

Facility ID: 1431342852 Issuance type: Final State Permit To Operate

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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: 1431342852 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 -400 TPH Drum Mix Hot Mix Asphalt Plant with Fabric Filter	OAC rule 3745-31-05(A)(3) (PTI 14-05985)	Stack Emissions  Nitrogen oxides (NOx) emissions while burning natural gas shall not exceed 0.029 pound per ton of asphalt produced.  NOx emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.053 pound per ton of asphalt produced.  NOx emissions while burning number 4 fuel oil shall not exceed 0.062 pound per ton of asphalt produced.  Sulfur dioxide (SO2) emissions while burning natural gas shall not exceed 0.011 pound per ton of asphalt produced.  SO2 emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.066 pound per ton of asphalt produced.  SO2 emissions while burning number 4 fuel oil shall not exceed 0.11 pound per ton of asphalt produced.  Carbon monoxide (CO) emissions while burning any approved fuel shall not exceed 0.15 pound per ton of asphalt produced.  Volatile organic compound (VOC) emissions while burning any approved fuel shall not exceed 0.10 pound per ton of asphalt produced.  Particulate emissions (PE) and particulate matter 10 microns and less in diameter (PM10) emissions while burning any approved fuel shall not exceed 0.030 grain (gr)/dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and 40 CFR Part 60, Subpart I.  See terms and conditions A.2.a through A.2.k below. See term and condition A.2.n below. Stack Emissions
	OAC rule 3745-21-08(B) OAC rule 3745-31-05(C) Synthetic minor to avoid	

Title V permitting	<p>NOX emissions shall not exceed 13.95 tons per rolling, 12-month period.</p> <p>SO2 emissions shall not exceed 24.75 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>PE/PM10 shall not exceed 4.45 tons per rolling, 12-month period.</p> <p>Asphalt Load Out Emissions</p> <p>CO emissions shall not exceed 0.30 ton per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 0.87 ton per rolling, 12-month period.</p> <p>PE/PM10 shall not exceed 0.12 ton per rolling, 12-month period.</p> <p>Asphalt Silo Filling Emissions</p> <p>CO emissions shall not exceed 0.27 ton per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 2.7 tons per rolling, 12-month period.</p> <p>PE/PM10 shall not exceed 0.13 ton per rolling, 12-month period.</p> <p>Cold End Fugitive Dust Emissions</p> <p>Fugitive PE/PM10 emissions associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 3.17 tons per rolling, 12-month period for PE and 1.51 tons per rolling, 12-month period for PM10.</p>
OAC rule 3745-17-07(A)(1)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-07(B)	<p>When applicable, the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-08(B)	<p>See term and condition A.2.i.i.</p>
OAC rule 3745-17-08(B)	<p>When applicable, the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-11(B)(1)	<p>See term and condition A.2.i.i.</p>
OAC rule 3745-18-06(E)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
40 CFR Part 60, Subpart I 60.92(a)(1) 60.92(a)(2)	<p>The emission limitations specified by 40 CFR Part 60, Subpart I are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-279-11	<p>See term and condition A.2.h.</p>

2. **Additional Terms and Conditions**

- (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. 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. There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator. 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. Visible particulate emissions from the stack shall not exceed 10 per cent opacity, as a six-minute average. All number 2 and "on-specification" (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.

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.

All used oil burned in this emissions unit shall be on-spec oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:  
Contaminant/Property Allowable Specifications

arsenic 5 ppm, maximum  
cadmium 2 ppm, maximum  
chromium 10 ppm, maximum  
lead 100 ppm, maximum  
total halogens 4,000 ppm maximum\*  
flash point 100oF, minimum

The used oil burned in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3; and shall also not exceed the following mercury limitation nor fall below the following heating value:

PCB's less than 2 ppm  
heat content 135,000 Btu/gallon, minimum  
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 3745-279-10(B).

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.

Based on the information in PTI Application 14-05985, submitted by the permittee in Sept 11, 2007, regarding the initial location of the portable plant:

- i. this emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08; and
- ii. this emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate notification and exemption requirements have been met. The director may issue a "Notice of Site Approval" through either of the following scenarios:

- i. If future location(s) of the proposed portable source are unknown, the approval to relocate the portable source shall be in accordance with OAC rule 3745-31-03(A)(1)(p)(i) and the following criteria shall be met:
  - (a) . the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
  - (b) . the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
  - (c) . the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
  - (d) . the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07 and that the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
  - (e) . the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site; or
- ii. Pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the director may issue a "Notice of Site Approval" for any pre-disclosed location(s) if the portable source meets the requirements of OAC rule 3745-31-05(E), as follows:
  - (a) . the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;

- (b) . the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- (c) . the permittee has identified the proposed site(s) to the permitting District Office or local air agency;
- (d) . the permitting District Office/local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);
- (e) . a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site(s) is/are located;
- (f) . the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s); and
- (g) . the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site. Any site approval(s) issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A) (1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal. Pursuant to OAC rule 3745-31-05(F), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a baghouse controlling the PE from the drum, compliance with the short-term emissions limitations, compliance with the rolling, 12-month operational restriction, compliance with the rolling, 12-month emissions limitations, compliance with the visible emissions limitations, and compliance with the operational restrictions regarding the use of used oil, maintenance of the fuel burner, use of RAP and latex, and fuel restrictions.

The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).

The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

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. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision 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 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.
- 2. The permittee has requested a federally enforceable limitation on asphalt produced in order to restrict the federally enforceable potential to emit. The total amount of asphalt produced using any fuel is limited to 450,000 tons per rolling 12-month period. To ensure enforceability during the first 12 calendar months of operation following the initial startup of this emissions unit, the permittee shall not exceed the production levels specified in the following table:

Maximum Allowable  
Month(s) Cumulative Production (Tons)

- 1 110,000
- 1 - 2 220,000
- 1 - 3 330,000
- 1 - 4 450,000
- 1 - 5 450,000
- 1 - 6 450,000
- 1 - 7 450,000
- 1 - 8 450,000

- 1 - 9 450,000
- 1 - 10 450,000
- 1 - 11 450,000
- 1 - 12 450,000

After the first 12 calendar months of operation or the first 12 calendar months following the initial startup of this emissions unit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

3. 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.
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 on an hourly basis. The permittee may not substitute materials for the aggregate such as shingles, slag, rubber, etc. without prior approval from Ohio EPA.
5. The permittee shall only burn natural gas, number 2 fuel oil, number 4 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 per paragraph E.1.a.

**C. Monitoring and/or Record Keeping 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 that the used oil meets the standards in OAC 3745-279-11 and does not contain quantifiable levels of PCBs:
    - i. arsenic content, in ppm;
    - ii. the cadmium content, in ppm;
    - iii. the chromium content, in ppm;
    - iv. the lead content, in ppm;
    - v. total halogens, in ppm;
    - vi. the PCB content, in ppm; and
    - vii. 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 rule 3745-279-10(B); and
  - e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.  
The metal contents for arsenic, cadmium, chromium, lead, and mercury shall be analyzed using a "Totals Analysis" or Total Metals" testing methodology, Chapter Two of "Testing Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)" should be referenced to for selecting appropriate test methods for the used oil analyses. Under no circumstances shall the metal contents of the used oil be analyzed using "TCLP", "EP-TOC", or other similar testing procedures, since these tests were developed to gauge leachate mobility from a landfill, of which is an irrelevant property of the used oil burned for energy recovery.  
  
Each analysis shall be kept in a readily accessible location for a period of not less than 5 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) upon 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 install, operate, and maintain equipment to continuously monitor and record the pressure drop in inches of water, across the baghouse, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop in inches of water, across the baghouse on a daily basis.  
  
Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.  
In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel

who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable pressure drop range across the baghouse shall be: 3.0 to 6.0 inches of water while the emissions unit is in operation.

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

3. The permittee shall maintain monthly records of the following information for emissions unit P901:
  - a. the total asphalt production, in tons 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 P901;
  - 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 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, PM10, SO2, NOx, VOC and CO emissions; and
  - f. the maximum percentage of RAP and/or other substitute/additive 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 permittee's 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 areas other than 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 location and color of the 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.

**D. Reporting Requirements**

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

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

2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services 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 quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.
3. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the restrictions specified in term B.4 above. These reports are due by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.
4. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling 12-month total PE, PM10, SO2, NOx, VOC and CO emission limitations. These reports are due by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.
5. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Hamilton County Department of Environmental Services), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
6. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the sulfur content limitations specified above. These reports are due by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.
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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
10. 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)  
P901 400 ton/hr asphalt plant Subpart I

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

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

appropriate times:

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

Reports are to be sent to the Hamilton County Department of Environmental Services.

**E. Testing Requirements**

1. Emission Limitations:

NOx emissions while burning natural gas shall not exceed 0.029 pound per ton of asphalt produced; NOx emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.053 pound per ton of asphalt produced; NOx emissions while burning number 4 fuel oil shall not exceed 0.062 pound per ton of asphalt produced; SO2 emissions while burning natural gas shall not exceed 0.011 pound per ton of asphalt produced; SO2 emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.066 pound per ton of asphalt produced; SO2 emissions while burning number 4 fuel oil shall not exceed 0.11 pound per ton of asphalt produced; CO emissions while burning any approved fuel shall not exceed 0.15 pound per ton of asphalt produced; VOC emissions while burning any approved fuel shall not exceed 0.10 pound per ton of asphalt produced; PE/PM10 while burning any approved fuel shall not exceed 0.030 gr/dscf.

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 6 months prior to permit renewal. Emission 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, NOx and SO2 for the primary fuel. Prior to secondary fuel emissions testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency 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:

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

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

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

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

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

The VOC pounds per hour emission rate observed during the emission test shall be calculated in accordance with OAC paragraph 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.

- iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, numbers 2 or 4 fuel oil, or on-spec used oil for PE, VOC, CO, NOx and SO2 and employing RAP to verify VOC emissions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

2. 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 emission testing, in pounds of VOC per ton of asphalt produced for each fuel, 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 term and condition C.3 above), summing the results for all fuels, and dividing by 2000.

The potential to emit VOC was calculated using information submitted by the permittee in permit to install (PTI) application 14-05985, submitted Sept 11, 2007:

0.10 lb of VOC/ton x 450,000 ton/year x 1 Ton/2000 lbs = 22.5 TPY of VOC.

3. Emission Limitation:

CO emissions shall not exceed 33.75 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of CO per ton of asphalt produced for each fuel, 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 term and condition C.3 above), summing the results for all fuels, and dividing by 2000.

The potential to emit CO was calculated using information submitted by the permittee in permit to install (PTI) application 14-05985, submitted Sept 11, 2007:

0.15 lb of CO/ton x 600,000 tons/year x 1 Ton/2000 lbs = 33.75 TPY of CO.

4. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 24.75 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of SO<sub>2</sub> per ton of asphalt produced for each fuel, 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 term and condition C.3 above), summing the results for all fuels, and dividing by 2000.

The potential to emit SO<sub>2</sub> was calculated using information submitted by the permittee in permit to install (PTI) application 14-05985, submitted Sept 11, 2007:

0.11lb of SO<sub>2</sub>/ton x 450,000 tons/year x 1 Ton/2000 lbs = 24.75 TPY of SO<sub>2</sub>.

5. Emission Limitation:

NO<sub>x</sub> 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 emission testing, in pounds of NO<sub>x</sub> per ton of asphalt produced for each fuel, 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 term and condition C.3 above), summing the results for all fuels, and dividing by 2000.

The potential to emit NO<sub>x</sub> was calculated using information submitted by the permittee in permit to install (PTI) application 14-05985, submitted Sept 11, 2007:

0.062 lb of NO<sub>x</sub>/ton x 450,000 tons/year x 1 Ton/2000 lbs = 13.95 TPY of NO<sub>x</sub>.

6. Emission Limitations:

Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in term A.2.h.

Applicable Compliance Method:

Compliance with the emission limitation for arsenic, cadmium and lead shall be demonstrated by the monitoring and record keeping in Section C.1 of this permit.

7. Emission Limitation:

There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.

Applicable Compliance Method:

Compliance with the limitation 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. Upon request by the appropriate Ohio EPA District Office or local air agency, compliance shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60, Standards of Performance for New Stationary Sources, as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

8. Emission Limitation:

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.

Applicable Compliance Method:

Upon request by the appropriate Ohio EPA District Office or local air agency, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

9. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 10 per cent opacity as a six-minute average.

Applicable Compliance Method:

compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

10. Emission Limitation:

Emissions of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate,

sand and RAP transfer operations shall not exceed 3.17 tons of PE per rolling 12-month period and 1.51 tons of PM10 per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be calculated based upon the following worst case calculations (Emission factors based on AP-42, 5th Edition, Table 11.12-2, 10/2001):

Fugitive emissions from the cold end are calculated as follows:

Hopper loading:

450,000 tons of material/year X 0.0051 lb of PE/ton of material = 2295 lbs of PE/yr; and  
450,000 tons of material/year X 0.0024 lb of PM10/ton of material = 1080 lbs of PM10/yr.  
Aggregate transfer:

450,000 tons of aggregate/year X 0.0069 lb of PE/ton of aggregate = 3105 lb of PE/yr; and

450,000 tons of aggregate/year X 0.0033 lb of PM10/ton of aggregate = 1485 lb of PM10/yr.

Sand transfer:

450,000 tons of sand/year X 0.0021 lb of PE/ton of sand = 945 lb of PE/yr; and  
450,000 tons of sand/year X 0.00099 lb of PM10/ton of sand = 445.5 lb of PM10/yr.

The sum of the above is 6345 lb of PE/yr X 1 ton/2000 lbs = 3.17 tons of PE; and  
The sum of the above is 3010.5 lb of PM10/yr X 1 ton/2000 lbs = 1.51 tons of PM10.

11. Asphalt Load out and Silo Filling Emissions:

Emissions from load out operations shall not exceed 0.30 ton of CO per rolling 12-month period, 0.12 ton of PE per rolling 12-month period and 0.87 tons of VOC per rolling 12-month period.

Emissions from silo filling operations shall not exceed 0.27 ton of CO per rolling 12-month period, 0.13 ton of PE per rolling 12-month period and 2.70 tons of VOC per rolling 12-month period.  
Emissions from asphalt load out and silo filling operations are calculated as follows:

Asphalt plant silo filling and plant load out Emission Factors based on AP-42, Fifth Edition, Table 11.1-14, dated 3/2004.

Known:

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

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

For plant load out, 7.3 per cent of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004  
Based on the above information, the emission factors and emissions are as follows.

Activity Pollutant lb/ton tons/yr (at 450,000 tons/yr production)

Silo filling PE  $5.86 \times 10^{-4}$  0.13  
Load out PE  $5.22 \times 10^{-4}$  0.12  
Silo filling VOC  $1.20 \times 10^{-2}$  2.70  
Load out VOC  $3.86 \times 10^{-3}$  0.87  
Silo filling CO  $1.18 \times 10^{-3}$  0.27  
Load out CO  $1.35 \times 10^{-3}$  0.30

The PM10 emissions are assumed equivalent to the PE.

F. **Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.