



**Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Air Quality**

**GENERAL PLAN APPROVAL AND/OR GENERAL OPERATING PERMIT
BAQ-GPA/GP-13**

HOT MIX ASPHALT PLANTS

1. Statutory Authority and General Description

In accordance with Section 6.1(f) of the Pennsylvania Air Pollution Control Act (APCA), 35 P.S. § 4006.1(f), 25 *Pa. Code* §§ 127.514 (relating to general operating permits at Title V facilities) and 127.611 (relating to general plan approvals and general operating permits), the Pennsylvania Department of Environmental Protection ("Department") hereby issues this General Plan Approval and General Operating Permit ("General Permit") for Hot Mix Asphalt plants ("HMA plants"), BAQ-GPA/GP-13.

2. Applicability/Source Coverage Limitations

BAQ-GPA/GP-13 applies to HMA plants which produce asphaltic concrete through batch, continuous mix, counter-flow drum-mix, or drum methods. This General Permit authorizes the construction, modification and operation of any HMA plant that is typically comprised of a combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for crushing, screening, handling, storing, and weighing recycled asphalt pavement; systems for loading, transferring, and storing mineral filler, asphalt heaters; systems for mixing, transferring, storing and loading hot mix asphalt into trucks, and the associated emission control systems.

This General Permit is limited to the construction, modification and/or operation of HMA plants that are located at facilities for which a valid mining permit or an air quality operating permit has been issued by the Department.

If an exemption is applicable under 25 *Pa. Code* §§127.14 (relating to exemptions) or 127.449 (relating to de minimis emission increases), the use of this General Permit to authorize construction, modification, and/or operation of HMA plants is not necessary.

If any HMA plant cannot be regulated by the requirements of this General Permit, a plan approval issued in accordance with 25 *Pa. Code*, Chapter 127, Subchapter B (relating to plan approval requirements), operating permit issued in accordance with Subchapter F (relating to operating permit requirements or 25 *Pa. Code*, Chapter 127, Subchapters F and G (relating to Title V operating permits) will be required, if applicable.

Prohibited Use

This General Permit has been established in accordance with 25 *Pa. Code* Chapter 127, Subchapter H (relating to general plan approvals and general operating permits) and is not applicable to:



- a. Any stationary air contamination source that is subject to 25 *Pa. Code* Chapter 127, Subchapter D (relating to prevention of significant deterioration);
- b. Any stationary air contamination source that is subject to 25 *Pa. Code* Chapter 127, Subchapter E (relating to new source review); and
- c. Any stationary air contamination source that is subject to 25 *Pa. Code* Chapter 127, Subchapters F and G (relating to operating permit requirements and Title V operating permits).

Plan Approval

This General Permit establishes best available technology (BAT) requirements and authorizes the construction or modification of HMA plants that are subject to the BAT requirements of 25 *Pa. Code* §§ 127.1 and 127.12(a)(5).

Operating Permit

This General Permit authorizes the operation of a HMA plant unless the respective operation is located in a facility that has or is required to have an operating permit pursuant to 25 *Pa. Code*, Chapter 127, Subchapter F, or 25 *Pa. Code* Chapter 127, Subchapters F and G. The HMA plant that is constructed or modified under this General Permit and located in a facility that is subject to 25 *Pa. Code*, Chapter 127, Subchapter F, or Subchapters F and G, may, however, be operated under this General Permit on a temporary basis until such time as the operating permit required pursuant to 25 *Pa. Code*, Chapter 127, Subchapter F, or Subchapters F and G, has been obtained or amended by the Department to include the terms and conditions of this General Permit.

Once authorization to use this General Permit is granted by the Department, operation may proceed provided that the owner or operator notifies the Department in accordance with Condition 7 of the General Permit.

3. Municipal Notifications

As required under section 1905-A of the Administrative Code of 1929 (71 P.S. § 510-5), a facility owner or operator proposing to use the General Plan Approval/ General Permit shall submit a copy of the application to each municipality in which the sources will be constructed, modified or operated under BAQ-GPA/GP-13. The notice to municipalities shall be provided at least 15 working days prior to submitting the application to the Department.

4. Application for Use

Pursuant to 25 *Pa. Code* § 127.621 (relating to application for use of general plan approvals and general operating permits), any person proposing to construct, operate or modify a HMA Plant under the General Permit shall notify the Department using the BAQ-GPA/GP-13 application and shall receive prior written approval from the Department before construction or modification may commence. This application shall be accompanied by the appropriate application fee, proof of municipal notification and any additional forms and information requested by the Department. The Department will take action on the complete application within thirty (30) days of receipt.



This General Permit authorizes the specific source and the specific location of the source as described in the application.

Words and terms that are not otherwise defined in this General Permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. §4003) and 25 *Pa. Code* §121.1.

5. Compliance

The owner or operator authorized to use BAQ-GPA/GP-13 shall comply with the specifications in the application and terms and conditions of the General Permit. The HMA plant owner or operator shall keep copies of the General Permit and application at the facility and shall make them available to the Department upon request.

The potential to emit of any HMA plant proposing to operate under this General Permit shall be limited by hours of operation, production rate and other relevant specifications in the application. The HMA plant shall be:

- a. Operated in such a manner as not to cause air pollution as that term is defined in 25 *Pa. Code* § 121.1;
- b. Operated and maintained in a manner consistent with good operating and maintenance practices;
- c. Operated and maintained in accordance with practices based on the "manufacturer's specifications;" and
- d. Operated and maintained in such a manner that no owner or operator may permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source that the malodors are detectable outside the property of the owner or operator on whose land the facility is being operated in accordance with 25 *Pa. Code* §123.31 (relating to limitations).

6. Modification, Suspension and Revocation

This General Permit may be terminated, modified, suspended or revoked if the Department determines that the HMA plant cannot be adequately regulated under this General Permit.

Any authorization to construct and/or operate an HMA plant under this General Permit may be suspended or revoked if the Department determines that, at any time, the owner or operator has failed to construct and/or operate the HMA plant in compliance with the terms and conditions of this General Permit or information identified in the application. Upon receipt of written notification by the Department of the suspension, termination or revocation of authorization to construct and/or operate the HMA plant under this General Permit, the owner or operator shall immediately cease construction or cease operation of the HMA plant until the Department grants approval, in writing.



7. Notice requirements

The applications and notifications required by 25 *Pa. Code* § 127.621 and Condition 4 of this General Permit shall be submitted to the appropriate Department Regional Office responsible for issuing general permits in the county in which the HMA plant is or will be located. As required under § 127.621(b), the application shall be either hand delivered or sent by certified mail, return receipt requested.

The owner or operator shall notify the Department, in writing, of the owner's or operator's intent to commence operation of the HMA plant or any activity authorized by this General Permit at least five (5) business days prior to commencement of operation. When the HMA plant involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

Malfunctions: The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction of any HMA plant operating pursuant to this General Permit, or any malfunction of an associated fabric collector (baghouse), which results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitation specified herein or in excess of the limitations specified in any applicable rule or regulation contained in 25 *Pa. Code*, Chapters 121 through 145, or which otherwise results in, or may possibly be resulting in, noncompliance with the requirements specified in any applicable condition of this General Permit. If the owner or operator is unable to provide notification to the appropriate Regional Office within twenty-four (24) hours of discovery of a malfunction due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first business day for the Department following the weekend or holiday. In addition, the owner or operator shall provide subsequent written reports regarding any reported malfunction, as requested by the Department.

8. Terms of Authorization to Use General Permit

The authorization to construct and/or operate any HMA plant under this General Permit is granted for a fixed period of five (5) years except that the authorization to construct the HMA plant will expire eighteen (18) months from the date of Department authorization if the owner or operator fails to commence construction. If construction commences (as defined in 25 *Pa. Code* Section 121.1) within eighteen (18) months of the date of receipt of authorization to use this General Permit, but it is not yet completed, the authorization to construct the HMA plant under this General Permit is automatically extended, provided there is no subsequent lapse in construction activity of eighteen (18) months or more.

The Department will notify the owner or operator, in writing, when authority to construct and/or operate under this General Permit is granted.

9. Fees

BAQ-GPA/GP-13 establishes the following plan approval and operating permit fee schedule:



- a. General Plan Approval application fee:

One thousand dollars (\$1,000)

A new application with fee as indicated above is required each time the owner or operator installs or modifies the HMA plant. The installation or modification of any HMA plant must be conducted according to the terms and conditions of this General Permit.

- b. General Operating Permit fee:

Three hundred seventy-five dollars (\$375)

The general operating permit fee shall be included in the total amount of the fees submitted to the Department when requesting authorization to use this General Permit.

- c. Annual operating permit administration fee, payable on an annual basis:

Three hundred seventy-five dollars (\$375)

- d. General Operating Permit renewal fee payable every five years:

Three hundred seventy-five dollars (\$375)

10. Expiration and Renewal of Authorization

Authorization to construct and/or operate under this General Permit shall terminate on the date of expiration of the authorization granted by the Department to construct and/or operate under this General Permit unless a complete renewal application is submitted to the Department at least thirty (30) days prior to the expiration date of the authorization.

Upon receipt by the Department of a timely and complete application for renewal to operate under this General Permit, the owner or operator may continue to operate the respective HMA plant subject to final action by the Department on the renewal application provided that the HMA plant is operated in compliance with all terms and conditions of this General Permit. However, this authorization shall terminate if the owner or operator fails to submit, by the deadline specified by the Department, any information required by the Department to process the renewal application.

11. Applicable Laws

Nothing in this General Permit relieves the owner or operator from the obligation to comply with all applicable federal, state and local laws, ordinances and regulations. The issuance of this General Permit does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the federal Clean Air Act, the APCA or regulations adopted under the



acts. The issuance of this General Permit shall not be construed to limit the Department's enforcement authority.

Wherever a conflict occurs between this General Permit and any applicable federal and state regulations, the owner or operator shall, in all cases, meet the more stringent requirements.

12. Public Records and Confidential Information

- a. The records, reports or information obtained by the Department under this General Permit shall be available to the public, except as provided in paragraph (b) of this condition.
- b. Upon cause shown by the owner or operator that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the APCA, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the APCA. The Department will implement this section consistent with sections 112(d) and 114(c) of the federal Clean Air Act (42 U.S.C.A. §§ 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to federal, state or local representatives as necessary for purposes of administration of federal, state or local air pollution control laws, or when relevant in a proceeding under the APCA.

13. Transfer of Ownership

The owner or operator may not transfer the authorization to construct and/or operate any HMA plant under this General Permit to another owner or operator. Any subsequent owner or operator must submit a new General Permit application and fee in accordance with Conditions 4 and 9 of this General Permit.

14. Limitations and Requirements (Including Best Available Technology)

- a. The owner or operator of any HMA plant for which a plan approval was previously issued pursuant to 25 Pa. Code §127.11 (relating to plan approval requirements) shall comply with the applicable air contaminant emission limitations specified in this General Permit and in 25 Pa. Code §§ 123.1 (relating to prohibition of certain fugitive emissions), 123.13 (relating to processes) and 123.41 (relating to limitations). In addition, compliance with any BAT requirements established in the previously issued plan approval pursuant to the BAT requirement specified in 25 Pa. Code §§ 127.1 and 127.12(a)(5) is also required.

Pursuant to 25 Pa. Code § 123.1(a), there shall be no fugitive emissions from this facility at any time, except those that are a direct result of stockpiling or use of roads. Pursuant to 25 Pa. Code § 123.1(c), all reasonable actions shall be taken to prevent particulate matter that may arise from stockpiling or use of roads from becoming airborne. Pursuant to 25 Pa. Code § 123.2 (relating to fugitive particulate matter), fugitive emissions shall not cross the owner or operator's property line at any time.



Any HMA plant owner or operator authorized to use this General Permit shall comply with the following limitations and requirements:

- i. The drop heights from front-end loaders being used to stockpile, transfer, and load aggregate shall be kept as short as possible to minimize dust emissions.
- ii. Stockpiles shall be kept as compact as possible to limit exposure to the wind. Material shall be stockpiled in such a manner that it may be adequately wetted as necessary to control fugitive emissions.
- iii. All in-plant roads shall be maintained to prevent particulate matter from becoming airborne in accordance with *25 Pa. Code* §§ 123.1 and 123.2.
- iv. All unpaved in-plant roads shall be watered once per day during warm weather, at the start of each shift, if no precipitation has fallen within the previous twenty-four (24) hours, and as needed thereafter on a preventative basis such that visible fugitive emissions are controlled in accordance with *25 Pa. Code* §§ 123.1 and 123.2. Other methods of dust control may be used when weather conditions make the watering of unpaved roads hazardous.
- v. In accordance with *25 Pa. Code* § 123.1(c), the owner or operator shall promptly remove earth or other material from paved roads onto which earth or other material has been transported by trucking or earth moving equipment, or other means.
- vi. A set vehicle pattern shall be established and maintained for vehicles entering and exiting the plant.
- vii. The owner or operator shall post a sign limiting speeds to less than 15 mph on all in-plant roads.
- viii. The owner or operator shall post and enforce a requirement stating "All vehicles entering or exiting the plant property shall be properly tarpaulin covered." Vehicles with a gross vehicle weight rating of less than 10,000 pounds shall be exempt from this condition.
- ix. The Department reserves the right to require additional controls (water sprays, paving, conveyor covers, etc.) based on evaluation of the operation after inspection and determination that existing controls are not adequate for controlling fugitive emissions.
- x. Speed limit signs shall be posted consistent with the requirements of the Pennsylvania Department of Transportation (overall dimension 20 inches x 24 inches, "SPEED LIMIT" in 4-inch letters and 10-inch numerals).
- xi. Only HMA plants controlled by an appropriately designed fabric collector (i.e., baghouses capable of complying with all applicable requirements) may apply for this General Permit. A fabric collector ("baghouse") shall be accepted by the Department as "appropriately designed" only if the Department determines



it to be based upon the information provided by the owner or operator and on any other information available to the Department.

- xii. No fugitive air contaminant emissions shall be generated as a result of removing collected dust from the baghouse or as a result of subsequently handling the collected dust on-site following its removal from the collector.
- xiii. The owner or operator shall keep sufficient quantity of spare baghouse bags, at a minimum of 10% of the total number of bags, on hand for immediate replacement.
- xiv. The owner or operator is approved to burn the following fuels under this General Permit:
 - 1.) Propane
 - 2.) Natural gas
 - 3.) No.2 fuel oil
 - 4.) No.4 fuel oil
 - 5.) On-specification waste-derived liquid fuel ("WDLF")
 - 6.) Biodiesel that is a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats and conform to ASTM D6751 specifications.
 - 7.) Any alternative fuels that, unless specified, meet the same specification as other fuels permitted under this General Permit, such as:
 - A.) Liquid biofuels derived from recycled vegetable oils or animal fats from restaurants or food processing industries after processed through filtration, deodorization, water washing or other polishing and refining steps.
 - B.) Biofuels from bio-processing of cellulosic bio-mass.
 - C.) Bio-oils produced by pyrolysis of bio-mass materials.
- xv. The owner or operator may not use a fuel to fire a burner at the plant that exceeds the sulfur limits stated below:
 - 1.) For No.2 fuel oil, biodiesel and alternative fuels, $\leq 0.3\%$, by weight.
 - 2.) For No.4 fuel oil and WDLF, $\leq 0.5\%$, by weight.
- xvi. Fuel analysis records shall be used to demonstrate compliance with the above sulfur limitations. For each shipment of any liquid fuel, fuel sulfur content shall also be demonstrated by providing the supplier's fuel certification for the type of fuel received.



xvii. On-Specification WDLF

The owner or operator shall not accept at the facility any WDLF which is represented by the oil supplier as failing to meet following standards, or for which the facility does not have documentation from the waste oil supplier verifying the following acceptable standards:

- Sulfur \leq 0.5% (by weight)
- Btu \geq 8000 btu/lb
- Flashpoint \geq 100°F;
- Total Halogens (TX) \leq 1000 ppmw
- Lead \leq 100 ppmw
- Arsenic \leq 5 ppmw
- Cadmium \leq 2 ppmw
- Chromium \leq 10 ppmw
- PCBs Not Detectable
- Ash \leq 1.0% (by weight)

xviii. Analytical Techniques

The following analytical techniques and methods, or alternative methods approved in writing by the Department, will be accepted for the analyses required by this General Permit.

Constituent	Analytical Technique
Arsenic	EPA Method 6010, 6020, 7010, 7061, or 7062
Cadmium	EPA Method 6010, 6020, 7000 or 7010
Chromium	EPA Method 6010, 7000 or 7010
Lead	EPA Method 6010, 7000 or 7010
PCBs	EPA Method 8082
TX	EPA Method 9075, 9076, or 9077
Flash Point	EPA Method 1010 or ASTM D93
Ash	ASTM D482
Sulfur	ASTM D3227, D1552, D4294, or D129

xix. The owner or operator may not blend WDLF into existing fuel or burn WDLF by itself unless an analysis has been performed for the specified constituents and a copy of the analysis is available demonstrating that none of the levels cited in Condition 14 a.xvii are exceeded before it is fired as fuel for the dryer. For each shipment of WDLF, a fuel specification sheet shall be obtained from the supplier. All such documents shall be kept at the facility for a period of three (3) years and shall be made available to the Department upon request.

xx. Total Halogen Screening for WDLF

Prior to accepting each shipment of WDLF delivered to the facility, the owner or operator shall test each shipment for total halogens using EPA Reference Method 9077, or an alternate test method if approved in writing by the Department. If the test of any shipment reveals total halogens in excess of 1,000 ppmw, then the owner or operator shall refuse to accept the shipment.



Vendor guarantee or recent test data from WDLF suppliers shall be sufficient to show compliance with this standard. The permittee shall keep records of the results of sampling required by this condition for at least three (3) years.

xxi. Taking and Retaining Samples

The owner or operator shall take and retain a sample of each shipment of WDLF, biodiesel and any alternative fuels that is delivered to the facility. The samples shall be retained on-site for at least one year and shall be made available to the Department upon request. The samples are to be sealed and identified with the identity of the supplier, the date of delivery, the delivery invoice number, and the total gallons of WDLF in the shipment.

xxii. Auditing for WDLF

For at least one (1) out of every fifteen (15) shipments of WDLF received at the facility, the owner or operator shall take an additional sample for the purpose of conducting a complete analysis for all the properties listed in Condition 14.a.xvii. The owner or operator shall use test methods specified in Condition 14.a.xviii, unless an alternate test method has been approved in writing by the Department. Aside from any sample taken from a shipment of WDLF received at the facility, the owner or operator need not store such additionally-sampled fuel separately nor delay its use. If the analysis results on such fuel are not received within fifteen (15) days of the date of delivery of the relevant shipment, the permittee shall cease using the WDLF fuel from the tank(s) in which the relevant shipment was placed until compliance with the limits listed in Condition 14.a.xvii is verified in the laboratory results. This auditing provision should not be interpreted, in any event, to allow the owner or operator to accept knowingly or use fuel not meeting permit specifications, or to accept or use fuel for which the facility does not have documentation from the waste oil supplier regarding compliance with permit specifications. If the analysis results show exceedances of any of the limits listed in Condition 14.a.xvii, then the owner or operator shall cease using the WDLF from the tank(s) in which the relevant shipment was placed, and shall not resume using WDLF from the tank(s) until either:

- 1.) The Department has granted written approval to resume use of the WDLF based on an alternate demonstration of acceptability of the WDLF in the tank(s) for use as fuel at the facility, or
- 2.) The WDLF remaining in the tank(s) has been re-sampled and
 - A.) If the re-sample meets the limits in Condition 14.a.xvii, the Department has granted written permission to resume using the WDLF, or
 - B.) If the re-sample fails to meet the limits in Condition 14.a.xvii, the Department has granted written permission to resume using the tank(s) after the owner or operator has emptied the WDLF from the tank(s) and has made proper disposal arrangements and the tank



has been refilled with WDLF that meets the limits in Condition 14.a.xvii.

The owner or operator shall cease using the WDLF from such tank(s) not later than two (2) hours after making the original determination, or having had reasonable opportunity to make the determination that off-specification WDLF was placed in the tanks.

Upon successful demonstration for each supplier of their accuracy in ensuring delivery of eight (8) consecutive samples of on-specification WDLF fuels that comply with properties listed in Condition 14.a.xvii, the auditing frequency of shipments may be decreased by the Department. The auditing frequencies shall be determined for each individual supplier on a case-by-case basis depending on recorded compliance history and margin of compliance. The records of sample analysis results shall be kept at the facility for a period of three (3) years and shall be made available to the Department upon request.

xxiii. WDLF Sampling

The Department reserves the right to random sample any alternative fuels to check if they meet the same specifications as other fuels permitted under this General Permit.

In the case of WDLF, if the analysis results from any random tank sampling conducted by the Department show exceedances of any of the limits in Condition 14.a.xvii of the General Permit, the owner or operator shall cease using WDLF from the affected tank(s) and shall not resume using WDLF from the tank(s) until either:

- 1.) The Department has granted written approval to resume use of the WDLF based on an alternate demonstration of compliance for the original sample; or
- 2.) The Department has granted written permission to resume placing WDLF in the tank(s) after the owner or operator has emptied the off-specification WDLF from the tank(s) and has made proper disposal arrangements.

The owner or operator shall cease using the WDLF from such tank(s) not later than 2 hours after receiving notification from the Department of the exceedances.

- xxiv. This General Permit shall not be construed to authorize the permittee to transport, treat, process, or refine any fuel, or to blend off-specification fuel with any other fuels for the purpose of producing an on-specification mixture.
- xxv. The owner or operator is responsible for the proper storage and management of liquid biofuels to ensure the following:
- 1.) The storage conditions shall not cause the harborage, breeding, or attraction of vectors; and



2.) If vectors are present, measures necessary to exterminate them are immediately taken.

b. The owner or operator of any existing HMA plant constructed after July 1, 1972, but prior to the effective date of this General Permit and for which an approval was obtained pursuant to 25 Pa. Code § 127.11 shall comply with the following limitations and requirements:

- i. The filterable particulate matter emissions in the exhaust of the baghouse shall not exceed 0.016 grains per dry standard cubic foot of effluent gas volume.
- ii. The following emission limits pertain to Nitrogen Oxide (NOx), Carbon Monoxide (CO) and Volatile Organic Compounds (VOC, as propane):

Pollutant	NOx	CO	VOC (as propane)
Emission limits	85 ppmvd @15% O ₂	350 ppmvd @15% O ₂	60 ppmvd @15% O ₂

- iii. The owner or operator may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is equal to or greater than 10% at any time.

c. The owner or operator of any HMA plant constructed after the effective date of this General Permit, and a plant constructed after July 1, 1972, but prior to the effective date of this General Permit and for which no plan approval was obtained pursuant to 25 Pa. Code § 127.11 shall comply with the following best available technology requirements, which are hereby established pursuant to 25 Pa. Code §§ 127.1 and 127.12(a)(5):

- i. The filterable particulate matter emissions in the exhaust of the fabric collector (baghouse) shall not exceed 0.009 grains per dry standard cubic foot of effluent gas volume.
- ii. The total PM-10 (filterable plus condensable) in the exhaust of the baghouse shall not exceed 0.021 grains per dry standard cubic foot of effluent gas volume.
- iii. There shall be no visible air contaminant emissions from the exhaust of the baghouse.
- iv. Pursuant to BAT requirements, the following emission limits pertain to NOx, CO and VOC (as propane)



Pollutant	NOx	CO	VOC (as propane)
Emission limits	60 ppmvd @15% O ₂	200 ppmvd @15% O ₂	30 ppmvd @15% O ₂

15. Performance Testing/Tuning

- a. Emissions testing using EPA reference methods shall be conducted one time while the source is burning the worst case fuel to verify compliance with filterable particulate, NOx, CO and VOCs. An existing HMA plant as described in Condition 14.b. may use an earlier stack test result approved by the Department for demonstration of compliance with this requirement, if it has been tested for the worst case fuel. The new and other plants as described in Condition 14.c. shall be tested for total PM₁₀ and PM_{2.5}.

The owner or operator shall comply with the following requirements:

- i. Within one hundred eighty (180) days of the commencement of operation of any HMA plant at the respective site, the owner or operator shall perform a source test to establish the baseline emissions of filterable particulate, NOx, CO and VOCs. The new and other plants as described in Condition 14.c. of this General Permit shall also be tested for total PM₁₀ and PM_{2.5}.
- ii. At least sixty (60) calendar days prior to commencing an emissions testing program required by this General Permit, a test protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- iii. At least fifteen (15) calendar days prior to commencing an emissions testing program required by this General Permit, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Notification in writing shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing and Monitoring. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing.
- iv. Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring at RA-epstacktesting@state.pa.us and the appropriate Regional Office indicating the completion date of the on-site testing.



- v. A complete test report shall be submitted to the Department no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program.
- vi. A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results shall include, at a minimum, the following information:
 - 1.) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings;
 - 2.) Permit number(s) and condition(s) which are the basis for the evaluation;
 - 3.) Summary of results with respect to each applicable permit condition; and
 - 4.) A statement of compliance or non-compliance with each applicable permit condition.
- vii. All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- viii. All submittals, except notifications, shall be accomplished through PSIMS*Online, available through <https://www.depgreenport.state.pa.us/ecommm/Login.jsp> . If Internet submittal is not feasible, one copy of the submittal shall be sent to the appropriate Pennsylvania Department of Environmental Protection Regional Office and to the attention of the Department's Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachel Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.
- ix. The owner or operator shall comply with all applicable federal reporting requirements, including timelines more stringent than those contained in this General Permit. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the permittee shall comply with the most stringent provision, term, condition, method or rule.
- x. All testing shall be conducted in accordance with any applicable federal regulations (such as New Source Performance Standards, Subpart I); 25 Pa. Code, Chapter 139 (relating to sampling and testing); and the current revision of the Department's Source Testing Manual. The following federal reference methods shall be used to demonstrate compliance.
 - 1.) 40 CFR 60, Appendix A, Methods 1-4 shall be used to determine the volumetric flow rate of the effluent exiting the fabric collector (baghouse).



- 2.) 40 CFR 60, Appendix A, Method 5 shall be used to determine the filterable particulate emission concentration (grains/dscf) and emission rate (lbs/hour) in the effluent exiting the fabric collector (baghouse).
 - 3.) 40 CFR 60, Appendix A, Method 7E shall be used to determine the nitrogen oxides (NO_x) concentration (ppmvd) and emission rate (lbs/hour) in the effluent exiting the fabric collector (baghouse).
 - 4.) 40 CFR 60, Appendix A, Method 10 shall be used to determine the carbon monoxide (CO) concentration (ppmvd) and emission rate (lbs/hour) in the effluent exiting the fabric collector (baghouse).
 - 5.) 40 CFR 60, Appendix A, Method 18 or an alternate method approved by the Department, shall be used to determine the methane/ethane concentration (ppmvd) and emission rate (lbs/hour) in the effluent exiting the fabric collector (baghouse).
 - 6.) 40 CFR 60, Appendix A, Method 25A shall be used to determine the total hydrocarbon (THC) concentration (ppmvd as propane) and emission rate (lbs/hour) in the effluent exiting the fabric collector (baghouse). The VOC concentration and emission rate shall be determined by subtracting the Method 18 (methane/ethane) results from the Method 25A results.
 - 7.) 40 CFR 60, Appendix A, Method 202 shall be used to determine the condensable particulate matter (CPM) concentration (grains/dscf) and emission rate (lbs/hour) in the effluent exiting the fabric collector (baghouse). The Method 5 and Method 202 results shall be summed to calculate the total PM-10 concentration and emission rate.
- xi. The testing shall be performed while the source is operating at a maximum routine operating conditions rate and while producing a typical mix formulation.

The following process data shall be recorded at 15-minute intervals (if possible) during each test run to document the operation of the plant and the baghouse:

- 1.) Type of Fuel (propane, natural gas, No.2 & No. 4 oil, WDLF, biodiesel, alternative fuels);
 - 2.) Fuel Usage (gpm for liquids; cfm for gases);
 - 3.) Asphalt Production Rate (tons/hr);
 - 4.) Aggregate Usage (tons/hr);
 - 5.) Asphaltic Oil (%);
 - 6.) Fines in mix (% <600 mesh); and
 - 7.) Mix Temperature (°F).
- b. Except for the first year, the owner or operator shall conduct a burner tuning procedure in accordance with the manufacturer's specifications to minimize NO_x and CO emissions each year thereafter. The owner or operator shall conduct each annual tune-up not later than June 15 of each year or within four (4) weeks after each start-up of the HMA plant. An existing HMA plant as described in Condition 14.b of this General Permit may use an earlier stack test result approved by the



Department for demonstration of compliance with this requirement, if it has been already tested for the worst case fuel. In such case, conducting a burner tuning procedure in accordance with the manufacturer's specifications will be adequate. The owner or operator shall comply with the following requirements:

- i. The burner shall be tuned so that the emissions do not exceed limits stated in Conditions 14.b.ii. and 14.c.iv of the General Permit.
- ii. The air-to-fuel ratio controls shall be inspected and adjusted to ensure proper operation in accordance with the manufacturer's specifications.
- iii. Monitoring records stating the following information shall be kept on site for a minimum of five years and shall be made available to the Department upon request.
 - 1.) The date of the tuning procedure;
 - 2.) The name of the servicing company and technician;
 - 3.) The production rate (tons/hr) or load before and after tuning;
 - 4.) The CO and NO_x concentrations (ppmvd) before and after tuning; and
 - 5.) The percent O₂ before and after tuning.
- c. The owner or operator shall, upon request of the Department, provide fuel analyses, or samples of any fuel permitted by the Department for use in any unit authorized to operate under this General Permit.
- d. If at any time the Department has reason to believe that the air contaminant emissions from the exhaust of a fabric collector (baghouse) associated with an HMA plant operating under this General Permit are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct such stack tests or source tests requested by the Department to determine the actual air contaminant emission rate. The owner or operator shall perform any such testing in accordance with the applicable provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

16. Monitoring, Recordkeeping and Reporting

- a. The owner or operator shall maintain records including the following:
 - i. Monthly and 12-month rolling total for asphalt production;
 - ii. Daily records shall be made available to the Department upon request;
 - iii. 12-month rolling total for gallons of No. 2 fuel oil, No. 4 fuel oil, WDLF, biodiesel, alternative fuels used;
 - iv. Hours operated while firing each liquid fuel;
 - v. 12-month rolling total for each pollutant listed;
 - vi. Daily baghouse pressure drop reading;
 - vii. Daily stack, fugitive and malodor surveys;
 - viii. Any corrective actions taken to bring facility back into compliance with stack, fugitive, and malodor requirements of this permit; and



- ix. Records of tune-up and annual portable monitor testing done in accordance with Condition 15.b. of the General Permit.

- b. All logs and required records shall be maintained on site for a minimum of five (5) years and shall be made available to the Department upon request.

- c. The owner or operator shall perform monitoring of the facility at least once per operating day for the presence of visible emissions and malodors. The owner or operator shall take immediate corrective action to eliminate any emissions that are out of compliance with the plant's operating permit. A Method 9 reading is not required for the evaluation of visible emissions.

- d. The baghouse shall be equipped with instrumentation to monitor the differential pressure across the unit on a continuous basis. The gauge should be positioned so that it is easily accessed and read.

- e. Pursuant to 25 Pa. Code § 135.5 (relating to recordkeeping), the owner or operator of the HMA plant shall maintain and make available, upon request by the Department, such records as may be necessary to demonstrate compliance with 25 Pa. Code § 135.3 (relating to reporting). These records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. The records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

- f. Pursuant to 25 Pa. Code § 135.3, a person who owns or operates an air contamination source to which 25 Pa. Code, Chapter 135 (relating to reporting of sources) applies and who has previously been advised by the Department to submit an annual emissions report shall submit by March 1 of each year an emission report for the preceding calendar year. The report shall include information for all previously reported air contamination sources, new air contamination sources that were first operated during the preceding calendar year and air contamination sources modified during the same period that were not previously reported.

An owner or operator who receives initial notification by the Department that an emission report is necessary shall submit the report within sixty (60) days after receiving notification or by March 1 of the year following the year for which the report is required, whichever is later.

- g. HMA plants constructed after June 11, 1973 are subject to the New Source Performance Standards of 40 CFR, Part 60, Subpart I, Standards of Performance for HMA Facilities. In accordance with 40 CFR 60.4, copies of all requests, reports, applications, and submittals, and other communications, shall be forwarded to EPA at the address listed below, unless otherwise noted.

Air Enforcement Branch Chief (3AP00)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029



- h. The owner or operator of the HMA plant shall submit to EPA Region III the notifications required by 40 CFR § 60.7. The required notifications shall include the following: date of commencement of construction (within 30 days after starting construction), date of anticipated start-up (30-60 days prior to equipment start-up), actual start-up date (within 15 days after equipment start-up), physical or operational changes (60 days or as soon as practicable before equipment start-up), and opacity observations (within 30 days).

17. Circumvention

- a. The owner or operator, or any other person, may not circumvent the new source review requirements of 25 *Pa. Code* Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- b. No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the APCA or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

Approved by:

Joyce E. Epps
Director, Bureau of Air Quality

Date approved:

February 2, 2010