

ADDITIONAL SPECIAL TERMS AND CONDITIONS

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

1. The maximum particulate emissions from the fabric filter exhaust stack shall not exceed 0.04 grains per dry standard cubic foot and 22.9 pounds per hour.
2. Visible particulate emissions from the fabric filter exhaust stack shall not exceed ten percent (10%) opacity, as a six-minute average, except as provided by rule.
3. Visible particulate emissions from any fugitive dust emissions point shall not exceed twenty percent (20%) opacity as a three-minute average.
4. 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 cold feed bins and recycled material (RAP) bin.
5. 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.
6. All recycled, used oil burned in this emissions unit shall meet the following specifications:

| <u>Contaminant/Property</u> | <u>Allowable Specifications</u> |
|-----------------------------|---------------------------------|
| arsenic                     | 5 ppm, maximum                  |
| cadmium                     | 2 ppm, maximum                  |
| chromium                    | 10 ppm, maximum                 |
| lead                        | 60 ppm, maximum                 |
| PCB's                       | 10 ppm, maximum                 |
| total halogens              | 4000 ppm, maximum               |
| mercury                     | 1 ppm, maximum                  |
| flash point                 | 100°F, minimum                  |
| heat content                | 135,000 Btu/gallon, minimum     |
| sulfur content              | 0.5%, maximum                   |

\*Some or all of these used oil specifications exceed the Resource Conservation & Recovery Act Standards of 40 CFR Part 266.40 and OAC rule 3745-58-50, thereby, making the used oil off-specification.

Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-58-50. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

7. Mass emissions shall not exceed the amounts specified in the Air Emissions Summary page of PTI 14-4667.

**B. Operational Restrictions**

1. To ensure the fabric filter is operated according to the manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, a pressure drop across the fabric filter of not less than 3 or greater than 6 inches of water shall be maintained at all times while the emissions unit is in operation.
2. The maximum asphaltic concrete production from this plant shall not exceed 400 tons per hour. This production rate is based on the emissions unit's potential to emit, therefore no hourly records are required.
3. The maximum annual production rate for this emissions unit shall not exceed 800,000 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, compliance with the annual production rate limitation shall not exceed the production levels specified in the following table:

| <u>Month</u> | <u>Cumulative Production (Tons)</u> |
|--------------|-------------------------------------|
| 1-1          | 66,667                              |
| 1-2          | 133,333                             |
| 1-3          | 200,000                             |
| 1-4          | 266,667                             |
| 1-5          | 333,333                             |
| 1-6          | 400,000                             |
| 1-7          | 466,667                             |
| 1-8          | 533,333                             |
| 1-9          | 600,000                             |
| 1-10         | 666,667                             |
| 1-11         | 733,333                             |
| 1-12         | 800,000                             |

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

4. The permittee may not receive or burn any used oil which does not meet the specifications listed in this permit without first obtaining a permit to install that authorizes the burning of such used oil.
5. The permittee may not receive or burn any #2 fuel oil and/or used oil which has a sulfur content greater than 0.5 percent.

**C. Monitoring and Recordkeeping Requirements**

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter 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 fabric filter on a once per shift basis.
2. 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:

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- a. Date of shipment or delivery.
- b. 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 °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.
- l. The sulfur content (%).

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical 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.

3. The permittee shall maintain monthly records of the following information:
  - a. The asphalt production rate for each month.
  - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the asphalt production rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative asphalt production rate for each calendar month.

4. For each shipment of #2 fuel 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.

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5. 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, unless otherwise specified in this permit. 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.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all periods of time during which the pressure drop across the fabric filter did not comply with the allowable pressure drop range specified in Term B.1.
2. 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.

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The reports shall be submitted quarterly, i.e., by January 30, April 30, July 30, and October 30 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. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the oil specifications. 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 off-

specification used oil from a marketer, the permittee must provide the marketer a one-time, written and signed notice certifying that:

- a. The permittee has notified USEPA of its used oil management activities and that the notice included the location and description of those activities; and
- b. The permittee will burn the used oil only in an industrial furnace or boiler identified in 40 CFR Part 266.41(b) and OAC rule 3745-58-42.

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 date it last received off-specification used oil from that marketer.

The facility shall also submit a copy of each certification notice to the Ohio EPA field office.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative production levels. The report shall also identify any exceedances of the sulfur content limits of the oil contained in Term B.5.
5. The permittee shall submit annual reports which specify the total PM, PM-10, SO<sub>2</sub>, NO<sub>x</sub>, OC and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.

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6. The permittee shall submit a "Notice of Intent to Relocate a Portable or Mobile Source" form 30 days prior to any planned relocation of this emissions unit, in accordance with OAC rule 3745-31-03(A)(6) [A copy of the form is attached to this permit]. Approval of the planned relocation must be obtained from the Hamilton County Department of Environmental Services prior to the relocation.
7. The permittee shall furnish the Administrator written notification as follows:

A notification of any physical or operational change to an existing facility which may increase the emission

rate of any air pollutant to which a standard applies, unless that change is specifically exempted under 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

**E. Compliance Methods/Testing Requirements**

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

Emission Limitation:

Specified emissions limits for CO, NOX, SO2, OC, PM and PM-10.

Applicable Compliance Method:

The permittee shall calculate the PM10, CO, NOX, and SO2 emission rates using emission factors from AP-42 Table 11.1-6 and 11.1-8.

The OC and PM emission rates will be determined based on the emission testing.

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2. Emission Limitation:

20% opacity for fugitive emissions and 10% opacity for stack emissions.

Applicable Compliance Method:

Method 9, 40 CFR Part 60, Appendix A

3. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 180 days after initial startup of the emissions unit, the permittee shall conduct, or have conducted, an emission test(s) for this emissions unit in order to demonstrate compliance with the allowable mass emission rate(s) for particulate matter (PM) and organic compounds (OC). The PM test(s) shall be conducted in accordance with the test methods and procedures specified in Method 5 of 40 CFR Part 60,

Appendix A and the OC test(s) shall be conducted in accordance with the test methods and procedures specified in Method 25 (or suitable equivalent) of 40 CFR Part 60, Appendix A while the emissions unit is operating at or near maximum capacity and using only virgin aggregate.

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 dates(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.

For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the emissions test unless visibility or other conditions prevent the opacity observations from being conducted concurrently with the emissions test.

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In such a case, the permittee shall reschedule the opacity observations as soon after the emissions test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date.

In these cases, the 30-day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the emissions test. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9, 40 CFR Part 60, Appendix B. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual

observations were made and shall provide evidence indicating proof of current visible observer emission certification.

A comprehensive written report on the results of the emission test(s) shall be submitted within 30 days following completion of the test(s).

4. Compliance with the used oil specifications in Term A.6 shall be demonstrated by the recordkeeping in Term C.2.
5. Compliance with the annual asphalt production limitations in Term B.3 shall be demonstrated by the recordkeeping in Term C.3.
6. This permit allows the use of materials specified by the permittee in the application for PTI number 14-4667. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the hydrogen chloride emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application.

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Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

**Pollutant: Hydrogen Chloride**

**TLV (ug/m3): 7500**

**Maximum Hourly Emission Rate (lbs/hr): 3.2**

**Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 4.2**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 179**

As long as the application of the "Air Toxics Policy" continues to show compliance with the applicable MAGLIC, the permittee may implement any of the following changes with prior notification to and approval from the appropriate Ohio EPA field office:

- a. Any changes in the composition materials, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height).

For any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a permit to install prior to the change.

Permit Review Narrative  
14-4667

Valley Asphalt Corporation  
5073 Kilby Road  
Cleves, Ohio 45002

PN: 1431400140

This permit application is for a 400 ton per hour portable asphalt plant (P908) to be permitted from the Kilby Road location of Valley Asphalt. This permit will be made a Synthetic Minor by limiting production to 800,000 tons per year.

Applicable rules:

40 CFR Part 60, Subpart I (Hot Mix Asphalt Facilities)  
OAC 3745-15-07 (Air pollution nuisance prohibited)  
OAC 3745-17-07 (Visible emissions limitations)  
OAC 3745-17-08 (Emissions of fugitive dust)  
OAC 3745-17-11 (Particulate emissions from stack sources)  
OAC 3745-31-05 (BAT requirements)

Emissions summary:

See Air Emissions Summary page of PTI 14-4667 and attached emissions summary sheet.

BAT determination:

P908 - Use of fabric filter to control particulate emissions, production limitation, maintain aggregate material in moist condition, visible emission limitations, compliance with the Air Toxics Policy and specified emission limitations.

Emissions units P908 will comply with all applicable rules and emission limitations and/or control requirements, therefore approval is recommended.

Permit Fee:

|      |                |                   |
|------|----------------|-------------------|
| P908 | >50,000 lbs/hr | <u>\$1,000.00</u> |
|      |                | <b>\$1,000.00</b> |

Prepared by: Peter Sturdevant  
Date prepared: December 24, 1998

### Synthetic Minor Determination

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A. Source Description

Valley Asphalt Corporation has submitted an application for a 400 ton per hour portable drum mix asphalt plant. This equipment will be used for the production of asphaltic concrete.

B. Facility Description

This facility is located in Hamilton County, Ohio and is presently a minor facility. Hamilton County is classified as non-attainment for VOC and attainment for all other criteria pollutants.

C. Source Emissions

Potential emissions from this emissions unit (including fugitive particulate emissions) will be limited, through this PTI, to 15.2 tons per year of particulate matter, 10.4 tons per year of PM-10, 40.0 tons per year of SO<sub>2</sub> and 27.6 tons per year of VOC. Without control equipment and production limitations this emissions unit would have maximum uncontrolled emissions of 7600 tons per year for

particulate matter, 1720 tons per year PM-10, 255.79 tons per year SO<sub>2</sub> and 121 tons per year of VOC.

This permit will impose an asphalt production limit of 800,000 tons per year. Compliance with the annual production limit will be based upon a rolling, 12-month summation. This facility shall maintain monthly records and submit excursion reports that identify all exceedances of the rolling, 12-month production rate limitation.

D. Conclusion:

With this permit, the federally enforceable terms and conditions will limit the annual asphalt production and require the use of control equipment so that the facility has a potential to emit less than 100 tons per year of PM, PM-10, SO<sub>2</sub> and VOC. Valley Asphalt Corporation will not be considered a major facility for the purpose of Title V permit. The PM, PM-10 and SO<sub>2</sub> emissions will be less than 100 tons per year thus PSD will not apply and the VOC emissions will be less than 100 tons per year so the Emission Offset Policy will not apply.

Prepared by: Peter Sturdevant  
Date prepared: December 24, 1998