

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install: 01-12023

A. Source Description

The Apple Smith Company has submitted an air permit-to-install (PTI) application which includes proposed federally enforceable limitations for the new Apple Smith Plant 2 located in Columbus, Ohio. The purpose of the federally enforceable limitations is to effectively restrict Apple Smith's potential to emit (PTE) below those emission levels which trigger Title V permitting requirements or additional federal permitting requirements. The proposed federally enforceable limitations are specific to emissions unit P902.

B. Facility Emissions and Attainment Status

Apple Smith's PTE based upon 8760 hours of operation, is above 100 tons/year for SO₂, VOC, CO and NO_x. Apple Smith's current PTE, based upon 8760 hours per year of operation, is described below.

<u>E.U.</u>	<u>NO_x PTE(TPY)</u>	<u>CO PTE(TPY)</u>	<u>VOC PTE(TPY)</u>	<u>SO₂ PTE(TPY)</u>
P902	108.62	262.8	175.2	305.2
P001	0.6	9.0	0.4	0.1
Facility Total	109.22	271.8	175.6	305.3

Due to the proposed synthetic minor strategy, the PTE of emissions unit P902, upon issuance of the PTI, will be as described below.

<u>E.U.</u>	<u>NO_x PTE(TPY)</u>	<u>CO PTE(TPY)</u>	<u>VOC PTE(TPY)</u>	<u>SO₂ PTE(TPY)</u>
P902	13.95	33.75	22.5	39.2

Therefore, Apple Smith's facility-wide PTE upon issuance of the PTI will be as described below:

<u>E.U.</u>	<u>NO_x PTE(TPY)</u>	<u>CO PTE(TPY)</u>	<u>VOC PTE(TPY)</u>	<u>SO₂ PTE(TPY)</u>
P902	13.95	33.75	22.5	39.2
P001	0.6	9.0	0.4	0.1
Total PTE	14.55	42.75	22.9	39.3

C. Source Emissions

The facility and the Ohio EPA have agreed a synthetic minor strategy that includes a rolling 12-month operational restriction and emissions calculation formula that corresponds to maximum annual emissions below those levels which trigger Title V permitting requirements and/or Prevention of Significant Deterioration (PSD). The aforementioned formula calculates the emissions, based upon the most recent stack test, by multiplying the observed emissions factor (in the units of lbs of pollutant/ ton of asphalt produced) by the actual number of tons of asphalt produced (as recorded in the records required by the permit).

D. Conclusion

The operation of the emissions units in accordance with the terms and conditions of the proposed air PTI will result in maximum annual facility emissions below those levels which trigger Title V permitting requirements or Major New Source Review (either non-attainment review and/or PSD).



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: DRAFT PERMIT TO INSTALL

FRANKLIN COUNTY

Application No: 01-12023

Fac ID: 0125042120

CERTIFIED MAIL

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

DATE: 6/20/2006

Apple Smith Plant 2
Frederick Smith
3040 McKinley Avenue
Columbus, OH 43204

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1650** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

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

PUBLIC NOTICE

ISSUANCE OF DRAFT PERMIT TO INSTALL 01-12023 FOR AN AIR CONTAMINANT SOURCE FOR Apple Smith Plant 2

On 6/20/2006 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Apple Smith Plant 2**, located at **3040 McKinley Ave, Columbus, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 01-12023:

400TPH skid mounted counterflow plant (counterflow drum hot mix asphalt plant).

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Isaac Robinson, Ohio EPA, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417
[(614)728-3778]



DRAFT PERMIT TO INSTALL 01-12023

Application Number: 01-12023
Facility ID: 0125042120
Permit Fee: **To be entered upon final issuance**
Name of Facility: Apple Smith Plant 2
Person to Contact: Frederick Smith
Address: 3040 McKinley Avenue
Columbus, OH 43204

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3040 McKinley Ave
Columbus, Ohio**

Description of proposed emissions unit(s):
400TPH skid mounted counterflow plant (counterflow drum hot mix asphalt plant).

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

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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized 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

Apple Smith Plant 2

Facility ID: 0125042120

PTI Application: 01-12023

Issued: To be entered upon final issuance

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.

Apple Smith Plant 2**PTI Application: 01-12023****Issued: To be entered upon final issuance****Facility ID: 0125042120****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>
NOx	13.95
CO	34.32
SO2	39.3
VOC	26.19
PM(stack)	5.34
PM-10(stack)	5.34
PM(fugitive)	27.73
PM-10(fugitive)	9.46

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) - roadways and parkways

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions shall not exceed 8.71 tons per year.</p> <p>PM-10 emissions shall not exceed 2.18 tons per year.</p> <p>No visible particulate emission except for one minute during any 60-minute period from the paved roadways and parking areas (see Section A.2.a).</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the paved roadways and parking areas (see Sections A.2.c and A.2.e through A.2.i).</p> <p>No visible particulate emission except for 3 minutes during any 60-minute period from the unpaved roadways and parking areas (see Section A.2.b).</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the unpaved roadways and parking areas (see Sections A.2.d through A.2.i).</p>
OAC rule 3745-17-07 (B)(6)	This rule is less stringent than the above-mentioned visible emission limitation.
OAC rule 3745-17-08(B), (B)(6)	This rule is less stringent than the above-mentioned control measure requirements.

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas are covered by this permit and subject to the above-mentioned requirements.
- 2.b The unpaved roadways and parking areas are covered by this permit and subject to the above-mentioned requirements.

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by 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.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with 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.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.g** 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.h** 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.i 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 the roadways and parking areas in accordance with the following frequencies:

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

- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

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

D. Reporting Requirements

- 1. The permittee shall submit 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 limitation for the paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.
- 2. Emissions Limitation: PE emissions shall not exceed 8.71 tons per year.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be determined by the summation of particulate emissions from the paved roadways and unpaved roadways. The particulate emissions from the paved roadways are determined by using equation 1 found in Chapter 13.2.1.3(12/2003) of AP-42:

Paved roadways

$$E = k(sL/2)^{0.65} (W/3)^{1.5} (1-P/4N) - C$$

where

E = emission factor lbs/VMT

k = particle size multiplier = 0.082

sL = silt loading on road surface = 12 g/m²

W = average vehicle weight (tons) = 23.5

Apple Smith Plant 2

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Facility ID: 0125042120

Emissions Unit ID: F001

P = number of days with at least 0.01 inches of precipitation per year (149)

C = Emission factor for 1980s vehicle fleet exhaust and tire wear (0.00047)

$$E = 5.76 \text{ lbs PM/VM}$$

The maximum miles traveled per year equals 30,000 miles. Therefore, the particulate matter emissions from paved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 5.76 lbs/VM and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 3.89 tons/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The particulate emissions from the unpaved roadways are determined by using equation 2 found in Chapter 13.2.2.2(10/2001) of AP-42:

Unpaved roadways

$$E = k(s/12)^a (W/3)^b$$

E = emission factor lbs/VM

k = particle size multiplier = 4.9.

sL = silt loading on road surface = 10 g/m²

W = average vehicle weight (tons) = 23.5

a and b = constants from table 13.2.2-2; a= 0.7; b= 0.45;

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

The maximum miles traveled per year equals 30,000 miles. Therefore, the particulate matter emissions from unpaved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 6.43 lbs/VM and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 4.82 tons/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The total PM emissions are therefore equal to 8.71 tons / yr. (the sum of the particulate emissions from paved roadways and unpaved roadways)

3. Emissions Limitation: PM-10 emissions shall not exceed 2.18 tons per year.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be determined by the summation of PM-10 emissions from the paved roadways and unpaved roadways. The PM-10 emissions from the paved roadways are determined by using equation 1 found in Chapter 13.2.1.3(12/2003) of AP-42:

Paved roadways

$$E = k(sL/2)^{0.65} (W/3)^{1.5} (1-P/4N) - C$$

where

E = emission factor lbs/VMT

k = particle size multiplier = 0.016

sL = silt loading on road surface = 12 g/m²

W = average vehicle weight (tons) = 23.5

P = number of days with at least 0.01 inches of precipitation per year (149)

C = Emission factor for 1980s vehicle fleet exhaust and tire wear (0.00047)

E = 1.12 lbs PM-10/VMT

The maximum miles traveled per year equals 30,000 miles. Therefore, the PM-10 emissions from paved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 1.12 lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 0.76 ton/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The PM-10 emissions from the unpaved roadways are determined by using equation 2 found in Chapter 13.2.2.2(10/2001) of AP-42:

Unpaved roadways

$$E = k(s/12)^a (W/3)^b$$

E = emission factor lbs/VMT

k = particle size multiplier = 1.5.

s = silt loading on road surface = 10 g/m²

W = average vehicle weight (tons) = 23.5

a and b = constants from table 13.2.2-2; a= 0.9; b= 0.45;

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

The maximum miles traveled per year equals 30,000 miles. Therefore, the PM-10 emissions from unpaved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 1.90 lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 1.42 tons/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The total PM-10 emissions are therefore equal to 2.18 tons/yr. (the sum of the PM-10 emissions from paved roadways and unpaved roadways).

F. Miscellaneous Requirements

None

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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) - storage piles

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions shall not exceed 0.18 ton per year.</p> <p>PM-10 emissions shall not exceed 0.09 ton per year.</p> <p>No visible emissions except for one minute in any hour from the load-in and load-out of storage piles (see Section A.2.a for identification of storage piles).</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the load-in and load-out of storage piles (see Sections A.2.b, A.2.c, and A.2.f).</p> <p>No visible emission except for one minute in any hour from the wind erosion from storage piles (see Section A.2.a for identification of storage piles).</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the wind erosion from storage piles (see Sections A.2.d through A.2.f).</p>
OAC rule 3745-17-07 (B)(6)	This rule is less stringent than the above-mentioned visible emission limitation.
OAC rule 3745-17-08(B), (B)(6)	This rule is less stringent than the above-mentioned control measure requirements.

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:

Coarse aggregate

Fine aggregate

RAP

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to minimizing the drop height of the loader bucket to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other 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 purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintaining sufficient moisture 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 or if 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 rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

None

Apple Smith Plant 2

PTI Application: 01-12023

Issued: To be entered upon final issuance

Facility ID: 0125042120

Emissions Unit ID: F002

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:

storage pile identification	minimum load-in inspection frequency
-----------------------------	--------------------------------------

Coarse aggregate	Daily
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Fine aggregate	Daily
----------------	-------

RAP	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:

storage pile identification	minimum load-out inspection frequency
-----------------------------	---------------------------------------

Coarse aggregate	Daily
------------------	-------

Fine aggregate	Daily
----------------	-------

RAP	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:

storage pile identification	minimum wind erosion inspection frequency
-----------------------------	---

Coarse aggregate	Daily
------------------	-------

Fine aggregate	Daily
----------------	-------

RAP	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 may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

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

D. Reporting Requirements

1. 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 visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as

such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

2. Emissions Limitation: PE emissions shall not exceed 0.18 ton per year.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be determined by the summation of emissions from the load in/load out of the storage piles and the emissions from wind erosion.

Sand/aggregate load-in/load-out emissions are determined based upon the following equation as found in (AP-42, Fifth edition, Section 13.2-4)(1/95)

$$E = k(0.0032) \left(\frac{U}{5} \right)^{1.3} \left(\frac{M}{2} \right)^{1.4} \text{ lbs/ton}$$

E = emission factor for aggregate unloading
 k = particle size multiplier = 0.74 for PE
 U = mean wind speed (mph) = 7.67
 M = material moisture content = 3% for all materials
 $E = 0.74(0.0032) \left(\frac{8.1}{5} \right)^{1.3} \left(\frac{4}{2} \right)^{1.4} \text{ lbs/ton} = 0.00234 \text{ lbs PE/ton}$

The total emissions from the load-in/Loadout of the storage piles is determined by use of the above emission factor and the annual process weight rate for each storage pile, as described below:

Storage Pile	Annual PWR in Tons	Annual Emissions in Tons
aggregate/sand/rap	1,000,000	0.06

Therefore, the total annual emissions from the load in/loadout activities equals 0.12 Tons.

Based upon the following equation, which follows from Section 13.2.4.3 of AP-42, the emissions due to wind erosion are calculated as follows

$$E = 1.7(s/1.5) \left(\frac{365-p}{235} \right) (f/15) (365) (A/2000)$$

where E equals the emission factor in lbs/day/acre
 s equals the silt content of the stored materials
 p equals the number of days w more than 0.1 inch of precipitation
 f equals the percentage of time the wind speed exceeds 12 mph
 A equals the totals surface area of the specific storage pile

For each storage pile type, s equals 2(Coarse aggregate),7(Fine aggregate) and 10(RAP), P equals 149 and f equals 13. Based upon the surface area of each storage pile type, the contribution to the total particulate emissions from each storage pile type is as follows:

Storage Pile	Acres	Annual Emissions in Tons
aggregate/sand/rap	0.77	0.06

The total emissions from wind erosion are therefore 0.06 tons per year. Summation of the emissions due to load in/load out and wind erosion results in a total annual particulate emission rate of 0.18 tons.

- Emissions Limitation: PM-10 emissions shall not exceed 0.09 ton per year.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be determined by the summation of emissions from the load in/load out of the storage piles and the emissions from wind erosion.

Sand/aggregate load-in/load-out emissions are determined based upon the following equation as found in (AP-42, Fifth edition, Section 13.2-4)(1/95)

$$E = k(0.0032)(U/5)^{1.3}/(M/2)^{1.4} \text{ lbs/ton}$$

E = emission factor for aggregate unloading
 k = particle size multiplier = 0.35 for PM-10
 U = mean wind speed (mph) = 7.67
 M = material moisture content = 3% for all materials
 $E = 0.35(0.0032)(8.1/5)^{1.3}/(4/2)^{1.4} \text{ lbs/ton} = 0.00111 \text{ lbs PE/ton}$

The total emissions from the load-in/Loadout of the storage piles is determined by use of the above emission factor and the annual process weight rate for each storage pile, as described below:

Storage Pile	Annual PWR in Tons	Annual Emissions in Tons
aggregate/sand/rap	1,000,000	0.03

Therefore, the total annual emissions from the load in/loadout activities equals 0.06 Tons.

Based upon the following equation, which follows from Section 13.2.4.3 of AP-42, the emissions due to wind erosion are calculated as follows

$$E = 1.7(s/1.5)((365-p)/235)(f/15)(365)(A/2000)(0.5)$$

where E equals the emission factor in lbs/day/acre
 s equals the silt content of the stored materials
 p equals the number of days w more than 0.1 inch of precipitation
 f equals the percentage of time the wind speed exceeds 12 mph
 A equals the totals surface area of the specific storage pile

For each storage pile type, s equals 2(Coarse aggregate),7(Fine aggregate) and 10(RAP), P equals 149 and f equals 13. Based upon the surface area of each storage pile type, the contribution to the total particulate emissions from each storage pile type is as follows:

Storage Pile	Acres	Annual Emissions in Tons
aggregate/sand/rap	0.77	0.03

The total emissions from wind erosion are therefore 0.09 ton per year. Summation of the emissions due to load in/load out and wind erosion results in a total annual PM-10.

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.

Operations, Property, and/or Equipment - (P902) - 400 TPH double barrel counter flow asphalt plant controlled by a baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Carbon monoxide (CO) emissions from burning on-spec used oil, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or natural gas shall not exceed 60.0 lbs/hr.</p> <p>Nitrogen Oxide (NO_x) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 21.2 lbs/hr.</p> <p>Nitrogen Oxide (NO_x) emissions from burning number 4 fuel oil or number 6 fuel oil shall not exceed 24.8 lbs/hr.</p> <p>NO_x emissions from burning natural gas shall not exceed 11.6 lbs/hr.</p> <p>Sulfur Dioxide (SO₂) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 26.4 lbs/hr.</p> <p>Sulfur Dioxide (SO₂) emissions from burning number 4 fuel oil shall not exceed 48.0 lbs/hr.</p> <p>Sulfur Dioxide (SO₂) emissions from burning number 6 fuel oil shall not exceed 69.7 lbs/hr.</p> <p>SO₂ emissions from burning natural gas shall not exceed 4.4 lbs/hr.</p> <p>Volatile Organic Compound (VOC) emissions from burning on-spec used oil, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, or natural gas shall not exceed 40.0 lbs/hr.</p> <p>PE from the stack shall not exceed 0.03 gr/dscf.</p> <p>Emissions of fugitive PM-10 shall not exceed 7.19 pounds per hour.</p> <p>Fugitive particulate emissions shall not exceed 18.84 pounds per</p>

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Issued: To be entered upon final issuance

Facility ID: 0125042120

Emissions Unit ID: P902

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>hour.</p> <p>Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in A.2.h below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC ruler 3745-35-07(B), 3745-23-06(B), 3745-21-08(B), and 40 CFR Part 60, Subpart I.</p> <p>See A.2.a-h below.</p>
<p>OAC rule 3745-35-07(B)</p>	<p>Particulate emissions (PE) from the stack shall not exceed 5.34 tons per rolling 12-month period.</p> <p>PM-10 emissions from the stack shall not exceed 5.34 tons per rolling 12-month period.</p> <p>Fugitive PE shall not exceed 18.84 tons per rolling 12-month period.</p> <p>Fugitive PM-10 emissions shall not exceed 7.19 tons per rolling 12-month period.</p> <p>CO emissions shall not exceed 33.75 tons per rolling 12-month period.</p> <p>VOC emissions shall not exceed 22.5 tons per rolling 12-month period.</p> <p>SO₂ emissions shall not exceed 39.2 tons per rolling 12-month period.</p> <p>NO_x emissions shall not exceed 13.95 tons per rolling 12-month period.</p> <p>Fugitive emissions from drum mix load out operations (hot side) shall not exceed 0.94 ton VOC per rolling 12-month period and 0.30 ton CO per rolling 12-month period.</p> <p>Fugitive emissions from the silo filling operations (hot side) shall not exceed 2.75 tons VOC per rolling 12-month period and 0.27 ton CO per rolling 12-month period.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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) 40 CFR Part 60, Subpart I	The emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-23-06(B)	See term A.2.i below.
OAC rule 3745-21-08(B)	See term A.2.j below.

2. Additional Terms and Conditions

- 2.a** 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.b** The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from conveyors and all transfer points to the dryer.
- 2.c** There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.
- 2.d** Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10 per cent opacity, as a 3-minute average.
- 2.e** Visible particulate emissions from the stack shall not exceed 20 per cent opacity, as a 3-minute average.
- 2.f** All number 2 and on-spec used oil burned in this emission unit shall have a sulfur content equal to or less than 0.5 per cent, by weight.
- 2.g** All number 4 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 0.8 per cent, by weight.
- 2.h** All used oil burned in this emissions unit shall be “on-specification” (on-spec) oil and must meet the used oil fuel specifications contained in OAC rule 3745-279-11, which restricts the used oil to the following limitations:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum

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cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
flash point	100°F, minimum;

and shall also not exceed the following maximum PCB and mercury limitations nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
PCB's	50 ppm, maximum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

- 2.i** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

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

- 2.j** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 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.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation.
2. The permittee may not receive or burn any used oil which does not meet the specifications listed in A.2.h of this permit without first obtaining a permit-to-install that authorizes the burning of off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.
3. The maximum annual asphalt production rate for this emissions unit shall not exceed 450,000 tons per year, based upon a rolling, 12-month summation of the production rates.

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

Month(s)	Maximum Allowable Cumulative Production (Tons)
1	75,000
1-2	150,000
1-3	225,000
1-4	300,000
1-5	375,000
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

4. 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 VOC, CO and NOx.
5. 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 on an hourly basis. The permittee may not substitute raw materials for the aggregate such as shingles, slag, rubber, etc. without prior approval from Ohio EPA.

6. The permittee shall only burn natural gas, #2 fuel oil, #4 fuel oil, #6 fuel oil and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel as specified in Section E.1.a.

C. Monitoring and/or Recordkeeping Requirements

1. 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 the used oil meets the standards in OAC rule 3745-279-11, including:
 - 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; and
 - vi. the flash point
 - 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 paragraph 3745-279-63(B); and
 - e. the results of the analyses demonstrating that the used oil meets the heating value and mercury and PCB limitations 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 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.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 across the baghouse on daily basis.
3. The permittee shall maintain monthly records of the following information:
 - a. the total asphalt production for each month;
 - b. the total asphalt produced for each fuel type for each month;
 - c. for the first 12 calendar months following the initial startup of this emissions unit, the cumulative asphalt production and asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for each calendar month since the startup of emissions unit P902;
 - d. beginning after the first 12 calendar months following the startup of this emissions unit, the rolling, 12 month summation of the total asphalt production and the asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
 - e. the rolling, 12-month summation of the PE, SO₂, NO_x, VOC and CO emissions; and
 - f. the maximum percentage of RAP used for any mix type.
4. For each shipment of number 2 fuel oil, number 4 fuel oil 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 permittees or oil supplier's analyses for sulfur content and heat content.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

6. 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 enclosures for the rotary drum and the hot mix asphalt elevator 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 minimize or eliminate the visible emissions.

7. The permittee shall perform daily 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 rotary drum and the hot mix asphalt elevator) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer

may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

8. 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.2). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.
9. 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 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): 3.76

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 6.47

MAGLC (ug/m3): 39,048

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.

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 submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).
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 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 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).
5. The permittee shall notify the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency), 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 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, exceeds the PCB's limitation of 50 ppm, and/or is documented as having a heating value of less than 135,000 Btu/gallon.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the sulfur content limitations specified above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).
7. The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to minimize or eliminate any abnormal visible particulate emissions. These reports shall be submitted to the appropriate 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 semiannual written deviation (excursion) reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the enclosures for the rotary drum and the hot mix asphalt elevator serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the appropriate 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.
9. 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 from the rotary drum and the hot mix asphalt elevator, and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall

be submitted to the appropriate 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.

10. 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 appropriate Ohio EPA District Office or local air agency by January 31 of each year and shall cover the previous calendar year.

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: PE shall not exceed 0.03 gr/dscf; Carbon monoxide (CO) emissions from burning on-spec used oil , number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or natural gas shall not exceed 60.0 lbs/hr; Nitrogen Oxide (NO_x) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 21.2 lbs/hr; Nitrogen Oxide (NO_x) emissions from burning number 4 fuel oil or number 6 fuel oil shall not exceed 24.8 lbs/hr; NO_x emissions from burning natural gas shall not exceed 11.6 lbs/hr; Sulfur Dioxide (SO₂) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 26.4 lbs/hr; Sulfur Dioxide (SO₂) emissions from burning number 4 fuel oil shall not exceed 48.0 lbs/hr; Sulfur Dioxide (SO₂) emissions from burning number 6 fuel oil shall not exceed 69.7 lbs/hr; SO₂ emissions from burning natural gas shall not exceed 4.4 lbs/hr; and Volatile Organic Compound (VOC) emissions from burning on-spec used oil, number 2 fuel oil, number 4 fuel oil, or number 6 fuel oil shall not exceed 40.0 lbs/hr.

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 for the primary fuel but no later than 120 days after initial startup of the emissions unit. Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel;
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO_x and SO₂ for the primary fuel. Prior to secondary fuel emissions testing, the permittee shall consult the Ohio EPA, Central District Office to determine which pollutants should be tested;
- 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_x, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A

For SO₂, 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 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 rule 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; and

- iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, #2 fuel oil, #4 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 Ohio EPA Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office 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, Central District Office 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, Central District Office.

- b. Emissions Limitation: PE emissions shall not exceed 5.34 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing for each fuel, in pounds of PE per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

- c. Emission Limitation: VOC emissions shall not exceed 22.5 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing for each fuel, in pounds of VOC per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

- d. Emission Limitation: SO₂ emissions shall not exceed 39.2 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing for each fuel, in pounds of SO₂ per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

- e. Emission Limitation: NO_x emissions shall not exceed 13.95 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing for each fuel, in pounds of NO_x per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

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

Applicable Compliance Method: Compliance with the emissions limitation for arsenic, cadmium and lead shall be demonstrated by the monitoring and recordkeeping in Section C.1 of this permit.

- g. 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, 1996 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- h. Emission Limitation: No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator:

Applicable Compliance Method: Compliance with the limitations on visible emissions of fugitive dust found in Section A.2 of this permit shall be demonstrated by the monitoring and record keeping in Section C.6.

- i. Emission Limitation: Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator) 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, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- j. Emissions Limitation: PM-10 emissions from the stack shall not exceed 5.34 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month emissions limitation for particulate emissions.

- k. Emissions Limitation: Fugitive PM-10 emissions shall not exceed 7.19 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations:

Total fugitive emissions equal the summation of the fugitives from the cold end and the hot end of the plant operations.

Fugitives emissions from the cold end are calculated as follows:

Apple Smith Plant 2

PTI Application: 01-12023

Issued: To be entered upon final issuance

Facility ID: 0125042120

Emissions Unit ID: P902

Material Loading (AP-42, Fifth edition, Table 11.12-2, 10/01):

$((450,000 \text{ tons of material/year} \times 0.0024 \text{ lb PM-10/ton of material}) + (225,000 \text{ tons of aggregate/year} \times 0.0033 \text{ lb PM-10/ton of aggregate}) + (225,000 \text{ tons of sand/year} \times 0.00099 \text{ lb PM-10/ton of sand})) \times (1 \text{ ton}/2000 \text{ pounds}) = 1.02 \text{ ton of PM-10/year}$

Screening (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

(450,000 tons of material/year) X (0.0087 lb PM-10/ton of material) = 1.96 tons PM-10/year

Transfer Points (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

(450,000 tons of material/year) X (16 transfer points) X (0.0011 lb PM-10/ton of material) = 3.96 tons of PM-10/year

Fugitives emissions from the hot end are calculated as follows:

Drum Mix Load-out (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor = $0.000181 + 0.00141(-V)e^{((0.0251)(T+460) - 20.43)}$ = 0.000522 lb/ton asphalt

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

(450,000 tons of asphalt produced X 0.000522 lb of PM-10/ton of asphalt produced) X (1 ton/2000 pounds) = 0.12 ton of PM-10/ year

Silo Filling (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor = $0.000332 + 0.00105(-V)e^{((0.0251)(T+460) - 20.43)}$ = 0.000586 lb/ton asphalt

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

(450,000 tons of asphalt produced X 0.000586 lb of PM-10/ton of asphalt produced) X (1 ton/2000 pounds) = 0.13 ton of PM-10/year

Total fugitive emissions are therefore 7.19 tons of PM-10/year

- I. Emissions Limitation: Fugitive PM emissions shall not exceed 18.84 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations:

Total fugitive emissions equal the summation of the fugitives from the cold end and the hot end of the plant operations.

Fugitives emissions from the cold end are calculated as follows:

Material Loading (AP-42, Fifth edition, Table 11.12-2, 10/01):

$((450,000 \text{ tons of material/year} \times 0.0051 \text{ lb PM/ton of material}) + (225,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PM/ton of aggregate}) + (225,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PM/ton of sand})) \times (1 \text{ ton}/2000 \text{ pounds}) = 2.16 \text{ tons of PM/year}$

Screening (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

$(450,000 \text{ tons of material/year}) \times (0.025 \text{ lb PM/ton of material}) = 5.63 \text{ tons PM/year}$

Transfer Points (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

$(450,000 \text{ tons of material/year}) \times (16 \text{ transfer points}) \times (0.0030 \text{ lb PM/ton of material}) = 10.8 \text{ tons of PM/year}$

Fugitives emissions from the hot end are calculated as follows:

Drum Mix Load-out (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor = $0.000181 + 0.00141(-V)e^{((0.0251)(T+460) - 20.43)} = 0.000522 \text{ lb/ton asphalt}$

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

$(450,000 \text{ tons of asphalt produced} \times 0.000522 \text{ lb of PM/ton of asphalt produced}) \times (1 \text{ ton}/2000 \text{ pounds}) = 0.117 \text{ ton of PM.}$

Silo Filling (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor = $0.000332 + 0.00105(-V)e^{((0.0251)(T+460) - 20.43)} = 0.000586 \text{ lb/ton asphalt}$

where,

V = asphalt volatility (- 0.5)*
 T = HMA temperature (325°F)*

* Default values listed in AP-42

(450,000 tons of asphalt produced X 0.000586 lb of PM/ton of asphalt produced) X (1 ton/2000 pounds) = 0.117 ton of PM/year

Total fugitive emissions are therefore 18.84 tons of PM/year.

- m. Emission Limitations: Emissions of fugitive PM-10 shall not exceed 7.19 pounds per hour.

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed based upon the following worst case calculation:

$$7.19 \text{ PM-10/ yr} \times 2000 \text{ lbs/ ton} \times 1\text{yr}/2000 \text{ hours} = 7.19 \text{ PM-10/hr}$$

- n. Emission Limitations: Emissions of fugitive PM shall not exceed 18.84 pounds per hour.

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed based upon the following worst case calculation:

$$18.84 \text{ ton PM/ yr} \times 2000 \text{ lbs/ ton} \times 1\text{yr}/2000 \text{ hours} = 18.84 \text{ lb PM/hr}$$

- o. Emission Limitations: Fugitive emissions from drum mix load out operations (hot side) shall not exceed 0.94 ton VOC per rolling 12-month period and 0.30 ton CO per rolling 12-month period. Fugitive emissions from the silo filling operations (hot side) shall not exceed 2.75 tons VOC per rolling 12-month period and 0.27 ton CO per rolling 12-month period.

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed based upon the following worst case calculations.

Fugitive emissions from the hot side load out and silo filling operations are calculated based on the following emission factors from AP-42, Fifth edition, Table 11.1-14, 03/04:

Activity	Pollutant	Predictive Emission Factor Equation (lb/ton)
Load-out	VOC**	$EF = 0.0172 (-V)e^{((0.251)(T+460) - 20.43)}$
Silo Filling	VOC**	$EF = 0.0504 (-V)e^{((0.251)(T+460) - 20.43)}$
Load-out	CO	$EF = 0.00558 (-V)e^{((0.251)(T+460) - 20.43)}$
Silo Filling	CO	$EF = 0.00488 (-V)e^{((0.251)(T+460) - 20.43)}$

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP

** Assumes VOC = TOC

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

Activity	Pollutant	EF, in lb/ton	tons/year (at 450,000 tons/yr production)
Load-out	VOC*	4.16×10^{-3}	0.94
Silo Filling	VOC*	1.22×10^{-2}	2.75
Load-out	CO	1.35×10^{-3}	0.30
Silo Filling	CO	1.18×10^{-3}	0.27

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 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, 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 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.4) 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 NO_x, 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 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. If the baseline level testing or the initial season tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

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. 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.

Source Number	Source Description	NSPS Regulation (Subpart)
P902	400 tph 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:

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

Reports are to be sent to:

Apple Smith Plant 2

PTI Application: 01-12023

Issued: To be entered upon final issuance

Facility ID: 0125042120

Emissions Unit ID: P902

Ohio Environmental Protection Agency
 DAPC- Air Quality Modeling and Planning
 P.O. Box 1049
 Columbus, OH 43216-1049

and

Central District Office
 Division of Air Pollution Control
 3232 Alum Creek Drive
 Columbus, OH 43207

2. The terms and conditions of this PTI are federally enforceable.
3. Burner Tuning Form (see next page)

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	
		Pre Tuning	Post Tuning ³
Fuel flow to the burner (gallon/hr) (for fuel oil and on-spec used oil)			
Fuel pressure (psi)			

Apple Smith Plant 2

PTI Application: 01-12023

Issued: To be entered upon final issuance

Facility ID: 0125042120

Emissions Unit ID: P902

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: