



# **Air Quality Standard Permit for Hot Mix Asphalt Plants**

Air Permits Division  
Texas Natural Resource Conservation Commission

## **Table of Contents**

|       |   |    |
|-------|---|----|
| I.    | Executive Summary .....   | 1  |
| II.   | Explanation and Background of Air Quality Standard Permit ..... | 1  |
| III.  | Overview of Air Quality Standard Permit .....                   | 1  |
| IV.   | Permit Condition Analysis and Justification .....               | 2  |
| V.    | Protectiveness Review .....                                     | 8  |
| VI.   | Public Notice and Comment Period .....                          | 9  |
| VII.  | Public Meetings .....   | 9  |
| VIII. | Analysis of Comments .....                                      | 9  |
| IX.   | Statutory Authority .....                                       | 11 |
|       | Air Quality Standard Permit for Hot Mix Asphalt Plants .....    | 12 |

# **HOT MIX ASPHALT PLANT AIR QUALITY STANDARD PERMIT SUMMARY DOCUMENT**

## **I. EXECUTIVE SUMMARY**

The Texas Commission on Environmental Quality (TCEQ or commission) is issuing an air quality standard permit for hot mix asphalt plants (HMAPs). This standard permit is applicable to all HMAPs that have a production rate of not more than 400 tons per hour.

## **II. EXPLANATION AND BACKGROUND OF AIR QUALITY STANDARD PERMIT**

This standard permit for HMAPs is being developed to provide an authorization process that will allow HMAPs to process material in a timely manner, and be in compliance with all TCEQ regulations. This standard permit provides a streamlined preconstruction authorization process that may be used by any HMAP complying with the standard permit requirements and which is not prohibited by some other state or federal permitting statute or regulation.

## **III. OVERVIEW OF AIR QUALITY STANDARD PERMIT**

Based on the results of a protectiveness review, the commission is issuing a standard permit for HMAPs under Title 30 Texas Administrative Code Chapter 116 (30 TAC Chapter 116), Subchapter F, Standard Permits. The commission currently authorizes HMAPs under the conditions of 30 TAC Chapter 106, Permits by Rule (PBR), or under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification. The general public often expresses concern with HMAP registration applications. These objections often include traffic safety, noise, appearance, and property values. These concerns are beyond the commission's jurisdiction to address. The general public also expresses concerns over nuisance dust, odor, ambient air quality, and potential negative health impacts. These issues are the focus of the HMAP protectiveness review and the proposed conditions of the standard permit.

The commission is including requirements to minimize dust emissions, property line distance limitations, opacity and visible emission limitations based on computer dispersion modeling, impacts analysis, and plant observations performed to verify the protectiveness of the standard permit. The commission has concluded research which shows that the standard permit for HMAPs is protective of the public health and welfare and that facilities which operate under the conditions specified will comply with TCEQ regulations.

The standard permit is designed to authorize both temporary and permanent HMAPs. However, it is not intended to provide an authorization mechanism for all possible unit configurations or for unusual operating scenarios. Those facilities which cannot meet the standard permit conditions may apply for an air quality permit under 30 TAC § 116.111, General Application.

#### **IV. PERMIT CONDITION ANALYSIS AND JUSTIFICATION**

The proposed new standard permit for HMAPs creates a new authorization mechanism for hot mix asphalt producing facilities that will replace the permit-by-rule in 30 TAC §106.147. Any hot mix asphalt producing facility may continue to apply for an air quality permit under 30 TAC § 116.111.

##### Applicability and General Conditions

The general conditions for standard permits, located in 30 TAC Chapter 116, Subchapter F, apply to all HMAPs seeking authorization under this standard permit. All HMAPs are required to meet 30 TAC Chapter 116, Subchapter F rule requirements as well as the specific conditions listed in section (1) of this standard permit. Additionally, section (2), Sampling Requirements, apply to all HMAPs seeking authorization under this standard permit. Temporary HMAPs must also comply with section (3) and permanent HMAPs must comply with section (4). In addition to complying with sections (1), (2), and either (3) or (4), HMAPs that use crumb rubber in the asphalt mix must comply with section (5). The standard permit registration is location specific and relocation to a new site requires the owner or operator to reapply for a new authorization under the standard permit.

##### General Requirements

Section (1) of the proposed standard permit outlines the requirements that all HMAPs must meet in order to be eligible to use this standard permit. Subsection (1)(A) defines the types of hot mix asphalt that may be produced by a plant under this standard permit. This standard permit does not authorize the production of any mixes made with cut back asphalt or asphalt emulsion. Subsection (1)(B) is the definition of a plant site and should be used when determining the meaning of the term “site” that is used throughout this standard permit.

Subsection (1)(C) requires that any HMAP authorized by this standard permit comply with all applicable requirements in 40 CFR Part 60 Subpart A, General Provisions; Subpart I, Standards of Performance for New Stationary Sources for Hot Mix Asphalt Facilities; Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 1, 1973 and Prior to May 19, 1978; Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and prior to July 23, 1984; or Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Liquid Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

Subsection(1)(D) requires facilities authorized by this standard permit to be registered in accordance with 30 TAC §116.611, Registration to Use a Standard Permit, however those temporary HMAPs, that have been previously registered for this standard permit and are relocating to a public works project under subsection (3)(B) of this standard permit, are exempt

from registration requirements. Facilities that meet the conditions of this standard permit do not have to meet the emissions and distance limitations in 30 TAC §116.610(a)(1), Applicability. All applicants will be required to submit a Form PI-1S, a Table 22 for hot mix plants and a Hot Mix Asphalt Standard Permit Checklist with each standard permit registration.

Subsection (1)(E) specifies that all owner operators subject to registration requirements in subsection (1)(D) shall comply with 30 TAC § 116.614, Fee Requirements. A registration fee is required under 30 TAC § 116.614 for any standard permit registration unless otherwise specified in a particular standard permit. This fee is intended to recover staff expenses associated with registration for a standard permit. Those temporary HMAPs, that have been previously registered for this standard permit and are relocating to a public works project under subsection (3)(B) of this standard permit, are exempt from fee requirements.

Subsection (1)(F) reminds owners or operators of an HMAP, that facilities located in counties that are subject to 30 TAC Chapter 101, Subchapter H, Division 3, Mass Emissions Cap And Trade Program; 30 TAC Chapter 116 Subchapter B, Division 5, Nonattainment Review; and 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, must comply with those requirements if applicable.

This standard permit shall not be used to authorize an aggregate handling facility. Subsection (1)(G) requires that all aggregate materials received at the plant site be used at that site or project, unless the material is left from a temporary project and removed from the site when the HMAP is relocated. The transfer and storage of aggregate at the site for any other purpose requires a separate authorization under 30 TAC Chapter 116, 30 TAC Chapter 106, or other appropriate authorization.

Subsection (1)(H) limits HMAPs to no visible emissions exceeding 30 seconds over a six-minute period as determined by the U.S. Environmental Protection Agency (EPA) Test Method (TM) 22 from the recycled asphalt product (RAP) breaker, screens, transfer points on belt conveyors, stockpiles and in-plant roads associated with the facility.

Paragraph (1)(I) requires that the emissions from the drum dryer be controlled by a fabric filter. A fabric filter represents the current Best Available Control Technology (BACT) for an aggregate dryer at an HMAP.

Subsection (1)(J) requires that lime and mineral fillers be transported and stored in a closed system and that the exhaust air be controlled by a fabric filter. This subsection also requires that a bulk storage silo be equipped with an overflow warning device to prevent overflow into the fabric filter while filling the silo.

Paragraph (1)(K)(i) requires that all fabric filter systems be properly operated and maintained to prevent excess emissions resulting from damaged filters or an improperly operated or maintained collection system. Paragraph (1)(K)(ii) requires that the drum dryer fabric filter system be properly designed to meet a front half outlet grain loading of 0.02 grains per dry standard cubic

foot (gr/dscf) and a combined (front half and back half) total outlet grain loading of 0.04 gr/dscf until July 10, 2007. Paragraph (1)(K)(iii) requires that, on and after July 10, 2007, the drum dryer fabric filter system must meet the emission standard of 0.01 grains per dry standard cubic foot (gr/dscf) for the front half of the filter catch and a total of 0.04 gr/dscf for the combined front half and back half of the filter catch. Paragraph (1)(K)(iv) requires that lime/mineral bulk storage silo(s) not vented to the drum dryer system shall vent to a fabric filter system designed to meet at least 0.01 outlet grain loading (combined front half and back half).

Subsection (1)(L) limits opacity from the lime silo fabric filter baghouse stack and/or the drum dryer fabric filter baghouse stack to no more than 5 percent averaged over a six-minute period, and according to EPA TM 9. The performance expectations are listed for compliance demonstrations with the conditions of the standard permit and prevention of nuisance conditions. Visible emission limitations and opacity requirements ensure that both the operators and TCEQ field investigators can clearly understand how to demonstrate compliance with the rule and regulations of the commission.

Subsection (1)(M) requires that dust from stockpiles be controlled by watering, dust-suppressant chemicals, or covered as necessary to minimize emission from these sources. Subsection (1)(N) specifies the maximum sulfur concentrations allowed in fuels used at an HMAP authorized by this standard permit. This subsection also specifies the maximum concentration of metals allowed in reclaimed industrial oil for those facilities using reclaimed industrial oil as fuel.

Subsection (1)(O) limits the maximum temperature of the asphalt mix, at the discharge point, 325° F for standard hot mix, 350° F for mixes that include performance grade binders, and 375° F for mixes that include crumb rubber. Subsection (1)(P) lists the mix additives and their respective concentrations that are specifically allowed by this standard permit. This subsection also allows the use of other unspecified additives when the conditions of 30 TAC §116.116(e), Changes to qualified facilities, §116.117, Documentation and Notification of Changes to Qualified Facilities, and §116.118, Pre-change Qualification, are met.

Subsection (1)(Q) allows the use of asphalt release agents that do not emit VOCs at ambient temperature such as vegetable oil or surfactants. The use of release agents such as, but not limited to, kerosene or fuel oil is not authorized by this standard permit. Subsection (1)(R) specifies that the owner/operator shall not operate more than one truck load out point at any time.

Subsections (1)(S) and (1)(T) establish the distance from the asphalt plant and all associated facilities to nearest property line based on the volatility factor of the asphalt cement and the production rate. The volatility of an asphalt cement binder is obtained from the most recent version of American Society for Testing and Materials (ASTM) Method D2872 "Effects of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test [RTFOT]), where a loss on heating is expressed as a negative number. If no site-specific data is available, a 0.5 percent loss (-0.5) should be used. The appropriate distance is chosen by determining the maximum hourly production rate and the volatility factor of the asphalt cement and rounding up to the next highest

production rate and volatility factor shown in the table. There shall be no interpolation in determining the appropriate property line distance. Subsection (1)(S) provides distance requirements for those HMAPs operating at any time during a 24-hour period. Subsection (1)(T) provides distance requirements for those plants that elect to operate in daylight hours only. Daylight hours are defined in this subsection as that period of time between one hour after sunrise and one hour before sunset.

Subsection (1)(U) limits all industrial traffic and stock piles to be no closer than 25 feet from the nearest property line for HMAPs processing less than or equal to 300 tph of asphalt mix and 50 ft for HMAPs processing more than 300 tph of asphalt mix. While this and other setbacks are not a guarantee against an HMAP ever being a nuisance, these buffer distances are based on observations of dust dissipation and have been included to minimize the potential for nuisance dust off-site. Based on comments received on the Concrete Batch Plant (CBP) Standard Permit, as an alternative to meeting distance setbacks for traffic areas, the commission includes an option to block dispersion by fencing or other barrier in the case of roads and a three-sided bunker in the case of stock piles. These alternatives should complement the required best management practices outlined in subsection (1)(M), (3)(F), and (4)(B) and additionally minimize nuisance dust to an equal or better level than a setback distance. Given the conservative assumptions and the extremely low number of modeled exceedences of 30 TAC Chapter 111 standards, it is not expected that any individual facility, or group of facilities which meet the site-wide production limits, will exceed the standards of 30 TAC § 111.155, Ground Level Concentrations.

Subsection (1)(V) establishes a minimum 550-ft. “separation distance between any HMAP authorized under this standard permit and an operating concrete batch plant (CBP) or rock crusher (RC). Additionally this subsection requires a minimum of 1300 ft between any HMAP authorized under this standard permit and any other HMAP located on the same site. If either of these distances cannot be met, then the HMAP authorized under this standard permit shall not operate at the same time as the CBP, RC, or other HMAP. This requirement helps ensure that the cumulative emissions from multiple facilities on the same site are unlikely to result in any adverse off property impacts or exceed the standards of 30 TAC Chapter 111 (one hour and three hour) or the 24-hour or annual NAAQS.

Subsection (1)(W) requires that HMAPs keep records in accordance with 30 TAC § 116.615(8). The records include any applicable record keeping requirements in listed in 40 CFR 60 Subparts A and I, annual and hourly production rates of all mix types, continuous temperature of the mix at the outlet of the drum, dryer fuel type and sulfur concentration, sulfur and metals concentrations of reclaimed industrial oil, the asphalt volatility factor for each type of asphalt cement used, and documentation of any new additives authorized by §§116.116(e). These records must be maintained on site for a rolling 24 month period.

Subsection (1)(X) authorizes the use of a generator set of no more than 1000 hp that is fueled by natural gas, propane, or liquid petroleum gas. This subsection also requires that any generator

set of more than 1000 hp or using fuel other than those previously mentioned and used at an HMAP for a period of greater than 12 months be authorized separately under 30 TAC Chapter 116, 30 TAC Chapter 106, or other appropriate authorization.

### Sampling Requirements

Subsection (2)(A) requires that the owner or operator conduct stack sampling to satisfy the sampling requirements of 40 CFR Part 60 Subparts A and I and to demonstrate compliance with the emission standards in subsection (1)(L), paragraph (1)(K)(ii) and paragraph (1)(K)(iv) or, if the start-up is on or after July 10, 2007, subsection (1)(L), paragraph (1)(K)(iii), and paragraph (1)(K)(iv); of this standard permit. However, if the owner or operator of an HMAP can demonstrate that previous stack sampling on the same model of asphalt plant showed compliance with 40 CFR Part 60, Subparts A and I and subsection (1)(L) and paragraphs (1)(K)(ii) and (1)(K)(iv) or, if the start-up is on or after July 10, 2007, subsection (1)(L) and paragraph (1)(K)(iii) and paragraph (1)(K)(iv), of this standard permit, then this data in lieu of testing (DILOT) will be sufficient to demonstrate compliance and a stack test will not be required.

Subsection (2)(B) requires the stack sampling to be completed or a DILOT to be submitted within 60 days of achieving the maximum allowable production rate based on the table in subsection (1)(S) or (1)(T) of this standard permit but no later than 180 days from initial startup. Section 2(C) requires that facilities complying with subsection (1)(K)(ii) conduct stack sampling for particulate matter (PM) emissions no later than 60 days after July 10, 2007. DILOT will not be accepted for this requirement. The stack sampling must comply with 40 CFR Part 60, Subparts A and I and the requirements listed in subsection (1)(L) and paragraph (1)(K)(iii) and paragraph (1)(K)(iv) of this standard permit. During the performance test, the plant must run at maximum capacity as required by subsection (2)(D). Additionally the owner or operator is responsible for providing sampling facilities and conducting the sampling at his expense as required by subsection (2)(E), and notifying the appropriate regional office of the proposed stack sampling and need for a pretest meeting not more than 45 days before the sampling event as required by subsection (2)(F).

The owner or operator of an HMAP authorized by this standard permit must provide the TCEQ with a sampling report. As required by subsection (2)(G), this report must include the production rate during the test; the type of fuel, its sulfur content, and consumption rate; the mix type and temperature; and the concentration by weight of liquid asphalt and any additives used in the mix. This report must be submitted to the appropriate regional office, the TCEQ Compliance Support Division, and any local pollution control agency having jurisdiction within 45 days of completion of the sampling as required by subsection (2)(H). Subsection (2)(I) requires that the owner or operator provide a sample of the fuel or allow a sample to be taken upon request.

### Temporary HMAPs

Subsection (3)(A) limits the type and number of facilities that may be authorized at a temporary hot mix asphalt plant by this standard permit. This list of authorized facilities is not intended to

be an exhaustive listing of all equipment that may be found at a hot mix asphalt plant. Equipment that does not meet the definition of a facility does not require authorization.

Subsection (3)(B) allows an HMAP, that has been previously reviewed by the commission for compliance with the technical provisions of the standard permit and will be located in or immediately adjacent to the right of way of a public works project, to supply asphalt concrete exclusively to the public works project, to locate using a different registration procedure. In lieu of the registration requirement in subsection (1)(D), the owner or operator may instead choose to register by providing written notice to the appropriate regional office and any local air pollution control agency having jurisdiction no less than 30 calendar days prior to locating at the site. This notice shall include the owner's and, if applicable, the operator's name, address, and phone number as well as the physical description of the site, scaled plot plan of the site including the location of equipment to be authorized by this standard permit, asphalt plant serial number, account number or regulated entity number, expected date of arrival, expected date to vacate the site, a completed Table 22, and a Hot Mix Asphalt Standard Permit Checklist. Once the notification has been made, the facility will be considered registered at the new site as of the date represented on the notification for arrival on site.

Subsection (3)(C) defines a temporary HMAP as one that occupies a designated site for no more than 180 days or for the duration of a single public works project. Subsection (3)(D) requires a temporary HMAP to be removed from the site within 15 calendar days from the completion of the public works project or 180 days. Alternatively, the owner or operator may notify the regional office at the end of the project and store the non-operational facilities on-site until the next relocation. Once the region has been notified that the facility will be shut down, re-registration as a permanent facility as described in this standard permit will be required to resume operation at the current site.

Subsection (E) specifies that for those cases where plants are located in the right-of-way or contiguous to a public works project, the distance will be measured to the outer boundaries of the roadway project. In these cases, the public entity (state, city, or county) often specifies a given site which is contiguous to the project and has very limited space. For purposes of compliance with 30 TAC § 111.155, the edge of the public works project is to be considered the property line. This distance measurement technique is protective of the public health and welfare since no one from the general public will be exposed for a continuous hour on the roadway undergoing the pavement project. In addition, in no circumstance will any facility be allowed to create a nuisance as defined in 30 TAC § 101.4, Nuisance.

To help ensure compliance with subsection (1)(H), subsection (3)(F) requires that in-plant roads and traffic areas be covered, treated with a dust-suppressant chemical, watered, or paved.

#### Permanent HMAPs

Subsection (4)(A) limits the type and number of facilities that may be authorized at a permanent hot mix asphalt plant by this standard permit. This list of authorized facilities is not intended to

be an exhaustive listing of all equipment that may be found at a hot mix asphalt plant. Equipment that does not meet the definition of a facility does not require authorization. To help ensure compliance with subsection (1)(H), subsection (4)(C) requires that in-plant roads and traffic areas be paved.

### HMAPs Using Crumb Rubber

Use of crumb rubber in the asphalt mix is authorized by this standard permit provided that the facility can demonstrate, by stack sampling, that the VOC emissions from the facility are less than .032 pounds per ton of asphalt mix produced. The plant shall operate at the maximum expected concentration of crumb rubber during the stack sampling event. If the plant is unable to operate at the maximum concentration of crumb rubber during testing, then future concentrations shall be limited to the concentration established during testing. This stack sampling must be specific to the facility producing the crumb rubber asphalt mix. A DILOT is not an acceptable demonstration of VOC emissions from an HMAP producing crumb rubber asphalt mix. The stack sampling for VOC shall occur within 45 days of achieving the maximum allowable production rate based on the table in subsection (1)(S) or (1)(T) of this standard permit but no later than 90 days from initial startup of equipment. Additionally, the stack sampling must comply with subsections (2)(D) - (H).

## **V. PROTECTIVENESS REVIEW**

The HMAP standard permit team developed representative operating scenarios to be evaluated by dispersion modeling. Impacts were obtained using the EPA Industrial Source Complex (ISC) model. The model's output was used as the basis to develop the distance limits for the standard permit. A copy of the modeling report may be requested by contacting the Air Permits Division at (512) 239-1250.

The modeling was performed for two types of asphalt plant configurations with various hourly maximum production capacities and various asphalt volatility values as determined by the most recent version of ASTM method D2872. The production rates examined were 400, 300, and 200 tons/hr (tph). The volatility values examined were 0.5, 0.42, and 0.3 percent mass loss on heating. One configuration includes temporarily constructed hot-mix storage silos (Relocatable Plant) and the other configuration includes a hot-mix surge bin (Portable Plant) instead of silos. All other equipment between the two configurations is assumed to be identical in size and function. **The plant footprint for both configurations extends 100 feet from the plant center.**

Each combination of configuration, production rate, and volatility value was modeled as a separate modeling scenario. Pollutants evaluated were particulate matter and sulfur dioxide, asphalt vapors, asphalt fumes, formaldehyde, nickel particulate, hydrogen chloride, and a number of other constituents that are listed in Appendix A of the modeling report. **Of the pollutants modeled only total particulate and asphalt vapors exceeded their applicable standard or guideline.**

## VI. PUBLIC NOTICE AND COMMENT PERIOD

In accordance with 30 TAC § 116.603, the TCEQ published notice of the proposed standard permit in the January 10, 2003 issue of the *Texas Register* (28 TexReg 501). The notice was also published in the newspapers of the largest general circulation in the following metropolitan areas: Amarillo; Austin; Corpus Christi; Dallas; El Paso; Houston; Lower Rio Grande Valley; Lubbock; Permian Basin; San Antonio; and Tyler. The date for these publications was January 10, 2003. The comment period closed on February 13, 2003.

## VII. PUBLIC MEETINGS

A public meeting on the proposal was held on February 13, 2003 at 1:30 p.m., at the Texas Commission on Environmental Quality. The meeting was attended by 15 people and oral comments were taken from one attendee and written comments were received from three.

## VIII. ANALYSIS OF COMMENTS

Written comments were received from Harris County Public Health and Human Services Pollution Control Division (HCPC), Koch Materials Company (KMC), the Associated General Contractors of America (AGC), the Texas Asphalt Pavement Association (TAPA), APAC-Texas, Inc. (AT), Reece Albert, Inc. (RA), and Colorado Materials, Inc. (CM).

Additionally oral comments were received from APAC-Texas, Inc.

HCPC commented that in addition to providing notification 30 days in advance to the appropriate TCEQ regional office, the owner/operator of an HMAP relocating to a public works site should also give notification 30 days in advance to any local air pollution control agency having jurisdiction.

**The commission agrees with the comment. Subsection (3)(B) of the standard permit has been changed to include a requirement to notify, “any local air pollution control agency having jurisdiction,” no less than 30 days prior to locating on the site.**

KMC requested that the limit for styrene-butadiene-styrene (SBS) polymers in subsection (1)(P) be raised from 6% by weight of the asphalt mix to 10% by weight based on the availability of asphalt binder products currently on the market and information indicating that these products will not result in increased VOC emissions.

**The commission agrees with this comment. The 6% by weight limitation was based solely on values represented in past permitting actions and the commission believes that the standard permit should reflect industry norms provided that it is protective of public health and safety. The SBS polymer has a total volatile matter content of less than 0.7% by weight. The volatile matter is approximately 99% water. This material is not expected to produce any excess emissions when heated within the range allowed by this standard permit.**

AGC, AT, RA, and CM requested that the waiver of the 45 day limit in Subsection (1)(G) of the standard permit be deleted.

**The commission agrees with this comment. This condition has been removed from the standard permit.**

TAPA commented that plants that use wet scrubbers as the control device need time to comply with the requirement to use a fabric filter and request that a transition period be included for these plants to purchase and install filters.

**The commission disagrees with this comment. Plants currently operating under another method of authorization (PBR or regular permit) with a wet scrubber as a control device may continue to operate under that authorization until the plant is moved or modified. For plants that require reauthorization due to a move or modification, authorization under a regular NSR permit is still available.**

AGC, AT, RA, CM, and TAPA suggested the use of a memorandum that would allow use of additional mix additives as they become available .

**Authorization of modification by memorandum is not supported by statute or regulation. Additional mix additives may be authorized under §§116.116(e), 116.117, and 116.118 as long as the emissions from the additional additives conform to the specific requirements in these sections.**

AGC, AT, RA, CM, and TAPA requested that, for plants that comply with the requirements for daylight hours operation, the truck load-out be restricted to operation no earlier than one hour after sunrise and that the commission should allow mix production and silo filling prior to that time.

**The commission agrees with this comment. Operation of emission units other than the truck load-out prior to one hour after sunrise should not result in adverse off property impacts. Subsection (1)(T) has been changed to allow mix production and silo filling to begin at sunrise. However, the commission believes that it is important to insure compliance with the start and stop times and has added a record keeping requirement for the start and stop times of the truck load-out, mix production, and silo filling.**

AGC, AT, RA, and CM commented that, since HMAPs do not typically have the equipment for quality control testing of asphalt cement, it would be appropriate for the supplier to certify the volatility factor required by Subsection (1)(V)(vi) of the standard permit.

**The commission agrees with this comment. Subsection (1)(V)(vi) of the standard permit requires that a record of the volatility factor be kept and does not require owner/operators**

**to conduct the testing prescribed in ASTM method D2872. The staff's intent is for permit holders to obtain the volatility factor, for each type of asphaltic cement used, from the manufacturer.**

TAPA requested that TCEQ provide guidelines for acceptable DILOT demonstrations that are allowed under Subsection (2)(A) of the standard permit.

**The DILOT guidelines are available from the TCEQ Field Operations Division.**

AGC, AT, RA, and CM asked whether the requirement to sample under subsection (5)(A) of the standard permit applies each time the plant is moved and relocated and whether DILOT would be accepted.

**The requirement to sample VOC emissions for crumb rubber is intended to be a one time test for each facility. A separate test will not be required each time the facility is moved. However, the concentration of crumb rubber used in the asphalt mix at the time of the test becomes the maximum authorized by this standard permit. Any increase in the concentration of crumb rubber in the asphalt mix would require retesting. No DILOT reports will be accepted as a replacement for stack sampling on plants using crumb rubber asphalt mix.**

## **IX. STATUTORY AUTHORITY**

This standard permit is issued under Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA § 382.011), which authorizes the commission to control the quality of the state's air, TCAA § 382.023, which authorizes the commission to issue orders necessary to carry out the policy and purposes of the TCAA , TCAA § 382.051, which authorizes the commission to issue permits, including standard permits for similar facilities for numerous similar sources, and TCAA § 382.05195 which authorizes the commission to issue standard permits according to the procedures set out in that section.

## AIR QUALITY STANDARD PERMIT FOR HOT MIX ASPHALT PLANTS

Effective Date July 10, 2003

This air quality standard permit authorizes the air emissions from the operation of hot mix asphalt plants that meet the conditions listed in section (1) and section (2) and either section (3) for temporary plant sites or section (4) for permanent plant sites. This standard permit does not relieve the owner or operator from complying with any other applicable provision of the Texas Health and Safety Code, Texas Water Code, or rules of the Texas Commission on Environmental Quality.

### (1) General Requirements

- (A) For the purposes of this standard permit, a hot mix asphalt plant is defined as a facility that produces or will produce one or more of the following: standard hot mix asphalt, asphalt mixes made with Performance Grade (PG) binders, asphalt mixes made with crumb rubber, and pre-coat aggregate.
- (B) For the purposes of this standard permit, a site is defined as one or more contiguous or adjacent properties which are under common control of the same person (or persons under common control).
- (C) Any hot mix asphalt plant that is authorized under this standard permit shall comply with all applicable requirements of the EPA regulations in 40 CFR Part 60, including but not limited to:
  - (i) Subpart A, General Provisions;
  - (ii) Subpart I, Standards of Performance for New Stationary Sources for Hot Mix Asphalt Facilities;
  - (iii) Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 1, 1973, and Prior to May 19, 1978;
  - (iv) Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984; and
  - (v) Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

- (D) Any hot mix asphalt plant authorized under this standard permit shall be registered in accordance with 30 TAC § 116.611, Registration to Use a Standard Permit. Owners or operators shall submit a completed current PI-1S, Table 22, Table 29 if requesting authorization for an engine, and Hot Mix Asphalt Standard Permit Checklist. Facilities which meet the conditions of this standard permit do not have to meet the emissions and distance limitations listed in 30 TAC § 116.610(a)(1), Applicability.
- (E) Registration applications for hot mix asphalt plants shall comply with 30 TAC § 116.614, Standard Permit Fees, except for a temporary plant that has been previously registered with the commission for this standard permit, and supplies asphalt to a public works project and is located in or contiguous to the right of way of a public works project.
- (F) Facilities located in counties subject to 30 TAC Chapter 101, Subchapter H, Division 3; Chapter 116 Subchapter B Division 5; and Chapter 117, shall comply with all applicable requirements in 30 TAC Chapter 101, Subchapter H, Division 3; Chapter 116 Subchapter B Division 5; and Chapter 117.
- (G) For all facilities that are authorized by this standard permit, aggregate materials (rock, sand, etc.) received at the plant site shall be used at that site and shall not be transported to another site unless the material is left from a temporary project and removed from the site when the plant vacates the site. The storage of raw aggregate materials at the site for use at other sites requires a separate authorization under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, 30 TAC Chapter 106, Permits by Rule, or other appropriate authorization.
- (H) Except for those periods described in 30 TAC § 101.201 Emissions Event Reporting and Recordkeeping Requirements and 30 TAC § 101.211 Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; visible fugitive emissions from recycled asphalt product (RAP) breakers, screens, transfer points on belt conveyors, stockpiles, work areas and any in-plant roads associated with the facility shall not leave the property for a period exceeding 30 seconds in any six-minute period as determined by U.S. Environmental Protection Agency (EPA) Test Method (TM) 22.
- (I) The drum dryer exhaust shall be vented to, and controlled by, a properly sized fabric filter baghouse.
- (J) Lime and mineral fillers shall be transported and stored in a closed system and all exhaust air to the atmosphere shall be vented through a properly sized fabric filter. An operational overflow warning device shall be installed on each bulk storage silo to alert operators in sufficient time prior to the silo reaching capacity. Any overfilling of the silo resulting in failure of the abatement system, or visible emissions in excess of the requirements of subsection(1)(D) of this standard permit, must be documented and reported following the requirements of 30 TAC §§ 101.201 or 101.211, as appropriate.

- (K) Fabric filters and collection systems shall meet all of the following requirements:
- (i) all fabric filter systems shall be maintained and operated properly with no tears or leaks;
  - (ii) before July 10, 2007 all drum dryer filter systems shall meet at least a front half outlet grain loading of 0.02 grains per dry standard cubic foot (gr/dscf) and a combined (front half and back half) total outlet grain loading of 0.04 gr/dscf;
  - (iii) on and after July 10, 2007 all drum dryer filter systems shall meet at least a front half outlet grain loading of 0.01 grains per dry standard cubic foot (gr/dscf) and a combined (front half and back half) total outlet grain loading of 0.04 gr/dscf; and
  - (iv) lime/mineral bulk storage silo(s) not vented to the drum dryer system shall vent to a fabric filter system designed to meet at least 0.01 outlet grain loading (combined front half and back half).
- (L) Except for those periods described in 30 TAC §§ 101.201 and 101.211, opacity of emissions from the lime silo fabric filter baghouse stack and/or the drum dryer stack shall not exceed 5 percent averaged over a six-minute period, and according to EPA TM 9.
- (M) All stockpiles shall be sprinkled with water, dust-suppressant chemicals, or covered, as necessary, to minimize dust emissions.
- (N) Fuel for dryers and hot oil heaters shall be either:
- (i) pipeline sweet natural gas as defined in the 30 TAC Chapter 101, General Air Quality Rules, containing no more than 5 grains total sulfur and 0.2 grain hydrogen sulfide per 100 dscf;
  - (ii) liquid petroleum gas;
  - (iii) diesel fuel with a maximum sulfur content of 0.6 percent by weight;
  - (iv) first-run No. 2 fuel oil with a maximum sulfur content of 0.6 percent by weight;
  - (v) first-run No. 4 fuel oil with a maximum sulfur content of 0.6 percent by weight; or
  - (vi) reclaimed industrial oil with a maximum sulfur content of 0.6 percent by weight. Reclaimed industrial oil shall meet all requirements specified in 40 CFR Part 279, Standards for the Management of Used Oil, and not contain more than the indicated amounts of the substances listed below in

parts per million by weight (ppm):

| <u>Substance</u> | <u>Concentration (ppm)</u> | <u>Substance</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|------------------|----------------------------|
| Antimony         | 180                        | Selenium         | 75                         |
| Arsenic          | 3                          | Thallium         | 37                         |
| Beryllium        | 1                          | Vanadium         | 18                         |
| Cadmium          | 2                          | Lead             | 100                        |
| Chromium         | 9                          | Nickel           | 5                          |
| Mercury          | 37                         | Total Halogens   | 1000                       |

- (O) The maximum mix temperature, at the discharge point of the drum, shall not exceed 325° F except:
- (i) when a PG binder requires a higher mix temperature, in which case the maximum mix temperature shall not exceed 350° F; or
  - (ii) when crumb rubber mix, produced in compliance with section (5) of this standard permit, requires a higher temperature, in which case the maximum mix temperature shall not exceed 375° F; or
  - (iii) during periods of start-up or shutdown, not surpassing 20 minutes.
- (P) The following materials, added at the plant at no more than the maximum concentration, are authorized by this standard permit

| <u>Description</u>                         | <u>Maximum Concentration</u>                      |
|--|---|
| Hydrated Lime, Portland Cement, or Fly Ash | Not Applicable                                    |
| Liquid Amine Antistrip Agents              | <u>2%</u> by weight of liquid asphalt in the mix  |
| Styrene-Butadiene-Styrene                  | <u>10%</u> by weight of liquid asphalt in the mix |
| Styrene-Butadiene Rubberized Latex         | <u>6%</u> by weight of liquid asphalt in the mix  |
| RAP  | <u>50%</u> displacement of aggregate              |

Other materials added at the hot mix asphalt plant may be used provided that such use complies with the requirements of 30 TAC §116.116(e), Changes to facilities, §116.117, Documentation and Notification of Changes to Qualified Facilities, and §116.118, Pre-change Qualification.

- (Q) Asphalt release agents that do not emit VOCs at ambient temperature, such as vegetable oil or surfactants, may be used.
- (R) The owner or operator shall not operate more than one truck load out point at any time.
- (S) The hot mix asphalt plant, and all its associated facilities (silos, conveyors,

screens, RAP crushers and equipment), shall be located a minimum distance to the property line. This minimum property line distance is determined by utilizing the following table. If no site-specific data is available, a 0.5 volatility factor (-0.5) shall be used. In all cases, the holder of this standard permit shall determine the appropriate distance by rounding up to the highest distance that is provided in the table by production and volatility factor. There shall be no interpolation in determining the appropriate property line distance. Only one of the nine distances provided in this table shall be used. For example, a plant producing 250 tph of asphalt mix and using a volatility factor of .35 shall use the distance of 300 ft. For a 300 tph plant using a volatility factor of, 0.42 this distance would be 425 feet.

| Actual Production    | Volatility factor of no more than 0.30 | Volatility factor of no more than 0.42 | Volatility factor of no more than 0.50 |
|----------------------|--|--|--|
| no more than 400 tph | 450 ft                                 | 550 ft                                 | 650 ft                                 |
| no more than 300 tph | 300 ft                                 | 425 ft                                 | 500 ft                                 |
| no more than 200 tph | 200 ft                                 | 275 ft                                 | 375 ft                                 |

(T) As an alternative to the distance requirements in (1)(S) of this a standard permit, a hot mix asphalt plant that restricts hours of operation of the truck load out to the period of time between one hour after sunrise and one hour before sunset and mix production and silo filling at the plant to a period of time between sunrise and one hour before sunset, the minimum distance to the property line shall be determined by using the following table. If no site-specific data is available, a 0.5 volatility factor (-0.5) should be used. In all cases, the holder of this standard permit shall determine the appropriate distance by rounding up to the highest distance that is provided in the table by production and volatility factor. There shall be no interpolation in determining the appropriate property line distance. Only one of the nine distances provided in this table shall be used.

| Actual Production    | Volatility factor of no more than 0.30 | Volatility factor of no more than 0.42 | Volatility factor of no more than 0.50 |
|----------------------|--|--|--|
| no more than 400 tph | 225 ft                                 | 300 ft                                 | 375 ft                                 |
| no more than 300 tph | 150 ft                                 | 200 ft                                 | 275 ft                                 |
| no more than 200 tph | 100 ft                                 | 150 ft                                 | 175 ft                                 |

(U) For a production rate of less than or equal to 300 tph, stockpiles and vehicle traffic areas (except for entrance and exit to the site) shall be located at least 25 feet from any property line. For a production rate of greater than 300 tph, stockpiles and vehicle traffic areas (except for entrance and exit to the site) shall

be located at least 50 feet from any property line. In lieu of meeting the distance requirements for roads and stockpiles, the following shall occur:

- (i) roads and other traffic areas located less than the applicable distance requirement from the property line must be bordered by dust-suppressing fencing or barriers. The fencing or barriers shall be constructed to a height of at least 12 feet; and
  - (ii) if any portion of a stockpile is located less than the applicable distance requirement from the property line, then the entire stockpile must be contained within a three-walled bunker which extends at least two feet above the top of the stockpile.
- (V) The hot mix asphalt plant and all associated facilities, as defined in subsections (3)(A) and (4)(A) of this standard permit, authorized by this standard permit shall be located at least 550 ft. from any concrete batch plant, or rock crusher located on the same site. Additionally, any hot mix asphalt plant and all associated facilities, as defined in subsections (3)(A) and (4)(A) of this standard permit, authorized by this standard permit shall be located at least 1300 ft. from any other hot mix asphalt plant located on the same site. If either of these distances cannot be met, then the hot mix asphalt plant authorized under this standard permit shall not operate at the same time as the concrete batch plant, rock crusher, or other hot mix asphalt plant. Stockpiles and other associated sources must comply with subsection (1)(U) of this standard permit.
- (W) Records shall be maintained on-site for a rolling 24 month period and shall consist of the following:
- (i) if applicable, record keeping requirements listed in 40 CFR Part 60, Subparts A and I;
  - (ii) annual and hourly production rates of all mix types produced by the facility;
  - (iii) continuous temperature as monitored at the outlet of the drum. During any periods when the mix temperature is greater than 325EF, the PG binder type shall also be recorded;
  - (iv) dryer fuel type and its maximum sulfur content being used for each mix type;
  - (v) when a reclaimed industrial fuel is used, documentation from independent third-party testing laboratory that lists the concentrations of the substances, listed in paragraph (N)(vi) of this section, shall be kept on-site

at all times. Upon request by the executive director, or any local air pollution control program with jurisdiction, this documentation shall be provided to the commission staff to demonstrate compliance with the concentrations listed above,

- (vi) the asphalt volatility for each type of asphaltic cement used in the production of hot mix asphalt produced, as determined by the most recent version of ASTM method D2872;
  - (vii) documentation of any new additives authorized by §§116.116(e); and
  - (viii) for facilities complying with subsection (1)(T) documentation of the start and stop times of the truck load out, mix production, and silo filling.
- (X) A generator set, that is used to provide electrical power to a hot mix asphalt plant authorized under this standard permit, with an internal combustion engine rated at no more than 1000 horsepower (hp), and fueled by natural gas, propane, or liquid petroleum gas, as defined by paragraph (1)(N)(i) and (1)(N)(ii) of this section, is authorized by this standard permit. The engine horsepower rating shall be based on the engine manufacturer's maximum continuous load rating at the lesser of the engine or driven equipment's maximum published speed and load. A generator set with an engine rated at greater than 1000 hp or fueled by any fuel other than natural gas, propane, or liquid petroleum gas and is located at a plant site for period greater than 12 months shall be authorized separately under 30 TAC Chapter 116, 30 TAC Chapter 106, or other appropriate authorization.

(2) Sampling Requirements

- (A) Stack sampling for particulate matter (PM) emissions shall occur after initial start-up of the plant to comply with 40 CFR Part 60, Subparts A and I and the requirements listed in subsection (1)(L), paragraph (1)(K)(iv), and paragraph (1)(K)(ii) or paragraph (1)(K)(iii) of this standard permit. This initial stack sampling analysis for PM shall not be required of the holder of this permit provided that acceptable data in lieu of testing (DILOT) documentation demonstrates to the satisfaction of the executive director that the model of the hot mix asphalt plant being constructed has been previously tested and shown to meet the requirements of 40 CFR Part 60, Subparts A and I and the requirements listed in subsection (1)(L), paragraph (1)(K)(iv), and paragraph (1)(K)(ii) or paragraph (1)(K)(iii) . If DILOT demonstrations are used, then a copy of such documentation shall be maintained on site with the hot mix asphalt plant and made available to the appropriate regional office or any local air pollution control program having jurisdiction over this facility.

- (B) Sampling or submission of a DILOT shall occur within 60 days of achieving the maximum allowable production rate based on the table in subsection (1)(S) or (1)(T) of this standard permit but no later than 180 days from initial startup of equipment. Requests for additional time to perform sampling shall be submitted to the appropriate regional office. Additional time to comply with the applicable requirements of 40 CFR Part 60 requires EPA approval, and requests shall be submitted to the TCEQ Compliance Support Division.
- (C) Facilities complying with paragraph (1)(K)(ii), shall conduct stack sampling for particulate matter (PM) emissions no later than 60 days after July 10, 2007 to comply with 40 CFR Part 60, Subparts A and I and the requirements listed in subsection (1)(L) and paragraph (1)(K)(iii) of this standard permit.
- (D) The plant shall operate at maximum production rates during stack emissions testing. If the plant is unable to operate at the maximum rates during testing, then future production rates shall be limited to the rates established during testing ( $\pm 10$  percent not to exceed the maximum production rate listed in subsections (1)(S) or (1)(T) and the PM emission limits listed in subsection (1)(L) and paragraph (1)(K)(ii) or (1)(K)(iii). Additional stack testing shall be required when higher production rates are achieved.
- (E) The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling ports and platforms shall be installed on the exhaust stack, according to the specifications set forth in Chapter 2 of the TCEQ Sampling Procedures Manual, prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the executive director.
- (F) A pretest meeting concerning the required sampling shall be held with the appropriate regional office before the required tests are performed. The regional office shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test results. A written proposed description of any deviation from sampling procedures specified in this standard permit or TCEQ or EPA sampling procedures shall be made available prior to the pretest meeting. Any deviation from specified sampling procedures requires the approval of the executive director. The pretest meeting notice office shall also include:
- (i) date for pretest meeting;
  - (ii) date sampling shall occur;

- (iii) name of firm conducting sampling;
    - (iv) type of sampling equipment to be used; and
    - (v) method or procedure to be used in sampling.
  - (G) The sampling report shall include the following:
    - (i) plant production rate during tests;
    - (ii) type of fuel and consumption rates;
    - (iii) mix type and temperature;
    - (iv) percent sulfur in fuel; and
    - (v) concentration (by weight) of liquid asphalt, antistripping agents, or any additive present in the asphalt concrete mix.
  - (H) Copies of the final sampling report shall be submitted within 45 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
    - (i) one copy to the appropriate TCEQ Regional office;
    - (ii) one copy to the TCEQ Compliance Support Division; and
    - (iii) one copy to each appropriate local air pollution control program.
  - (I) Upon request by the executive director, or any local air pollution control program with jurisdiction, the holder of this permit shall provide a sample of the fuel(s) utilized in these plants and shall allow air pollution control program representatives to obtain a sample for analysis.
- (3) Requirements Specific to Temporary Hot Mix Asphalt Plants
- (A) This standard permit authorizes not more than the following facilities (as defined in 30 TAC Chapter 116.10(4)):
    - (i) cold feed bin(s);
    - (ii) transfer conveyor(s);

- (iii) aggregate screen(s);
- (iv) a counter/parallel flow drum;
- (v) a RAP feed bin;
- (vi) a RAP conveyor;
- (vii) 90,000 gallons or less total asphalt binder storage in no more than three tanks with associated hot oil heater(s);
- (viii) three hot mix surge bins/storage silos;
- (ix) 90,000 gallon or less total fuel oil storage in no more than three tanks;
- (x) a liquid anti-strip tank
- (xi) a RAP breaker/crusher;
- (xii) a release agent application facility
- (xiii) a lime storage silo;
- (xiv) a mineral filler silo; and
- (xv) a fines storage silo.

Equipment that is not a source of emissions does not require authorization.

- (B) The owner or operator of a temporary hot mix asphalt plant that has been determined by the commission to be in compliance with the technical requirements of the standard permit in effect at the time of the registration, and which supplies asphalt to a public works project and is located in or contiguous to the right of way of that public works project may, in lieu of the registration requirement in subsection(1)(D) of this standard permit, register by notifying the appropriate TCEQ Regional office and any local air pollution control agency having jurisdiction in writing at least 30 calendar days prior to locating at the site. The notification shall include the owner's and, if applicable, the operator's name, address, and phone number as well as the physical description of the site, scaled plot plan of site with location of equipment authorized by this standard permit, asphalt plant serial number, account number or regulated entity number, expected hours of operation, expected date of arrival on site, expected date to vacate the site, a completed Table 22, Hot Mix Asphalt Plants, and a Hot Mix

Asphalt Standard Permit Checklist. Temporary hot mix asphalt plants that do not supply asphalt to a public works project must apply for a new registration under subsection (1)(D) of this standard permit in order to relocate at a new site.

- (C) For the purposes of this section, a temporary hot mix asphalt plant is one that occupies a designated site for not more than 180 consecutive days or supplies asphalt for only a single public works project (single contract or same contractor for related project segments), and not to other unrelated projects.
- (D) The owner or operator shall remove the hot mix asphalt plant and associated equipment from the site within 15 calendar days of ceasing operation. The 15 days allotted for the removal of equipment shall not be used as additional operational time above the 180 consecutive calendar days or completion of a project. Alternatively, the owner or operator may notify the regional office at the end of the project and store the non-operational facilities on-site until the next relocation. Once the region has been notified that the facility will be shut down, re-registration as a permanent facility as described in this standard permit will be required to resume operation at the current site.
- (E) For a hot mix asphalt plant supplying asphalt for a single public works project, the “property line” measurements, for purposes of compliance with this standard permit and 30 TAC §111.155, Ground Level Concentrations, shall be made at the outer boundaries of the designated public property, roadway project, and associated rights-of-way.
- (F) In order to maintain compliance with subsection (1)(H), emissions from all in-plant roads and traffic areas associated with the operation of the hot mix asphalt plant shall be minimized at all times by at least one of the following methods. In-plant roads and traffic areas shall be:
  - (i) covered with a material such as, but not limited to, roofing shingles or tire chips (when used in combination with (ii) or (iii) of this subsection);
  - (ii) treated with dust-suppressant chemicals;
  - (iii) watered; or
  - (iv) paved with a cohesive hard surface that is maintained intact and cleaned.

(4) Requirements Specific to Permanent Hot Mix Asphalt Plants

- (A) This standard permit authorizes not more than the following facilities (as defined in 30 TAC Chapter 116.10(4)):

- (i) cold feed bin(s);
- (ii) transfer conveyor(s);
- (iii) aggregate screen(s);
- (iv) a counter/parallel flow drum;
- (v) a RAP feed bin;
- (vi) a RAP conveyor;
- (vii) 90,000 gallons or less total asphalt binder storage in no more than three tanks with associated hot oil heaters;
- (viii) three, hot mix surge bin/storage silos;
- (ix) 90,000 gallons or less total fuel oil storage in no more than three tanks;
- (x) a liquid anti-strip tank
- (xi) a RAP breaker/crusher;
- (xii) a release agent application facility
- (xiii) a lime storage silo;
- (xiv) a mineral filler silo; and
- (xv) a fines storage silo.

Equipment that is not a source of emissions does not require authorization.

- (B) In order to maintain compliance with paragraph (1)(H), all entry and exit roads and main traffic routes associated with the operation of the hot mix asphalt plant (including batch truck and material delivery truck roads) shall be paved with a cohesive hard surface to be maintained intact and cleaned. All batch trucks and material delivery trucks shall remain on paved surfaces when entering, conducting primary function, and leaving the property. All other traffic areas must comply with the control requirements listed in paragraph (3)(F).

- (5) Requirements specific to permanent or temporary plants producing crumb rubber asphalt mix
- (A) Stack sampling for VOC shall occur within 45 days of achieving the maximum allowable production rate based on the table in subsection (1)(S) or (1)(T) of this standard permit but no later than 90 days from initial startup of equipment and shall demonstrate an emission rate of less than .032 pound of VOC per ton of asphalt mix produced.
  - (B) The stack sampling required in subsection (A) of this section shall comply with all requirements listed in subsections (2)(D) - (H) of this standard permit.
  - (C) The plant shall operate at the maximum expected concentration of crumb rubber during the stack sampling event. If the plant is unable to operate at the maximum concentration of crumb rubber during testing, then future concentrations shall be limited to the concentration established during testing.