



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
PORTAGE COUNTY**

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 16-02436

Fac ID: 1667000081

DATE: 4/12/2007

Tallmadge Asphalt/Paving Co., Inc.
Mark Winters
741 Tallmadge Road
Brimfield Township, OH 44240-7329

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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

ARAQMD



**Permit To Install
Terms and Conditions**

**Issue Date: 4/12/2007
Effective Date: 4/12/2007**

FINAL PERMIT TO INSTALL 16-02436

Application Number: 16-02436
Facility ID: 1667000081
Permit Fee: **\$5400**
Name of Facility: Tallmadge Asphalt/Paving Co., Inc.
Person to Contact: Mark Winters
Address: 741 Tallmadge Road
Brimfield Township, OH 44240-7329

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

**741 Tallmadge Road
Brimfield Township, Ohio**

Description of proposed emissions unit(s):

Barber Green batch hot mix asphaltic concrete plant, storage piles, and paved roadways and parking areas.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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

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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)

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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.

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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

Pollutant

Tons Per Year

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CO	90.00 (stack)
CO	0.57 (fugitive)
NO _x	27.00 (stack)
VOCs	91.60 (stack)
VOCs	3.57 (fugitive)
SO ₂	19.80 (stack)
PE	10.10 (stack)
PE	53.97 (fugitive)
PM10	9.7 (fugitive)

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 roadways and parking areas, for industries with a maximum of 40,000 vehicle miles traveled per year and a maximum silt content of 120 g/m ²	OAC rule 3745-31-05(A)(3)	6.6 tons/year of fugitive particulate matter of 10 microns or less (PM10)
		33.8 tons/year of fugitive particulate emissions (PE)
		no visible PE, except for one minute during any 60-minute period
		best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.I.2.a through A.I.2.f.)
	OAC rule 3745-17-07(B)(4)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	(See Sections A.I.2.a through A.I.2.f.)

2. Additional Terms and Conditions

- 2.a** 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 application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or 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.b** 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 paved roadways and parking areas that are 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.c** 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.e** 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.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 best available technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of

Emissions Unit ID: F001

each of the roadway segments and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all roads and parking areas	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 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 3.d. 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 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.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:
6.6 tons/year of fugitive PM10
33.8 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used. These emission limits in the General Permit were based on a maximum of 40,000 vehicle miles traveled per year, and a 95 % control efficiency for PE and PM10.

- b. Emission Limitation:
No visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE 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").

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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 - Storage piles, including load-in, load-out and wind erosion for facilities with a maximum production of 3,000,000 tons/year and a maximum storage pile surface area less than or equal to 6 acres	OAC rule 3745-31-05(A)(3)	3.1 tons/year of fugitive particulate matter of 10 microns or less (PM10) 6.4 tons/year of fugitive particulate emissions (PE) no visible PE, except for one minute during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.2.a through A.2.e)
	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	(See Sections A.2.a through A.2.e)

2. Additional Terms and Conditions

- 2.a** 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 application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.b** 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.c** 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. In accordance with the application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) 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 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.e** Implementation of the above-mentioned control measures in accordance with the

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PTI A

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Emissions Unit ID: **F002**

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

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	daily

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>
all	daily

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	daily

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 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 required in 6.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. The permittee shall submit quarterly 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emissions Limitations:
3.1 tons/year of fugitive PM10
6.4 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits in the General Permit were based on a maximum production of 3,000,000 tons per year, a maximum storage surface area less than or equal to 6 acres, and a 95 % overall control efficiency for PE and PM10.

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Issue:

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Emissions Unit ID: F002

b. Emission Limitation:

There shall be no visible PE except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE 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").

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>	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).	<u>Applicable Rules/Requirements</u>
<p>P901 ("Barber Green model 937 Asphalt Plant", installed March 2003) batch-mix hot mix asphalt (HMA) plant, 200 TPH maximum design capacity, particulate emissions (PE) controlled by a baghouse, air emissions of carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and volatile organic compounds (VOCs) uncontrolled.</p> <p>P901 will burn fuels including: natural gas, on-spec used oil and #2 virgin, and #6 virgin fuel oils. The permittee has designated on-spec used oil as primary fuel and natural gas and #2 virgin, and #6 virgin fuel oils as secondary fuels.</p> <p>In order to maintain this facility as a minor source of all criteria pollutants, thus avoiding Title V and moderate nonattainment</p>		<p>OAC rule 3745-31-05(A)(3)</p>

OAC rule 3745-31-05(C)
(to avoid moderate
nonattainment program
requirements);

40 CFR Part 60, Subpart I

OAC rule 3745-17-07(A)(1)
OAC rule 3745-17-11(B)(1)
OAC rule 3745-17-07(B)
OAC rule 3745-17-08
OAC rule 3745-18-06(E)

OAC rule 3745-21-07(B)
OAC rule 3745-21-08(B)

OAC rule 3745-23-06(B)

Tallm**PTI A****Issued: 4/12/2007**Emissions Unit ID: **P901**

<u>Applicable Emissions Limitations/Control Measures</u>		
Stack emissions from burning on-spec used oil shall not exceed the following limitations:	80.0 lbs/hr of CO; 24.0 lbs/hr of NO _x ; 61.1 lbs/hr of VOCs; and 17.6 lbs/hr of SO ₂ .	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.
6.97 lbs/hr of carbon monoxide (CO); 7.98 lbs/hr of nitrogen oxides (NO _x); 61.1 lbs/hr of volatile organic compounds (VOCs); and 3.29 lbs/hr of sulfur dioxide (SO ₂).	Visible stack PE shall not exceed 20% opacity, as a 3-minute average.	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(B), OAC rule 3745-21-08(B), OAC rule 3745-23-06(B), and OAC rule 3745-31-05(C).
Stack emissions from burning natural gas shall not exceed the following limitations:	Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in A.2.b below.	Stack PE from burning any approved fuel in this permit shall not exceed 0.04 gr/dscf.
80.00 lbs/hr of CO; 5.00 lbs/hr of NO _x ; 1.64 lbs/hr of VOCs; and 0.92 lbs/hr of SO ₂ .	The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible fugitive emissions from the rotary dryer.	The emission limitations/control requirements specified by these rules are less stringent than the emission limitations/control requirements established pursuant to OAC rule 3745-31-05(A)(3).
Stack emissions from burning virgin #2 fuel oil shall not exceed the following limitations:	No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper.	See A.2.c below.
80.0 lbs/hr of CO; 24.0 lbs/hr of NO _x ; 7.2 lbs/hr of VOCs; and 17.6 lbs/hr of SO ₂ .	Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper) shall not exceed 10% opacity, as a 3-minute average.	See A.2.d below.
Stack emissions from burning virgin #6 fuel oil shall not exceed the following limitations:	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.	Emissions, in tons/year, from burning any fuel approved in this permit shall not exceed the following limitations (based upon rolling, 12-month summations of the monthly emissions, per the

federally enforceable asphalt production restrictions of B.5):

	<u>Stack (TPY)</u>	<u>Fugitive</u>
(TPY)		
CO:	90.00	0.57
NO _x :	27.00	--
VOCs:	91.60	
	3.57	
SO ₂ :	19.80	--
PE:	10.10	
	13.77	

2. Additional Terms and Conditions

2.a The CO, NO_x, and VOC stack emission limits established pursuant to OAC rule 3745-31-05(A)(3) reflect the potentials to emit for this emissions unit. In addition, the SO₂ and PE stack emission limits established pursuant to OAC rule 3745-31-05(A)(3) are greater than the potentials to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emission limitations.

However, the permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any change, such as with the method of operation, the types of fuels burned, and/or equipment modification, that would increase the potential to emit for any air pollutant.

2.b 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.c** The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-21-07(B), respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.d** The design of the emissions unit and technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore is no longer a 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 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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- 2.e** 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.f** 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.g** 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 VOC, CO and NO_x.
- 2.h** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

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.b 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 for this emissions unit shall not exceed 450,000 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 following the issuance of this permit, 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	100,000
1-2	200,000
1-3	300,000
1-4	400,000
1-5	450,000
1-6	450,000
1-7	450,000
1-8	450,000
1-9	450,000
1-10	450,000
1-11	450,000
1-12	450,000

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

The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 percent 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.

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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 1 to 4 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 ARAQMD. 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 maintain fuel receipts from the fuel supplier listing the ASTM D396-78 specifications, including fuel oil number, heat content, and weight percent sulfur content, and total quantity of each shipment of virgin fuel oil received.
4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;

- b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
- c. the results of the chemical analyses demonstrating that the used oil meets the standards in OAC 3745-279-11 and does not contain quantifiable levels of PCBs:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;
 - v. total halogens, in ppm;
 - vi. the PCB content, in ppm;
 - vii. the flash point;
 - Viii. the Btu value;
 - ix. the mercury content, in ppm; and
 - x. the sulfur content, in weight percent.
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-10(B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

The metal contents for arsenic, cadmium, chromium, lead, and mercury shall be analyzed using a "Totals Analysis" or Total Metals" testing methodology, Chapter Two of "Testing Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)" should be referenced to for selecting appropriate test methods for the used oil analyses. Under no circumstances shall the metal contents of the used oil be analyzed using "TCLP", "EP-TOC", or other similar testing procedures, since these tests were developed to gauge leachate mobility from a landfill, of which is an irrelevant property of the used oil burned for energy recovery.

Each analysis shall be kept in a readily accessible location for a period of not less than 5 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) upon

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verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory of 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.

Also, for each shipment of number 2 and number 6 virgin fuel oils and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.

5. The permittee shall maintain monthly records of the following information:
 - a. the asphalt production rate for each month, in tons;
 - b. beginning after the first 12 calendar months following the startup of this emissions unit, the rolling, 12 month total asphalt production rate, calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
 - c. for the first 12 calendar months following the initial startup of this emissions unit, the monthly cumulative asphalt production rates, calculated by adding the current month's asphalt production to the asphalt production for each calendar month since the startup of the emissions unit;
 - d. the monthly stack emissions, in tons, for CO, NO_x, VOCs, SO₂, and PE (calculated in accordance with the methodology as outlined in section E of this permit);
 - e. the monthly fugitive emissions, in tons, for CO, NO_x, VOCs, SO₂, and PE (if applicable) (calculated in accordance with the methodology as outlined in section E of this permit);
 - f. the rolling, 12-month CO, NO_x, VOCs, PE, and SO₂ stack emissions, in tons;
 - g. the rolling, 12-month CO, NO_x, VOCs, PE, and SO₂ (if applicable) fugitive emissions, in tons; and
 - h. the maximum percentage of RAP used for any mix.

6. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when weather conditions allow, for any 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 emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible 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 hot aggregate elevator, vibrating screens, and weigh hopper 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;
 - c. the total duration of any visible emissions incident; and
 - d. any corrective actions taken to eliminate the visible emissions.
8. 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 areas other than the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper) serving this emissions unit. If visible emissions are observed, the permittee shall note the following in the operation log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
9. While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in term F.1). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.
10. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for

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each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Heptane

TLV (mg/m³): 1,640

Maximum Hourly Emission Rate (lbs/hr): 1.88

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 13.46MAGLC (ug/m³): 39,048

11. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

12. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Director (the ARAQMD) 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 (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. 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.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the virgin oil and used oil sulfur content limits specified above. These reports are due by the date described in Part I- General Terms and Condition of this permit under section (A)(2).
4. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (the ARAQMD), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
5. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the RAP limitation specified above. These reports are due by the date described in Part I- General Terms and Condition of this permit under section (A)(2).
6. 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).
7. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month total PE, SO₂, NO_x, VOC, and CO emission limitations. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).
8. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to eliminate any visible particulate emissions. These reports shall be submitted to the ARAQMD by January 31 and July 31 of each year and shall cover the previous 6-month period.

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9. 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 hot aggregate elevator, vibrating screens, and weigh hopper serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the ARAQMD by January 31 and July 31 of each year and shall cover the previous 6-month period.
10. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from the areas other than the enclosures the hot aggregate elevator, vibrating screens, and weigh hopper, and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the ARAQMD by January 31 and July 31 of each year and shall cover the previous 6-month period.
11. The permittee shall submit a copy of the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form to the ARAQMD 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.
12. 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	200 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, if not previously done so, 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 ARAQMD responsible for the permitting of the facility.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emissions testing for any approved fuel allowed by this permit to be burned in this emissions unit (P901) in accordance with the following requirements:
 - a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate for the primary fuel during the asphaltic concrete production season in which Permit to Install 16-02436 is issued final. Emissions testing for each secondary fuel shall be conducted within 60 days after the switch to the secondary fuel.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO_x and SO₂, or, if necessary, to establish site-specific, potential stack emissions for PE, VOC, CO, NO_x and SO₂.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO_x and SO₂, or, if necessary, to establish site-specific, potential stack emissions for PE, VOC, CO, NO_x and SO₂:

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

NO_x, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

SO₂, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

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

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

The VOC pounds per hour emission rate observed during the emissions test shall

be calculated in accordance with OAC 3745-21-10(C)(7) where the average molecular weight of the VOC emissions equals 16. i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC as carbon emission rate observed during testing by 16 and dividing by 12. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, virgin number 2 fuel oil, virgin number 4 fuel oil, virgin number 6 fuel oil, or on-spec used oil for PE, VOC, CO, NO_x, and SO₂, and employing RAP to verify VOC emissions, unless otherwise

specified or approved by the ARAQMD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the ARAQMD. 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 ARAQMD's refusal to accept the results of the emission test(s).

Personnel from the ARAQMD 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 ARAQMD 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 ARAQMD.

2. 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:

Stack emissions from burning on-spec used oil shall not exceed the following limitations:

6.97 lbs/hr of CO;
7.98 lbs/hr of NO_x;
61.1 lbs/hr of VOCs;
3.29 lbs/hr of SO₂; and
0.04 gr/dscf of PE.

- Applicable Compliance Method:

Compliance with the hourly allowable mass emission limitations above shall be demonstrated based on the results of emission testing conducted in accordance with the methods outlined in section E.1 of this permit.

[On-spec used oil is designated by the permittee as the primary fuel for this emissions unit. Stack testing was conducted with on-spec used oil, prior to the final issuance of Permit to Install (PTI) #16-02436, in order to establish site-specific, potential stack emissions, when burning on-spec used oil. The results of the stack testing, which was conducted on October 07, 2004, represent the above allowable mass emission rates for CO, NO_x, VOCs, and SO₂, when burning on-spec used oil, as established pursuant to OAC rule 3745-31-05(A)(3) in PTI #16-02436. The emission results of the stack testing, which was conducted on April 21, 2005, represent the above allowable mass emission rates for PE when burning on-spec used oil, as established pursuant to OAC rule 3745-31-05(A)(3) in PTI #16-02436.]

b. Emission Limitations:

Stack emissions from burning natural gas shall not exceed the following limitations:

80.00 lbs/hr of CO;
5.00 lbs/hr of NO_x;
1.64 lbs/hr of VOCs;
0.92 lbs/hr of SO₂; and
0.04 gr/dscf of PE

Applicable Compliance Method:

Compliance with the hourly allowable mass emission limitations above shall be demonstrated based on the results of emission testing conducted in accordance with the methods outlined in section E.1 of this permit.

[The NO_x, and CO allowable emission limitations were established based on F.I.R.E 6.25 emission factors and a maximum process weight rate of 188 tons of aggregate/hour; the SO₂ allowable emission limitation was established based on F.I.R.E 6.25 emission factor and a maximum process weight rate of 200 tons of HMA produced/hour; the VOC allowable emission limitation was established based on F.I.R.E 6.25 emission factor and a maximum process weight rate of 200 tons of HMA produced/hour; and the PE allowable limitation was established based on best available technology (BAT) baghouse outlet loading requirement common to similar sources in Ohio.]

c. Emission Limitations:

Stack emissions from burning virgin #2 fuel oil shall not exceed the following limitations:

80.0 lbs/hr of CO;
24.0 lbs/hr of NO_x;
7.2 lbs/hr of VOCs;
17.6 lbs/hr of SO₂; and
0.04 gr/dscf of PE.

Applicable Compliance Method:

Compliance with the hourly allowable mass emission limitations above shall be demonstrated based on the results of emission testing conducted in accordance with the methods outlined in section E.1 of this permit.

[The NO_x, CO, and SO₂ allowable emission limitations were established based on F.I.R.E 6.25 emission factors and a maximum process weight rate of 188 tons of aggregate/hour, and a maximum fuel sulfur content of 0.5% by weight; the VOC allowable emission limitation was established based on F.I.R.E 6.25 emission factor and a maximum process weight rate of 200 tons of HMA produced/hour; and the PE allowable limitation was established based on best available technology (BAT) baghouse outlet loading requirement common to

similar sources in Ohio.]

d. Emission Limitations:

Stack emissions from burning virgin #6 fuel oil shall not exceed the following limitations:

80.0 lbs/hr of CO;
 24.0 lbs/hr of NO_x;
 61.1 lbs/hr of VOCs;
 17.6 lbs/hr of SO₂; and
 0.04 gr/dscf of PE.

Applicable Compliance Method:

Compliance with the hourly allowable mass emission limitations above shall be demonstrated based on the results of emission testing conducted in accordance with the methods outlined in section E.1 of this permit.

[The NO_x, CO, and SO₂ allowable emission limitations were established based on F.I.R.E 6.25 emission factors, a maximum process weight rate of 188 tons of aggregate/hour, and a maximum fuel sulfur content of 1.0%, by weight; given that the F.I.R.E. 6.25 emission factors for on-spec used oil and virgin #6 fuel oil are equivalent, the VOC emission rates for burning on-spec used oil and virgin #6 fuel oil are assumed to be the same. The on-spec used oil VOC emission rate is based on the results of stack testing which was conducted on October 07, 2004, and a maximum process weight rate of 200 tons of HMA produced per hour.]

e. Emissions Limitation: Stack PE shall not exceed 10.10 tons per rolling, 12-month period, when burning any approved fuel in this permit.

Applicable Compliance Method: Compliance with the annual emission limitation shall

be determined by multiplying 0.042 lb PE/ton of HMA produced [F.I.R.E 6.25 emission factor] by the actual rolling, 12-month amount of HMA produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.5 above), and then dividing by 2000.

f. Emission Limitation: Stack VOC emissions shall not exceed 91.60 tons per rolling, 12-month period, when burning on-spec used oil or virgin #6 fuel oil

(these fuels produce the highest potential VOC emissions of any approved fuel in this permit).

Applicable Compliance Method: Compliance with the annual emission limitation shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of VOC per ton of HMA produced, by the actual rolling, 12-month amount of HMA produced, in tons per rolling 12-month period (as derived from the records required by term and condition C.5 above), and then dividing by 2000.

- g. Emission Limitation: Stack CO emissions shall not exceed 90.00 tons per rolling, 12-month period, when burning natural gas, virgin # 2 and/or virgin #6 fuel oils (these fuels, assumed to have the same CO emission factor, produce the highest potential CO emissions of any approved fuel in this permit).

Applicable Compliance Method: Compliance with the annual emission limitation shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of CO per ton of HMA produced, by the actual rolling, 12-month amount of HMA produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.5 above), and then dividing by 2000.

- h. Emission Limitation: Stack SO₂ emissions shall not exceed 19.80 tons per rolling, 12-month period, when burning virgin # 2 and/or virgin #6 fuel oils (these fuels, assumed to have the same SO₂ emission factor, produce the highest potential SO₂ emissions of any approved fuel in this permit).

Applicable Compliance Method: Compliance with the annual emission limitation shall be determined by multiplying 0.088 lb SO₂/ton of hot mix asphaltic concrete produced [F.I.R.E 6.25 emission factor], by the actual rolling, 12-month amount of HMA produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.5 above), and then dividing by 2000.

- i. Emission Limitation: Stack NO_x emissions shall not exceed 27.00 tons per rolling, 12-month period, when burning virgin # 2 and/or virgin #6 fuel oils (these fuels, assumed to have the same NO_x emission factor, produce the highest potential NO_x emissions of any approved fuel in this permit).

Applicable Compliance Method: Compliance with the annual emission limitation shall be determined by multiplying 0.12 lb NO_x/ton of aggregate [F.I.R.E 6.25

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emission factor], by the actual rolling, 12-month amount of HMA produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.5 above), and then dividing by 2000.

- j. Emission Limitations: Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in A.2.b.

Applicable Compliance Method: Compliance with the emission limitations for arsenic, cadmium, chromium, and lead shall be demonstrated by the monitoring and record keeping in Section C.4 of this permit.

- k. Emission Limitation: Visible particulate emissions from the stack shall not exceed 20% opacity, as a 3-minute average.

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

- l. Emission Limitation: No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, the rotary drum and weigh hopper.

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.

- m. Emission Limitation: Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, the rotary drum and weigh hopper) 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.

- n. Emissions Limitation: Fugitive PE from the emissions unit shall not exceed 13.77 tons per rolling, 12-month period.

Applicable Compliance Method: The above emission limitation was calculated based upon the rolling, 12-month production restriction and emissions data from AP-42 5th Edition, Table 11.19.2-2 (08/04), for the cold side material handling operations, and Table 11.1-14 (03/04) for the hot side load-out and silo filling operations, as demonstrated below:

$$E = [A(S + TN + C) + P(L + F)](1 \text{ ton}/2000 \text{ pounds})$$

Where:

E = 13.77 tons of fugitive PE per rolling, 12-month period [synthetic minor potential to emit];

Cold Side Material Handling Operations:

A = 423,000 tons of sand/aggregate per rolling, 12-month year [federally enforceable production restriction, excluding the asphalt cement];

S = 0.025 pound/ton of production [screening emissions];

T = 0.0030 pound/ton of production/transfer point [emissions per material transfer point];

N = 13 [the number of material transfer points]; and

C = 0.000016 pound/ton of production [cold feed loading emissions].

Hot Side Load-out and Silo Filling Operations:

P = 450,000 tons of asphalt per rolling, 12-month year [federally enforceable production restriction];

L = 0.0005194 pound/ton of production [load-out emissions]; and

F = 0.000584 pound/ton of production [silo filling emissions].

- o. Fugitive emissions from the hot side (hot mix asphalt (HMA) load-out and silo filling) are calculated as follows:

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Asphalt plant silo filling and plant load-out emissions from AP-42, Table 11.1-14 dated 3/2004

Known:

V = -0.5 Asphalt volatility factor (default) (default) T = 325 HMA mix temp (F)

For silo filling, 1.4% of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004

For plant load-out, 7.3% of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004

<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	VOC	$EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$
Load-out	VOC	$EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$
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 450,000 tons/yr production)</u>
Silo filling	PE	5.86×10^{-4}	0.13
Load-out	PE	5.22×10^{-4}	0.12
Silo filling	VOC	1.20×10^{-2}	2.70
Load-out	VOC	3.86×10^{-3}	0.87
Silo filling	CO	1.18×10^{-3}	0.27
Load-out	CO	1.35×10^{-3}	0.30

3. 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 emissions 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_x, VOC, O₂ 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 term E.1.a. The baselines shall be determined for VOC, NO_x, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacture's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in Section 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 Section 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 manufacture's specifications.
 - iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for VOC, NOx, 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 per cent 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 ARAQMD 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

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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.

In addition to the burner tuning procedure required above, the permittee shall conduct the burner tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the initial emissions tests that establish the pollutant baseline levels or the fuel burned during the most recent burner tuning procedure, whichever is later.

F. Miscellaneous Requirements

1. Burner Tuning Form:

BURNER TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS	
Facility ID:	Tuning Date:
Legal Name:	Other Company Name (if different than legal name):
Mailing Address:	Other Company Site Address: (if different than mailing address):
City, State, Zip Code:	Other Company City, County, Zip Code:
Site Contact Person:	Site Contact Telephone Number:
Site Contact Title:	Site Contact Fax Number:
Name of company performing tuning:	Name of company performing emission monitoring:
Type of plant (ie: batch, drum mix, etc.):	Calibration date for analyzers:

Reason for Tuning: Season Initial Tuning June Tuning September Tuning Fuel Switch Other (describe)

Fuel employed during tuning: Natural Gas #2 Fuel Oil #4 Fuel Oil Used Oil Other (describe)

Tuning Results:

Parameter	Recent Stack Test Pollutant Baseline Levels ¹	Results
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		Pre Tuning	Post Tuning ³
Fuel flow to the burner (gallon/hr) (for fuel oil and on-spec used oil)			
Fuel pressure (psi)			
For burners that require compressed air for proper operation, pressure at the burner (psi)			
Carbon Monoxide (CO) concentrations (ppm) ²			
NOx concentrations (ppm) ²			
Oxygen concentrations (%) ²			
Asphalt Production (tons/hr)			

¹These values are based on the results of the most recent Ohio EPA approved emissions test.

² Specify whether on a dry or wet basis.

³ If the burner did not require adjusting, please record N/A in the post tuning column.

Describe in detail a list of adjustments and/or repairs made to bring the operating parameters into conformance with the manufacturers specifications. Use additional paper if necessary.

Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

Name of Official (Printed or Typed):	Title of Official and Phone Number:
Signature of Official:	Date: