

**Texas Commission on Environmental Quality
Air Permits Division**

New Source Review (NSR) Boiler Plate Special Conditions

This information is maintained by the Mechanical/Agricultural/Construction NSR Section and is subject to change. The last update was made to this document in December 2007. These special conditions represent current NSR boilerplate guidelines and are provided for informational purposes only. The special conditions for any permit are subject to change through TCEQ case by case evaluation procedures. Please contact the NSR Mechanical/Agricultural/Construction Section management if there are questions related to the boilerplate guidelines.

Hot Mix Asphalt Plants

SPECIAL CONDITIONS

Permit Number _____

EMISSION STANDARDS and FUEL SPECIFICATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the attached table.
2. All equipment shall comply with all requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subparts A and I on Standards of Performance for New Stationary Sources (NSPS) promulgated for Hot Mix Asphalt Facilities except as otherwise represented in the permit application. This facility shall also comply with Title 30 Texas Administrative Code (30 TAC) Chapter 115, Subchapter F regarding cutback asphalt. *(Last sentence added when making cold mixes in an ozone nonattainment county.)*
3. The applicant has represented the following:
 - A. This permit does not authorize the operation of an internal combustion engine in conjunction with this facility. The holder of this permit shall obtain prior authorization for any engine which remains or will remain at a single point or location for more than 12 consecutive months. Any portable engine which remains or will remain at a single point or location for less than or equal to 12 consecutive months is not considered stationary and no authorization is required. *(This condition used only if a generator is not authorized by this permit)*

OR....

- A. Fuel for the generator or engine shall be pipeline quality sweet natural gas or liquid fuel with a maximum sulfur content of no more than 0.3 percent by weight and shall not consist of a blend containing waste oils or solvents. *(If a generator is authorized by this permit)*
- B. Fuel for the dryer and the hot oil heater(s) shall be either pipeline sweet natural gas containing no more than 5 grains total sulfur and 0.25 grain hydrogen sulfide per 100 dscf or first-run No. 2 fuel oil. All liquid fuel must have a maximum sulfur content of no more than 0.6 percent by weight and shall not consist of a blend containing waste oils or solvents.

Use of any other fuel shall require prior written approval of the Executive Director of the Texas Commission On Environmental Quality (TCEQ). Upon request by the TCEQ Executive Director or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel(s) utilized at this plant or shall allow air pollution control program representatives to obtain a sample for analysis.

OR....

- B. Fuel for the dryer and hot oil heater (s) shall be either pipeline sweet natural gas containing no more than 5 grains total sulfur and 0.25 grain hydrogen sulfide per 100 dscf, liquid petroleum gas, first-run No. 2 fuel oil, first-run No. 4 fuel oil, or 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	1,000

Documentation from an approved independent testing laboratory that lists the concentrations of the above ingredients of the fuel shall be kept on site at all times when a reclaimed industrial oil is used. Upon request by the TCEQ Executive Director or any local air pollution control program with jurisdiction, this documentation shall be provided to TCEQ staff to demonstrate compliance with the concentrations listed above and with the Federal Resource Conservation and Recovery Act (RCRA) Standards.

Use of any other fuel shall require prior written approval of the Executive Director of the TCEQ. Upon request by the Executive Director of the TCEQ 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 or shall allow air pollution control program representatives to obtain a sample for analysis.

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OPACITY/VISIBLE EMISSION LIMITATIONS

4. No visible fugitive emissions from the recycled asphalt product (RAP) breaker, screens, all material transfer points, the engine or generator, stockpiles, or internal roads and work areas shall leave the property. Visible emissions shall not exceed a cumulative 30 seconds in duration in any six-minute period as determined using EPA Test Method (TM) 22 or equivalent. If this condition is violated, additional controls or process changes may be required to limit visible particulate matter (PM) emissions. Stack emissions may leave the plant property provided opacity restrictions are not violated.
5. According to EPA TM 9 or equivalent, opacity of emissions from the lime silo fabric filter baghouse and/or the drum dryer fabric filter baghouse stack shall not exceed 5 percent averaged over a six-minute period, except for those times described in 40 CFR 60, Subpart A, Section 60.11 (c). If 5 percent opacity is exceeded, sampling may be required.

OPERATIONAL LIMITATIONS AND WORK PRACTICES

6. As represented by the applicant, the following shall occur:
 - A. Production is limited to _____ tons per hour (tph) and _____ tons per year (tpy) of standard hot mix asphalt, _____ tph and _____ tpy of recycled rubber modified asphalt mix, and _____ tph and _____ tpy for cold mix asphalt in any rolling 12-month period.
 - B. Emissions from the drum dryer shall be vented to a fabric filter baghouse . The baghouse shall be installed and operated in accordance with the manufacturer's specifications.
 - C. The maximum mix temperature at the discharge of the drum shall not exceed 350°F.
 - D. Except for periods of start-up or shutdown not surpassing 20 minutes, the maximum mix temperature of the asphalt concrete shall not be exceeded. A temperature of asphalt concrete in excess of the maximum, confirmed by the TCEQ or any local air pollution control program with jurisdiction, may be cause for stack sampling. There may be multiple periods of start-up and shutdown during an operating day.

An opacity or an odor nuisance condition, as confirmed by the TCEQ or any local air pollution control program with jurisdiction, created by exceeding the maximum temperature, may be cause for additional controls and/or lowering of the asphalt concrete mixture temperature. If the nuisance condition persists, subsequent stack sampling may also be required.

- E. All in-plant roads and traffic areas shall be paved with a cohesive hard surface which can be cleaned by sweeping or washing. All roads, active work areas, and stockpiles

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shall be sprayed with water and/or environmentally sensitive chemicals upon detection of visible particulate emissions to maintain compliance with all TCEQ rules and regulations. *(This condition must be used for permanent plants)*

OR....

- E. All in-plant roads and traffic areas, active work areas, and aggregate stockpiles shall be sprayed with water and/or environmentally sensitive chemicals upon detection of visible PM emissions to maintain compliance with all the TCEQ rules and regulations. *(This condition can be used only for temporary plants)*
 - F. Asphalt mixes made with cutback asphalt and asphalt emulsions containing solvents shall not be produced at this facility. *(Added when these mixes are not authorized by the permit)*
 - G. Lime shall be transported in a closed conveying system and all exhaust air to the atmosphere shall be vented through a fabric filter. *(For plants that use lime in the mix)*
7. Asphalt additives represented for use at this plant are:

<u>Description</u>	<u>Maximum Concentration</u>
Hydrated Lime	___percent (%) by weight of aggregate
Liquid Amine Antistrip Agents	___% by weight of liquid asphalt in the mix
Styrene-Butadiene-Styrene	___% by weight of liquid asphalt in the mix
Styrene-Butadiene Rubberized Latex	___% by weight of liquid asphalt in the mix
Recycled Rubber	___% by weight of liquid asphalt in the mix
RAP	___% displacement of aggregate

Asphalt additives which have not been represented in the permit application shall not be used without prior written approval from the TCEQ Executive Director.

- 8. All stationary equipment authorized by this permit shall be prominently marked to show the assigned TCEQ regulated entity number or permit number, excluding the location suffix (example: L001). These markings must be clearly visible. These identification markings shall be removed from the equipment when it is no longer authorized by the TCEQ. *(This condition included in portable permits)*

MOVEMENT OF A PORTABLE PLANT

- 9. The following are requirements for movement of portable plants:
 - A. Prior to moving permitted plants or sources to any new site (even if authorization for the site has previously been granted), the holder of the permit shall request relocation or

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change of location authorization and obtain written approval from a delegated representative of the TCEQ Executive Director. Additionally, once construction has begun at any site, the applicant shall notify the appropriate TCEQ Regional Office and local air pollution control programs in writing of the actual dates of start of construction and operation.

- B. The appropriate TCEQ regional office may approve the following types of relocations:
- (1) A permitted hot mix plant and associated equipment moving to a site for support of a public works project when the proposed site is located in or contiguous to the right-of-way of the public works project, or
 - (2) A portable hot mix plant moving to a site where a portable facility has been located at the site at any time during the previous two years.
- C. If the holder of the permit meets either Special Condition No. 9.B.(1) or 9.B.(2) above, then they shall submit a request letter to the appropriate TCEQ Regional Office prior to relocating . After evaluating the relocation request, the TCEQ Regional Office will send a written response to the permit holder. The permit holder shall submit the following information to the TCEQ Regional Office:
- (1) Company name, address, company contact, and telephone number;
 - (2) Copy of existing permit conditions and the maximum allowable emission rates table that are in effect for the permitted facility;
 - (3) TCEQ account number, regulated entity number (RN), customer reference number (CN), and permit number;
 - (4) Location description of the proposed site (city, county, and exact location description);
 - (5) A plot plan to scale, marked with north orientation, that identifies the location of all equipment and stockpiles and demonstrates that the required distances to the property lines can be met;
 - (6) A scaled area map that identifies the distance and direction to the closest off-property receptor (if required) and clearly indicates how the facility is contiguous or adjacent to the public works project right of way (if required);
 - (7) Proposed date for start of construction and expected date for start of operation;
 - (8) Expected time period at the proposed site; and
 - (9) If applicable, the permit number of the portable plant that was at the proposed site in the last two years.

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- D. To move a permitted plant and associated equipment to a site that does not meet either Special Condition No. 9.B(1) or 9.B(2), the holder of this permit shall submit a change of location request to the TCEQ Air Permits Division, Air Permits Initial Review Team, MC-161, P.O. Box 13087, Austin, Texas 78711-3087 using Form PI-1, along with all supporting documents. In accordance with the Texas Health and Safety Code §382.056, the applicant may be required to publish public notice prior to being authorized for a change of location to a new site.
- E. All relocation and change of location applications shall comply with the following conditions.
- (1) This hot mix asphalt plant and all associated facilities and sources (except for stockpiles and traffic areas) shall be located a minimum of _____ feet from the property line and at least 1300 feet from another hot mix asphalt plant and 550 feet from a concrete batch plant or rock crushing plant. *(This distance is determined during the permit review)*
 - (2) Stockpiles and vehicle traffic areas (except for entrance and exit to the site) shall be located at least 25 feet from any property line. In lieu of meeting the distance requirements for roads and stockpiles, the following must occur:
 - a. Roads and other traffic areas within the buffer distance must be bordered by dust suppressing fencing or other dust suppressing barrier along all traffic routes or work areas. These borders shall be constructed to a height of at least twelve feet; and
 - b. Stockpiles within this buffer distance must be contained within a three-walled bunker which extends at least two feet above the top of the stockpile.

DETERMINATION OF COMPLIANCE

10. After initial start-up of the plant, one of the following shall occur:
- A. Stack sampling for particulate matter (PM) emissions shall occur after initial start-up of the plant to comply with NSPS Subpart A and I requirements. 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.
 - B. Initial stack sampling analysis for PM shall not be required of the holder of this permit provided that all of the following conditions are met:
 - (1) Adequate documentation, including copies of past test results, demonstrates to the satisfaction of the TCEQ Executive Director that the model of the asphalt concrete plant being constructed has been tested and shown to meet the 0.04 grains per dry standard cubic feet per hour of air flow (gr/dscf) allowable. Consideration must be given to establishing similar operating conditions between the permitted facility and

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the plant tested (*See memo dtd April 3, 2003: Guidance on Waiving Particulate Matter Testing Requirements for New and Relocated Hot Mix Asphalt Plants*); and

- (2) The permitted plant's visible emissions are equal to or less than 5 percent opacity; and
 - (3) The permitted plant's maximum mix temperature is not exceeded.
11. The differential pressure across each baghouse shall be continuously monitored and recorded at least once each day that the plant is in operation. The minimum and maximum pressure drop shall be established using the manufacturer's recommendations, engineering calculations, historical data, or the most recent performance test data. Documentation shall be maintained with the permit records providing the methodology used to determine the minimum and maximum pressure drop allowed.
- Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate within 0.5 inch of water gauge pressure or 0.5% of span (*1 inch water gauge pressure or 2% of span for scrubbers*).
- Quality assurance data must be generated when the plant is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the plant operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
- The holder of this permit shall perform monthly inspections to verify proper operation of all hooding, duct, and collection systems and to verify there are no holes, cracks, and/or other conditions that would reduce the collection efficiency of the emission capture system as represented. If the results of the inspections indicate that the capture system is not operating properly or is not achieving the represented collection efficiency, the permit holder shall promptly take necessary corrective actions.
12. Upon being informed by the TCEQ Executive Director that the staff has documented opacity exceeding 5 percent from any baghouse stack, averaged over six consecutive minutes, the holder of this permit may be required to conduct stack sampling analyses or other tests to prove satisfactory equipment performance and demonstrate compliance with the Best Available Control Technology approved in the permit application. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual or in accordance with applicable EPA Code of Federal Regulations procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling.

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13. The holder of this permit may be required to perform stack sampling analysis for PM and total volatile organic compounds and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the exhaust stack when the maximum asphalt concrete mix temperature is exceeded.
14. The TCEQ Regional Director may require the permit holder to perform stack sampling or ambient air monitoring to determine the opacity, rate, composition, and/or concentration of the plant's emissions. The holder of this permit may request the TCEQ Executive Director to approve alternate sampling techniques or other means to determine the opacity, rates, composition, and/or concentration of emissions in accordance with the 30 TAC § 101.8.

SAMPLING REQUIREMENTS

15. 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 the attachment entitled "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the TCEQ Executive Director.
16. A pretest meeting concerning the required monitoring shall be held with personnel from the appropriate TCEQ Regional Office before the required tests are performed. Air contaminants to be tested for and the test methods to be used shall be determined at this pretest meeting.
 - A. Sampling shall occur within 60 days of being informed that testing is required.
 - B. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice to the TCEQ Regional Office shall include:
 - (1) Date for pretest meeting;
 - (2) Date sampling shall occur;
 - (3) Name of firm conducting sampling;
 - (4) Type of sampling equipment to be used; and
 - (5) Method or procedure to be used in sampling.

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.

- C. A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the

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TCEQ prior to the pretest meeting. The TCEQ Regional Office shall approve or disapprove of any deviation from specified sampling procedures.

- 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 (+10 percent). Additional stack testing shall be required when higher production rates are achieved.
- E. The sampling report shall include the following:
 - (1) Plant production rate during tests;
 - (2) Type of fuel and consumption rates;
 - (3) Mix type and temperature; and
 - (4) Percent sulfur in fuel.
 - (5) Concentration (by weight) of liquid asphalt, antistrip agents, or any additive present in the asphalt concrete mix.
- F. Copies of the final sampling report shall be submitted within 30 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:

One copy to the appropriate TCEQ Regional Office.

One copy to the TCEQ Compliance Support Division.

One copy to each appropriate local air pollution control program.

RECORD KEEPING REQUIREMENTS

- 17. In addition to the record keeping requirements specified in General Condition No. 7 and 40 CFR 60, Subparts A and I, the following records shall be kept and maintained on site for a rolling 24-month period:
 - A. Hourly and annual production rates of all mix types (records shall be summarized daily and monthly);
 - B. Continuous temperature of the mix as monitored in the discharge section of the drum;
 - C. Quantity of fuel used in hot oil heater(s), generator, and/or engine;
 - D. Fuel analysis for the dryer, hot oil heater(s), generator, and/or engine;
 - E. Documentation from a laboratory listing concentrations of ingredients for reclaimed industrial oil;
 - F. Records of daily baghouse pressure drop measurements;

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- G. Records of repairs and maintenance of all pollution abatement equipment;
- H. Records showing concentrations of asphalt additives used, to show compliance with Special Condition No. 7;
- I. Records of daily road cleaning, daily application of road dust control, or daily road maintenance for dust control; and
- J. Inspections of capture systems and abatement devices shall be recorded as they occur.