

Facility ID: 0857043082 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 0857043082 Emissions Unit ID: P901 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P901 - 440 tons/hr, Drum Mix Hot Mix Asphalt Plant; rotary dryer controlled with baghouse  (Non-Appendix A area)	OAC rule 3745-31-05(A)(3) PTI 08-03942	The requirements of this rule also include compliance with the requirements of NSPS 40 CFR Part 60, Subpart I, OAC 3745-31-05(C) and OAC 3745-35-07 (B).  The particulate emissions (PE) from the stack for this emissions unit shall not exceed 3.06 tons/yr.  The carbon monoxide (CO) emissions from this emissions unit when burning on-spec used oil, #2 fuel oil and natural gas shall not exceed 57.2 lbs/hr.  The nitrogen oxide (NOx) emissions from this emissions unit when burning natural gas shall not exceed 11.44 lbs/hr and 8.45 tons/yr.  The nitrogen oxide (NOx) emissions from this emissions unit when burning #2 fuel oil shall not exceed 24.2 lbs/hr.  The nitrogen oxide (NOx) emissions from this emissions unit when burning on-spec used oil shall not exceed 24.2 lbs/hr.  The sulfur dioxide (SO2) emissions from this emissions unit when burning natural gas shall not exceed 1.5 lbs/hr and 1.11 tons/yr.  The sulfur dioxide (SO2) emissions from this emissions unit when burning #2 fuel oil shall not exceed 4.84 lbs/hr and 3.58 tons/yr. The sulfur dioxide (SO2) emissions from this emissions unit when burning on-spec used oil shall not exceed 25.52 lbs/hr.  The volatile organic compound (VOC) emissions from this emissions unit when burning natural gas and #2 fuel oil shall not exceed 14.08 lbs/hr and 10.4 tons/yr.  The volatile organic compound (VOC) emissions from this emissions unit when burning on-spec used oil shall not exceed 16.28 lbs/hr and 12.03 tons/yr.  The CO emissions from this emissions unit when burning natural gas, #2 fuel oil and on-spec used oil shall not exceed 42.25 tons/yr.
	OAC rule 3745-35-07(B) (Synthetic minor to avoid Title V)	

		The SO2 emissions from this emissions unit when burning on-spec used oil shall not exceed 18.85 tons/yr.
	OAC rule 3745-35-07(B) OAC rule 3745-31-05(C) (Synthetic minor to avoid Title V and PSD)	The NOx emissions from this emissions unit when burning #2 fuel oil and on-spec used oil shall not exceed 17.88 tons/yr.
		The ton/yr limitations are based upon a rolling 12-month summation.
		Particulate emissions from the stack shall not exceed 0.04 grain per dry standard cubic foot of exhaust gases.
	NSPS 40 CFR Part 60, Subpart I	Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, from the stack, except as provided by 40 CFR Part 60, Subpart I.
		The emission limitations specified in these rules are less stringent than the emission limitations specified in 40 CFR Part 60, Subpart I.
	OAC rule 3745-17-07(A) and 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation specified in OAC rule 3745-18-06(H).
	OAC rule 3745-18-06(E)(2)	
aggregate storage bins, cold aggregate elevator, load-out and silo filling operations	OAC rule 3745-31-05(A)(3) PTI 08-03942	The fugitive particulate emissions from silo filling and plant load out (hot end) shall not exceed 0.36 ton/yr.
		The fugitive VOC emissions from silo filling and plant load out (hot end) shall not exceed 5.2 tons/yr.
		Visible particulate emissions from any fugitive source shall not exceed 20 percent opacity, as a 3-minute average.
		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 elevator loading area.
		The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize or eliminate the visible emissions of fugitive dust from the elevator and the transfer point to the dryer.

**2. Additional Terms and Conditions**

- (a) The lbs/hr of CO, NOx, SO2 and VOC emissions limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.  
The particulate emission limitation specified above includes particulate matter (PM10) emissions that are less than 10 microns in diameter.

**B. Operational Restrictions**

- 1. The maximum annual production rate for this emissions unit shall not exceed 650,000 tons, based upon a rolling 12-month summation. Since this is an existing source it has existing records and therefore does not need to be limited to first year monthly amounts of production.
- 2. The pressure drop across the baghouse shall be maintained within the range of 2.0 to 5.0 inches of water when the emissions unit is in operation.
- 3. All recycled, on-spec used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property Allowable Specifications

arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	50 ppm, maximum*
total halogens	4000 ppm maximum**
mercury	1 ppm, maximum
flash point	100 degrees Fahrenheit, minimum
heat content	135,000 Btu/gallon, minimum

\* If the permittee is burning used oil with any quantifiable level  $2\text{ppm} < 50\text{ ppm}$  of PCBs, then the permittee is subject to any applicable requirements found under 40 CFR part 279., subparts G and H and 40 CFR 761.20(e).

\*\* Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1)(ii) and OAC rule 3745-279- 10(B)(1)(b). Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the used oil supplier has demonstrated the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

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

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

1. The permittee shall maintain monthly records of the following information:

- a. The total quantity of asphalt products produced each month; and
- b. The rolling, 12-month summation of the monthly production rates.
- c. The maximum percentage RAP used for any mix.

2. The permittee shall properly, operate, and maintain equipment to monitor the pressure drop across the baghouse when 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 a daily basis.

3. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:

- a. The date of shipment or delivery.
- b. The quantity of used oil received.
- c. The Btu value of the used oil, in BTU/gallon.
- d. The flash point of the used oil in degrees F.
- e. The arsenic content, in ppm.
- f. The cadmium content, in ppm.
- g. The chromium content, in ppm.
- h. The lead content, in ppm.
- i. The PCB content, in ppm.
- j. The total halogen content, in ppm.
- k. The mercury content, in ppm.

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

4. 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 and for any visible fugitive particulate emissions from the rotary dryer, aggregate storage bins and cold aggregate elevator, load out and silo filling operations 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 location and 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 abnormal 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.

5. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating

experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports to the Director (the appropriate District Office or local air agency) which identify all exceedances of the rolling, 12-month production rate limitation.
2. The permittee shall submit pressure drop quarterly 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.
3. The permittee shall submit quarterly deviation (excursion) reports to the USEPA and the Ohio EPA (appropriate DO or LAA) if any of the used oil exceeds the used oil specifications in this permit. An identification number from USEPA shall be obtained prior to the combustion of any used oil.

Before the permittee accepts the first shipment of any on-specification used oil from a marketer, the permittee must provide the marketer a one-time, written and signed notice certifying that:

- a. The company has notified USEPA of its used oil management activities and that the notice included the location and description of those activities; and
- b. The company will burn the used oil only in an industrial furnace or boiler identified in 40 CFR Part 266.41(b) and OAC rule 3745-279-42.

A copy of each certification notice that the permittee sends to a marketer must be kept on file for a minimum of 5 years from the

4. The permittee shall submit annual reports of the production rate and the total PM, OC, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions units. These reports shall be submitted by January 31 of each year to the Director (District Office or Local Air Agency).
5. The permittee shall submit quarterly deviation (excursion) reports that (a) identify all days during which any visible particulate emissions were observed in excess of the allowable opacity limit specified above from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed in excess of the allowable opacity limit specified above from the rotary dryer, aggregate storage bins and cold aggregate elevator, load out and silo filling operations serving this emissions unit, and (c) describe any corrective actions taken to minimize the abnormal visible particulate and/or visible fugitive particulate emissions.
6. The permittee shall submit quarterly deviation (excursion) reports to the Director (the appropriate District Office or local air agency) which identify all exceedances of the RAP limitation specified above.
7. These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA Central District Office or local air agency by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

**E. Testing Requirements**

**1. Compliance Methods**

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

**Emission Limitation-**

PE emissions shall not exceed 0.04 gr/dscf; CO emissions when burning on-spec used oil, #2 fuel oil or natural gas shall not exceed 57.2 lbs/hr; NO<sub>x</sub> emissions when burning on-spec used oil or #2 fuel oil shall not exceed 24.2 lbs/hr, NO<sub>x</sub> emissions when burning natural gas shall not exceed 11.44 lbs/hr; SO<sub>2</sub> emissions when burning natural gas shall not exceed 1.5 lbs/hr, SO<sub>2</sub> emissions when burning #2 fuel oil shall not exceed 4.84 lbs/hr, SO<sub>2</sub> emissions when burning on-spec used oil shall not exceed 25.52 lbs/hr; VOC emissions when burning on-spec used oil shall not exceed 16.28 lbs/hr, VOC when burning #2 fuel oil or natural gas shall not exceed 14.08 lbs/hr.

**Applicable Compliance Method-**

If required, compliance shall be based on conducting a stack test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for PM, CO, NO<sub>x</sub>, VOC and SO<sub>2</sub>.

The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for:

PM, USEPA Reference Methods 1-5, of 40 CFR Part 60, Appendix A.

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

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

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

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

The test shall be conducted while the emissions unit is operating at or near maximum capacity and burning natural gas, #2 fuel oil or on-spec used oil for PM, CO, NO<sub>x</sub>, VOC and SO<sub>2</sub> and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

Future emission testing for CO shall be conducted at the frequency specified in Ohio EPA engineering Guide #16 based on the results of the initial emissions testing.

Future emission testing for NO<sub>x</sub>, PM, VOC and SO<sub>2</sub> may be required at the discretion of RAPCA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test"

notification. 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 field office's refusal to accept the results of the emissions test(s).

Personnel from the Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment and acquire data and information regarding the emissions unit operating parameters.

A comprehensive written report on the results of the emissions test(s) shall be submitted 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 appropriate Ohio EPA District Office or local air agency.

Emission Limitation -

Particulate emissions from the stack shall not exceed 3.06 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method -

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.0094 lb PM/ton and dividing by 2,000 lbs/ton. The emission factor was developed from the emissions test conducted on 11/10/1999, in accordance with USEPA Reference Methods 1-5, of 40 CFR Part 60, Appendix A. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

Emissions Limitation-

CO emissions when burning natural gas, #2 fuel oil or on-spec used oil shall not exceed 42.25 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.13 lb CO/ton, as specified in USEPA reference document AP-42, 11.1-7 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

Emissions Limitation-

NOx emissions when burning #2 fuel oil or on-spec used oil shall not exceed 17.88 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.055 lb NOx/ton, as specified in USEPA reference document AP-42, 11.1-7 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

Emissions Limitation-

NOx emissions when burning natural gas shall not exceed 8.45 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.026 lb NOx/ton, as specified in USEPA reference document AP-42, 11.1-7 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

Emissions Limitation-

SO2 emissions when burning natural gas shall not exceed 1.11 ton/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.0034 lb SO2/ton, as specified in USEPA reference document AP-42, 11.1-7 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

SO2 emissions when burning #2 fuel oil shall not exceed 3.58 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.011 lb SO2/ton, as specified in USEPA reference document AP-42, 11.1-7 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

SO2 emissions when burning on-spec used oil shall not exceed 18.85 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.058 lb SO2/ton, as specified in USEPA reference document AP-42, 11.1-7 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

Emission Limitation-

VOC emissions from this emissions unit when burning on-spec used oil shall not exceed 12.03 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.037 lb PM/ton and dividing by 2,000 lbs/ton. The emission factor was developed from the emissions test conducted on 11/10/1999, in accordance with USEPA Reference Methods 1-4 and 25A of 40 CFR Part 60, Appendix A. If required, compliance shall also be verified by conducting a stack test in accordance with Section E.1.a.

Emission Limitation-

VOC emissions from this emissions unit when burning #2 fuel oil and natural gas shall not exceed 10.4 tons/yr, on a 12-month rolling basis.

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month production summation by the emission factor of 0.032 lb VOC/ton, as specified in USEPA reference document AP-42, 11.1-8 (03/04), and dividing by 2,000 pounds per ton. If required, compliance shall also be verified by conducting a stack test in accordance with

## Section E.1.a.

## Emission Limitation -

Fugitive particulate emissions shall not exceed 0.36 ton/yr, on a 12-month rolling basis.

## Applicable Compliance Method -

Compliance with the annual fugitive particulate emissions shall be assumed based upon the following worst case calculations:

Fugitive particulate emissions from the hot end are calculated as follows

Silo filling (650,000 tons/yr of material/yr x 0.00052 lb PM/ton x ton/2000 lbs) +  
Plant Load Out (650,000 tons/yr of asphalt produced/yr x 0.00058 lb PM/ton x ton/2000 lbs)  
= 0.36 ton/yr particulate

The emission factors in the above equations are derived from AP-42, Fifth Edition, Table 11.1-14 (3/04).

## Emission Limitation -

Fugitive VOC emissions shall not exceed 5.2 tons/yr, on a 12-month rolling basis.

## Applicable Compliance Method -

Compliance with the annual fugitive VOC emissions shall be assumed based upon the following worst case calculations:

Fugitive VOC emissions from the hot end are calculated as follows

Silo filling (650,000 tons/yr of material/yr x 0.012 lb VOC/ton x ton/2000 lbs) +  
Plant Load Out (650,000 tons/yr of asphalt produced/yr x 0.004 lb VOC/ton x ton/2000 lbs)  
= 5.2 tons VOC

The emission factors in the above equations are derived from AP-42, Fifth Edition, Table 11.1-14 (3/04).

## Emissions Limitation-

20 percent opacity as a 6-minute average, from the stack

## Applicable Compliance Method-

Compliance shall be demonstrated through visible emissions observations in accordance with OAC rule 3745-17-03(B)(1).

## Emission Limitation-

20 percent opacity as a 3-minute average, from fugitives

## Applicable Compliance Method-

Compliance shall be demonstrated through visible emissions observations in accordance with OAC rule 3745-17-03(B)(3).

F. **Miscellaneous Requirements**

## 1. Notice to Relocate a Portable or Mobile Source

Pursuant to Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing the following criteria are met:

- a. the portable emissions unit is equipped with the best available control technology for such portable emissions unit;
- b. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO);
- c. the applicant has provided proper notice of intent to relocate the portable emissions unit to the Director (the appropriate Ohio EPA District Office and/or local air agency having jurisdiction over the new site) within a minimum of thirty days prior to the scheduled relocation; and
- d. in the Director's (the appropriate Ohio EPA District Office and /or local air agency judgement, the proposed site is acceptable under the rule 3745-15-07 of the Administrative Code.

OR

Under OAC rule 3745-31-05(F), portable or mobile emission sources may relocate to sites that have been preapproved by the Director. The permittee may relocate the portable or mobile sources listed in this permit if:

- a. the permittee has applied for and obtained a site approval for the new site from the Director;
- b. the site approval is current and effective;
- c. the permittee has complied with all of the conditions and restrictions contained in the site approval; and
- d. the permittee has provided the appropriate Ohio EPA District Office and/or local air agency having jurisdiction over the new site at least 15 days written notice of the relocation.