yr.)

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PM10 limitation will be assumed.

- c. Emission Limitation: No visible emissions except for one minute during any 60-minute period.

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, 2002, 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.

**Operations, Property, and/or Equipment - (P901) - Modification to a 250 ton per hour drum mix asphalt plant with baghouse. Modification to include more accurate carbon monoxide allowable, to increase annual throughput and, for the use of alternative fuels. Particulate emissions controlled by baghouse, air emissions of carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO2), and volatile organic compounds (VOC's) uncontrolled. P901 will burn fuels including: natural gas, on-spec used oil and #2 virgin, and #6 virgin fuel oils. In order to maintain this facility as a minor source of all criteria pollutants, thus avoiding Title V and moderate nonattainment program requirements, the permittee requested federally enforceable asphalt production restrictions to limit the potential to emit CO, and VOCs below major source thresholds. With no other changes, this facility remains an unrestricted natural minor source of all other criteria pollutants and hazardous air pollutants (HAPs).**

***(Administrative modification of PTI #03-17082 issued on 6/7/07 to correct operational throughput restriction)***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Stack Emissions:  Sulfur dioxide (SO2) emissions shall not exceed 0.058 pounds per ton of asphalt produced when burning on-spec used oil, and fuel oil.  SO2 emissions shall not exceed 0.0034 pounds per ton of asphalt produced when burning natural gas.  Nitrogen oxide (NOx) emissions shall not exceed 0.055 pounds per ton of asphalt produced when burning on-spec used oil, and fuel oil.  NOx emissions shall not exceed 0.026 pounds per ton of asphalt produced when burning natural gas.  Carbon monoxide (CO) emissions shall not exceed 0.15 pounds per ton of asphalt produced when burning on-spec used oil, and fuel oil.  Organic compounds (OC) emissions shall not exceed 0.08 pounds

	<p>per ton of asphalt produced when burning on-spec used oil, and fuel oil.</p> <p>See A.2.b through A.2.g.</p>
<p>OAC rule 3745-31-05(C)</p>	<p>Stack Emissions:</p> <p>5.36 tons PE (stack) per rolling 12-month period            9.42 tons SO<sub>2</sub> per rolling, 12-month period            8.93 tons NO<sub>x</sub> per rolling, 12-month period            24.37 tons CO per rolling, 12-month period            13.00 tons OC per rolling, 12-month period</p> <p>Asphalt Load Out Emissions</p> <p>Emissions from load out operations shall not exceed 0.21 ton CO per rolling, 12-month period, 0.08 ton PE per rolling, 12-month period and 0.68 ton of OC per rolling, 12-month period.</p> <p>Asphalt Silo Filling Emissions</p> <p>Emissions from silo filling operations shall not exceed 0.19 ton CO per rolling, 12-month period, 0.09 ton PE per rolling, 12-month period and 1.98 ton OC per rolling 12-month period.</p> <p>Cold End Fugitive Dust Emissions</p> <p>Emissions of fugitive dust associated with the weigh hopper loading, aggregate transfer operations and sand transfer operations shall not exceed 2.28 tons of PE per rolling, 12-month period.</p> <p>See A.2.a.</p>
<p>40 CFR Part 60, Subpart I</p>	<p>0.04 gr PE/dscf of exhaust gas</p> <p>Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.</p>
<p>OAC rule 3745-21-07(B)            OAC rule 3745-21-08(B)            OAC rule 3745-17-07(A)(1)            OAC rule 3745-17-11(B)(1)            OAC rule 3745-17-08(A)(1)</p>	<p>See A.2.h.            See A.2.h.            See A.2.i.            See A.2.i.            See A.2.j.</p>

OAC rule 3745-17-07(B)(1)	See A.2.j.
OAC rule 3745-18-06(E)	See A.2.o.

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

- 2.a** The emission limitations per rolling 12-month period contained in A.1 are based on production restrictions (see B.1) for the purpose of establishing federally enforceable limitations to avoid Prevention of Significant Deterioration (PSD) and Title V applicability. For purposes of federal enforceability, a limitation on OC emissions effectively restricts volatile organic compound (VOC) emissions.
- 2.b** The permittee shall properly install (or have properly installed), adjust, operate, and maintain a baghouse to serve this emissions unit, including enclosures, ductwork, fans, and any other equipment necessary to capture, contain, and vent particulate emissions to the baghouse serving this emissions unit, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- 2.c** The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see section A.2.b).
- 2.d** There shall be no visible emissions of fugitive dust from the rotary drum.
- 2.e** Visible emissions of fugitive dust (from areas other than the rotary drum) shall be less than or equal to 10% opacity, as a 3-minute average.
- 2.f** The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.
- 2.g** The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and all transfer points to the dryer.
- 2.h** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs

and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.i** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart I.
- 2.j** This emissions unit is a portable source and is applicable to the requirements of OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. The emission limitations and control requirements established by OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B) are equivalent to or less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

When the emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08, this emission unit is exempt from the requirements of OAC rule 3745-17-08(B) pursuant to OAC rule 3745-17-08(A) and is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).

- 2.k** The gr/dscf emission limitation for PE specified by this rule is less stringent than the emission limitation for the maximum outlet concentration established pursuant to OAC rule 3745-31-05(A).
- 2.l** All used oil burned in this emissions unit shall meet the following specifications:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	2 ppm, maximum*
total halogens	4000 ppm maximum**
mercury	1 ppm, maximum
flash point	100°F, minimum
heat content	135,000 Btu/gallon, minimum
sulfur content	0.5%, by weight, maximum

\*If the permittee is burning used oil with any quantifiable level (2 ppm or greater) of PCB's, then the permittee is subject to the notification requirements of 40 CFR 279.62.

\*\*Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-279. Therefore, the permittee may receive and

burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

- 2.m** In addition to the on-spec used oil specified above in A.2.b, only the following oils shall be burned in this emissions unit:
  - i. Virgin #2 fuel oil containing no more than 0.5% by weight sulfur;
  - ii. Virgin #4 fuel oil containing no more than 0.8% by weight sulfur; and
  - iii. Virgin #6 fuel oil containing no more than 1% by weight sulfur.
  
- 2.n** The permittee shall operate and maintain the fuel burners in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for CO and NO<sub>x</sub>.
  
- 2.o** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**B. Operational Restrictions**

1. The baghouse and associated control equipment serving this emissions unit shall be employed all times the emissions unit is in operation.
  
2. No fuels, other than natural gas and the oils specified above, shall be burned in this emissions unit. In order to use an approved fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per term and condition E.1.
  
3. Used oil that does not meet the specifications listed in A.2.m is off-specification used oil. The permittee shall not receive or burn any off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.
  
4. The maximum annual asphalt production rate for this emissions unit shall not exceed ~~500,000~~ **325,000** tons per year, based upon a rolling, 12-month summation of the asphalt production.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Tons of Hot Mix Asphalt Produced</u>
1	50,000
1-2	75,000
1-3	100,000

1-4	150,000
1-5	200,000
1-6	300,000
1-7	325,000
1-8	325,000
1-9	325,000
1-10	325,000
1-11	325,000
1-12	325,000

After the first 12 calendar months of operation, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the asphalt production.

5. The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for OC, CO and NOx.
6. The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 per cent of all aggregate materials.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall document all times the baghouse and/or associated control equipment serving this emissions unit were/was not employed when the emissions unit was in operation.
2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the

corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

Except for an initial operating period after filter media replacement to attain design filtering efficiency, the acceptable range for the pressure drop across the baghouse is 2 to 8 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the NWDO. The permittee may request revisions to the pressure drop range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the pressure drop range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of administrative modification.

3. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
  - a. The date of the shipment or delivery.
  - b. The quantity of used oil received.
  - c. The Btu value of the used oil, in Btu/gallon.
  - d. The flash point of the used oil, in Btu/gallon.
  - e. The arsenic content, in ppm.
  - f. The cadmium content, in ppm.
  - g. The chromium content, in ppm.
  - h. The lead content, in ppm.
  - i. The PCB content, in ppm.
  - j. The total halogen content, in ppm.
  - k. The mercury content, in ppm.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analysis through an independent laboratory or any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

4. The permittee shall maintain monthly records of the following information:
  - a. the asphalt production for each month;
  - b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the asphalt production;
  - c. during the first 12 calendar months of operation, the permittee shall record the cumulative asphalt production for each calendar month; and
  - d. the maximum percentage of RAP used for any mix.
5. For each shipment of distillate oil, received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.
6. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal (above the allowable) visible particulate emissions from the baghouse servicing this emissions unit. If visible particulate emissions are observed, the permittee shall note the following in the operation log:
  - a. the color of the visible emissions;
  - b. the cause of the visible emissions;
  - c. the total duration of the visible emission incident; and
  - d. corrective actions taken to correct the excess visible particulate emissions.
7. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the rotary drum, the feed hoppers and cold aggregate elevator/conveyor serving this emissions unit. If visible emissions are observed, the permittee shall note the following in the operation log:
  - a. the location and color of the visible emissions;
  - b. the cause of the visible particulate emissions;

- d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.
8. While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form Asphalt Concrete Plants form* (as found in F.2). An alternative form may be used upon approval of the appropriate Ohio EPA District Office of local air agency.

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

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
- a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 12-month asphalt production limitation, and, for the first 12 calendar months of operation following the startup of this emissions unit, all exceedances of the maximum allowable monthly cumulative production levels. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the RAP limitation specified above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the sulfur content limits specified above. These reports are due by the

dates described in Part I - General Terms and Condition of this permit under section (A)(2).

5. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC rule 3745-279-11 and the applicable portions of 40 CFR part 761 and shall also notify Ohio EPA if any used oil exceed the mercury limitation and falls below the heat content limitation listed in term B.4 within thirty days after the exceedance occurs. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11 and the applicable portions of 40 CFR part 761, the permittee is subject to that rule and must comply with all applicable provisions of that rule(s).
6. The permittee shall submit semiannual written deviation (excursion) reports that (a) identify all days during which any abnormal (above the allowable) visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written deviation (excursion) reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the rotary drum, feed hoppers and cold aggregate elevator/conveyor serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.
8. The permittee shall submit a copy of the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form to the appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.
9. The permittee shall notify the Director in writing of any record in which the baghouse and/or associated control equipment serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the event occurs.

## **E. Testing Requirements**

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitations: NO<sub>x</sub> emissions shall not exceed 0.055 pound per ton of asphalt produced; SO<sub>2</sub> emissions shall not exceed 0.058 pound per ton of asphalt produced; CO emissions shall not exceed 0.15 pound per ton of asphalt

produced; OC emissions shall not exceed 0.08 pound per ton of asphalt produced; 0.04 gr PE/dscf of exhaust gas

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate, but no later than 120 days after initial startup of the emissions unit.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, OC, CO, NO<sub>x</sub> and SO<sub>2</sub>.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

For PE, Methods 1-5 of 40 CFR Part 60, Appendix A.

For NO<sub>x</sub>, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

For SO<sub>2</sub>, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

For CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

For OC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity for PE, OC, CO, NO<sub>x</sub> and SO<sub>2</sub> and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office or local air agency's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and

information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA District Office or local air agency.

- b. Emissions Limitation: PE emissions shall not exceed 5.36 tons per rolling, 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the pound per ton of asphalt produced emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

- c. Emission Limitation: OC emissions shall not exceed 13.00 tons per rolling, 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the pound per ton of asphalt produced emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

- d. Emission Limitation: CO emissions shall not exceed 24.37 tons per rolling, 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the pound per ton of asphalt produced emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

- e. Emission Limitation: SO<sub>2</sub> emissions shall not exceed 9.42 tons per rolling ,12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the pound per ton of asphalt produced emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

- f. Emission Limitation: NO<sub>x</sub> emissions shall not exceed 8.93 tons per rolling, 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the pound per ton of asphalt produced emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

- g. Emission Limitation: Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.

Applicable Compliance Method: Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A.

- h. Emission Limitation: No visible emissions of fugitive dust from the rotary drum.

Applicable Compliance Method: Compliance 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, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- i. Emission Limitation: Visible emissions of fugitive dust (from areas other than the rotary drum) shall be less than or equal to 10% opacity, as a 3-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- j. Emissions Limitation: Fugitive PE emissions from the cold end shall not exceed 2.29 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual emission limitation shall be assumed based upon the following worst-case calculations using emission factors from AP-42 5th Edition, Table 11.12-2 (10/01) and 11.1.2.5 (12/00):

Fugitives emissions from the cold end are calculated as follows

Weigh hopper loading:

$$325,000 \text{ tons of material/year} \times 0.0051 \text{ lb PE/ton of material} = 1,657.5 \text{ lbs PE/yr}$$

Aggregate transfer:

$$325,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PE/ton of aggregate} = 2,242.5 \text{ lbs PE/yr}$$

Sand transfer:

$$325,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PE/ton of sand} = 682.5 \text{ lbs PE/yr}$$

The sum of the above is 7050 lbs PE/yr X 1 ton/2000 pounds = 2.29 tons PE

- k. Emissions Limitation: Fugitive emissions from the hot end (hot mix asphalt load-out and silo filling):
  - a. Emissions from load out operations shall not exceed 0.21 tons CO per rolling 12-month period, 0.08 tons PE per rolling 12-month period and 0.68 tons of OC per rolling, 12-month period.
  - b. Emissions from silo filling operations shall not exceed 0.19 tons CO per rolling 12-month period, 0.09 tons PE per rolling 12-month period and 1.98 tons OC per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations using emission factors from AP-42 5th Edition, Table 11.1-14 (3/2004) and the asphalt production restriction:

Known:

V = -0.5 Asphalt Volatility factor (default)

T = 325 HMA mix temp (F) (default)

<u>Activity</u>	<u>Pollutant</u>	<u>Predictive Emission Factor Equation, lb/ton</u>
Silo filling	PE	$EF=0.000332+0.00105(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	PE	$EF=0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

Silo filling	OC	$EF=0.0504(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	OC	$EF=0.0172(-V)e^{((0.0251)(T+460)-20.43)}$
Silo filling	CO	$EF=0.00488(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	CO	$EF=0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

Based on the above information, the emission factors and emissions are as follows:

<u>Activity</u>	<u>Pollutant</u>	<u>lb/ton</u>	<u>tons/yr (at 500,000 tons/yr production)</u>
Silo filling	PE	5.86 x 10 <sup>-4</sup>	0.15
Load-out	PE	5.22 x 10 <sup>-4</sup>	0.13
Silo filling	OC	1.22 x 10 <sup>-2</sup>	3.05
Load-out	OC	4.14 x 10 <sup>-3</sup>	1.04
Silo filling	CO	1.18 x 10 <sup>-3</sup>	0.30
Load-out	CO	1.35 x 10 <sup>-3</sup>	0.34

## 2. Burner Tuning

### a. Introduction

The permittee is required to conduct periodic tuning of the asphalt plant burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

### b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

### c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO<sub>x</sub>, O<sub>2</sub> and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NO<sub>x</sub> and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.2.e. The general procedure for tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally.
- ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.
- iii. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NO<sub>x</sub> and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.
- v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Asphalt Concrete Plants forms produced during the

past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior to the associated tuning due date.

**F. Miscellaneous Requirements**

- 1. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
P901	250 Ton/Hr asphalt plant	Subpart I

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);
- b. Actual start-up date (within 15 days after such date); and
- c. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

- 2. Burner Tuning Form (see next page)
- 3. The terms and conditions contained in Part II, A.1 through F.2 are federally enforceable.
- 4. Pursuant to Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria are met:

- a. the portable emissions unit is equipped with the best available control technology for such portable emissions unit;
  - b. the portable emissions unit is operating pursuant to a currently effective permit to install, permit to operate or registration;
  - c. the applicant has provided proper notice of intent to relocate the portable emissions unit to the Northwest District Office (NWDO) and the appropriate field office having jurisdiction over the new site within a minimum of thirty days prior to the scheduled relocation; and,
  - d. in the NWDO's and the appropriate field office's judgement, the proposed site is acceptable under the rule 3745-15-07 of the Administrative Code.
5. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria of OAC rule 3745-31-05(F) are met:
- a. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
  - b. the portable emissions unit is equipped with best available technology;
  - c. the portable emission unit owner has identified the proposed site to Ohio EPA;
  - d. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
  - e. a public notice, consistent with Chapter 3745-47 of the Administrative Code, is published in the county where the proposed site is located;
  - f. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to the proposed site; and,
  - g. the portable emissions unit owner has provided the Ohio EPA with fifteen days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to section F.2. above, shall be valid for no longer than three years and are subject to renewal.

6. In order for the NWDO and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the owner or operator of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the NWDO (347 North Dunbridge Road, Bowling Green, OH 43402) and the appropriate

office having jurisdiction over the new site. Upon receipt of the notice, the NWDO and/or the appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

7. The permittee should be advised that when portable emission units are located at a stationary source or at a source comprised of portable emission units, potential emissions from the portable emission units are included in the facility potential to emit calculations for Title V and PSD applicability.

The permittee shall include a potential to emit analysis of facility-wide emissions (including the portable sources) for the proposed relocation in the "Notice of Intent to Relocate".